Bioretec Ltd

Listing on Nasdaq First North Growth Market Finland
Share Issue of approximately EUR 25 million
Subscription Price of EUR 3.90 per Offer Share

This offering circular (the "**Offering Circular**") has been prepared in connection with the initial public offering of Bioretec Ltd, a limited liability company incorporated in Finland ("**Bioretec**" or the "**Company**"). The Company aims to raise gross proceeds of approximately EUR 25 million by offering preliminarily a maximum of 6,410,256 new shares in the Company (the "**New Shares**") for subscription (the "**Share Issue**"). In addition to the Share Issue, the Company's Board of Directors may grant Danske Bank acting as a stabilizing manager (the "**Stabilizing Manager**") an over-allotment option (the "**Over-Allotment Option**" and together with the Share Issue, the "**Offering**") which would entitle the Stabilizing Manager to subscribe for a maximum of 961,538 new shares in the Company (the "**Additional Shares**") at the Subscription Price solely to cover over-allotments, if any, in connection with the Offering. Unless the context indicates otherwise, the New Shares and any Additional Shares to be issued are together referred to herein as the "**Offer Shares**". The subscription price for the Offer Shares in the Institutional Offering and the Public Offering is EUR 3.90 per Offer Share (the "**Subscription Price**"). The Subscription Price may be changed during the subscription period, provided, however, that in the Public Offering, the Subscription Price cannot be higher than the original Subscription Price, i.e. EUR 3.90 per Offer Share.

The Offering consists of (i) a public offering to private individuals and entities in Finland (the "**Public Offering**") and (ii) an institutional offering to institutional investors in Finland and, in accordance with applicable laws, internationally outside the United States (the "**Institutional Offering**").

Handelsbanken Fonder AB, Mandatum Life Insurance Company Limited and Kaleva Mutual Insurance Company (the "**Cornerstone Investors**") have given subscription commitments in relation to the Offering, under which they commit to subscribe for Offer Shares equal to EUR 8 million in total at the Subscription Price. The subscription commitments of the Cornerstone Investors are conditional upon, among others, that the amount of the Offer Shares covered by the subscription commitments will be allocated to the Cornerstone Investors as set out in the section "*Terms and Conditions of the Offering – Special terms and conditions concerning the Institutional Offering – Subscription undertakings*".

Danske Bank A/S, Finland branch ("**Danske Bank**") is acting as sole global coordinator and bookrunner (the "**Sole Global Coordinator**") in the Offering. Nordnet Bank Ab, Finland branch ("**Nordnet**") acts as the subscription place in the Public Offering along with the Sole Global Coordinator.

The subscription period for the Public Offering will commence on 7 June 2021 at 10:00 a.m. and end on 15 June 2021 at 4:00 p.m. The subscription period for the Institutional Offering will commence on 7 June 2021 at 10:00 a.m. and end on 17 June 2021 at 10:00 p.m. Instructions for submitting the subscriptions as well as detailed terms and conditions of the Offering are described in section "*Terms and conditions of the Offering*" of this Offering Circular.

Prior to the Offering, Bioretec's shares (the "**Shares**") have not been subject to trading on a regulated market or multilateral trading facility. Bioretec intends to submit its application to Nasdaq Helsinki Ltd for listing the Shares on the First North Growth Market Finland multilateral marketplace maintained by Nasdaq Helsinki Ltd ("**First North**") under trading code BRETEC (the "**Listing**"). Trading in the Shares is expected to commence on the First North on or about 18 June 2021 provided that Nasdaq Helsinki accepts the Company's listing application. The Offer Shares allocated in the Public Offering will be recorded in the investors' book-entry accounts maintained by Euroclear Finland Oy ("**Euroclear Finland**"), which acts as the Central Securities Depository in Finland, on or about 18 June 2021. In the Institutional Offering, the allocated Offer Shares will be ready to be delivered against payment on or about 22 June 2021 through Euroclear Finland Ltd. Danske Bank will act as Bioretec's certified adviser ("**Certified Adviser**") on First North.

Nasdaq First North Growth Market is a registered SME growth market, in accordance with the Directive on Markets in Financial Instruments (EU 2014/65) as implemented in the national legislation of Denmark, Finland and Sweden, operated by an exchange within the Nasdaq group. Issuers on Nasdaq First North Growth Market are not subject to all the same rules as issuers on a regulated main market, as defined in EU legislation (as implemented in national law). Instead they are subject to a less extensive set of rules and regulations adjusted to small growth companies. The risk in investing in an issuer on Nasdaq First North Growth Market may therefore be higher than investing in an issuer on the main market. All issuers with shares admitted to trading on Nasdaq First North Growth Market have a Certified Adviser who monitors that the rules are followed. The respective Nasdaq exchange approves the application for admission to trading.

In certain countries, such as the United States, Australia, Canada, Hong Kong, Japan, New Zealand, South Africa and Singapore statutory limitations may apply to the distribution of this Offering Circular. This Offering Circular or any other materials relating to the Offering shall not be distributed or disseminated in any country without complying with the laws and regulations of such country. This Offering Circular does not constitute an offer to issue or sell Shares to anyone in any such country, where it would be prohibited by local laws or other regulations to offer the Shares to such person. The Shares have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (the "**U.S. Securities Act**"), or under the securities laws of any state of the United States and, accordingly, may not be offered or sold, directly or indirectly, in or into the United States subject to certain exceptions. The Shares are being offered and sold outside the United States in compliance with Regulation S under the U.S. Securities Act. See "*Important information*".

An investment in the Offer Shares involves risks. Prospective investors should read this entire Offering Circular and, in particular, "*Risk factors*", when considering an investment in the Offer Shares.

Sole Global Coordinator and Bookrunner

Danske Bank

IMPORTANT INFORMATION

Bioretec has prepared and published a Finnish-language prospectus (the "**Finnish Prospectus**") in order to offer the Offer Shares to the public. Bioretec has prepared the Finnish Prospectus in accordance with the Finnish Securities Markets Act (746/2012, as amended, the "**Finnish Securities Markets Act**"), Regulation (EU) 2017/1129 of the European Parliament and of the Council on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC (as amended) (the "**Prospectus Regulation**"), Commission Delegated Regulation (EU) 2019/980 (Annexes 1 and 11) supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council as regards the format, content, scrutiny and approval of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Commission Regulation (EC) No 809/2004, Commission Delegated Regulation (EU) 2019/979 supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council with regard to regulatory technical standards on key financial information in the summary on a prospectus, the publication and classification of prospectuses, advertisements for securities, supplements to prospectus and notification portal, and repealing Commission Delegated Regulation (EU) No 382/2014 and Commission Delegated Regulation (EU) 2016/301, as well as the regulations and guidelines issued by the Finnish Financial Supervisory Authority (the "**FIN-FSA**"). The Finnish Prospectus also contains a summary in the format required by Article 7 of the Prospectus Regulation. The FIN-FSA has approved the Finnish Prospectus as competent authority under the Prospectus Regulation; however, it is not responsible for the accuracy of the information presented therein or herein. The register number of the FIN-FSA's approval decision is FIVA 28/02.05.04/2021. The Finnish Prospectus has been prepared in Finnish and this Offering Circular is an unofficial translation of the Finnish Prospectus. Bioretec is responsible for the contents of this Offering Circular. The FIN-FSA has not approved this English translation. In the event of any discrepancies between the language versions, the Finnish Prospectus shall prevail. The restrictions concerning the distribution of the Finnish Prospectus and this Offering Circular may differ from each other.

This Offering Circular is valid until the offering of the Offer Shares to the public ends. The obligation to supplement the Finnish Prospectus or this Offering Circular due to significant new factors or material mistakes or material inaccuracies in the Finnish Prospectus of this Offering Circular shall end when this Offering Circular expires.

In this Offering Circular "**Bioretec**" refers to Bioretec Ltd, its subsidiaries on a combined basis, unless the context clearly requires that the expression refers to Bioretec Ltd alone, a certain subsidiary or business area or some of these on a combined basis. However, reference to Bioretec's Shares, share capital or Bioretec's management are reference to Bioretec Ltd's issued shares, share capital and management.

No person is or has been authorized to give any information or to make any representation regarding the Offering other than those contained in this Offering Circular and, if given or made, such information or representation must not be considered as having been so authorized by Bioretec or the Sole Global Coordinator. Nothing contained in this Offering Circular is, or shall be relied upon as, a promise or representation by the Sole Global Coordinator in this respect, whether as to the past or the future. The Sole Global Coordinator assumes no responsibility for the accuracy, comprehensiveness or verification of the information and disclaim to the fullest extent permitted by applicable law, any and all liability whether arising in tort, contract or otherwise, which they might otherwise be found to have in respect of this Offering Circular or any such statement. Shareholders and prospective investors are encouraged to rely solely on the information contained in this Offering Circular as well as in the company releases published by Bioretec. Delivery of the Offering Circular shall not, under any circumstances, indicate that the information presented in the Offering Circular is correct on any day other than on the date of the Offering Circular, or that there would not have been any adverse changes or events after the date of the Offering Circular, which could have an adverse effect on Bioretec's business, financial position and results of operations.

In making an investment decision, each investor is encouraged to rely on their own examination, analysis and enquiry of Bioretec and the terms of the Offering, including the merits and risks involved. Neither Bioretec nor the Sole Global Coordinator, nor any of their respective affiliates or representatives, is making any representation to any offeree or subscriber of the Offer Shares regarding the legality of an investment in the Offer Shares by such offeree, subscriber or purchaser under the laws applicable to such offeree, subscriber or purchaser. The investors are encouraged, based on their own assessment, consult their own advisers before subscribing for the Offer Shares. Investors are encourages to make their independent assessment of the legal, tax, business, financial and other consequences of subscription for the Offer Shares. Any tax consequences arising from an investor's participation in the Offering will be solely on account of such investor. The Sole Global Coordinator is acting exclusively for Bioretec and no one else in connection with the Offering. They will not regard any other person (whether or not a recipient of this Offering Circular) as its respective client in relation to the Offering. The Sole Global Coordinator will not be responsible to anyone other than Bioretec for providing the protections afforded to its respective clients nor for giving advice in relation to the Offering or any transaction or arrangement referred to herein.

This Offering Circular does not constitute an offer to sell the Offer Shares to any person in any jurisdiction in which it is unlawful to make such offer to a person, or a solicitation of an offer to subscribe or buy the Offer Shares made to a person in a jurisdiction in which it is unlawful to make such solicitation. No action has been or will be taken by Bioretec or the Sole Global Coordinator to permit any public offering of the Offer Shares outside Finland. Nevertheless, the Offer Shares may be offered to qualified investors in member states of the European Economic Area (the "**EEA**") or in the United Kingdom, if any of the exceptions in the Prospectus Regulation is applicable.

The Offer Shares have not been, and will not be, registered under the U.S. Securities Act or with any securities regulatory authority of any state or other jurisdiction of the United States. The Offer Shares may not, with certain exceptions, be offered, sold, exercised, pledged, transferred or delivered, directly or indirectly, in or into the United States. In addition to the United States, the legislation of certain other countries may restrict the distribution of this Offering Circular. This Offering Circular must not be considered an offer of securities in such country, where offering of Offer Shares would be forbidden. The Offer Shares may not be offered, sold, exercised, pledged, transferred or delivered, directly or indirectly, in or into such country. As a condition to subscribing for the Offer Shares, each subscriber will be deemed to have made, or in some cases, be required to make, certain representations and warranties regarding their domicile that will be relied upon by Bioretec and the Sole Global Coordinator. Bioretec reserves the right, in its sole and absolute discretion, to reject any subscription for Offer Shares that Bioretec or its representatives believe may give rise to a breach or violation of any law, rule or regulation.

Matters related to the Offering are governed by the laws of Finland. All disputes arising in connection with the Offering are settled exclusively by a court of competent jurisdiction in Finland.

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SUMMARY

INTRODUCTION

*This summary contains all the sections required to be included in a summary for this type of securities and issuer in accordance with the Prospectus Regulation. This summary should be considered as an introduction to this offering circular (the "**Offering Circular**"). Any decision to invest in the securities presented in this Offering Circular (the "**Shares**"), should be based on consideration of the Offering Circular as a whole by the investor. An investor investing in the Shares could lose all or part of the invested capital. Where a claim relating to the information contained in this Offering Circular is brought before a court, the plaintiff investor might, under applicable law, have to bear the costs of translating the Offering Circular before legal proceedings are initiated. Bioretec Ltd ("**Bioretec**") assumes civil liability in respect of this summary only if it is misleading, inaccurate or inconsistent when read together with the other parts of the Offering Circular, or if it does not provide, when read together with the other parts of the Offering Circular, key information to said investors when considering whether or not to invest in the securities issued by Bioretec.*

Name of the issuer	Bioretec Ltd
Registered address	Hermiankatu 22, FI-33720 Tampere, Finland
Business identity code	1474196-9
Legal entity identifier (LEI)	7437008736AG7HY51K13
ISIN code of the Shares	FI4000480454
Trading code	BRETEC

The shares in Bioretec are issued in the book-entry system maintained by Euroclear Finland Oy ("**Euroclear Finland**"). This Offering Circular is an unofficial English language translation of the original Finnish language Prospectus (the "**Finnish Prospectus**"). The Finnish Prospectus has been approved by the Finnish Financial Supervisory Authority (the "**FIN-FSA**") as the competent authority under Regulation (EU) 2017/1129 (the "**Prospectus Regulation**") on 4 June 2021. The FIN-FSA has only approved the Finnish Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Approval by the FIN-FSA on the Finnish Prospectus shall not be considered as an endorsement of the issuer that is the subject of the Finnish Prospectus. The register number of the approval of the Finnish Prospectus is FIVA 28/02.05.04/2021.

The identity and contact details of the competent authority, the FIN-FSA, approving the Finnish Prospectus are as follows:

Financial Supervisory Authority
P.O. Box 103, FI-00101 Helsinki, Finland
Tel.: +358 9 183 51
E-mail: registry@fiva.fi

KEY INFORMATION ON THE ISSUER

Who is the issuer of the securities?

Bioretec Ltd is a limited company incorporated under the laws of Finland. Bioretec is domiciled in Tampere, Finland. Bioretec is registered in the Finnish Trade Register (the "**Trade Register**") under business identity code 1474196-9 and legal entity identifier (LEI) 7437008736AG7HY51K13.

General

Bioretec is a Finnish medical device company focusing on the development of strong and safe bioresorbable implants for pediatric and adult orthopedics. Bioretec develops, manufactures and commercializes innovative bioresorbable orthopedic devices and materials used for repairing defects in bones and soft tissue. As implants produced by Bioretec are bioresorbable, their removal from the body does not require a separate surgical operation. Bioretec's existing product portfolio comprises biopolymer products available for applications in pediatrics, trauma surgery and sport medicine. In addition to the existing biopolymer products, Bioretec develops new products based on a magnesium alloy and hybrid composite, some of which are in the commercialization phase and some in the development phase. Bioretec's business model is based on the experience and special skills of its personnel in materials and their processing gathered over decades. Bioretec is in a growth path, and it invests significantly in the sales and marketing of new and unique products and continuously develops its product portfolio and distribution channels.

Bioretec's business premises, product development premises and cleanrooms used in production are located in Tampere, Finland. Bioretec's products are used all over the world. As part of Bioretec's commercialization plan for its new products in the United States, Bioretec plans to establish its own distribution center and sales organization in the United States

Major Shareholders

The following table sets forth the shareholders owning individually or through a sphere of control at least 5 per cent of the Shares in Bioretec and voting rights attached to the Shares, pursuant to information available to Bioretec on the date of this Offering Circular. Obligations to notify and disclosure obligations of major holdings and proportions of voting rights pursuant to the Finnish Securities Markets Act (746/2012, as amended) (the "**Finnish Securities Markets Act**") only apply to issuers whose shares have been admitted to trading on a regulated market and to shareholders of such issuers and thus such obligations do not apply to Bioretec or its shareholders.

Shareholder	Shares, total	Shares, %	Votes, %[(1)]
Innovestor Kasvurahasto I Ky	1,317,650	12.3	12.3
Helsingin yliopiston rahastot	917,966	8.5	8.5
EAKR-Aloitusrahasto Oy	606,370	5.6	5.6
Springvest Oy	539,468	5.0	5.0
Major shareholders, total	3,381,454	**31.5**	**31.5**
Other shareholders	7,366,404	68.5	68.5
Total	**10,747,858**	**100**	**100**

No shareholder of Bioretec has control over Bioretec as referred in Chapter 2, Section 4 of the Finnish Securities Market Act. Bioretec's present minority shareholders have entered into a shareholders' agreement concerning Bioretec, and the agreement will be terminated when the Listing is completed. In addition, certain key shareholders have entered into a mutual shareholders' agreement, and the agreement will be terminated when the Listing is completed. Bioretec is not aware of any arrangements or agreements concluded between its shareholders which could, after the Listing, affect the control or use of voting rights in the general meetings of Bioretec. Other than the Offering, Bioretec is not aware of any arrangements the operation of which could result in a change of control in Bioretec.

Key management and auditor of Bioretec

The Board of Directors of Bioretec comprises the following persons:

Name	Year born	Position	First elected to the Board of Directors
Tomi Numminen	1971	Chairman of the Board	2016
Michael Piccirillo	1959	Member	2018
Hans Rosén	1960	Member	2018
Pekka Simula	1974	Member	2020
Sarah Fisher	1978	Member	2021

The Management Team of Bioretec comprises following persons:

Name	Year born	Position	In the Management Team since
Timo Lehtonen	1975	CEO	2019
Minna Ahlstedt-Soini	1966	Production Director	2013
Lauri Hokkanen	1986	Director, Marketing and Sales	2020
Kimmo Lähteenkorva	1965	Chief Technology Officer	2017
Mari Ruotsalainen	1974	Director, QA & RA	2004
Johanna Salko	1967	Chief Financial Officer	2021

The auditor of Bioretec is Authorized Public Accountants Ernst & Young Oy. Ernst & Young Oy has appointed Authorized Public Accountant Erika Grönlund as the responsible auditor. Erika Grönlund is registered in the auditor register in accordance with Chapter 6, Section 9 of the Finnish Auditing Act (1141/2015, as amended).

What is the key financial information regarding the issuer?

Historical financial information

The selected financial information below has been derived from Bioretec's unaudited interim financial information as at and for the three months ended 31 March 2021, drawn up to the extent required by Section 4.4 of the First North Rules, including unaudited comparative figures as at and for the three months ended 31 March 2020 and Bioretec's audited consolidated financial statements as at and for the year ended 31 December 2020 including audited comparative

consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018. Bioretec has prepared its consolidated financial statements in accordance with the Finnish Accounting Standards (the "**FAS**").

In its audit report for the financial year ended 31 December 2020, Bioretec's auditor has drawn attention to the note "Going Concern" in the financial statements. According to the audit report, Bioretec Ltd incurred a loss of EUR 2,138,875.43 for the period ended 31 December 2020. As explained in the notes to the financial statements, Bioretec Ltd's internal financing is not sufficient to cover operating costs, and its business operations require additional financing also during the coming accounting period. According to the auditor, these matters indicate a material uncertainty relating to Bioretec Ltd's ability to continue as going concern. The auditor's opinion is not modified in this respect.

	As at and for the three months ended 31 March		As at and for the year ended 31 December		
Information from the consolidated income statement, balance sheet and cash flow statement	**2021**	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	(unaudited)		(audited, unless otherwise indicated)		
Information from the consolidated income statement					
Revenue	519.4	368.2	1.499.3	1,746.5	1,585.0
Operating profit (loss)	-541.1	-523.0	-1,924.8	-1,737.4	-1,602.0
Profit (loss) for the period	-542.5	-850.0	-2,258.8	-1,734.9	-2,054.0
Information from the consolidated balance sheet					
Total assets	3,736.8	4,780.9	3,892.4	1,634.2	2,476.0
Equity total	870.8	2,140.1	1,360.1	-1,263.1	33.8
Net debt (cash)	404.5	-1,236.1	-220.1(1)	2,049.1(1)	898.6(1)
Information from the consolidated cash flow statement					
Cash flow from operating activities	-586.8	-484.5	-1,998.2	-1,217.8	-1,539.0
Cash flow from investments	-91.0	-31.6	-121.2	-54.9	-52.8
Cash flow from financing	35.0	3,755.9	4,334.5	99.0	2,409.1

(1) Unaudited.

What are the key risks that are specific to the issuer?

- Bioretec's business is in a growth stage and in part based on research and development projects, and there can be no assurance that the business will become profitable.
- The loss of market approvals for its products, failure to obtain new market approvals or a longer-than-expected duration of application processes may have a material adverse effect on Bioretec's business.
- In clinical trials or clinical use, Bioretec's new generation magnesium and hybrid composite based products may prove to be unfit for their intended purpose or have safety defects or they may not generate sufficient demand.
- The production of medical devices is a highly regulated industry, and changes in legislation or case law relating to the industry, Bioretec or Bioretec's products may be adverse to Bioretec.
- Bioretec may fail in concluding cooperation agreements or marketing its new products, both of which are material for the growth of its business, as a result of which Bioretec's products may not reach the market position envisaged for them.
- Bioretec's working capital does not satisfy the Company's needs for the next 12 months, and this may jeopardize the continuity of the Company's operations.
- Bioretec may be subjected to claims related to product liability or safety, which may have an adverse effect on its business.
- Implementation of the commercialization plan for magnesium and hybrid composite based products according to plan is dependent on the product development of the competitors and their schedules for the commercialization of their products.
- Bioretec may unintentionally infringe on the intellectual property rights of third parties, and such breaches may result in legal actions, which may have an adverse effect on the Company's business.
- Bioretec's intellectual property rights may fail to provide adequate protection for the Company's products, and the Company may fail to obtain necessary new intellectual property rights or to protect its intellectual property rights.

KEY INFORMATION ON THE SECURITIES

What are the main features of the securities?

The ISIN code of the Shares is FI4000480454. Bioretec has one share class with equal voting rights and all Shares provide equal rights to dividend. There are no voting restrictions related to the Shares. The Shares do not have a nominal value. The Shares have been issued in accordance with Finnish laws and all Shares have been paid in full. The shares are freely transferable within the limits of the transfer described below.

The Shares are issued in the book-entry system maintained by Euroclear Finland Oy.

Bioretec's business has been unprofitable so far, and due to this, it has not distributed any dividends during its operating history. The Company does not expect to distribute dividends in the short or medium term. In the long term, the Company's dividends and their distribution is linked to the Company's' results of operations and financial position. Bioretec reduced its share capital to cover losses by EUR 5,472,696.89 with a decision registered on 1 December 2020. Therefore, Bioretec cannot distribute dividends or otherwise distribute unrestricted equity prior to 1 December 2023 otherwise than in compliance with the creditor protection procedure as provided in the Finnish Companies Act (624/2006, as amended).

Where will the securities be traded?

Bioretec intends to submit its application to Nasdaq Helsinki Ltd for listing the Shares on the First North Growth Market Finland multilateral marketplace maintained by Nasdaq Helsinki Ltd ("**First North**") ("**Listing**"). Trading in the Shares is expected to commence on the First North on or about 18 June 2021 under trading code BRETEC.

What are the key risks that are specific to the securities?

- Bioretec's ability to pay dividends is uncertain, and it is possible that Bioretec will not pay dividends or make capital repayments at all.
- The Offering may not be subscribed for in full, or it may not be completed as planned or at all.
- The Listing may be delayed or cancelled.
- Bioretec's Shares have not been subject to public trading on any regulated market or multilateral trading facility prior to the Listing; the price of the Shares may fluctuate, and an active and liquid market may not develop for them.
- Companies listed on First North are not subject to the same securities market regulation as companies listed on a regulated market and thus investing in such a company may contain more risks than investing in a company listed on regulated market; as it stands, the Company cannot transfer to regulated market.

KEY INFORMATION ON THE OFFERING OF THE SECURITIES AND ADMISSION TO TRADING ON A MULTILATERAL TRADING FACILITY

Under which conditions and timetable can I invest in this security?

General terms and conditions of the Offering

Bioretec, a limited liability company incorporated in Finland, aims to raise gross proceeds of EUR 25 million by offering preliminarily a maximum of 6,410,256 new shares in the Company (the "**New Shares**") for subscription (the "**Share Issue**").

In addition, the Company's Board of Directors may grant Danske Bank acting as a stabilizing manager (the "**Stabilizing Manager**") an over-allotment option (the "**Over-Allotment Option**" and together with the Share Issue, the "**Offering**"). The Over-Allotment Option would entitle the Stabilizing Manager to subscribe for a maximum of 961,538 new shares in the Company (the "**Additional Shares**") at the Subscription Price solely to cover over-allotments, if any, in connection with the Offering. Unless the context indicates otherwise, the New Shares and any Additional Shares to be issued are together referred to herein as the "**Offer Shares**".

The Offering consists of (i) a public offering to private individuals and entities in Finland (the "**Public Offering**") and (ii) an institutional offering to institutional investors in Finland and, in accordance with applicable laws, internationally outside the United States (the "**Institutional Offering**"). A maximum of 6,410,256 New Shares in the Company (assuming that the Over-Allotment Option is not exercised) and a maximum 7,371,794 Offer Shares in the Company (assuming that the Over-Allotment Option is exercised in full) may be issued in the Offering. Please see "– *Dilution*" below.

Preliminarily a maximum of 1,025,641 New Shares are offered in the Public Offering to private individuals and entities in Finland. Preliminarily a maximum of 5,384,615 New Shares are being offered in the Institutional Offering to institutional investors in Finland and, in accordance with the applicable laws, internationally outside the United States on the terms and conditions set forth herein. Depending on the demand, the Company may reallocate New Shares between the Institutional and the Public Offerings in deviation from the preliminary number of shares without limitation. However, the minimum

number of New Shares to be offered in the Public Offering will be 1,025,641 New Shares or, if the aggregate number of shares covered by the Commitments submitted in the Public Offering is smaller than this, such aggregate number of New Shares as covered by the Commitments.

The Offer Shares are being offered in deviation from the shareholders' pre-emptive subscription right in order to enable the listing of the Shares on First North, and therefore, according to the assessment of the Company's Board of Directors, there is a weighty financial reason for the deviation from the shareholders' pre-emptive subscription right. The payment made to the Company for the approved Offer Share subscriptions will be booked in its entirety in the invested unrestricted equity fund. Thus, the Company's share capital will not increase in connection with the Offering.

Handelsbanken Fonder AB, Mandatum Life Insurance Company Limited and Kaleva Mutual Insurance Company (the "**Cornerstone Investors**") have each in June 2021 given subscription undertakings in relation to the Offering, under which the Cornerstone Investors have, each individually, committed to subscribe for Offer Shares at the Subscription Price, subject to certain conditions being fulfilled, including a condition that the maximum valuation of all of the Company's outstanding Shares (after any proceeds from the Offering and excluding treasury Shares), based on the Subscription Price, does not exceed EUR 71 million. According to the terms and conditions of the subscription undertakings, the Cornerstone Investors will be guaranteed the number of Offer Shares covered in the subscription undertaking. The Cornerstone Investors will not be compensated for their subscription undertakings. The Cornerstone Investors have given subscription undertakings as follows:

- The commitment of Handelsbanken Fonder AB undertaking amounts to EUR 4 million;
- The commitment of Mandatum Life Insurance Company Limited undertaking amounts to EUR 3 million; and
- The commitment of Kaleva Mutual Insurance Company undertaking amounts to EUR 1 million.

Subscription undertakings of the Cornerstone Investors represent approximately 32 per cent of New Shares assuming that the Over-Allotment Option is not exercised (approximately 28 per cent of Offer Shares assuming that the Over-Allotment Option is exercised), and assuming that all initially offered New Shares in the Offering are subscribed for.

Danske Bank A/S, Finland Branch ("**Danske Bank**") acts as the sole global coordinator and bookrunner of the Offering (the "**Sole Global Coordinator**"). In addition, the Company has appointed Nordnet Bank AB ("**Nordnet**") to act as the subscription place in the Public Offering.

In connection with the Offering, the Company may grant the Stabilizing Manager the Over-Allotment Option, which would entitle the Stabilizing Manager to subscribe for a maximum of 961,538 Additional Shares at the Subscription Price solely to cover over-allotments, if any, in connection with the Offering. The Over-Allotment Option is exercisable within 30 days from the commencement of trading of the Shares on First North (i.e. on or about the period between 18 June 2021 and 16 July 2021) (the "**Stabilization Period**"). The maximum number of Additional Shares represents 5.6 per cent of the Shares and votes vested by the Shares assuming that the Company will issue 6,410,256 New Shares. However, the number of Additional Shares will in any case represent no more than 15 per cent of the maximum number of New Shares offered in the Offering.

Subscription price and subscription period

The subscription price for subscription of the Offer Shares in the Institutional Offering and the Public Offering is EUR 3.90 per Offer Share (the "**Subscription Price**"). The Subscription Price may be changed during the subscription period, provided, however, that in the Public Offering, the Subscription Price cannot be higher than the original Subscription Price, i.e. EUR 3.90 per Offer Share. The change, if any, will be communicated through a company release and on the Internet at www.bioretec.com/ipo, www.danskebank.fi/bioretec-en and www.nordnet.fi/fi/bioretec. If the Subscription Price is changed, the Finnish language prospectus published by the Company in connection with the Offering (the "**Finnish Prospectus**") will be supplemented and the supplement will be published through a company release. If the Finnish Prospectus is supplemented, investors who have given their Commitments before the supplement or correction of the Finnish Prospectus have the right to cancel their Commitments as described below in section "*– Cancellation in accordance with the Prospectus Regulation*".

The final number of Offer Shares will be determined in negotiations between the Company and the Sole Global Coordinator based on the subscription offers (a "**Subscription Offer**") of institutional investors in the Institutional Offering after the expiry of the subscription period of the Institutional Offering, on or about 17 July 2021 (the "**Completion Decision**"). The amount of Subscription Price in the Public Offering and in the Institutional Offering may differ from one another only if the Subscription Price is changed so that the Subscription Price in the Institutional Offering is higher than the original Subscription Price. Information on the Completion Decision will be published through a company release and be available on the Company's website at www.bioretec.com/ipo immediately after the Completion Decision and in the subscription

places of the Public Offering and on the Internet at www.danskebank.fi/bioretec-en and www.nordnet.fi/fi/bioretec no later than the business day following the Completion Decision, i.e. on or about 18 June 2021.

The subscription period for the Public Offering will commence on 7 June 2021 at 10:00 a.m. (Finnish time) and end on 15 June 2021 at 4:00 p.m. (Finnish time).

The subscription period for the Institutional Offering will commence on 7 June 2021 at 10:00 a.m. (Finnish time) and end on 17 June 2021 at 10:00 a.m. (Finnish time).

The Company's Board of Directors has, in the event of an oversubscription, the right to end the Institutional Offering and the Public Offering at the earliest on 14 June 2021 at 4:00 p.m. (Finnish time). The Institutional and Public Offerings may be ended or not ended independently of one another. A company release regarding any ending will be published without delay.

The Company's Board of Directors is entitled to extend the subscription periods of the Institutional and the Public Offering. A possible extension of the subscription period will be communicated through a company release, which will indicate the new end date of the subscription period. The subscription periods of the Institutional and the Public Offering will in any case end on 25 June 2021 at 12:00 p.m. The subscription periods of the Institutional and the Public Offering may be extended independently of one another. A company release concerning the extension of a subscription period must be published no later than on the estimated final dates of the subscription periods for the Institutional and Public Offerings stated above.

Cancellation in accordance with the Prospectus Regulation

A commitment to subscribe for Offer Shares in the Public Offering (a "Commitment") cannot be amended. A Commitment may only be cancelled in the situations provided for in the Prospectus Regulation.

If the Finnish Prospectus is supplemented in accordance with the Prospectus Regulation due to a material error or omission or due to material new information that has become known after the FIN-FSA has approved the Finnish Prospectus and before the public offering of the Offer Shares ends, investors who have given their Commitments before the supplement or correction of the Finnish Prospectus have, in accordance with the Prospectus Regulation, the right to cancel their Commitments within three (3) working days after the supplement has been published. The use of the cancellation right requires that the error, omission or material new information that led to the supplement or correction has become known prior to the end of the subscription period. Any cancellation of a Commitment must concern the total number of shares covered by the Commitment given by an individual investor. If the Finnish Prospectus is supplemented, the supplement will be published through a company release. The company release will also include information on the right of the investors to cancel their Commitment in accordance with the Prospectus Regulation.

Trading in the Shares

Before the execution of the Offering, the Shares in the Company have not been subject to trading on any multilateral trading facility or regulated market. The Company intends to file a listing application with Nasdaq Helsinki Ltd to list the Shares on First North. Trading in the Shares is expected to commence on the First North on or about 18 June 2021. The trading code of the Shares is BRETEC and the ISIN code is FI4000480454.

Fees and Expenses

The Company will pay the Sole Global Coordinator a sales fee which is determined on the basis of the gross proceeds from the Offer Shares. In addition, the Company may, at its sole discretion, pay the Sole Global Coordinator a performance fee. In addition, the Company has undertaken to reimburse the Sole Global Coordinator for certain expenses. The Company expects to pay approximately EUR 2.8 million in fees and expenses (including the discretionary fees) in connection with the Offering.

Dilution

The maximum number of Offer Shares offered in the Offering represents 41 per cent of all Shares and 41 per cent of all votes after the completion of the Offering. In the event that existing shareholders of the Company do not subscribe for the Offer Shares in the Offering, their total holding of Shares would be diluted by 41 per cent and the total holding of voting rights would be diluted by 41 per cent.

The Company's equity per Share, excluding the treasury shares, stood at EUR 0.01 on 31 March 2020.

Lock-up

The Company is expected to commit and certain largest shareholders have committed during the period that will end 360 days from the Listing, without the prior written consent of the Sole Global Coordinator, not to issue, offer, pledge, sell, contract to sell, sell any option rights or contract to purchase, purchase any option or contract to sell, grant any option right or warrant to purchase, lend or otherwise transfer or dispose of (or publicly disclose such transaction), directly or indirectly, any Shares or any securities they hold entitling to Shares or exchangeable for or convertible into or exercisable for Shares, or enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Shares, whether any such transactions are to be settled by delivery of the Shares or other securities, in cash or otherwise or make a proposal to the General Meeting to execute such arrangement. The lock-up does not apply to the measures related to the execution of the Offering.

The members of the Board of Directors and the management team of the Company have entered into a lock-up agreement with similar terms to that of the Company that will end 360 days from the Listing.

In aggregate, the terms of lock-up agreements apply to approximately 32 per cent of the Shares after the Offering without the Over-Allotment Option (approximately 30 per cent with the Over-Allotment Option assuming that all Offer Shares preliminarily offered in the Offering are subscribed for in full). The proportion of the Shares represented by the lock-up has been calculated prior to the members of the Board of Directors and management team or the current shareholders have made any possible subscriptions in the Offering.

Why is this Offering Circular being produced?

Bioretec has prepared and published this Offering Circular to offer the Offer Shares to the public.

Reasons for the Offering

The objective of the Offering and Listing is to enable investments into the commercialization of the Company's RemeOs™ Screws and research and development as well as commercialization of future products of the RemeOs™ product family and thus support the Company's growth strategy with the proceeds received from the Offering.

The Offering and the Listing are expected to increase the general interest of the investors, clients, surgeons and business partners towards the Company, as well as enhance the Company's attractiveness from the perspective of potential employees and its ability to engage its current employees with the Company's activities. In addition, the Offering and the Listing are expected to expand the Company's owner base with domestic and foreign investors, as well as enable a liquid market for the Company's Shares in the future.

Use and amount of proceeds

Bioretec aims to raise gross proceeds of approximately EUR 25 million from the Share Issue, assuming that the Share Issue is fully subscribed. Bioretec estimates the charges, fees and expenses to be paid by Bioretec in connection with the Offering to amount to approximately EUR 2.8 million (assuming that Bioretec raises gross proceeds of EUR 25 million), as a result of which Bioretec estimates to receive net proceeds of approximately EUR 22.2 million from the Share Issue.

The Company intends to use the gross proceeds from the Share Issue to support the Company's growth strategy predominantly in the following way:

- Approximately 50 per cent of the gross proceeds from the Share Issue will be used to cover the commercialization costs of Bioretec's RemeOs™ product family incurred for example from establishing a sales and distribution organization in the United States;
- approximately 20 per cent of the gross proceeds from the Share Issue will be used for research, development and clinical studies of Bioretec's new products to be launched after the RemeOs™ Screws;
- approximately 10 per cent of the gross proceeds from the Share Issue will be used to cover the capital expenditures incurred from the expansion of Bioretec's production. The expenditures include for example an investment into new CNC machines intended to improve the ability of Bioretec to scale up its production capacity; and
- approximately 20 per cent of the gross proceeds from the Share Issue will be used for other corporate purposes such as to repay Bioretec's current capital loans of approximately EUR 3.3 million (including the interest accrued thereto by the estimated payment date) (including all convertible capital loans held by the US and Finnish lenders as well as product development loans from Business Finland) and to pay charges, fees and expenses to be paid by Bioretec in connection with the Offering.

Interests Related to the Offering

The fees to be paid to the Sole Global Coordinator are, in part, linked to the proceeds from the Offering.

Danske Bank, acting as the Sole Global Coordinator, as well as other entities in the same group, may purchase and sell the Shares for their own or their customers' account prior to, during and after the Offering subject to applicable legislation and regulations.

Danske Bank, acting as the Sole Global Coordinator, as well as other entities in the same group have provided and may in the future provide to the Company investment or other banking services in accordance with their ordinary business.

Applicable law and dispute resolution

The Offering shall be governed by the laws of Finland. Any disputes arising in connection with the Offering shall be settled by a court of competent jurisdiction in Finland.

RISK FACTORS

Investing in the Shares involves certain risks, some of which may be significant. Investors considering investing in the Shares are encouraged to carefully review the information contained in this Offering Circular, and in particular, the risk factors described below. The following description of the risk factors is based on information known and assessed on the date of this Offering Circular and, therefore, it is not necessarily exhaustive. Furthermore, Bioretec's business may involve risks that are not known or considered material at the date of this Offering Circular but that could have an adverse effect on Bioretec's business, financial position, results of operations or future prospects as well as on the value of the Shares. Should one or more of the risk factors materialize, it could have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects as well as on the value of the Shares. Should one or more of the risks materialize or the likelihood of their materialization increase, the investors in the Shares could lose their investment partially or in full.

The risks presented herein are divided into five categories depending on their nature. Although the order in which the categories are presented does not indicate their materiality, the risks presented first in each category are those which Bioretec assesses to be the most material, taking into consideration their potential negative impact on Bioretec and the probability of their occurrence. The categories are:

1. *Risks related to Bioretec's operating environment, industry and regulation*
2. *Risks related to Bioretec's business operations*
3. *Risks related to product development, manufacturing and commercialization of products*
4. *Risks related to Bioretec's financing*
5. *Risks relating to the Shares, the Offering and the Listing*

Risks related to Bioretec's operating environment, industry and regulation

The production of medical devices is a highly regulated industry, and changes in legislation or case law relating to the industry, Bioretec or Bioretec's products may be adverse to Bioretec

The production of medical devices is a highly regulated industry. Bioretec's products are sold in approximately 40 countries, and furthermore, new distribution agreements are continuously negotiated (for more information, see "*Business overview – Sales and customers – Distribution channels for existing products*"). Consequently, Bioretec's products are required to comply with, in addition to the legislation applied in Finland and the European Union, statutory requirements for the products in each country where Bioretec's products are sold. Furthermore, Bioretec's operations are subject to significant amount of legislation, standards and regulations, which relate to, for example, product development, product testing, manufacturing process, safety of the manufacturing process, the equipment used in the manufacturing process, sterilization of the products, the Company's premises and quality management systems, packaging of the products, labelling, distribution, import and export as well as registration and commercialization of products (for more information, see "*Business overview – Regulatory environment and standards*").

In its operations, the Company must comply with a large amount of legislation, various standards and regulations governing its industry, as well as be able to respond to changes made to them from time to time. Bioretec may incur additional costs from adapting its operations to changes in legislation, standards and regulations. For example, Regulation (EU) 2017/745 of the European Parliament and of the Council on medical devices that came into effect on 25 May 2017 and will be applied in the European Union as of 26 May 2021, will replace, after a transition period, the previous Council Directive 93/42/EEC on medical devices, and has tightened statutory requirements applied to Bioretec and has required certain changes in the Company's operations (for more information, see "*Business overview – Regulatory environment and standards*"). Failure to comply with applicable legislation, standards or regulation may result in restrictions on or suspension of Bioretec's operations, which may be temporary or permanent. In addition to this, the Company may be subjected to various sanctions, such as fines or sanctions under civil or criminal law, third parties may present claims to Bioretec and it may incur additional costs.

The materialization of any risk described above may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects, as they may impair the Company's product development, commercialization and production of its products, or result in administrative penalties.

Global emergencies may have a material adverse effect on Bioretec's business

Global emergencies, such as the ongoing pandemic caused by COVID-19, may have both direct and indirect effects on Bioretec's business due to, among others, restrictions and other measures to limit an epidemic or pandemic and prevent its spread. Bioretec uses foreign experts and employees in its business. In several counties due to the COVID-19

pandemic, the mobility of people has been limited by closing areas and cities, as well as by ordering individuals to quarantine to prevent the spread of the COVID-19 virus. The mobility of people has also been limited internationally by imposing various restrictions of different durations on travel between countries, and borders have been forced to be closed completely from time to time. Gatherings of people have also been restricted in several countries. Such restrictions in emergencies may impact the availability and use of the experts and employees utilized by Bioretec. Should Bioretec not be able to, due to the restrictions, utilize its personnel and experts in the development, commercialization and production of its products as planned, this may lead to delays and increase costs in the development, commercialization and production of products.

Emergencies may also impact, for example, the opening hours of embassies. The application process for the residence permit for an employed person also includes an interview carried out in a mission of Finland. Restrictions on the mobility of people may prevent the applicant from travelling to the mission where the interview is intended to be arranged, and in addition to this, restrictions on gatherings or the opening hours of missions may completely prevent the arrangement of interviews. Therefore, the emergencies may also impact, in addition to the mobility of the employees, the approval process of the residence permits of the employees and the availability of the permits, which may prevent their entry to the country and, as such, weaken the availability and use of the employees.

The restrictions on mobility may limit or even halt the delivery of materials due to disruptions and problems occurring in global transport traffic. Bioretec uses international suppliers for providing the raw materials used in its products. For example, the magnesium used in the products of the Bioretec's new generation RemeOs™ product family is currently provided by a supplier located in the United Kingdom, where mobility has been restricted significantly during the ongoing COVID-19 pandemic. In addition to Finland, restrictions on mobility and lockdowns in other countries as well may impact the availability of raw materials and result in delays in raw material deliveries, which may affect Bioretec's ability to manufacture its products, as well as the production schedules of the products.

Epidemics and pandemics may also lead to large-scale absences due to sickness and quarantines among Bioretec's personnel. As at the date of this Offering Circular, the number of Bioretec's employees was 24. The manufacture of Bioretec's products requires certain types of production facilities (for more information, see "*Business Overview – Production – Production Facilities*"), and it is not possible to manufacture the products through remote work. Due to the number of the employees and the characteristics of the manufacturing process, a simultaneous absence or quarantine of several of Bioretec's employees may delay Bioretec's manufacturing process or even interrupt it completely for a while. This could result in Bioretec failing to keep the delivery schedules agreed with its contractual parties, which may incur additional costs for Bioretec and lower the Company's revenue.

The impact of the above-mentioned disruptions and other problems related to the availability and utilization of the workforce, absences due to sickness and logistics of raw material deliveries is not limited to Bioretec only, but they may equally affect its suppliers of raw materials and other production inputs, the distributors of Bioretec's products and other contractual parties. As Bioretec has delivery, sales and other agreements with international operators across the world and it also utilizes foreign experts and employees in its business, the emergencies and restrictions in other countries than Finland may also have a material adverse effect on Bioretec's operations.

Furthermore, the approval process for the COVID-19 vaccines by the authorities of various countries has also delayed the approval processes for other products, for example, in the United States, which may also delay the launch of the marketing phase of products belonging to the Bioretec's new generation RemeOs™ product family if the application processes for the products prove to be longer than expected. Restrictions on mobility, gatherings and leisure-time activities also decrease the mobility of people, and this leads to a decrease in accidents requiring surgery. Congestion in the health care systems of various counties may also lead, and has already led, to the postponement of non-critical surgical operations, which may temporarily decrease the demand for Bioretec's current products used in special health care.

The COVID-19 pandemic and the resulting restriction measures have been estimated to have negatively impacted and continue to affect demand for orthopedic trauma products which, together with the global economic impact of the pandemic and, therefore, the impact on the Company's export market, affected Bioretec's revenue negatively in 2020. The COVID-19 pandemic has also slowed the Company's research relating to its new products. The effects of the COVID-19 pandemic to Bioretec have been described below in sections "*Market and industry review – Growth of the market, market drivers and trends – Impact of the COVID-19 pandemic on the demand for orthopedic trauma products*", "*Operating and financial review – Key factors affecting the results of operations*" and "*Operating and financial review – Results of operations*".

The ultimate impacts (including their timing, duration and scope) of the COVID-19 pandemic ongoing as at the date of this Offering Circular on Bioretec's business and the suppliers of Bioretec's raw materials and other production inputs, distributors and other contractual parties is difficult to estimate, especially as the pandemic situation and the subsequent measures taken by public authorities change rapidly. Bioretec estimates that the pandemic situation may affect, at least in the short term, the availability and use of experts and employees, as well as lead to delays in raw material deliveries, which

in turn may delay Bioretec's own production and increase its costs. The materialization of any risk described above may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects by, among other things, slowing down product development and production, as well as by decreasing demand.

Political or economic uncertainty in certain countries may have an adverse effect on Bioretec's business

Bioretec has entered into distribution agreements concerning the sale of its existing products in approximately 40 countries, and it continues to negotiate new distribution agreements (for more information, see "*Business overview – Sales and customers – Distribution channels for existing products*"), in addition to which Bioretec aims to commercialize products of its new generation RemeOs™ product family first in the United States and Europe and later elsewhere in the world (for more information, see "*Business overview – Products – New products*"). Since Bioretec is directing its exports to countries across the world, it is exposed to, for example, the political, economic, legislative and social conditions in each country to which it directs its exports. Due to the international nature of its operation, Bioretec is exposed to the impacts of risks related to international trade. Such risks related to international trade which, if materialized, could have an adverse effect on Bioretec's business, include, for example, economic and political uncertainty, international crisis situations, industrial action and strikes, changes in trade and tax legislation, and sanctions, terrorist attacks or acts of war suffered by the export countries or Finland.

In 2020, Bioretec's revenue was EUR 1.5 million. In 2020, 47 per cent of Bioretec's revenue came from Europe (42 per cent in 2019 and 37 per cent in 2018), 5 per cent from the United States (7 per cent in 2019 and 4 per cent in 2018) and 49 per cent from the rest of the world (51 per cent in 2019 and 59 per cent in 2018). Measured by revenue, the Republic of Turkey and Russia in Europe, the People's Republic of China in Asia and the Islamic Republic of Iran in the Middle East have historically been the most significant export countries for Bioretec. The Company's largest export countries in distribution cooperation are currently Russia and China, which together accounted for approximately 47 per cent of the Company's revenue in 2020 (for more information on the geographical distribution of sales, see "*Business overview – Sales and customers – Geographic breakdown of sales*"). There has historically been a risk of political uncertainty in these countries, due to which many other countries have imposed trade sanctions on them, restricting exports to these countries. In recent years, the European Union and the United States have imposed trade sanctions on Russia due to, among other things, the situations in eastern Ukraine and Crimea. Similarly, in recent years, there have been tensions between the United States and China regarding trade, and these have even escalated to a trade war. Both the European Union and the United States have imposed numerous economic sanctions on Iran, in addition to which relations between Iran and the United States have also led to military action in recent years. Bioretec cannot be certain that the validity of such sanctions will not be extended or that new sanctions will not be imposed on the countries in question, or other countries, in which Bioretec has concluded agreements on the sale of its products. Furthermore, there can be no certainty that the countries targeted by the aforementioned measures will not impose similar restrictions, which could escalate the situation to a trade war. Similarly, there can be no certainty that the conflicts will not further escalate in the future and lead to, for example, new or broader military action than before.

Bioretec has concluded distribution agreements concerning its existing products in the emerging economies as well. The economic, political and administrative systems and legal systems of the countries in question are not necessarily fully established, which could pose a risk relating to, for example, compliance with and enforcement of concluded agreements in these countries. Problems relating to the enforcement of agreements could lead to Bioretec being unable to effectively require its contractual counterparties to comply with their agreements, which could lead to significant costs for Bioretec. Due to these unstable systems, the risks relating to such countries, and their effects, cannot be fully predicted.

The materialization of any risk described above may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects by, among other things, preventing Bioretec to distribute its products to such countries or by hampering the delivery or production of products significantly.

Risks related to Bioretec's business operations

Bioretec's business is in a growth stage and is in part based on research and development projects, and there can be no assurance that the business will become profitable

In addition to the production and sales of its existing products, Bioretec's present business is focused on the development and commercialization of new products. As at the date of this Offering Circular, Bioretec is striving to commercialize its first magnesium-based products belonging to the RemeOs™ product family, and furthermore, it continues to develop and test completely new products, as well as develop its existing products in such a way as to expand their indications (for more information, see "*Business overview – Products*" and "*Business overview – Research and development*"). The development and commercialization of Bioretec's products has incurred, and will continue to incur in the future, significant costs for the Company. For example, Bioretec estimates that it will need approximately EUR 10–15 million of external

financing for the implementation of its commercialization plan in the United States, if the commercialization plan progresses as planned (for more information, see "*Business overview – Products – Commercialization plan for the new products in the United States*"). Obtaining additional financing may also affect the relative ownership in the Company and the distribution of any future earnings between the Company's shareholders.

In the medium term, the Company's future prospects and ability to generate profits are significantly dependent on the Company's success in obtaining market approvals for its first magnesium-based products of the RemeOs™ product family in the United States and Europe, and the timetable of obtaining the market approvals. In the long term, the Company's future prospects and ability to generate profits are dependent on the success of clinical testing and commercialization of new products based on magnesium and hybrid composite technology in the future and on whether the Company is able to adhere to the planned schedule related to this. For more detail on factors affecting results of operations, see "*Operating and financial review – Key factors affecting the results of operations*".

As a significant part of Bioretec's future revenue is expected to originate from products that are still in the development or commercialization phase, it is difficult to foresee the development of Bioretec's revenue, and therefore there can be no assurance that Bioretec will be able to make its operations profitable. Even if the Company succeeds in achieving profitable operations, there can be no assurance that Company's operations will remain profitable in the medium or long term.

Bioretec may be subjected to claims related to product liability or safety, which may have an adverse effect on its business

In Bioretec's industry, the risk of becoming the subject of product liability and safety claims is significant. While as at the date of this Offering Circular Bioretec is not aware of any product liability or safety claims against the Company, the Company may be subjected to product liability and safety claims in the future. Claims could be filed with respect to the products when they are on the market, but also during clinical tests before they are commercially marketed and sold. Product liability and safety claims concerning Bioretec's products could lead to a temporary or permanent suspension of the products' sales or the temporary or permanent suspension of the development and testing of Bioretec's products that are in the development or research phase.

Bioretec plans to introduce to the market magnesium-based and hybrid composite based products belonging to the RemeOs™ product family, which are made from completely new material. The materials have been tested on a specific population during the testing phase, and therefore there can be no certainty as to how the material will react in a population in which it has not been tested. New products manufactured from new materials always involve a higher risk of becoming subject to product liability and safety claims than existing materials and products already in clinical use. However, there can be no assurance that product liability or safety claims could not be filed against Bioretec's existing products, as well as the new products.

Product liability and safety claims may result in significant liabilities for the Company, which may result in considerable costs for Bioretec. Potential court cases would also require the Company to commit significant personnel and time resources, as well as financial resources, and there are no assurances that the Company would have such resources available at the time of the legal proceedings or that the Company would win such legal proceedings. Additionally, the Company is planning to commercialize its new generation products in the United States, where product liability and safety claims could lead to, on Finland's scale, significant compensation for damages should such claims against the Company be pursued in the United States. The risk of the size of the claims will grow further if such claims are pursued through class-action suits.

In addition to the direct costs of court cases and the liabilities arising from them, product liability and safety claims lodged against the Company and its products could also lead to indirect costs due to reputational damage arising from allegations, demands and legal proceedings. Allegations of safety deficiencies in Bioretec's products and claims and legal proceedings related to them expose the Company to a significant reputational risk. Should Bioretec's reputation among its partners or distributors or the users of its products, i.e. hospitals and doctors, be damaged, it could have an effect on demand for Bioretec's products and consequently on Bioretec's financial position.

The risk of becoming subject to product liability and safety claims requires the Company to maintain broad and adequate insurance cover. There can be no assurance that the insurance cover obtained and maintained by the Company will suffice to cover the Company's potential product and safety liabilities or that the Company will continue to be able to obtain and maintain adequate insurance cover in the future. For more information on the Company's insurance cover, see "*Business overview – Insurance*". Bioretec may not necessarily be able to estimate the extent of potential claims for compensation in advance and may therefore fail to expand its insurance cover appropriately following its expansion into the United States. Therefore the risk that the level of insurance cover maintained by Bioretec is not adequate will grow when the commercialization plan is implemented in the United States. The Company's plan to commercialize its new generation

products in the United States is also expected to raise the price of Bioretec's insurance cover, which will increase the costs of maintaining adequate insurance cover for Bioretec.

The materialization of any risk described above may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Bioretec may unintentionally infringe on intellectual property rights of third parties, and such breaches may result in legal actions, which may have an adverse effect on the Company's business

It is important for Bioretec's reputation and business that the Company does not infringe on the intellectual property rights of third parties in its business activities. However, the Company may unintentionally infringe on the intellectual property rights of third parties in its business activities, and there are no assurances that the Company's current or future products do not currently, or will not in the future, infringe on the intellectual property rights of third parties. Such infringements may lead to legal action. Such legal action would, first of all, require significant personnel and time resources, as well as financial resources, and there are no assurances that the Company would have the necessary resources available at the time of the legal action. Legal action could also lead to restrictions on the Company's operations, annulment or abrogation of the Company's intellectual property and liability to pay compensation for damages. As at the date of this Offering Circular, Bioretec's subsidiary BRI.Tech GmbH ("**BRI.Tech**") is involved in a patent dispute concerning patent EP2857536 in which the European Patent Office ("**EPO**") has on 10 May 2021 issued a decision invalidating BRI.Tech's patent. Bioretec plans to appeal the decision. The dispute concerns only the European patent and the patent to which it relates additionally extends only to the use of magnesium alloy in implants in pediatric use (for more information on the patent dispute, see "*Business overview – Legal and arbitration proceedings*").

In addition to these, an alleged or proven infringement of the intellectual property rights of a third party could damage the Company's brand and reputation, which could impact the Company's ability to enter into new contractual relationships or maintain its present ones, weaken demand for the Company's current products and make it more difficult to commercialize new products. The materialization of any risk described above may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Bioretec's intellectual property rights may fail to provide adequate protection for the Company's products, and the Company may fail to obtain necessary new intellectual property rights or to protect its intellectual property rights

Bioretec's intellectual property rights consist of patents, trademarks, licenses, domain names and unregistered intellectual property rights, such as know-how and trade secrets. Bioretec continuously assesses the adequacy of the protection for its products provided by its intellectual property rights, and submits new applications if they are considered to provide strategically valuable protection for Bioretec's innovations (for more information, see "*Business overview – Intellectual property rights*"). However, there are no assurances that Bioretec will succeed appropriately in its assessments, and it may fail to protect its products sufficiently, in which case third parties may benefit from Bioretec's innovations. In such a case, Bioretec could lose some of its competitive advantage over its competitors, which would have an adverse effect on the Company's financial position. Even if the Company is successful in appropriately identifying the need for new intellectual property rights, there are similarly no assurances that an application for intellectual property rights already submitted by the Company, or one submitted in the future, will be successful and the intellectual property rights being applied for will be granted to the Company. Furthermore, there are no assurances that the Company will be successful in maintaining intellectual property rights already granted to it, as it is possible that the Company will lose one or more of its existing intellectual property rights as result of, for example, claims by third parties. As at the date of this Offering Circular, Bioretec's subsidiary BRI.Tech is involved in a patent dispute concerning patent EP2857536 in which EPO has on 10 May 2021 issued a decision invalidating BRI.Tech's patent. Bioretec plans to appeal the decision (for more information on the patent dispute, see "*Business overview – Legal and arbitration proceedings*").

Despite Bioretec's protection measures, its competitors or other third parties may use Bioretec's intellectual property rights unlawfully, in addition to which disputes may arise over the ownership of the intellectual property rights. In such an event, the Company may be forced to defend its intellectual property rights in court, for example, which may require it to commit significant personnel and time resources, as well as financial resources. Furthermore, there are no assurances that the Company would succeed in defending its intellectual property rights effectively. The Company may also decide to resort to measures with which it aims to prevent its competitors from obtaining protection for their intellectual property rights. Such measures could require it to commit significant resources and result in significant costs. There can be no assurance in advance that, in the aforementioned situations, the Company will have all the necessary resources to defend its intellectual property rights, pursue claims or undertake other measures.

Failure in the protection of intellectual property rights, acquisition of new intellectual property rights or defense of existing intellectual property rights may have a material adverse effect on Bioretec's business, financial position, results of

operations, and future prospects by, among other things, hindering product development and maintenance of the existing product portfolio.

Bioretec is dependent on its ability to recruit and commit key individuals

As is typical for a growth company, Bioretec has a small workforce compared to companies with a more established business. As at the date of this Offering Circular, the number of Bioretec's employees is 24 (for more information, see "Business overview – Personnel and organization"). The competence and experience of the Company's key personnel and other key individuals are significant factors for the development of Bioretec's business. Since the development of Bioretec's business is materially dependent on the competence of the Company's employees and management, it is also materially dependent on the Company's ability to commit its current key individuals and to recruit new, competent personnel and other key individuals in the future, where necessary. Due to the small number of the Company's personnel, the departure of several key individuals simultaneously from the Company could cause temporary delays in the Company's manufacturing process and the planned development of its operations.

Bioretec's industry requires Bioretec's employees and management personnel to possess special competence and expertise in Bioretec's products. Experts in the field are fairly scarce across the world and, especially in Finland, it may be difficult to find top-level experts. For this reason, the Company may be forced to recruit experts both in Finland and abroad, and has historically done so. Due to the small number of experts, the recruitment processes may be lengthy and recruitments abroad may prolong it even further, which could result in delays in, for example, the Company's manufacturing process, the development of new products and the planned development of the operations.

To succeed in recruiting the best experts in its field and to commit them to the Company, Bioretec must also maintain its position as an attractive employer and partner. Bioretec's reputation and ability to develop its product portfolio, business and financial position are key factors in this respect. Negative publicity concerning, for example, Bioretec's financial position, the safety of Bioretec's products, the testing results of upcoming products, intellectual property rights and potential breaches thereof, compliance with legislation and official regulations, the fulfilment of other obligations or failure in the execution of future plans could weaken Bioretec's reputation among experts in its field and thus weaken Bioretec's ability to recruit competent personnel and other key individuals.

Failure in committing or recruiting key employees and other key individuals may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Bioretec's operations are exposed to legal risks

During the course of its normal business, Bioretec may become a party to court cases or administrative procedures (relating, for example, to contractual liabilities, distribution network and the interpretation of distribution agreements, employer obligations, interpretations of employment or managerial contracts, competitive matters, privacy, processing of personal data and data protection legislation, tax interpretations, fraud, bribery and crime), and it may also be subjected to tax audits and administrative audits. Should administrative audits lead to the initiation of administrative procedures, such procedures may become very long in duration and as such require significant personnel and time resources, as well as financial resources. In addition, possible penalty payments imposed as a result of administrative audits may be significant. Court cases may result in, for instance, Bioretec being held liable to compensate for damages, fines being imposed or a prohibition on certain business activities engaged in by Bioretec. Court cases may also have a negative effect on Bioretec's reputation among its present or potential customers, employees and other stakeholders. If the outcome of legal proceedings results in sanctions being imposed on Bioretec or damage to its reputation, this may have an adverse effect on Bioretec's business, financial position, results of operations and future prospects. As at the date of this Offering Circular, Bioretec's subsidiary BRI.Tech is involved in a patent dispute concerning patent EP2857536 in which EPO has on 10 May 2021 issued a decision invalidating BRI.Tech's patent. Bioretec plans to appeal the decision (for more information on the patent dispute, see "Business overview – Legal and arbitration proceedings").

Problems in the operation of information systems used by Bioretec could have a material adverse effect on Bioretec's business

Bioretec's business is dependent on the proper functioning of the information systems and technologies it uses. Bioretec's most important information systems relate to research and development, quality assurance, production management, payroll and payment processing. The Company's ERP system is partially developed for the Company's own specific needs (for more information, see "*Business overview – IT*"). There can be no certainty that the information systems used by Bioretec will not require repair measures or will not experience technical or other faults due to, for example, viruses, hacking, human error, power outages and other operating disturbances.

Significant disturbances in Bioretec's information systems could lead to the loss of information that is vital for Bioretec or, for example, to delays in financial reporting or cash transfers. Problems in the operation of information systems could therefore have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Fluctuation in exchange rates may have an adverse effect on Bioretec

Bioretec has entered into distribution agreements concerning the sale of its existing products in approximately 40 countries, and it continues to negotiate new distribution agreements. Since Bioretec's reporting currency is the euro, it is exposed to the risk of fluctuations in exchange rates every time it makes or receives payments in a currency other than the euro.

Bioretec sells its existing biopolymer products under its own brand mainly through regional distributors, in which case Bioretec in practice sells its products to a local distributor, which sells the products to their end users, namely hospitals and surgeons (for more information on the distribution of products, see "*Business overview – Sales and customers – Distribution channels for existing products*"). If Bioretec fails to negotiate agreements denominated in euro with its distributors in the future, it could become exposed to an even bigger foreign exchange risk than currently, as in such an event it would be forced to accept payments in several different currencies from its distributors. Some of the risk relating to fluctuations in exchange rates is beyond Bioretec's control because the foreign exchange contracts concluded by Bioretec's distributors could also have an effect on Bioretec.

A significant proportion of Bioretec's revenue originates from countries with an elevated risk of fluctuation in exchange rates. Such countries include, for example, Russia, China and Turkey. The Company's largest export countries in distribution cooperation are currently Russia and China, which together accounted for approximately 47 per cent of the Company's revenue in 2020. Should foreign exchange rates fluctuate significantly in these or other countries where Bioretec's products are sold, this may have an adverse effect on Bioretec's business, results of operations, financial position and future prospects. The higher the proportion of the Company's revenue coming from such a country where the exchange rate fluctuates significantly, the more significant this adverse effect is. Should the uncertainty in the global economy increase due to, for example, the ongoing COVID-19 pandemic or other reasons, this may also increase the risk of adverse fluctuation in exchange rates.

Fluctuations in exchange rates also impact Bioretec through demand. A significant change in exchange rates in a country where Bioretec's products are sold could impact the competitiveness of Bioretec's products compared to the products of competitors that are manufactured and/or sold in another currency. For instance, a significant decline in the value of a currency could make Bioretec's products too expensive in the currency area in question, in which case demand for the products could collapse quickly or completely cease to exist. The materialization of such an indirect risk related to the exchange rate risk may have a material adverse effect on Bioretec's business, results of operations, financial position and future prospects. The bigger the proportion of Bioretec's revenue generated by such a country where fluctuations in exchange rates have a negative effect on demand for Bioretec's products, the more material this negative impact is.

Risks related to product development, manufacturing and commercialization of products

The loss of market approvals for its products, failure to obtain new market approvals or a longer-than-expected duration of application processes may have a material adverse effect on Bioretec's business

Bioretec is a growth-stage company whose future outlook and future profit-making ability are materially dependent on the success of the clinical tests and commercialization plan for the Company's new magnesium-based and hybrid composite based products (see above *"– Risks related to Bioretec's business operations – Bioretec's business is in a growth stage and is in part based on research and development projects, and there can be no assurance that the business will become* profitable"). The progress of the approval process of the Company's new products is partly beyond the control of Bioretec, and thus Bioretec is unable to influence, for example, how long it will take the authorities to process the market approval applications for the products. For instance, the approval process of the authorities in various countries for COVID-19 vaccines has delayed the application processes for other products, and this effect may persist while Bioretec's market approval applications are pending (for more information, see above *"– Risks related to Bioretec's operating environment, industry and regulation – Global emergencies may have a material adverse effect on Bioretec's business*"). Furthermore, there are no assurances that other factors slowing down the processes will not emerge before the start of, or during, the market approval processes for Bioretec's products. The slowing of the approval processes would affect the planned timetable for Bioretec's commercialization plan, and delays in the timetable could incur significant additional costs for Bioretec.

Bioretec's future outlook and profit-making ability are, in the medium term, materially dependent on whether the Company will succeed in gaining market approvals for its first magnesium-based products in the United States and Europe (for more detail on factors affecting results of operations, see "*Operating and financial review – Key factors affecting the results of*

operations"). However, there are no assurances that the authorities will grant Bioretec the market approvals it is applying for. The safety and efficacy of the products, proven through clinical studies, are prerequisites for obtaining s market approvals. The purpose of clinical trials is to assess the functionality, effectiveness, safety, i.e. benefits and, on the other hand, clinical adverse and side effects, i.e. risks. It is common knowledge that magnesium-based materials donate hydrogen gas as a byproduct upon their biodegradation.[1] Based on the available clinical trial data, this has not caused any clinical problems with the Company's new RemeOs™ products but, on the other hand, due to the limited amount of available clinical information, the theoretical risk of potential clinical problems cannot be completely excluded.

Even though, according to the Company's management, the RemeOs™ products are well positioned in relation to the US compensation system, it possible that the new products will not be covered by insurance compensation or that products once compensated will lose their compensability in the US or in other market areas which could have a debilitating impact on demand for products. For more information on the importance of product compensability, see "*Business overview – Products – Commercialization plan for the new products in the United States – Pricing of the new products*".

A large proportion of the products belonging to the Company's RemeOs™ product family are still in the development phase (for more information, see "*Business overview – Products – New products – Products in the development phase*"), and thus there are no assurances as to whether they will be suitable for their purpose, safe and effective and whether they can thus be commercialized according to plan or at all. Should Bioretec fail to obtain the necessary market approvals and the authorizations are not granted, Bioretec will not be able to execute its commercialization plan, which would lead to a significant deterioration in the Company's future outlook and future profit-making ability and it could be possible that Bioretec would not, in this case, be able to turn its business profitable at all. In such an event, Bioretec would be forced to alter its product development and commercialization plans and further develop its future products, which would require significant additional investments in product development and lead to a decrease in expected earnings. Furthermore, there are no assurances that Bioretec would be able to obtain the financing needed for additional investments.

After granting a market approvals, the authorities in the countries where Bioretec's products are sold subject Bioretec to post-permit supervision. Additionally, for example in Finland, a market approval is valid for five years at a time, after which the holder of the market approval must submit an application for the renewal of the market approval to the local authority. There can be no assurance that the supervision to which Bioretec is subject does not reveal factors that could have an impact on the validity of the market approvals, and no assurance that Bioretec's market approvals will be extended on the basis of an application for renewal. Bioretec may also lose a granted market approval, for example, because of safety deficiencies emerging in the products (for more information on regulation relating to supervision and the products, see "*Business overview – Regulatory environment and standards*"). Therefore there can be no certainty that, having received market approvals for its products, Bioretec will also manage to retain these permits. In addition, there can be no certainty that, despite being granted a market approval, Bioretec and the distributors of its products would be able to guarantee that the Company's products will also in the future always meet the statutory requirements for products in each country where Bioretec's products are sold. The temporary or permanent loss of a market approval would suspend the sale of Bioretec's products and thus reduce the amount of revenue generated by the sales. Since a significant proportion of Bioretec's future revenue is expected to accrue from the sale of Bioretec's new magnesium-based and hybrid composite based products of the RemeOs™ product family, this risk is particularly significant with respect to these products.

The loss of market approvals for its products, failure in obtaining new market approvals or a longer-than-expected duration of application processes may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

In clinical trials or clinical use, Bioretec's new generation magnesium and hybrid composite based products may prove to be unfit for their intended purpose or have safety defects or they may not generate sufficient demand

The RemeOs™ cannulated screws have undergone a clinical study, the follow-up report for the first year has been completed and the product is now in the authorization process (for more information, see "*Business overview – Products – New products – Products in the commercialization phase*"). Bioretec's future outlook and profit-making ability are materially dependent, first of all, on whether the Company will succeed in gaining market approvals for its first magnesium-based products in the United States and Europe, but also on whether the clinical studies on the products belonging to Bioretec's new product family are successful (for more detail on factors affecting results of operations, see "*Operating and financial review – Key factors affecting the results of operations*". Bioretec also intends to bring to the market other magnesium-based and hybrid composite based products belonging to the RemeOs™ product family than the RemeOs™ cannulated screws, and these products are still in the development phase (for more information, see "*Business overview – Products – New products – Products in the commercialization phase*").

[1] Source: Wang JL, Xu JK, Hopkins C, Chow DH, Qin L. Biodegradable Magnesium-Based Implants in Orthopedics-A General Review and Perspectives. Adv Sci (Weinh). 2020;7(8):1902443. Published 2020 Feb 28. doi:10.1002/advs.201902443.

Since a large proportion of Bioretec's products belonging to the RemeOs™ product family are still in the development phase, there are no assurances as to whether they will be suitable for their purpose, safe and effective and whether they can thus be commercialized according to plan or at all. Should Bioretec's products fail to pass the necessary clinical tests and therefore do not progress to the commercialization stage according to the planned timetable or at all, Bioretec will not be able to execute its commercialization plan according to plan, which would lead to a significant deterioration in the Company's future outlook and future profit-making ability and it could be possible that Bioretec would not, in this case, be able to turn its business profitable at all.

It is also possible, that the end users of the products, i.e. surgeons and hospitals, will not perceive the benefits of the products of the RemeOs™ product family in clinical use, or that the benefits of the products will prove to be less than expected in clinical use, in which case the products may not generate sufficient demand. Since Bioretec's future outlook and future profit-making ability are materially dependent on whether the development and commercialization for the Company's new magnesium-based and hybrid composite based products will succeed, insufficient demand for the new products would lead to a significant deterioration in the Company's future outlook and future profit-making ability and it could be possible that Bioretec would not, in this case, be able to turn its business profitable at all.

Consequently, failure in the research and development phase of the new generation products or their insufficient demand may have a material adverse effect on Bioretec's business, results of operations, financial position and future prospects.

Bioretec may fail in concluding cooperation agreements or marketing its new products, both of which are material for the growth of its business, as a result of which Bioretec's products may not reach the market position envisaged for them

Bioretec's future outlook and future profit-making ability are materially dependent on the success of the clinical tests and commercialization plan for the Company's new magnesium-based and hybrid composite based products (see above "*– Risks related to Bioretec's business operations – Bioretec's business is in a growth stage and in part based on research and development projects, and there can be no assurance that the business will become profitable*"). Bioretec intends to bring the magnesium-based cannulated screws of the RemeOs™ product family to the market in the United States in the first half of 2022 and in the European Union in the second half of 2022 (for more information, see "*Business overview – Products – New products – Products in the commercialization phase*").

As part of Bioretec's commercialization plan for its new magnesium-based products in the United States, Bioretec plans to establish its own distribution center and sales organization in the United States, and the intention is to carry out the induction into the use of the new products through regional key opinion leaders (for more information, see "*Business Overview – Products – Commercialization strategy for the new products in the United States*"). Convincing and committing these key opinion leaders will thus play a significant role in the commercialization and marketing of Bioretec's products. Committing the key opinion leaders will require the Company to succeed in convincing these key opinion leaders of the benefits and safety of its products and of the added value the products create. It is possible that Bioretec will fail to commit the key opinion leaders and thus fail to market and commercialize its new generation products as planned or at all. It is also possible that, despite committing the key opinion leaders, Bioretec will not be able to enter into cooperation agreements concerning its products or that the users of the products, i.e. hospitals and surgeons, will not adopt Bioretec's products as planned.

Failure in the marketing and commercialization of the products could lead to Bioretec failing to turn its operations profitable within the planned timetable or at all. Failure in the commercialization of the magnesium-based and/or hybrid composite based products would force the Company to alter its product development and commercialization plan and, possibly, to develop completely new products, which would result in significant additional costs for the Company. Furthermore, there are no guarantees that the Company would have access to the necessary financing to cover such costs, in addition to which the Company could face difficulties in complying with the terms and conditions of its current loan agreements and repaying its maturing loans (see below *"– Risks related to Bioretec's financing – Bioretec is dependent on external financing and the Company may face difficulties in obtaining financing with competitive terms and conditions, or at all, and the Company may fail to refinance its debts when they mature*" and *"– Risks related to Bioretec's financing – Bioretec may face difficulties in complying with the terms and conditions of its financing arrangements*").

The materialization of any risk described above may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Implementation of commercialization plan for magnesium and hybrid composite based products according to plan is dependent on product development of competitors and timing for commercialization of their products

In the view to the Company, Bioretec will be the first company to introduce bioresorbable metal implants that do not contain rare earth elements to the US market (for more information, see "*Business overview – Bioretec's strengths – Aim to be the*

first company to commercialize bioresorbable REE free metal implants in the United States"). However, the market conditions could change before Bioretec succeeds in commercializing its products in the United States, and therefore there can be no assurance that the Company's current understanding will still be valid in the future. It is possible that other companies as well have developed implants with similar, or sufficiently similar, characteristics as those of Bioretec's products that they intend to commercialize in the United States. Such competitors could influence the size of the market share that Bioretec will succeed in capturing with its products in the United States. It is also possible that Bioretec will not succeed in maintaining its competitiveness in relation to its current and future competitors. In such an event, Bioretec would not necessarily succeed in achieving as large a market share in the United States as it has planned, which would have an impact on the earnings generated by the implementation of the commercialization plan and on the development of Bioretec's financial position both in the short and in the long term.

The process aiming for market approval for the cannulated screws belonging to the RemeOs™ product family has been started with the U.S. Food and Drug Administration ("**FDA**") in the United states, after receiving the Breakthrough Device Designation granted by the FDA in March 2021, and Bioretec has planned the sales of the implant to start in the United States in the first half of 2022 (for more information, see "*Business overview – Products – New products – Products in the commercialization phase*"). The Company's understanding that it will be the first company to introduce bioresorbable metal implants that do not contain rare earth elements to the US market is also based on this planned timetable. Should the timetable for the commercialization plan be extended significantly compared to current plans due to, for example, a lengthier product testing or market approval process or delays in the timetable for establishing Bioretec's own sales and distribution organization, there will be a higher risk of Bioretec's competitors bringing other similar implants to the US market that will compete for market share with Bioretec.

Should any of Bioretec's competitors succeed in the commercialization of its product in the United States before Bioretec or materially at the same with it, this may have a material adverse effect on Bioretec's growth plan and thus Bioretec's business, financial position, results of operations and future prospects.

Difficulties in the deliveries of raw materials used by Bioretec in manufacturing of its products or their weakening availability may cause significant disruptions in production and additional costs for the Company

Bioretec orders the raw materials it uses in its products, such as biopolymers and magnesium, as well as other production inputs, such as the instruments used for installing the implants and packaging materials, from external suppliers. In particular, the availability of raw materials that are essential for the manufacturing of the Company's products is essential for the Company to maintain uninterrupted operations. The Company uses two suppliers for providing the raw materials for its biopolymer products, but magnesium is supplied by only one supplier as at the date of this Offering Circular (for more information, see "*Business overview – Production – Production process and raw materials*").

Although the Company is not aware of any significant disruptions or delays in raw material deliveries as the date of this Prospectus and while the Company seeks to ensure the security of supply of raw materials, delivery problems or weaker availability of raw materials or other production inputs, or interruptions in their availability, could cause significant production disturbances for the Company. In particular, this risk applies to the raw materials used in Bioretec's products for which there are fewer suppliers than for other production inputs. Significant disturbances and delays in the Company's own production could lead to Bioretec becoming unable to deliver its products to its distributors within the agreed timetable, which could lead to additional costs for the Company. Similarly, finding new suppliers for raw materials or other production inputs could result in additional costs for the Company, thus weakening the Company's results of operations.

Changes in prices of raw materials used in manufacturing of Bioretec's products or in their manufacturing processes may affect the Company's cost structure and, consequently, profitability of the production and sales of the products

The price of the raw materials used in magnesium-based products is very low relative to the selling price of the end product, and therefore the materials used in magnesium-based products do not involve a significant pricing risk according to the Company's management. The cost structure of biopolymer products relative to the price of the products is substantially higher than that of the magnesium-based products. Moreover, the manufacturing process of the biopolymer products is more complex and time-consuming than that of the magnesium-based products, and thus more expensive. Therefore the biopolymer products involve a higher risk than the magnesium-based products that changes in the prices of raw materials as well as in the manufacturing process and, in particular, the latter's costs, will affect the profitability of the end product (for more information on the pricing of raw materials, see "*Business overview – Production – Production process and raw materials*").

The sourcing costs of the raw materials used in a product and its manufacturing costs have a direct impact on the margin the Company obtains from the product. If the suppliers of raw materials used in the biopolymer products were to decide on significantly increasing the selling prices of the raw materials or the costs of the products' manufacturing process were

to increase significantly, this would have a direct impact on Bioretec's cost structure and the profits the Company gains from the sale of its biopolymer products. Should the prices of raw materials or the costs of the manufacturing process rise, the manufacturing of the biopolymer products could eventually become unprofitable.

The production of Bioretec's products requires that its production facilities comply with certain quality standards, and the Company is in a process of transferring its production to new production facilities, which may result in unexpected costs

Bioretec's products are manufactured in a cleanroom in which the amount of airborne particles is controlled. Cleanrooms are classified into nine classes by the maximum concentration of particles according to the ISO 14644-1:2015 standard[2]. Bioretec's lease agreement for its present production facilities in Tampere, Finland, will expire during 2021. As at the date of this Offering Circular, Bioretec is building new business and production premises for rented premises in Tampere, to which it plans to move in August 2021. Bioretec estimates that the construction of the new business and production premises will require total investments of approximately EUR 300 thousand in the first half of 2021 (see also "*Business overview – Material investments*"). Should the construction of the new premises be delayed or the transfer of production to the new operating facilities otherwise not succeed as planned, it could result in delays in the manufacture of Bioretec's products, which could lead to the Company failing to deliver products to its distributors within the agreed timetable. The materialization of this risk could result in significant unexpected costs for the Company. For more information on the production facilities and the move to new production facilities, see "*Business overview – Production – Production facilities*".

Since the manufacture of the Company's products requires special production facilities, the Company may face difficulties in finding leased replacement facilities for its production if it is unable to negotiate an extension to the lease with its lessor. The availability of business premises suitable for the Company's manufacture is dependent on the market situation for leased commercial premises, and if suitable business premises are unavailable the Company must invest capital to bring its leased premises up to the general standards in its sector, which could temporarily increase the Company's cost structure. If the search for new premises is prolonged, this could cause delays in the production of the Company's products, challenges in readiness for delivery in relation to the distributors of the Company's products, and thus significant additional costs.

The manufacture of Bioretec's products is dependent on special equipment and a quality management system used in Bioretec's manufacturing process and Bioretec's manufacturing process includes critical phases, and failure in these phases may have an adverse effect on the Company

Some of the process equipment used in the manufacturing process of the Company's products has been modified to suit the Company's special needs (for more information, see "*Business overview – Production – Production process and raw materials*"). Should such equipment suddenly break, it may be difficult to find a supplier of new equipment and the delivery process could be lengthy. For this reason, the breakage of special equipment that is material for the manufacturing of Bioretec's products could cause delays in production and thus have an impact on sales proceeds and the commercialization timetables for new products, causing unforeseen additional costs.

The Company monitors the quality of its products and the raw materials used in them with a quality management system in several production phases in accordance with the ISO 13485:2016 standard[3]. The Company's quality management system may not be able to identify or monitor all material risks and the Company may not be able to implement effective risk management systems. Despite adequate procedures, some of the identified risks may be beyond the Company's control.

The manufacturing process for the Company's products is complex and it involves critical phases. These process phases involve risks that, if materialized, could cause delays in production and thus have an impact on sales proceeds and the commercialization timetables for new products.

Risks related to Bioretec's financing

Bioretec's working capital does not satisfy the Company's needs for the next 12 months, and this may jeopardize the continuity of the Company's operations

Bioretec estimates that it does not possess sufficient working capital to cover its current needs for 12 months as of the date of this Offering Circular. As at the date of this Offering Circular, Bioretec estimates that its present working capital will

[2] ISO 14644-1:2015 Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness by particle concentration.

[3] ISO 13485:2016 Medical devices – Quality management systems – Requirements for regulatory purposes.

suffice until July 2021 (for more information, see "*Essential information on the Offering – Working capital statement*" and "*Capitalization and indebtedness*").

According to Bioretec, if the Offering is completed within the planned timetable, the proceeds received from it (together with the current assets of Bioretec) will guarantee sufficient working capital to cover the Company's current needs for at least the next 12 months. If the Offering is not completed, Bioretec would aim to satisfy its working capital needs by, among other things, obtaining additional financing through equity investments or possible other financing. Should Bioretec fail to obtain additional financing, the Company could face serious financial difficulties and the continuity of its operations could be jeopardized.

Should the Offering not be completed as expected, Bioretec's working capital will be insufficient for implementing the commercialization plan that is material for the Company's future expectations

Bioretec has previously financed its operations mainly through equity investments, research and development loans and income generated from the sale of its existing products. Bioretec estimates it will need approximately EUR 10–15 million in external financing to implement its commercialization plan in the United States if the commercialization plan progresses as planned (for more information, see "*Business overview – Products – Commercialization plan for the new products in the United States*"). Bioretec's working capital as at the date of this Offering Circular would not suffice to cover the expenses arising from the implementation of the commercialization plan (for more information, see "*Essential information on the Offering*" – "*Working capital statement*" and "*Capitalization and indebtedness*").The intention is to cover the expenses arising from the implementation of the commercialization plan with the proceeds from the Share Issue.

The Company's medium-term future outlook and profit-making ability are materially dependent on whether the Company will be successful in obtaining market approvals for its first magnesium-based products in the United States and Europe, and under which timetable. In addition, the Company's long-term future outlook and profit-making ability are materially dependent on the success of the clinical testing and commercialization of its magnesium-based and hybrid composite technology based products (see also "*– Bioretec's business is in a growth stage and in part based on research and development projects, and there is be no assurance that the business will turn profitable*" and "*Operating and financial review – Key factors affecting the results of operations*".). Thus, the Company's aforementioned medium- and long-term outlooks are materially dependent also on the completion of the Offering.

Should the Offering not be completed as planned, Bioretec's working capital will be insufficient for implementing its commercialization plan that is material for the realization of the Company's future expectations, which in turn would have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects. The execution of the Offering is conditional, among other things, on the subscription of all New Shares. For more information, see "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*".

Bioretec is dependent on external financing and the Company may face difficulties in obtaining financing with competitive terms and conditions, or at all, and the Company may fail to refinance its debts when they mature

Since Bioretec's operations do not currently generate profits, Bioretec is currently dependent on external financing. Bioretec has previously financed its operations mainly through equity investments, research and development loans and income generated from the sale of its existing products. Bioretec estimates that it will need approximately EUR 10–15 million in external financing to implement its commercialization plan in the United States if the commercialization plan progresses as planned, and it intends to cover the costs arising from the implementation of the commercialization plan with the proceeds from the Share Issue (for more details, see "*Business Overview – Products – Commercialization plan for the new products in the United States*" and "*Essential information on the Offering – Use of proceeds*"). As at the date of the Offering Circular, Bioretec's working capital would not suffice to cover the costs arising from the implementation of the commercialization plan, which means that the implementation of the commercialization plan and consequently making the Company's business profitable are dependent on the availability of external financing (see above "*– Risks related to Bioretec's business operations – Bioretec's business is in a growth stage and in part based on research and development projects, and there can be no assurance that the business will turn profitable*" and "*– Should the Offering be not completed as expected, Bioretec's working capital may be insufficient for implementing the commercialization plan that is material for the Company's future expectations*").

Bioretec's ability to finance its operations is dependent on many factors, such as cash flow from operating activities, the Company's ability to generate profits and uncertainties relating to its profitability, the Company's creditworthiness, and the availability of new debt financing and equity financing, and there can be no assurance that financing will be available on commercially reasonable terms, or at all. Some of these factors are completely or partially beyond Bioretec's control. For instance, an unfavorable trend in the global economy and the resulting uncertainty in the financial markets could have an adverse effect on Bioretec's financing costs and the general availability of financing. Due to the uncertainty in the financial

markets, the cost of the financing needed by Bioretec for its business operations may rise or the availability of the financing may weaken. Possible fluctuations and uncertainty as well as other potential disturbances or unfavorable developments in the financial markets may limit Bioretec's opportunities to raise financing and lead to, for example, weaker liquidity, which in turn may make it more difficult to obtain financing at low costs. Therefore Bioretec may not necessarily be able to obtain financing on favorable terms, at favorable costs or at all. Bioretec's interest-bearing liabilities as at 31 March 2021 amounted to EUR 2.0 million and they consisted mainly of capital loans, loans from financial institutions and installment debt. Should Bioretec fail to turn its operations profitable or obtain external financing, it may not necessarily be able to refinance its debts once they mature.

Bioretec may face difficulties in obtaining financing at any time, and as a result of this, it may fail in turning its operations profitable or to refinance its debts when they mature, which in turn may have an adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Bioretec may face difficulties in complying with the terms and conditions of its financing arrangements

Bioretec has previously financed its operations with, for example, research and development loans and capital loan agreements. Such loan agreements include various terms and conditions relating to, among other things, the purpose of the loans and the future development of Bioretec's profit-making ability. For more information on such terms and conditions, see "*Operating and financial review – Liquidity and capital resources – Restrictions on the use of capital sources*".

These terms and conditions may impact Bioretec's financing in the future. The terms and conditions may stipulate renegotiation with the finance providers if the terms and conditions cannot be satisfied, and there can be no assurance that Bioretec will be able to fulfil the terms and conditions of its loan agreements. Bioretec's indebtedness may affect its ability to refinance its existing debts. There are no guarantees that public funders and financial institutions will, in the future, accept the present terms and conditions of the financing, or that Bioretec will succeed in its negotiations with finance providers if the terms and conditions of the loan agreements are not fulfilled. Finance providers may stipulate financing terms and covenants as well as additional commitments or security in the future, which in turn could impact Bioretec's ability to obtain financing and place restrictions on its business operations. A breach of the terms and conditions of the loan agreements could also lead to an acceleration of existing financing. Bioretec's available financing would be unlikely to suffice to repay the accelerated debts because Bioretec's operations do not currently generate any profit.

If Bioretec fails to comply with the terms and conditions of its financing or obtaining financing in the future will require commitment to stricter terms and conditions as compared to the present terms and conditions, this may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects. Bioretec intends to repay in full the capital loans given to it, and the interest accrued thereto, by using the net proceeds from the Share Issue (for more details, see "*Essential information on the Offering – Use of proceeds*" and "*Business overview – Agreements concerning convertible loans*").

Bioretec is exposed to credit and counterparty risk in connection with receivables related to its distribution agreements and purchases

Bioretec is exposed to the credit risk related to, for example, receivables based on its distribution agreements and procurements of materials. Any downturn in the economy may weaken the solvency of Bioretec's contractual counterparties, which could have an adverse effect on Bioretec's ability to collect its receivables in full or at maturity. If a contractual counterparty of Bioretec becomes insolvent, Bioretec may lose its receivables partly or in full, or lose the expected benefits of contracts entered into with such counterparty.

Bioretec aims to require its distributors to provide advance payments for the products Bioretec supplies to the distributor for selling. Bioretec acts in this manner particularly when it enters into a distribution agreement with a new distributor with which Bioretec has not previously had any distribution agreements. On the other hand, Bioretec may grant even long credit periods to its established distributors, in which case Bioretec is exposed to the counterparty risk in relation to its distributors. As at the date of this Offering Circular, Bioretec is planning the commercialization of products in the magnesium and hybrid composite based RemeOs™ product family in the United States. In the United States, in addition to the current distribution model typical for Bioretec, whereby the distributor purchases products from Bioretec and sells them to its customers, a model whereby hospitals pay only for the products they use is followed. Under this model, Bioretec would deliver stocks of its products to hospitals, and the hospitals would pay Bioretec for the products on the basis of the products they use. A switch to such a distribution model will increase the credit and counterparty risk to which Bioretec is exposed.

The materialization of the credit or counterparty risk may have a material adverse effect on Bioretec's business, financial position, results of operations and future prospects.

Risks relating to the Shares, the Offering and the Listing

Bioretec's ability to pay dividends is uncertain, and it is possible that Bioretec will not pay dividends or make capital repayments at all

Bioretec's ability to pay dividends in the future is dependent on several factors, such as the Company's results, financial position, capital requirements and provisions of applicable legislation governing the distribution of profits. The distribution of dividends and other unrestricted distributable funds depends on the provisions of the Finnish Companies Act, the discretion of the Company's Board of Directors and, ultimately, the resolution of Bioretec's General Meeting of Shareholders. According to the Finnish Companies Act, the amount distributed by the company as dividends may not exceed the amount of distributable funds shown on the last audited financial statements approved by the General Meeting. The distribution of dividends is not permitted if, at the time of the resolution on the distribution, it is known or it should be known that the company is insolvent or the distribution would make the company insolvent. Due to this, Bioretec's Board of Directors must ensure the maintenance of the Company's solvency prior to any decision on the distribution of dividends.

Bioretec has not distributed any dividends during its operating history. There can be no assurance that the Company would be able to distribute any dividends in the future. Prior to 1 December 2023, Bioretec can distribute dividends or other unrestricted equity only in compliance with the creditor protection procedure under the Finnish Companies Act. See "Shares and share capital – Shareholder rights – Dividends and other distribution of funds".

The Offering may not be subscribed for in full, or it may not be completed as planned or at all

It is possible that not all the Offer Shares will be subscribed for in connection with the Offering or that the Offering is not executed at all due to, for example, insufficient demand, requirements set by Nasdaq Helsinki or other reasons. If the Offering does not result in all the New Shares being subscribed, the Offering will not be completed. Furthermore, if the Listing does not take place, the Offering will also be cancelled. For more information on the preconditions for the Offering, see: "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*". Delay of or failure in the Listing or the Offering may have a material adverse effect on Bioretec's business, financial position, results of operations, future prospects and the value of the Company's Shares.

If the Offering is not executed, an investor will not be able to use the subscription price they have paid for other investments until the subscription price paid has been returned to the investor. For more information on the refund of the subscription price paid, see: "*Terms and conditions of the Offering – Terms and conditions of the Public Offering – Returning the amount paid*".

The Listing may be delayed or cancelled

In the view of Bioretec's management, Bioretec fulfils, as at the date of this Offering Circular, the requirements set for companies seeking a listing on the First North marketplace, but there is no assurance that the Listing will be completed according to the Company's plans or at all. The Listing may fail due to, among other things, problems with the execution of the Listing, decisions by the authorities, requirements imposed by Nasdaq Helsinki or other factors, and some of these factors may be beyond Bioretec's control. It is also possible that Nasdaq Helsinki will not accept Bioretec's application for listing, which may lead to a delay in or cancellation of the Listing as well as significant additional expenses and an additional administrative burden.

Should the Listing be cancelled, an investor will not be able to use the subscription price they have paid for other investments until the subscription price paid has been returned to the investor. For more information on the refund of the subscription price paid, see "*Terms and conditions of the Offering – Terms and conditions of the Public Offering – Returning the amount paid* ".

Bioretec's Shares have not been subject to public trading on any regulated market or multilateral trading facility prior to the Listing; the price of the Shares may fluctuate, and an active and liquid market may not develop for them

Prior to the Listing, Bioretec's Shares have not been subject to public trading on any regulated market or multilateral trading facility, such as First North. Bioretec intends to submit its application to Nasdaq Helsinki for listing the Shares on the First North multilateral marketplace maintained by Nasdaq Helsinki. However, there are no guarantees that an active market for the Shares will emerge after the Listing, or that such a market can be maintained. Similarly, there are no guarantees of the future liquidity of the Shares. The shares of companies listed on a multilateral trading facility usually involve a higher risk than the shares of companies listed on a regulated market, and they usually have lower liquidity and weaker selling opportunities. The price of the shares of companies listed on a multilateral trading facility can also fluctuate more than the price of shares listed on a regulated market.

Following the Listing, the market price of the Shares may fluctuate significantly due to several factors, such as the market sentiment towards the Shares and Bioretec's business and future outlook, as well as the general market conditions. Additionally, in the international financial markets, the prices and trading volumes of shares have occasionally experienced significant volatility regardless of the development of the companies' business or their future outlook. For example, a deterioration of general market conditions or a drop in the prices of securities comparable to the Shares could have an unfavourable effect on the value and liquidity of the Shares and on the demand for them. Furthermore, there has been sometimes considerable fluctuation for a certain period in the prices of shares offered to the public for the first time, and this fluctuation has not necessarily been proportional to the companies' results of operations or future outlook. Such factors are beyond Bioretec's control.

Moreover, it is possible that Bioretec's business or future outlook could underperform the market's and investors' expectations, and any of these factors could, for its part, cause the price of the Shares to decline. Furthermore, there is no assurance that the market price of the Shares will not fall below the Subscription Price on First North.

Companies listed on First North are not subject to the same securities market regulation as companies listed on a regulated market and thus investing in such a company may contain more risks than investing in a company listed on regulated market; as it stands, the Company cannot transfer to regulated market

First North is a multilateral trading facility maintained by Nasdaq Helsinki. Companies listed on First North are not subject to the same rules as companies listed on a regulated market, such as the official list of Nasdaq Helsinki, but instead the companies on First North comply with rules with a lower requirement level adapted for small growth companies. All the requirements of the Securities Markets Act concerning a regulated market, such as the provisions on the obligation to notify major holdings or the obligation to launch a takeover bid, do not likewise apply to the shares accepted for trading on First North. As a result of the aforementioned and other differences in regulation, the rights and obligations of the First North companies and their shareholders differ from the rights and obligations of companies traded on a regulated market. Therefore, investing in a company listed on First North may contain more significant risks than investing in companies listed on regulated markets.

In accordance with the Finnish Companies Act, the securities of a private limited company may not be accepted for trading on a regulated market. As at the date of this Offering Circular, Bioretec's company form is private limited company, so should Bioretec seek to have its Shares accepted for trading on a regulated market, it must first amend its company form. Changing the company form from private limited company to public limited company requires, among other things, that the Company's equity amounts to at least its share capital. Bioretec's equity was less than its share capital as at 31 March 2021.

As a result of the Listing, Bioretec will incur additional costs and new obligations resulting in additional costs to ensure compliance with them; Bioretec may also fail to comply with the new obligations

Bioretec aims to submit a listing application to Nasdaq Helsinki for listing the Shares on the First North market place maintained by Nasdaq Helsinki. In addition to the one-time costs related to the Listing, Bioretec will incur administrative costs as a consequence of the Listing. After the Listing, Bioretec will be required to comply with regulatory requirements applied to companies whose shares are subject to trading on First North. The requirements relate, for example, to governance, planning, disclosure and control systems, as well as financial reporting, and Bioretec must allocate personnel and other resources for these purposes. Furthermore, it should be considered as regards to compliance with such obligations that there are members in Bioretec's Board of Directors and Management Team that do not have previous experience in the management of a company listed on First North. While the Company's management believes that Bioretec satisfies all the requirements placed on companies listed on First North, there can be no assurance that Bioretec will be able to fulfil all of its new obligations. Failure in satisfying the requirements placed on companies listed on First North may result in, for example, administrative sanctions or erode the confidence of investors and other stakeholders in the Company. Increased costs resulting from the Listing or problems related to satisfying the requirements concerning companies listed on First North may have a material adverse effect on Bioretec's business, financial position, results of operations, future prospects and the value of Bioretec's Shares.

Future share issues, sales or other transfers or subscriptions of Shares based on option rights or other special rights entitling to Shares that have been issued or will be issued in the future may affect the value of the Offer Shares and dilute the relative ownership and voting rights of the shareholders

Issues or sales of Bioretec's shares or the perception that such issues or sales may be executed in the future can have an adverse effect on the market value of the Offer Shares and on Bioretec's ability to obtain equity financing in the future. Furthermore, should Bioretec need equity financing through share issues or otherwise in addition to debt financing, Bioretec may possibly be forced to arrange new share issues in which shareholders will be given pre-emptive subscription rights,

or directed share issues deviating from the shareholders' pre-emptive subscription rights, provided that Bioretec's General Meeting of Shareholders authorizes the Company's Board of Directors to execute such share issues. Directed share issues may also be arranged, for example, in connection with Bioretec's incentive schemes or for other reasons if, in accordance with the Finnish Companies Act, the Company has a weighty financial reason for a directed share issue. In addition, Bioretec has issued, and may also issue in the future, option rights and other special rights, which entitle to subscription of Shares, based on which the holders of option rights and other special rights are entitled to subscribe for Shares (for more details on option rights and other special rights, see "*Shares and share capital – Option rights and other other rights entitling to Shares*").

Directed share issues and share issues that include pre-emptive subscription rights in which a shareholder does not participate, or participates only partially, as well as subscriptions of Shares based on option rights or other special rights entitling to Shares that have been issued or will be issued in the future, will dilute the shareholder's relative ownership in the Company. Should the Company not reach the financial targets it has set, including achieving positive cash flow from operating activities by the end of year 2025, the Company may be need to raise additional capital, which can further dilute the shareholder's relative ownership in the Company and affect expected returns. See "*Business overview – The Company's business objectives*".

Subscriptions cannot be cancelled or amended

Subscription commitments made in the Public Offering to subscribe for Offer Shares are binding and they cannot be cancelled or amended after they have been made, except in the situations described in section "*Terms and conditions of the Offering – General terms and conditions of the Offering – Cancellation of Commitments*". The Offer Shares subscribed for in the Public Offering shall be paid for in connection with the subscription, unless provided otherwise in the terms and conditions of the Offering. Therefore, investors must make their investment decision prior to having knowledge of the final outcome of the Offering.

Certain shareholders of Bioretec may lose their tittle to the Shares held by them, unless they claim for registration of their Shares on a book-entry account or a custodial nominee account

Bioretec's Shares were incorporated into the book-entry system maintained by Euroclear Finland in May 2021, so that the time period for incorporating the Shares into the book-entry system ended on 7 May 2021. The book-entry system refers to a system in which physical share certificates have been exchanged for book-entry securities entered in book-entry accounts. For the registration of entries in the book-entry system, the shareholder is required to open a book-entry account at an account manager or agree with a custodian on the custody of the book-entry securities on a custodial nominee account. For more information on the book-entry system, see "*Finnish Securities Market – Finnish book-entry system*".

At the time when Bioretec's Shares were incorporated into the book-entry system, all of Bioretec's shareholders were not reached, and all shareholders did not request their Shares to be recorded on book-entry accounts or custodial nominee accounts. These shareholders may not exercise their shareholder rights in Bioretec until the Shares owned by them have been recorded on a book-entry account or custodial nominee account. As at the date of this Offering Circular, the number of Shares that were not requested to be recorded on a book-entry account or custodial nominee account was 601,494.

Should these shareholder not request their Shares to be recorded on a book-entry account or custodial nominee account within ten years from the date on which the incorporation of the Shares into the book-entry system ended, Bioretec's General Meeting can resolve that title to these Shares and the rights based on them have ceased. The regulations concerning the Company's treasury shares are applied to the ceased shares. Bioretec's Board of Directors may resolve that the forfeited Shares are cancelled. Such Shares may also be transferred under the provisions on share issues in the Finnish Companies Act. See "*Shares and share capital – Shareholder rights*".

Certain foreign shareholders may not be able to exercise their possible subscription rights or other shareholder rights in the future

Under the Finnish Companies Act, shareholders have pre-emptive right to subscribe new shares in proportion to their holdings when Bioretec issues shares or securities entitling to subscription for shares, unless the resolution to issue shares provides otherwise. Certain shareholders of Bioretec who live in certain countries other than Finland, or whose registered address is located in such country, including shareholders in the United States, may not necessarily be able to exercise their pre-emptive subscription rights in any possible future share issues, unless the shares then offered have been registered in accordance with the securities legislation of the relevant jurisdiction, or unless a derogation from the registration or other regulations provided in the applicable legislation is available. No assurances can be given that local requirements will be met so as to enable the exercise of such shareholders' pre-emptive rights in rights issues or participation in any other share issue or tender offer. This may lead to the dilution of such shareholders' ownership in the Company or to potential tender offers not being made to shareholders located in all countries. A foreign shareholder's right

to have access to information concerning share issues may also be restricted due to the legislation of the relevant jurisdiction.

Furthermore, it is possible that shareholders who are not Finnish natural or legal persons and manage their Shares through so-called nominee-registration may not be able to exercise their shareholder rights through the management chain. Owners of nominee-registered Shares cannot use their voting rights directly in a General Meeting, unless the owner of the nominee registered Shares is temporarily registered in the Company's shareholder register at the latest on the date specified in the notice of the General Meeting. As such temporary registration requires actions by the asset manager and the account operator used by the asset manager in addition to the shareholder, the registration may not succeed in the applicable time frame.

Investors with a different main or base currency than the euro are exposed to certain foreign exchange risks when investing in the Offer Shares

The Offer Shares will be priced and traded on First North market place in euros. Furthermore, possible dividends paid on the Company's Shares in the future are in euros. Due to this, fluctuation in the value of the euro affects the value of possible dividends and other distributions of unrestricted equity if the investor's main or base currency is not the euro. In addition, the market price of the Company's Shares expressed in other currencies than the euro fluctuates in part due to changes in exchange rates. This can affect the value of the Company's Shares and possible dividends paid on them if the shareholder's main or base currency is not the euro.

PERSONS RESPONSIBLE FOR THE INFORMATION CONTAINED IN THE OFFERING CIRCULAR

Bioretec

Bioretec Ltd

Business identity code: 1474196-9

Domicile: Tampere, Finland

Registered address: Hermiankatu 22, FI-33720 Tampere, Finland

RESPONSIBILITY STATEMENT

This Offering Circular has been prepared by Bioretec Ltd and Bioretec Ltd accepts responsibility regarding the information contained in this Offering Circular. To the best of Bioretec Ltd's knowledge, the information contained in this Offering Circular is in accordance with the facts and makes no omission likely to affect its import.

CERTAIN ADDITIONAL INFORMATION

Information about Bioretec

The business name of Bioretec is Bioretec Ltd. Bioretec is a limited company incorporated in Finland, and it is organized under the laws of Finland. Bioretec is registered in the Trade Register upheld by the Finnish Patent and Registration Office (the "**Trade Register**") under the business identity code 1474196-9. Bioretec was registered in the Trade Register on 12 June 1998. Bioretec's legal entity identifier code (LEI) is 7437008736AG7HY51K13. Bioretec is domiciled in Tampere, Finland. The registered address of Bioretec is Hermiankatu 22, FI-33720 Tampere, Finland, and its telephone number is +358 20 778 9500.

According to Section 2 of Bioretec's Articles of Association Bioretec's line of business is to engage in the manufacturing, product development and marketing of medical products. For the purposes of its operations, the Company may own and manage real estate and shares.

Third-party information

This Offering Circular contains statistics, data and other information relating to the markets, market size, market shares, market positions and other information relating to Bioretec's business, markets, industry and economy. The information is derived from several sources, including a report by Professor Diego Mantovani [4] conducted in April 2021, and commissioned by Bioretec ("**Third-party Report**"). Where certain information, such as market information and market outlook, contained in this Offering Circular has been derived from third-party sources, such sources have been identified therein and Bioretec deems them to be reliable.

Bioretec confirms that any third-party information, including the Third-party Report, has been accurately reproduced and that, as far as Bioretec is aware and is able to ascertain from information published by such third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. However, as Bioretec does not have access to the underlying information, assumptions or presumptions of the market studies, including the Third-party Report, or to the statistical data or economic indicators followed by the third-party studies, Bioretec cannot give any assurances as to the appropriateness of such information. Furthermore, third-party market studies are frequently based on information and assumptions that may not be exact or appropriate, and their methodology is by nature forward looking and speculative. Therefore, changes in the postulates and their premises on which third-party market studies, such as the Third-party Report, are based, could have a significant influence on the analyses and conclusions made.

Should this Offering Circular contain market data or market estimates in connection with which no source has been presented, such market data or market estimate is based on the estimates of Bioretec's management. Where information on Bioretec's markets or Bioretec's competitive position therein is provided expressly according to Bioretec's management in this Offering Circular, such assessments have been made by Bioretec's management on the basis of information available to Bioretec's management. However, Bioretec cannot guarantee that any of the statements given by Bioretec's

[4] PhD, FBSE, FASM, FAIMBE, Professor in Biomaterials and Bioengineering, University of Laval, Quebec, Canada.

management or statements included in the reports it has commissioned give an accurate description of the market size or growth, market segments or Bioretec's market position.

Competent authority approval

This Offering Circular is an unofficial English-language translation of the Finnish Prospectus. The Finnish Prospectus has been approved by the FIN-FSA as the competent authority under the Prospectus Regulation on 4 June 2021. The FIN-FSA has only approved the Finnish Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Approval by the FIN-FSA on the Finnish Prospectus shall not be considered as an endorsement of the issuer that is the subject of the Finnish Prospectus and investors shall make their own assessment as to the suitability of investing in the securities. The register number of the approval of the Finnish Prospectus is FIVA 28/02.05.04/2021.

No incorporation of website information

The contents of the Bioretec's website (at www.bioretec.com) or any other website, excluding this Offering Circular, documents incorporated in this Offering Circular by reference and possible supplements to the Offering Circular, do not form a part of this Offering Circular. The information on such websites has not been scrutinized or approved by the FIN-FSA. Prospective investors should not rely on such information in making their decision to invest in the Shares.

Information available in the future

Bioretec shall publish its annual reports in Finnish and in English, including the report of its Board of Directors and its audited consolidated financial statements, half-yearly reports and other information as well as company releases as required by the regulation of the European Parliament and of the Council on market abuse ((EU) No 596/2014, as amended, "**MAR**"), the Securities Market Act and Nasdaq First North Growth Market – Rulebook ("**First North Rules**"). None of these documents are a part of this Offering Circular, excluding the documents incorporated in this Offering Circular by reference.

Auditors

Under Bioretec's Articles of Association, the Annual General Meeting elects the Company's auditor. Further, the auditor of Bioretec shall be an audit firm authorized by the Finnish Patent and Registration Office. The auditor is elected annually at the Annual General Meeting for a term ending at the close of the next Annual General Meeting. The Annual General Meeting decides on the remuneration of the auditor.

Bioretec's consolidated financial statements as at and for the year ended on 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018 have been audited by Authorized Public Accountant Erika Grönlund. Bioretec's Annual General Meeting held on 22 April 2021 elected Authorized Public Accountants Ernst & Young Oy as the auditor of the Company for a term ending at the close of the Annual General Meeting of 2022. Ernst & Young Oy has appointed Erika Grönlund, Authorized Public Accountant, as the responsible auditor. Erika Grönlund is registered in the auditor register in accordance with Chapter 6, Section 9 of the Finnish Auditing Act (1141/2015, as amended).

Forward-looking statements

This Offering Circular includes forward-looking statements which are not historical facts but statements regarding future expectations instead. These forward-looking statements include without limitation, those regarding Bioretec's future financial position and results of operations, Bioretec's strategy, objectives, future developments in the markets in which Bioretec participates or is seeking to participate or anticipated regulatory changes in the markets in which Bioretec operates or intends to operate. In some cases, forward-looking statements can be identified by terminology such as "aim," "anticipate," "believe," "continue," "could," "estimate," "expect," "forecast," "guidance," "intend," "may," "plan," "potential," "predict," "projected," "should" or "will" or the negative of such terms or other comparable terminology.

By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors because they relate to events and depend on circumstances that may or may not occur in the future. Forward-looking statements are not guarantees of future performance and are based on numerous assumptions. Bioretec's actual results of operations, including Bioretec's financial condition and liquidity and the development of the industries in which Bioretec operates, may differ materially from (and be more negative than) those made in, or suggested by, the forward-looking statements contained in this Offering Circular. In addition, even if Bioretec's historical results of operations, including Bioretec's financial condition and liquidity and the development of the industry in which Bioretec operates, are consistent with the forward-looking statements contained in this Offering Circular, those results or developments may not be indicative of results or developments in subsequent periods.

Forward-looking statements are set forth in a number of places in this Offering Circular, including in the sections "*Business overview*", "*Market and industry review*", "*Operating and financial review*" and wherever this Offering Circular includes information on the future results, plans and expectations with regard to Bioretec, the future growth and profitability of Bioretec and the future general economic conditions to which Bioretec is exposed.

Availability of the Finnish Prospectus and the Offering Circular

The Finnish Prospectus will be available on or about on 7 June 2021 from the following websites:

- Bioretec's website at www.bioretec.com/ipo;
- website of the Sole Global Coordinator at www.danskebank.fi/bioretec; and
- Nordnet's website at www.nordnet.fi/fi/bioretec.

This Offering Circular will be available on or about on 7 June 2021 from the following websites:

- Bioretec's website at www.bioretec.com/ipo; and
- website of the Sole Global Coordinator at www.danskebank.fi/bioretec-en.

Presentation of financial and certain other information

Historical financial information

The selected financial information presented in the Offering Circular has been derived from Bioretec's unaudited interim financial information as at and for the three months ended 31 March 2021, drawn up to the extent required by Section 4.4 of the First North Rules, including unaudited comparative figures as at and for the three months ended 31 March 2020 and Bioretec's audited consolidated financial statements as at and for the year ended 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018. Bioretec has prepared its consolidated financial statements in accordance with the Finnish Accounting Standards (the "**FAS**").

Bioretec's unaudited interim financial information as at and for the three months ended 31 March 2021 including unaudited comparative figures as at and for the three months ended 31 March 2020 and Bioretec's audited consolidated financial statements as at and for the year ended 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018 have been incorporated in this Offering Circular by reference.

Save for Bioretec's audited consolidated financial statements as at and for the year ended on 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018 incorporated in this Offering Circular by reference, no part of this Offering Circular has been audited.

Alternative performance measures

In this Offering Circular, the Company presents certain performance measures that are not indicative figures of historical financial performance, financial position or cash flows as defined or designated in FAS in accordance with the guidelines issued by the European Securities and Markets Authority, "*Alternative Performance Measures*", and are therefore considered alternative performance measures ("**Alternative Performance Measures**"). Such Alternative Performance Measures include sales margin, EBITDA, R&D spend on total costs (percent), equity ratio (percent) and net debt (cash).

Alternative Performance Measures are unaudited.

Rounded figures

The figures presented in this Offering Circular, including the financial information, have been rounded. Accordingly, in certain instances, the sum of the numbers in a column or row may not conform exactly to the total amount given for that column or row.

IMPORTANT DATES

Event	Date
The subscription period for the Offering commences	7 June 2021 at 10:00 a.m.
The Public Offering and the Institutional Offering may be ended at the earliest	14 June 2021 at 4:00 p.m.
The subscription period for the Public Offering ends	15 June 2021 at 4:00 p.m.
The subscription period for the Institutional Offering ends	17 June 2021 at 10:00 a.m.
The results of the Offering will be announced	On or about 17 June 2021
The Offer Shares allocated in the Public Offering will be recorded in the book-entry accounts of the investors	On or about 18 June 2021
Trading in the Shares on the First North is expected to commence	On or about 18 June 2021
The Offer Shares allocated in the Institutional Offering will be ready to be delivered against payment through Euroclear Finland	On or about 22 June 2021

ESSENTIAL INFORMATION ON THE OFFERING

Reasons for the Offering

The objective of the Offering and Listing is to enable investments into the commercialization of the Company's RemeOs™ Screws and research and development as well as commercialization of future products of the RemeOs™ product family and thus support the Company's growth strategy with the proceeds received from the Offering.

The Offering and the Listing are expected to increase the general interest of the investors, clients, surgeons and business partners towards the Company, as well as enhance the Company's attractiveness from the perspective of potential employees and its ability to engage its current employees with the Company's activities. In addition, the Offering and the Listing are expected to expand the Company's owner base with domestic and foreign investors, as well as enable a liquid market for the Company's Shares in the future.

Use of proceeds

Bioretec aims to raise gross proceeds of approximately EUR 25 million from the Share Issue, assuming that the Share Issue is fully subscribed. Bioretec estimates the charges, fees and expenses to be paid by Bioretec in connection with the Offering to amount to approximately EUR 2.8 million (assuming that Bioretec raises gross proceeds of EUR 25 million), as a result of which Bioretec estimates to receive net proceeds of approximately EUR 22.2 million from the Share Issue.

The Company intends to use the gross proceeds from the Share Issue to support the Company's growth strategy predominantly in the following way:

- Approximately 50 per cent of the gross proceeds from the Share Issue will be used to cover the commercialization costs of Bioretec's RemeOs™ product family incurred for example from establishing a sales and distribution organization in the United States;
- approximately 20 per cent of the gross proceeds from the Share Issue will be used for research, development and clinical studies of Bioretec's new products to be launched after the RemeOs™ Screws;
- approximately 10 per cent of the gross proceeds from the Share Issue will be used to cover the capital expenditures incurred from the expansion of Bioretec's production. The expenditures include for example an investment into new CNC machines intended to improve the ability of Bioretec to scale up its production capacity; and
- approximately 20 per cent of the gross proceeds from the Share Issue will be used for other corporate purposes such as to repay Bioretec's current capital loans of approximately EUR 3.3 million (including the interest accrued thereto by the estimated payment date) (including all convertible capital loans held by the US and Finnish lenders as well as product development loans from Business Finland) and to pay charges, fees and expenses to be paid by Bioretec in connection with the Offering.

Working capital statement

According to the estimate of Bioretec's management, the working capital available to Bioretec is insufficient for 12 months as at the date of this Offering Circular.

The Company's business is in a growth stage, in which research and development conducted under the Company's business plan, as well as the expansion of the Company into new markets require a significant amount of working capital. The cash flow generated from the sale of the Company's products is insufficient to cover the shortfall.

As at the date of this Offering Circular, Bioretec estimates that its current working capital would run out in July 2021, when taking into account the financing needs under its current business plan. The shortfall in the working capital for the 12-month period from the date of this Offering Circular is EUR 6.5 million under to the current business plan, and taking into account that the Company would not pay off its capital loans if its financial situation would not allow it.

With the Offering, the Company plans to raise proceeds to ensure, among other things, the adequacy of the Company's working capital. The Company estimates that the completed Offering would provide sufficient working capital (together with other cash resources available to the Company) for its current requirements and working capital needs for the 12-month period from the date of this Offering Circular. The execution of the Offering is conditional, among other things, on the subscription of all New Shares. For more information, see "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*". The Company has received subscription undertakings from the Cornerstone Investors under which they commit to subscribe for Offer Shares equal to EUR 8 million in total at the Subscription Price.

If the Offering would not be completed, Bioretec would seek to secure its working capital needs by, among other things, seeking further financing through, for example, equity investments and other potential financing. If Bioretec would not be

successful in raising additional financing, the Company could face serious financial difficulties and the continuity of its operations could be imperiled.

CAPITALIZATION AND INDEBTEDNESS

The following table sets forth Bioretec's (i) capitalization and indebtedness as at 31 March 2021 on an actual basis based on Bioretec's unaudited financial information and (ii) capitalization and indebtedness as at 31 March 2021 adjusted with net proceeds of EUR 22.2 million from the Share Issue as well as the prepayment of the Company's capital loans and the unrecorded interest accrued thereto by 30 September 2021, with an assumption that Share Issue and the prepayment of the capital loans and the interest accrued thereto would occur on 31 March 2021. The adjusted figures in the table shall be read with notice of the fact that there is uncertainty as to the materialization of the Offering.

The following table shall be read in conjunction with sections "*Risk factors*" and "*Selected financial information*", as well as the audited consolidated financial statements as at and for the year ended on 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018, and the unaudited interim information incorporated in this Offering Circular by reference.

	As at 31 March 2021	As at 31 March 2021 Adjusted
(EUR thousand)	(unaudited)	
CAPITALISATION		
Short-term liabilities		
Unguaranteed / unsecured	74.2	74.2
Short-term liabilities, total	**74.2**	**74.2**
Long-term liabilities		
Unguaranteed / unsecured	1,960.6	48.6
Long-term liabilities, total	**1,960.6**	**48.6**
Equity		
Share capital	3,748.6	3,748.6
Share Issue	4.2	4.2
Reserve for invested unrestricted equity	658.6	22,858.6
Profit (loss) for previous years	-2,998.1	-2,998.1
Profit (loss) for the period	-542.5	-1,937.8
Equity, total	**870.8**	**21,675.5**
Total	**2,905.6**	**21,798.3**
NET INDEBTEDNESS		
A. Cash and cash equivalents	1,630.3	20,523.0
B. Liquidity (A)	**1,630.3**	**20,523.0**
C. Short-term part of the long-term financial liabilities	74.2	74.2
D. Short-term financial liabilities, total (C)	**74.2**	**74.2**
E. Short-term net indebtedness (D-B)	**-1,556.1**	**-20,448.8**
F. Long-term financial liabilities	1,960.6	48.6
G. Long-term financial liabilities, total (F)	**1,960.6**	**48.6**
H. Net indebtedness, total (E+G)	**404.5**	**-20,400.2**

As at 31 March 2021, Bioretec has open leasing agreement liabilities in total nominal value of EUR 18.4 thousand and rental commitments relating to the business premises amounting to EUR 966.6 thousand. The unrecorded interest accrued to the capital loans until 31 March 2021 is EUR 1,342.7 thousand. Liabilities and off-balance sheet commitments are discussed in more detail in section "*Operating and financial review – Financial position – Off-balance sheet liabilities*" of this Offering Circular.

Bioretec is committed to repay the capital which as at 31 March 2021 was EUR 387,541.7[5] and the interest accrued thereto by the date of repayment to the convertible bond holders in the United States with the net proceeds received from the Share Issue. In addition, Bioretec intends to repay the capital of its other capital loans which as at 31 March 2021 was EUR 1,524,472.12 and interest accrued thereto by the date of repayment in their entirety with the net proceeds received from the Share Issue. The Company's capital loans and the interest accrued thereto by the estimated repayment date are in total approximately EUR 3.3 million. The execution of the Offering is conditional on certain factors. For more information, see "*Terms and conditions of the Offering – General terms and conditions of the Offering– Conditionality, execution and publishing of the Offering*".

[5] The capital includes capitalized interest until 31 March 2016.

TERMS AND CONDITIONS OF THE OFFERING

The term "subscription" refers in the following to the investor's offer or commitment to subscribe for Offer Shares (as defined below) in the Offering (as defined below), and an investor may be allocated either New Shares (as defined below) or Additional Shares (as defined below). Correspondingly, "subscriber", "subscription period", "subscription place", "subscription price", "subscription offer" and "commitment" (and other corresponding terms) refer to both Share Issue (as defined below) and Additional Shares offered as a part of the Over-Allotment Option (as defined below).

General terms and conditions of the Offering

Offering

Bioretec Ltd, a limited liability company incorporated in Finland (the "**Company**"), aims to raise gross proceeds of EUR 25 million by offering preliminarily a maximum of 6,410,256 new shares in the Company (the "**New Shares**") for subscription (the "**Share Issue**").

In addition, the Company's Board of Directors may grant Danske Bank A/S, Finland branch acting as a stabilizing manager ("**Danske Bank**") an over-allotment option (the "**Over-Allotment Option**" and together with the Share Issue, the "**Offering**"). The Over-Allotment Option would entitle Danske Bank (the "**Stabilizing Manager**") to subscribe for a maximum of 961,538 new shares in the Company (the "**Additional Shares**") at the Subscription Price solely to cover over-allotments, if any, in connection with the Offering. Unless the context indicates otherwise, the New Shares and any Additional Shares to be issued are together referred to herein as the "**Offer Shares**".

The Offering consists of (i) a public offering to private individuals and entities in Finland (the "**Public Offering**") and (ii) an institutional offering to institutional investors in Finland and, in accordance with applicable laws, internationally outside the United States (the "**Institutional Offering**"). The New Shares represent a maximum of approximately 37 per cent of all the shares in the Company ("**Shares**") after the Offering, assuming that the Over-Allotment Option is not exercised. The Offer Shares represent a maximum of approximately 41 per cent of all the shares in the Company, assuming that the Over-Allotment Option is exercised in full. As a result of the Offering, the number of Shares in the Company may increase to up to 18,119,652 Shares, assuming that all initially offered Offer Shares in the Offering are subscribed for in full. Please see also "*Plan of Distribution – Dilution*". In the Annual General Meeting of the Company on 22 April 2021, the shareholders of the Company resolved to authorize the Company's Board of Directors to decide on an issue of a maximum of 14,000,000 Offer Shares. Based on said authorization, the Company's Board of Directors has resolved on 3 June 2021 to issue Offer Shares in the Offering.

The Offer Shares are being offered in deviation from the shareholders' pre-emptive subscription right in order to enable the listing of the Shares on Nasdaq Helsinki Ltd's Nasdaq First North Growth Market ("**First North**") (the "**Listing**"), and therefore, according to the assessment of the Company's Board of Directors, there is a weighty financial reason for the deviation from the shareholders' pre-emptive subscription right. The payment made to the Company for the approved Offer Share subscriptions will be booked in its entirety in the invested unrestricted equity fund. Thus, the Company's share capital will not increase in connection with the Offering.

Offer Shares will be offered to investors outside the United States in offshore transactions in compliance with Regulation S under the US Securities Act of 1933, as amended (the "**US Securities Act**") and otherwise in compliance with the said regulation. The Shares (including the Offer Shares) have not been registered and they will not be registered under the US Securities Act or under the securities laws of any state of the United States and, accordingly, will not be offered or sold, directly or indirectly, in or into the United States (as defined in Regulation S).

The terms and conditions of the Offering are comprised of the general terms and conditions of the Offering as well as the special terms and conditions of the Public Offering and the Institutional Offering.

Sole global coordinator and subscription place

Danske Bank acts as the sole global coordinator and bookrunner of the Offering (the "**Sole Global Coordinator**"). In addition, the Company has appointed Nordnet Bank AB ("**Nordnet**") as the subscription place in the Public Offering.

Over-Allotment Option

In connection with the Offering, the Company may grant the Stabilizing Manager the Over-Allotment Option, which would entitle the Stabilizing Manager to subscribe for a maximum of 961,538 Additional Shares at the Subscription Price solely to cover over-allotments, if any, in connection with the Offering. The Over-Allotment Option is exercisable within 30 days from the commencement of trading of the Shares on First North (i.e. on or about the period between 18 June 2021 and 16 July 2021) (the "**Stabilization Period**"). The maximum number of Additional Shares represents 5.6 per cent of the Shares and votes vested by the Shares assuming that the Company will issue 6,410,256 New Shares. However, the

number of Additional Shares will in any case represent no more than 15 per cent of the maximum number of New Shares offered in the Offering.

Stabilization

The Stabilizing Manager may, but is not obligated to, engage in measures during the Stabilization Period that stabilize, maintain or otherwise affect the price of the Shares. The Stabilizing Manager may allocate a larger number of Shares than the maximum number of New Shares offered in the Offering, which will create a short position. The short position is covered if it does not exceed the number of Additional Shares. The Stabilizing Manager is entitled to close the covered short position using the Over-Allotment Option and/or by buying Shares on the market. In determining the acquisition method of the Shares to cover the short position, the Stabilizing Manager may consider, among other things, the market price of the Shares in relation to the Subscription Price. In connection with the Offering, the Stabilizing Manager may also bid for Shares to stabilize the market price of the Shares. The purpose of these measures is to support the market price of the Shares and these measures may raise or maintain the market price of the Shares in comparison with the price levels determined independently on the market or may prevent or delay any decrease in the market price of the Shares. However, stabilization measures cannot be carried out at a higher price than the Subscription Price. The Stabilizing Manager has no obligation to carry out these measures, and it may stop any of these measures at any time. At the end of the Stabilization Period, the Stabilizing Manager or the Company on behalf of the Stabilizing Manager will publish information regarding the stabilization required by legislation or other applicable regulations. The stabilization measures can be conducted on First North during the Stabilization Period.

Any stabilization measures will be conducted in accordance with Regulation (EU) No 596/2014 of the European Parliament and of the Council on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC (the "**MAR**") and Commission Delegated Regulation (EU) 2016/1052 supplementing the Market Abuse Regulation with regard to regulatory technical standards for the conditions applicable to buy-back programs and stabilization measures.

The Stabilizing Manager and Innovestor Growth Fund I LP are expected to enter into a stock lending agreement related to the settlement and stabilization concerning the Over-Allotment Option in connection with the Offering. According to the stock lending agreement, the Stabilizing Manager may borrow a number of Shares equal to the maximum number of Additional Shares to cover any possible over-allotments in connection with the Offering. To the extent that the Stabilizing Manager borrows Shares pursuant to the stock lending agreement, it must return an equal number of Shares to Innovestor Growth Fund I LP. For further information, see "*Plan of distribution*".

Placing Agreement

The Company and the Sole Global Coordinator are expected to conclude a placing agreement (the "**Placing Agreement**") on or about 17 June 2021. For further information, see "*Plan of distribution*".

Subscription Period

The subscription period for the Public Offering will commence on 7 June 2021 at 10:00 a.m. (Finnish time) and end on 15 June 2021 at 4:00 p.m. (Finnish time).

The subscription period for the Institutional Offering will commence on 7 June 2021 at 10:00 a.m. (Finnish time) and end on 17 June 2021 at 10:00 a.m. (Finnish time).

The Company's Board of Directors has, in the event of an oversubscription, the right to end the Institutional Offering and the Public Offering at the earliest on 14 June 2021 at 4:00 p.m. (Finnish time). The Institutional and Public Offerings may be ended or not ended independently of one another. A company release regarding any ending will be published without delay.

The Company's Board of Directors is entitled to extend the subscription periods of the Institutional and the Public Offering. A possible extension of the subscription period will be communicated through a company release, which will indicate the new end date of the subscription period. The subscription periods of the Institutional and the Public Offering will in any case end on 25 June 2021 at 12:00 p.m. The subscription periods of the Institutional and the Public Offering may be extended independently of one another. A company release concerning the extension of a subscription period must be published no later than on the estimated final dates of the subscription periods for the Institutional and Public Offerings stated above.

Subscription Price

The subscription price for the Offer Shares in the Institutional Offering and the Public Offering is EUR 3.90 per Offer Share (the "**Subscription Price**"). The Subscription Price may be changed during the subscription period, provided, however,

that in the Public Offering, the Subscription Price cannot be higher than the original Subscription Price, i.e. EUR 3.90 per Offer Share. The amount of the Subscription Price in the Public Offering and in the Institutional Offering may differ from one another only if the Subscription Price is changed so that the Subscription Price in the Institutional Offering is higher than the original Subscription Price. The change, if any, will be communicated through a company release and on the Internet at www.bioretec.com/ipo, www.danskebank.fi/bioretec-en and www.nordnet.fi/fi/bioretec. If the Subscription Price is changed, the Finnish language prospectus published by the Company in connection with the Offering (the "**Finnish Prospectus**") will be supplemented and the supplement will be published through a company release. If the Finnish Prospectus is supplemented, investors who have given their Commitments (as defined bellow) before the supplement or correction of the Finnish Prospectus have the right to cancel their Commitments as described below in section "*– Cancellation of Commitments*".

Conditionality, execution and publishing of the Offering

The Company's Board of Directors will decide, after consulting the Sole Global Coordinator, on the execution of the Offering, the final number of Offer Shares and the allocation of Offer Shares (the "**Completion Decision**") based on the subscription offers (a "**Subscription Offer**") of institutional investors in the Institutional Offering on or about 17 June 2021. The above information will be published through a company release and be available on the Company's website at www.bioretec.com/ipo immediately after the Completion Decision and in the subscription places of the Public Offering and on the Internet at www.danskebank.fi/bioretec-en and www.nordnet.fi/fi/bioretec no later than the business day following the Completion Decision, i.e. on or about 18 June 2021. If all New Shares are not subscribed for, the Offering will not be executed. The execution of the Offering is also conditional upon the signing of the Placing Agreement.

Cancellation of Commitments

A commitment to subscribe for Offer Shares in the Public Offering (a "**Commitment**") cannot be amended. A Commitment may only be cancelled in the situations provided for in the Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 (the "**Prospectus Regulation**").

Cancellation in accordance with the Prospectus Regulation

If the Finnish Prospectus is supplemented in accordance with the Prospectus Regulation due to a material error or omission or due to material new information that has become known after the Finnish Financial Supervisory Authority has approved the Finnish Prospectus and before the public offering of the Offer Shares ends, investors who have given their Commitments before the supplement or correction of the Finnish Prospectus have, in accordance with the Prospectus Regulation, the right to cancel their Commitments within three (3) working days after the supplement has been published. The use of the cancellation right requires that the error, omission or material new information that led to the supplement or correction has become known prior to the end of the subscription period. Any cancellation of a Commitment must concern the total number of shares covered by the Commitment given by an individual investor. If the Finnish Prospectus is supplemented, the supplement will be published through a company release. The company release will also include information on the right of the investors to cancel their Commitment in accordance with the Prospectus Regulation.

Procedure to cancel a Commitment

The cancellation of a Commitment must be notified to the subscription place where the initial Commitment was made, within the time limit set for such cancellation, with the following exceptions:

- A Commitment made through Danske Bank's eBanking service, corporate eBanking service or online subscription may be cancelled by visiting Danske Bank's offices (excluding corporate offices) in person or through an authorized representative or by calling Danske Bank's Investment Advisory Centre and using Danske Bank's bank identifiers.
- A Commitment given by phone to Danske Bank's Investment Advisory Centre may be revoked by phone using Danske Bank's bank identifiers.
- Investors who have submitted their subscriptions via Nordnet must send a written cancellation request within the set time limit by email to operations.fi@nordnet.fi or deliver the cancellation to the Nordnet's office with the following exceptions: the Commitment submitted by Nordnet's own customers via Nordnet's online service can be cancelled through an authorized representative or via Nordnet's online service by accepting a separate cancellation of Commitment by using the Nordnet's bank identifiers.

A cancellation of a Commitment applies to the entire Commitment. After the time limit set for cancellation has expired, the cancellation right is no longer valid. If the Commitment is cancelled, the subscription place refunds the sum paid for the Offer Shares to the bank account specified in the Commitment. To customers who gave their Commitments via Nordnet's

subscription place, the amount to be refunded will be paid to Nordnet cash accounts. The payment is refunded as soon as possible after the cancellation, approximately within five (5) banking days of serving the subscription place with the cancellation notice. If an investor's bank account is in a different monetary financial institution than the place of subscription, the refund will be paid to the investor's Finnish bank account in accordance with the payment schedule of the monetary financial institutions, approximately no later than two (2) banking days thereafter. No interest will be paid on the refunded amount.

Entry of Offer Shares into book-entry accounts

Investors who have submitted a Commitment must have a book-entry account with a Finnish account operator or an account operator operating in Finland, and investors must specify the details of their book-entry account in their Commitments. It is possible to make subscriptions to equity savings accounts though Danske Bank only to an equity savings account provided by Danske Bank and through Nordnet only to an equity savings account provided by Nordnet. The Offer Shares allocated in the Public Offering are recorded in the book-entry accounts of investors who have made an approved Commitment on or about the first banking day after the Completion Decision takes place, on or about 18 June 2021. In the Institutional Offering, investors should contact the Sole Global Coordinator of the Offering with respect to the book-entry accounts. In the Institutional Offering, the allocated Offer Shares will be ready to be delivered against payment on or about 22 June 2021 through Euroclear Finland Ltd.

Title and shareholder rights

The title to the Offer Shares will be transferred when the Offer Shares are paid for, the Offer Shares are registered in the Trade Register maintained by the Finnish Patent and Registration Office (the "Trade Register") and the Offer Shares are recorded in the investor's book-entry account. Offer Shares carry rights equal to all other Shares in the Company and they will entitle their holders to dividends and other distributions of funds as well as other rights related to the Shares when the title has been transferred.

Transfer tax and other expenses

Transfer tax will not be levied in connection with the issuance or subscription of the Offer Shares in Finland. The Additional Shares distributed in an event of an over-allotment, if any, will be distributed when the trading in the Shares commences in First North and no transfer tax is expected to be paid on these transfers in Finland. Should transfer tax be levied, the Company will pay the transfer tax levied on the transfers of the Additional Shares. Account operators charge fees in accordance with their price lists for the maintenance of the book-entry account and for safekeeping of Shares.

Trading in the Shares

Before the execution of the Offering, the Shares in the Company have not been subject to trading on any multilateral trading facility or regulated market. The Company intends to file a listing application with Nasdaq Helsinki Ltd to list the Shares on First North. Trading in the Shares is expected to commence on the First North on or about 18 June 2021. The trading code of the Shares is BRETEC and the ISIN code is FI4000480454.

When the trading on First North commences on or about 18 June 2021, not all of the Offer Shares may necessarily have been fully transferred to the investors' book-entry accounts. If an investor wishes to sell Offer Shares subscribed by it in the Offering, the investor should ensure that the number of Shares registered to its book-entry account covers the transaction in question at the time of clearing.

Right to cancel the Offering

The Company's Board of Directors has the right to cancel the Offering at any time before the Completion Decision on the grounds of, for example, the market conditions, the Company's financial position or a material change in the Company's business. If the Offering is cancelled, the subscription price paid by the investors will be refunded in approximately five (5) banking days from the cancellation decision. If an investor's bank account is in a different monetary financial institution than the place of subscription, the refund will be paid to a Finnish bank account in accordance with the payment schedule of the monetary financial institutions, approximately no later than two (2) banking days thereafter. To Nordnet's own customers who gave their Commitments via Nordnet's subscription place, the refunded amount will be paid to Nordnet cash account. No interest will be paid on the refunded amount.

Lock-up

The Company is expected to commit and certain largest shareholders have committed during the period that will end 360 days from the Listing, without the prior written consent of the Sole Global Coordinator, not to issue, offer, pledge, sell, contract to sell, sell any option rights or contract to purchase, purchase any option or contract to sell, grant any option right

or warrant to purchase, lend or otherwise transfer or dispose of (or publicly disclose such transaction), directly or indirectly, any Shares or any securities they hold entitling to Shares or exchangeable for or convertible into or exercisable for Shares, or enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Shares, whether any such transactions are to be settled by delivery of the Shares or other securities, in cash or otherwise or make a proposal to the General Meeting to execute such arrangement. The lock-up does not apply to the measures related to the execution of the Offering.

The members of the Board of Directors and the management team of the Company have entered into a lock-up agreement with similar terms to that of the Company that will end 360 days from the Listing.

In aggregate, the terms of lock-up agreements apply to approximately 32 per cent of the Shares after the Offering without the Over-Allotment Option (approximately 30 per cent with the Over-Allotment Option assuming that all Offer Shares preliminarily offered in the Offering are subscribed for in full. The proportion of the Shares represented by the lock-up has been calculated prior to the members of the Board of Directors and management team or the current shareholders have made any possible subscriptions in the Offering.

Other matters

The Board of Directors of the Company will decide on other issues and practical matters related to the Offering and on the practical arrangements resulting therefrom.

Documents on display

The Company's latest financial statements, annual report and the auditor's report as well as the other documents pursuant to Chapter 5, Section 21 of the Finnish Limited Liability Companies Act, are available during the subscription period at the Company's offices at Hermiankatu 22, 33720 Tampere, Finland.

Applicable law

The Offering shall be governed by the laws of Finland. Any disputes arising in connection with the Offering shall be settled by a court of competent jurisdiction in Finland.

Special terms and conditions concerning the Public Offering

Overview

Preliminarily a maximum of 1,025,641 New Shares are offered in the Public Offering to private individuals and entities in Finland. Depending on the demand, the Company may reallocate New Shares between the Institutional and the Public Offerings in deviation from the preliminary number of shares without limitation. However, the minimum number of New Shares to be offered in the Public Offering will be 1,025,641 New Shares or, if the aggregate number of shares covered by the Commitments submitted in the Public Offering is smaller than this, such aggregate number of New Shares as covered by the Commitments.

The place of subscription has the right to reject a Commitment, either partially or wholly, if the Commitment does not comply with the terms and conditions herein or if it is otherwise incomplete.

Right to participate and the minimum and maximum amounts for Commitments

Offer Shares will be offered in the Public Offering to investors whose domicile is in Finland and who submit their Commitments in Finland. Entities submitting a Commitment must have a valid LEI code. Commitments in the Public Offering must be no less than 200 Offer Shares and no more than 26,000 Offer Shares. Each investor may submit only one Commitment in the Public Offering. If an investor submits a Commitment in more than one subscription place in the Public Offering, only the first Commitment will be taken into account when allocating the Offer Shares.

Places of subscription and submission of Commitments

A Commitment is considered to have been made when the investor has submitted a signed commitment form to the place of subscription in accordance with instructions of the place of subscription or when the investor has confirmed the Commitment with bank identifiers in accordance with the instructions of the place of subscription and paid for the subscription concerned by the Commitment. A Commitment submitted as an online subscription is deemed to have been made when the investor has made the Commitment in accordance with the terms and conditions of the online subscription or has confirmed the Commitment with his or her bank identifiers and paid for the share subscription price in accordance with the Commitment. Any more detailed instructions issued by the place of subscription must be taken into consideration when submitting a Commitment.

Commitments may only be cancelled in the manner and situations referred to under "– *General terms and conditions of the Offering – Cancellation of Commitments*".

The places of subscription in the Public Offering for Danske Bank book-entry account and equity savings account customers are:

- Danske Bank's eBanking service with bank identifiers for private customers at www.danskebank.fi;
- Danske Bank's corporate eBanking service in the Markets Online Module for District customers;
- Danske Bank's Investment Advisory Centre with Danske Bank's bank identifiers by phone, 9:00 a.m. to 6:00 p.m. Monday to Friday (Finnish time), tel. +358 200 20109 (local network charge/mobile call charge). Danske Bank's Investment Advisory Centre calls will be recorded;
- Danske Bank offices in Finland during normal business hours; and
- Danske Bank Private Banking offices in Finland (for Danske Bank Private Banking customers only).

Submitting a Commitment by phone via Danske Bank's Investment Advisory Centre or Danske Bank eBanking service requires a valid eBanking agreement with Danske Bank.

Making a Commitment to an equity savings account through Danske Bank is only possible to equity savings account provided by Danske Bank.

The places of subscription in the Public Offering in Finland for persons who are not book-entry account customers of Danske Bank are:

- Danske Bank's online subscription for private customers at www.danskebank.fi. A Commitment can be made through the online service with bank identifiers of Aktia, Danske Bank, Handelsbanken, Nordea, Oma Savings Bank, Osuuspankki, POP Bank, S-Bank, Savings Bank and Ålandsbanken; and
- Danske Bank offices (excluding corporate offices) in Finland during normal business hours. Information on the offices offering subscription services is available by phone from Danske Bank's Investment Advisory Centre, 9:00 a.m. to 6:00 p.m. Monday to Friday (Finnish time), tel. +358 200 20109 (local network charge/mobile call charge) or on the Internet at www.danskebank.fi. Danske Bank's Investment Advisory Centre calls will be recorded.

Through online subscription of Danske Bank, an individual investor can submit a Commitment up to EUR 100,000 in the Public Offering. If the subscription exceeds EUR 100,000, the Commitment can be given at Danske Bank offices.

The Offer Shares covered by a Commitment must be paid using account in the name of the investor making the Commitment.

Corporations may not submit Commitments by Danske Bank's online subscription.

The place of subscription in the Public Offering in Finland for Nordnet's book-entry and equity savings account customers is:

- Nordnet's online banking service www.nordnet.fi/fi/bioretec. A Commitment submitted through Nordnet online banking service requires personal bank identifiers of Nordnet. A Commitment can also be made on behalf of a corporation through Nordnet's online service. A subscription to equity savings account can be made through Nordnet only to equity savings account registered with Nordnet.

Commitments by or on behalf of persons under the age of 18, or otherwise under guardianship, must be made by their legal guardians. A guardian may not subscribe for Offer Shares without the permission of the local guardianship authority, as the Offer Shares are not yet subject to trading at the time of the Commitment.

Payment of Offer Shares

When submitting a Commitment, the price to be paid for the Offer Shares is the Subscription Price i.e. EUR 3.90 per Offer Share multiplied by the number of Offer Shares covered by the Commitment.

The payment of a Commitment submitted in Danske Bank's office, Danske Bank Private Banking office or through the Investment Advisory Centre will be debited from the investor's bank account in Danske Bank or it can be paid by a bank transfer. The payment corresponding to the Commitment that has been submitted through Danske Bank eBanking service or Danske Bank corporate eBanking service will be charged from the investor's bank account when the investor confirms the Commitment with his or her bank identifiers. The payment of a Commitment submitted through Danske Bank online subscription must be made in accordance with the terms and conditions and instructions of subscription immediately after the Commitment has been submitted.

The Commitments submitted through Nordnet's online service will be debited in connection with the subscription when the investor confirms the Commitment with his/her bank identifiers.

Approval of Commitments and allocation

The Company will decide on the allocation of Offer Shares in the Public Offering to investors after the Completion Decision. The Company will decide on the procedure to be followed in any situation where there is overdemand. Commitments may be approved or rejected in whole or in part. In the event of an oversubscription, the Company aims to approve subscribers' Commitments in whole up to 100 Offer Shares and, for Commitments exceeding this amount, the Company allocates Offer Shares in proportion to the amount of Commitments unmet. Confirmations regarding the approval of the Commitments and the allocation of Offer Shares will be sent to the investors who have submitted their Commitments in the Public Offering as soon as possible and on or about 24 June 2021 at the latest. Investors who have submitted their Commitments as Nordnet's customers through Nordnet's online service, will see their Commitments as well as Offer Shares allocated to them on the transaction page of Nordnet's online service.

Refunding of paid amounts

If the Commitment is rejected or only partially approved and/or if the Subscription Price is changed and the Subscription Price is less than price paid in connection with submission of the Commitment, the excess amount paid will be refunded to the party that made the Commitment to the bank account identified in the Commitment on or about the fifth (5) banking day after the Completion Decision, i.e. on or about 24 June 2021. If an investor's bank account is in a different monetary financial institution than the place of subscription, the refund will be paid to a bank account in accordance with the payment schedule of the monetary financial institutions, approximately no later than two (2) banking days thereafter. To Nordnet's own customers who gave their Commitments via Nordnet's subscription place, the amount to be refunded will be paid to Nordnet cash accounts. No interest will be paid on the refunded amount. See also "– *General terms and conditions of the Offering – Cancellation of Commitments – Procedure to cancel a Commitment*" above.

Entry of Offer Shares into book-entry accounts

An investor submitting Commitments in the Public Offering must have a book-entry account with a Finnish account operator or an account operator operating in Finland, and the investor must specify the details of its book-entry account in its Commitment. Subscriptions to equity savings accounts though Danske Bank can be made only to an equity savings account provided by Danske Bank and through Nordnet only to an equity savings account provided by Nordnet. The Offer Shares allocated in the Public Offering will be recorded in the book-entry accounts of investors who have made an approved Commitment, on or about the first banking day after the Completion Decision, i.e. on or about 18 June 2021.

Special terms and conditions concerning the Institutional Offering

Overview

Preliminarily a maximum of 5,384,615 New Shares are being offered in the Institutional Offering to institutional investors in Finland and, in accordance with the applicable laws, internationally outside the United States on the terms and conditions set forth herein. Depending on the demand, the Company may reallocate New Shares between the Institutional and the Public Offering in deviation from the preliminary number of shares without limitation. However, the minimum number of New Shares to be offered in the Public Offering will be 1,025,641 New Shares or, if the aggregate number of shares covered by the Commitments submitted in the Public Offering is smaller than this, such aggregate number of New Shares as covered by the Commitments.

Offer Shares will be offered in the Institutional Offering outside the United States in offshore transactions in compliance with the US Securities Act and otherwise in compliance with said regulation. The Shares (including the Offer Shares) have not been registered, and they will not be registered under the US Securities Act or under the securities laws of any state of the United States and, accordingly, will not be offered or sold, directly or indirectly, in or into the United States (as defined in Regulation S of the US Securities Act). For more information on restrictions concerning the offering of the Offer Shares, please see "*Important information*".

The Sole Global Coordinator has the right to reject a Subscription Offer, either partially or wholly, if it does not comply with the terms and conditions herein or if it is otherwise incomplete.

Right to participate and place of subscription

An investor, whose Subscription Offer is at least 26,001 Offer Shares, may participate in the Institutional Offering. Entities submitting a Subscription Offer must have a valid LEI code.

The Subscription Offers of institutional investors will be received by the Sole Global Coordinator of the Offering.

Approval of Subscription Offers and allocation

The Company will decide on the acceptance of Subscription Offers submitted in the Institutional Offering after the Completion Decision. The Company will decide on the procedure to be followed in any overdemand situations. Subscription Offers may be approved or rejected in whole or in part. A confirmation of the approved Subscription Offers in the Institutional Offering will be provided as soon as practically possible after the allocation.

Payment of Offer Shares

Institutional investors must pay for the Offer Shares corresponding to their accepted Subscription Offers in accordance with the instructions issued by the Sole Global Coordinator on or about 22 June 2021. If necessary in connection with a Subscription Offer being made or before the approval of a Subscription Offer, the Sole Global Coordinator has the right, provided by the duty of care set for securities intermediaries, to require that the investor provides information concerning its ability to pay for the Offer Shares corresponding to its Subscription Offer or require that the payment for the Offer Shares concerned by the Subscription Offer be made in advance. The amount to be paid in this connection is the Subscription Price, i.e. EUR 3.90 multiplied by the number of Offer Shares covered by the Subscription Offer. If the Subscription Price is changed, the new Subscription Price will be applied to the Subscription Offers submitted thereafter. Possible refunds will be made on or about on the fifth (5th) banking day following the Completion Decision, on or about 24 June 2021. No interest will be paid on the refunded amount.

Subscription Undertakings

Handelsbanken Fonder AB, Mandatum Life Insurance Company Limited and Kaleva Mutual Insurance Company (the "**Cornerstone Investors**") have each in June 2021 given subscription undertakings in relation to the Offering, under which the Cornerstone Investors have, each individually, committed to subscribe for Offer Shares at the Subscription Price, subject to certain conditions being fulfilled, including a condition that the maximum valuation of all of the Company's outstanding Shares (after any proceeds from the Offering and excluding treasury shares), based on the Subscription Price, does not exceed EUR 71 million. According to the terms and conditions of the subscription undertakings, the Cornerstone Investors will be guaranteed the number of Offer Shares covered in the subscription undertaking. The Cornerstone Investors will not be compensated for their subscription undertakings. The Cornerstone Investors have given subscription undertakings as follows:

- The commitment of Handelsbanken Fonder AB undertaking amounts to EUR 4 million;
- The commitment of Mandatum Life Insurance Company Limited undertaking amounts to EUR 3 million; and
- The commitment of Kaleva Mutual Insurance Company undertaking amounts to EUR 1 million.

Subscription undertakings of the Cornerstone Investors represent approximately 32 per cent of New Shares assuming that the Over-Allotment Option is not exercised (approximately 28 per cent of Offer Shares assuming that the Over-Allotment Option is exercised), and assuming that all initially offered New Shares in the Offering are subscribed for.

PLAN OF DISTRIBUTION

Placing Agreement

Danske Bank acts as the Sole Global Coordinator of the Offering. The Company and the Sole Global Coordinator are expected to conclude a placing agreement concerning the Offering (the "**Placing Agreement**") on or about 17 June 2021. Under the terms and conditions of the Placing Agreement, the Company undertakes to issue Offer Shares to investors procured by the Sole Global Coordinator and the Sole Global Coordinator undertakes, subject to certain conditions, to procure subscribers for the Offer Shares. Placing Agreement referred to above defines the services to be provided by the Sole Global Coordinator in connection with the Offering.

The Placing Agreement includes customary conditions that entitle the Sole Global Coordinator to terminate the Placing Agreement in certain situations and with certain preconditions. Such situations include certain significant adverse changes in the Company's business, financial or other position, results of operations or prospects of the Company, as well as certain changes in, among others, national or international political or economic conditions. Furthermore, the Company has given customary representations and warranties to the Sole Global Coordinator related to, among others, the Company's business and compliance with the law, the Company's Shares and the content of this Offering Circular. According to the Placing Agreement, the Company is committed to, among others, release the Sole Global Coordinator of certain obligations and reimburse certain costs incurred in connection with the Offering.

The Offering consists of (i) the Public Offering in Finland and (ii) the Institutional Offering arranged in Finland and internationally. In the Institutional Offering, the Shares are offered to institutional investors in Finland and, in accordance with applicable laws, internationally in certain countries outside the United States in compliance with Regulation S adopted under the U.S. Securities Act. The Offer Shares have not been registered and they will not be registered under the US Securities Act or under the securities laws of any state of the United States and, accordingly, will not be offered or sold, directly or indirectly, in or into the United States (as defined in Regulation S).

Over-Allotment Option

In the event of an oversubscription, the Company is expected to grant the Sole Global Coordinator the Over-Allotment Option, exercisable within 30 days from commencement of trading in the Shares on First North, i.e. on or about the period between 18 June 2021 and 16 July 2021, to subscribe for, or to procure purchasers, for up to 961,538 Additional Shares assuming that the Company issues 6,410,256 New Shares solely to cover over-allotments. The Shares covered by the Over-Allotment Option correspond to a maximum of 9 per cent of the Shares and votes before the Share Issue and approximately 6 per cent after the Share Issue, provided that all the offered New Shares will be subscribed for.

Stabilization

In connection with the Offering, Danske Bank as the Stabilizing Manager may within 30 days from commencement of trading in the Shares on First North, i.e. on or about the period between 18 June 2021 and 16 July 2021, engage in measures that stabilize, maintain or otherwise affect the price of the Shares. The Stabilizing Manager may allocate a larger number of Shares than the maximum number of New Shares offered in the Offering, creating a short position. Any short selling would be covered if the short position does not exceed the number of Additional Shares. The Stabilizing Manager may close the covered short position using the Over-Allotment Option and/or by buying Shares on the market. In determining the acquisition method of the Shares to cover the short position, the Stabilizing Manager may consider, among other things, the market price of the Shares in relation to the Subscription Price. In connection with the Offering, the Stabilizing Manager may also bid for Shares to stabilize the market price of the Shares. The purpose of these measures is to support the market price of the Shares and these measures may raise or maintain the market price of the Shares in comparison with the price levels determined independently on the market or may prevent or delay any decrease in the market price of the Shares. However, stabilization measures cannot be carried out at a higher price than the Subscription Price. The Stabilizing Manager has no obligation to carry out these measures, and it may stop any of these measures at any time. At the end of the Stabilization Period, the Stabilizing Manager or the Company on behalf of the Stabilizing Manager will publish information regarding the stabilization required by legislation or other applicable regulations. The stabilization measures can be conducted on First North during the Stabilization Period.

Any stabilization measures will be conducted in accordance the MAR and Commission Delegated Regulation (EU) 2016/1052 supplementing the MAR with regard to regulatory technical standards for the conditions applicable to buy-back programs and stabilization measures.

The Stabilizing Manager and Innovestor Growth Fund I LP are expected to enter into a stock lending agreement related to the settlement and stabilization concerning the Over-Allotment Option in connection with the Offering. According to the stock lending agreement, the Stabilizing Manager may borrow a number of Shares equal to the maximum number of

Additional Shares to cover any possible over-allotments in connection with the Offering. To the extent that the Stabilizing Manager borrows Shares pursuant to the stock lending agreement, it must return an equal number of Shares to Innovestor Growth Fund I LP.

Lock-up

The Company is expected to commit and certain largest shareholders have committed during the period that will end 360 days from the Listing, without the prior written consent of the Sole Global Coordinator, not to issue, offer, pledge, sell, contract to sell, sell any option rights or contract to purchase, purchase any option or contract to sell, grant any option right or warrant to purchase, lend or otherwise transfer or dispose of (or publicly disclose such transaction), directly or indirectly, any Shares or any securities they hold entitling to Shares or exchangeable for or convertible into or exercisable for Shares, or enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Shares, whether any such transactions are to be settled by delivery of the Shares or other securities, in cash or otherwise or make a proposal to the General Meeting to execute such arrangement. The lock-up does not apply to the measures related to the execution of the Offering.

The members of the Board of Directors and the management team of the Company have entered into a lock-up agreement with similar terms to that of the Company that will end 360 days from the Listing.

In aggregate, the terms of lock-up agreements apply to approximately 32 per cent of the Shares after the Offering without the Over-Allotment Option (approximately 30 per cent with the Over-Allotment Option assuming that all Offer Shares preliminarily offered in the Offering are subscribed for in full. The proportion of the Shares represented by the lock-up has been calculated prior to the members of the Board of Directors and management team or the current shareholders have made any possible subscriptions in the Offering.

Fees and expenses

The Company will pay the Sole Global Coordinator a sales fee which is determined on the basis of the gross proceeds from the Offer Shares. In addition, the Company may, at its sole discretion, pay the Sole Global Coordinator a performance fee. In addition, the Company has undertaken to reimburse the Sole Global Coordinator for certain expenses. The Company expects to pay approximately EUR 2.8 million in fees and expenses (including the discretionary fees) in connection with the Offering.

Interests related to the Offering

The fees to be paid to the Sole Global Coordinator are, in part, linked to the proceeds from the Offering.

Danske Bank, acting as the Sole Global Coordinator, as well as other entities in the same group, may purchase and sell the Shares for their own or their customers' account prior to, during and after the Offering subject to applicable legislation and regulations.

Danske Bank, acting as the Sole Global Coordinator, as well as other entities in the same group have provided and may in the future provide to the Company investment or other banking services in accordance with their ordinary business.

Dilution

The maximum number of Offer Shares offered in the Offering represents 41 per cent of all Shares and 41 per cent of all votes after the completion of the Offering. In the event that existing shareholders of the Company do not subscribe for the Offer Shares in the Offering, their total holding of Shares would be diluted by 41 per cent and the total holding of voting rights would be diluted by 41 per cent.

The Company's equity per Share, excluding the treasury shares, stood at EUR 0.01 on 31 March 2021.

Subscription undertakings

Handelsbanken Fonder AB, Mandatum Life Insurance Company Limited and Kaleva Mutual Insurance Company (the "**Cornerstone Investors**") have each given subscription undertakings in relation to the Offering, under which the Cornerstone Investors have, each individually, committed to subscribe for Offer Shares at the Subscription Price, subject to certain conditions being fulfilled, including a condition that the maximum valuation of all of the Company's outstanding Shares (after any proceeds from the Offering and excluding treasury shares), based on the Subscription Price, does not exceed EUR 71 million. According to the terms and conditions of the subscription undertakings, the Cornerstone Investors will be guaranteed the number of Offer Shares covered in the subscription undertaking. The Cornerstone Investors will not be compensated for their subscription undertakings. The Cornerstone Investors have given subscription undertakings as follows:

- The commitment of Handelsbanken Fonder AB undertaking amounts to EUR 4 million;
- The commitment of Mandatum Life Insurance Company Limited undertaking amounts to EUR 3 million; and
- The commitment of Kaleva Mutual Insurance Company undertaking amounts to EUR 1 million.

Subscription undertakings of the Cornerstone Investors represent approximately 32 per cent of New Shares assuming that the Over-Allotment Option is not exercised (approximately 28 per cent of Offer Shares assuming that the Over-Allotment Option is exercised), and assuming that all initially offered New Shares in the Offering are subscribed for.

Information to distributors

Solely for the purposes of the product governance requirements contained within: (a) MiFID II, (b) Articles 9 and 10 of the Commission Delegated Directive (EU) 2017/593 supplementing MiFID II, and (c) local implementing measures (together, the "**MiFID II Product Governance Requirements**"), and disclaiming all and any liability, whether arising in tort, contract or otherwise, which any "manufacturer" (for the purposes of the MiFID II Product Governance Requirements) may otherwise have with respect thereto, the Shares have been subject to a product approval process, which has determined that they each are (i) compatible with an end target market of retail investor and investors who meet the criteria of professional clients and eligible counterparties, each as defined in MiFID II (the "**Target Market Assessment**"), and (ii) eligible for distribution through all distribution channels as are permitted by MiFID II. Distributors should note that: the price of the Shares may decline and investors could lose all or part of their investment; the Shares offer no guaranteed income and no capital protection; and an investment in the Shares is compatible only with investors who do not need a guaranteed income or capital protection, who (either alone or in conjunction with an appropriate financial or other adviser) are capable of evaluating the merits and risks of such an investment and who have sufficient resources to be able to bear any losses that may result therefrom. The Target Market Assessment is without prejudice to the requirements in any contractual, legal or regulatory selling restrictions in relation to the Offering.

The Target Market Assessment does not constitute (a) an assessment of suitability or appropriateness for the purposes of MiFID II; or (b) a recommendation to any investor or group of investors to invest in, obtain, or take any other action concerning the Shares. Each distributor is responsible for its own Target Market Assessment in respect of the Shares and determining the appropriate distribution channels.

BUSINESS OVERVIEW

General

Bioretec is a Finnish medical device company focusing on the development of strong and safe bioresorbable implants for pediatric and adult orthopedics. Bioretec develops, manufactures and commercializes innovative bioresorbable orthopedic devices and materials used for repairing defects in bones and soft tissue. Bioretec's business model is based on the experience and special expertise of its personnel in materials and their processing gathered over decades. Bioretec is in a growth phase, and it invests significantly in the sales and marketing of new and unique products and continuously develops its product portfolio and distribution channels. Bioretec's products are used all over the world.

Bioretec's existing Activa product portfolio consists of biopolymer products used in pediatrics, trauma surgery and sports medicine. Implants included in Bioretec's Activa product portfolio slowly bioabsord and gradually transfer stress to the healing bone, and thus do not cause so-called stress shielding, which can slow down the renewal of the bone and lead to resorption of the bone, or osteolysis.[6] Implants are bioresorbable and ultimately completely absorbed into the bone, and therefore their removal does not require a secondary surgery. The Company's current products focus on applications that do not require load-bearing features.

In addition to its existing biopolymer products, Bioretec develops new products based on magnesium and hybrid composite in its RemeOs™ product family. As a significant difference to the existing biopolymeric products, new products in the RemeOs™ product family can be used in applications requiring load-bearing capability, such as the treatment of long bones. The clinical study of Bioretec's first products in the RemeOs™ product family, cannulated screws, has been completed, and the report for their first-year follow-up is ready. The FDA granted the Company's magnesium-based RemeOs™ cannulated screw a Breakthrough Device Designation in March 2021 (for more information on the designation and the criteria for awarding it, see "– *Products – Commercialization plan for the new products in the United States – Registration of the products*"). After receiving the designation, the Company has in March 2021 initiated with the FDA a process to submit an application for market approval, and based on the information available as at the date of this Offering Circular, the Company estimates that the market approval process will be completed during the first half of 2022. Furthermore, the Company aims to apply for a market approval (an application for CE marking (*Conformité Européenne*)) in the European Union in the autumn of 2021.

Traditionally, bone and soft tissue defects have been treated mainly using metal-based implants, which are not bioabsorbed naturally inside the body after the bone and soft tissue has healed. Metal-based implants may need to be removed with another surgical operation, which exposes the patient to new risks, such as infections, weaker healing of the wound, new fractures, damage to tissue or nerves, post-operation bleeding or failure in the removal of the implant.[7] In addition, the operation required for removing the implant results in significant additional costs for the healthcare system. As implants produced by Bioretec are bioresorbable, their removal from the body does not require a separate surgical operation. According to Bioretec's management, Bioretec's products offer through these characteristics significant benefits both to the patients and to the healthcare system, and through this, to society at large.

For the three months ended 31 March 2021, Bioretec's revenue was EUR 0.5 million (EUR 0.4 million for the three months ended 31 March 2020), and its operating profit amounted to EUR -0.5 million (EUR -0.5 million for the three months ended 31 March 2020). For the financial year 2020, Bioretec's revenue amounted to EUR 1.5 million (EUR 1.7 million for the financial year 2019 and EUR 1.6 million for the financial year 2018), and its operating profit amounted to EUR -1.9 million (EUR -1.7 million for the financial year 2019 and EUR -1.6 million for the financial year 2018). The majority of Bioretec's revenue is generated from exports. For the three months ended 31 March 2021, approximately 6 per cent of the revenue was generated in Finland and approximately 94 per cent in other parts of the world (approximately 5 and 95 per cent for the three months ended 31 March 2020) and for the financial year 2020, approximately 6 per cent of the revenue was generated in Finland and approximately 94 per cent in other parts of the world (approximately 5 and 95 per cent for the financial year 2019 and approximately 5 and 95 per cent for the financial year 2018). In the past financial years and interim period, the Company's revenue was derived entirely from the sales of the existing products in the Activa product family, while the operating costs have included significant expenses relating to the development of new products in the RemeOs™ product family.

[6] Source: Mervi Puska, Allan J. Aho and Pekka K. Vallittu, Biomaterials in bone repair, Finnish Medical Journal Duodecim, 2013;129(5), p. 489–96.

[7] Source: Reith et al. BMC Surgery (2015) 15:96 DOI 10.1186/s12893-015-0081-6.

History

The most important development stages of Bioretec are listed below:

- 2003: Bioretec started its operating activities.
- 2003–2007: Bioretec received market approvals in the EU and the United States for the following products in the Activa product family: ActivaPin™, ActivaNail™, ActivaScrew™, ActivaScrew™ Cannulated, ActivaScrew™ Interference.
- 2014: Bioretec reached the milestone of 100,000 products sold.
- 2015–2018: Pre-clinical studies of the magnesium, calcium and zinc alloy.
- 2017: Bioretec reached the milestone of 200,000 products sold.
- 2018–2020: Clinical study of RemeOs™.
- 2019: Bioretec acquired all shares of BRI.Tech, an Austrian company, and with this transaction, obtained an advanced and patented product technology based on bioresorbable metal (magnesium, calcium and zinc composite), which enables Bioretec to access completely new product areas where the previous generation bioresorbable materials could not be used, as they did not have sufficient strength characteristics required in repairing load-bearing bones.
- 2019: The Company submitted international and European patent applications relating to hybrid composite.
- 2020: The Company submitted a European patent application relating to magnesium alloy.
- 2020: Bioretec reached the milestone of 300,000 products sold.
- Marc 2021: the FDA awarded the cannulated screws in the RemeOs™ product family with the Breakthrough Device Designation status.

Bioretec's strengths

Bioretec's management estimates that the following factors in particular are the Company's key strengths:

RemeOs™ products are an excellent and clinically proven effective solution for the treatment of bone fractures

The Company's management estimates that the upcoming RemeOs™ products developed by the Company have clear and significant advantages in repairing bone fractures as compared to the products currently used in the market. According to the management, the most important benefits of the RemeOs™ products for patients, surgeons using the products and the healthcare system are:

1) Unique[8], patented bioactive metal alloy, which comprises only magnesium, zinc and calcium, which are natural elements in bones, and promote bone formation and healing. The metal alloy is REE free and does not contain substances harmful to the body.
2) Suitability for load-bearing applications due to their rigidity and strength.
3) Full bioresorbability eliminating the need for removal operations and the risk of complications relating thereto.
4) Gradual bioresorption supporting the healing process, where the load on the bone increases gradually.
5) Application and methods are consistent with traditional metal implants, which eliminates the need for retraining surgeons.
6) Application of bioresorbable products allows the surgeons to focus on value-creating primary operations instead of removal operations.
7) The mechanical features allow similar fixation as with traditional metal implants.
8) More efficient utilization of the resources of the healthcare system.

The Company's management estimates that the metal alloy used in the RemeOs™ products is an optimal material to be used for orthopedic trauma implants. In terms of its strength and elastic modulus, the RemeOs™ metal alloy is between bioresorbable materials, such as biopolymers, and metal alloys based on titanium or steel. As compared to biopolymers and biocomposites, the RemeOs™ metal alloy is stronger and more rigid, which allows its use in load-bearing applications. As compared to metal alloys based on titanium or steel, the RemeOs™ metal alloy is closer to the natural strength of the bone, but still much stronger than bone.

Bioresorbability is also one of the significant advantages offered by RemeOs™. In the beginning of the bone's healing process, the material is rigid and strong, and due to this, it supports the bone's position as required by the healing process. As the healing process progresses, the material slowly bioresorbs and its strength decreases to gradually increase the load on the healing bone. For the healing of the bone, it is important that the load borne by the bone is increased in a controlled manner in order for the bone to reach its natural strength. Unlike the RemeOs™ metal alloy, metal alloys based

[8] According to the Company's management, other companies do not use metal alloys comprising of the same ingredients in the same proportion.

on titanium or steel currently used in the market are not bioabsorbable. Use of non-bioresorbable metals may hinder or prevent the recovery of the bone back to its natural strength. In many cases, the use of metal implants also leaves sections in the bone, which may never ossificate completely after the removal of the implant, and the formed soft or scar tissue may render the bone weaker and more susceptible to refractures. Based on the clinical and other studies conducted the RemeOs™ metal alloy also supports ossification in the implant area as it bioresorbs, and its use does not leave weaker sections in the bone.

The table below illustrates the view of the Company's management on the key benefits of the RemeOs™ implants compared to titanium and steel implants.

Benefits of RemeOs™ implants compared to titanium and steel implants	***Disadvantages of titanium and steel implants that can be avoided by using RemeOs™ implants***
• Are made of magnesium alloy that is bioactive and initiates apatite layer formation, enhancing new bone formation during bioresorption. • The magnesium alloy is produced from magnesium, calcium and zinc, all of which are naturally present in the human body. • Improve differentiation, attachment and growth of osteoblasts. • Slow surface absorption, increasing load distribution to the healing bone.	• Cause stress shielding by removing the load from the bone almost entirely, which prevents the bone from recovering back to its natural strength. • May shatter the bone or cause a permanent defect in the case of secondary trauma, such as an accident. • Leave sections in the bone that may lead to refractures after the removal of the implant, particularly in load-bearing bones. • May interfere with magnetic resonance imaging and completely prevent magnetic imaging in certain tissue areas.

Due to their bioresorbability, the RemeOs™ products eliminate the need for removing the implant with a surgical operation. Implant removal operations cause both clear disadvantages to the patient and large costs across the healthcare system. The table below describes disadvantages and costs resulting from implant removal operations. The cost figures below are for Germany only for the year 2014. The Company's management estimates that in other Western countries (e.g. the United States, Canada and Western Europe), corresponding figures per capita have a similar magnitude. There are variations in the estimates of the prevalence of the disadvantages caused by removal surgeries, as different studies have come to different results. This is due to, among other things, anatomical differences such as neural pathways in the application areas of the implants.

Disadvantages to the patient[9]	*Costs across the healthcare system (in Germany. 2014)*[10]
• General complications in 12–40 per cent of cases. • Refracture of the bone after removal in 27 per cent of cases. • Nerve damage in 5–40 per cent of cases. • Removal of the implant not possible in 9 per cent of cases. • Post-operative infections in 20 per cent of cases. • Pain after the surgery in 7–20 per cent of cases.	• Costs of EUR 515 million from inpatient treatment and operations. • Costs of EUR 145 million from outpatient treatment and operations. • Costs of EUR 240 million from treatment of infections. • Costs of EUR 190 million from the loss of productivity. • Total cost of approximately EUR 1.1 billion in Germany alone.

Large and steadily growing addressable market

The addressable market for Bioretec's upcoming RemeOs™ products is very large. In 2019, the global orthopedic products market was approximately USD 53.2 billion in terms of net sales.[11] In the market for orthopedic products, the addressable market for Bioretec's upcoming RemeOs™ products includes the market for trauma products and the market for products used for the repair of the back. In 2019, the market for orthopedic trauma products was approximately USD 7.45 billion and the market for products used for the repair of the back was approximately USD 9.7 billion.[12]

According to the Company's plans, the upcoming RemeOs™ products will include, as individual products, cannulated screws, K-wires, intramedullary nails and spinal cages. The commercialization of cannulated screws is expected to start in 2022, K-wires at the end of 2024, intramedullary nails in 2026 and spinal cages in 2027 or later. The addressable market of the Company's RemeOs™ products is expected to grow significantly with the commercialization of new products, and to reach USD 7 billion in 2027. The compound annual growth rate (CAGR) of the addressable market between 2020 and 2027 is expected to be approximately 2.0 per cent with the commercialization of cannulated screws, approximately 1.9 per cent with the commercialization of K-wires, approximately 2.0 per cent with the commercialization of intramedullary nails and approximately 3.7 per cent with the commercialization of spinal cage.[13] The graph below illustrates the development of the Company's addressable market. In the graph, the bar colors change from left to right from faded to dark for each product when the commercialization of the product is expected to take place.

[9] Based on a collection by the management of several different sources. Main sources are: Bostman O, Pihlajamaki H. Routine implant removal after fracture surgery: a potentially reducible consumer of hospital resources in trauma units. J Trauma.1996;41:846-9; Minkowitz RB, Bhadsavle S, Walsh M, Egol KA. Removal of Painful Orthopaedic Implants After Fracture Union. J Bone Joint Durg AM. 2007;89:1906-1912; Hanson B, van der Werken C, Stengel . Surgeon‘s beliefs and perceptions about removal of orthopaedic implants. BMC Musculoskeletal Disorders 2008, 9:73.

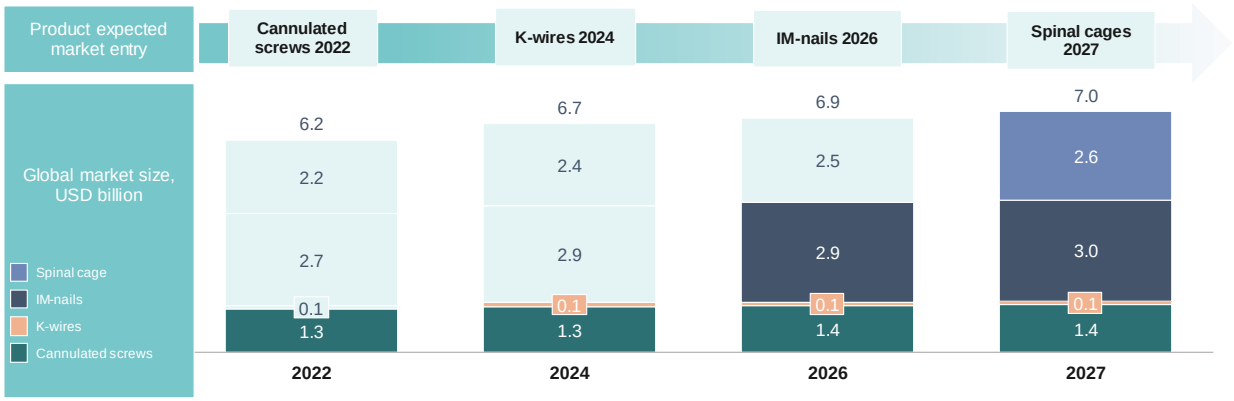
[10] Sources: Destatis; Robert Koch-Institute; Federal Health Report; Federal Occupational Health and Safety Agency; National Association of Statutory Health Insurance Funds; InEK – Institute for Hospital Remuneration Systems; Uniform Evaluation Scales (EBM) of the Association of Statutory Health Insurance Physicians. Source: Osteosynthesis Working Group – Association for the Study of Internal Fixation (AO/AO-ASIF).

[11] Source: The Orthopaedic Industry Annual Report, published June 2020 for the year ending December 31, 2019. ORTHOWORLD, Inc., 2020.

[12] Source: The Orthopaedic Industry Annual Report, published June 2020 for the year ending December 31, 2019. ORTHOWORLD, Inc., 2020.

[13] Source: For spinal cage: Global Market Analysis and Forecast Model (COVID-19 market impact), Allied Market Research, QYR, for other products: GlobalDataReport 2020, Trauma Fixation (Orthopedic Devices).

Expected development of Bioretec's addressable market in 2022–2027[14]



The Company's addressable market is not only very large, but also growing. The market for orthopedic trauma products is expected to grow approximately 1.7 per cent per year between 2019 and 2030.[15] The increase in the number of bone fractures is expected to be higher than that, but the average prices of orthopedic products are expected to decrease slightly, resulting in the market growing somewhat slower than the increase in the number of bone fractures.[16]

Several trends support the expected growth in the Company's addressable market:

- *Increase in the share of seniors in the population (main growth driver).* The number of people over 65 years old is expected to increase globally from 727 million in 2020 to over 1.5 billion in 2050.[17] Senior citizens have a higher risk of bone fractures, and therefore, this trend supports the growth of the Company's addressable market.
- *Increase in the number of traumas.* Increasing popularity of, for example, various extreme sports, and widespread obesity also increase the number of bone fractures.
- *Favorable reimbursement practices.* According to the Company's management, changes in reimbursement practices and improvement of insurance coverage support the growth of the market, particularly in the United States.
- *Increasing demand for advanced orthopedic implants.* Surgeons and other healthcare system actors increasingly recognize the need for better implants. Removal operations of the present non-bioresorbable implants expose the patients to risks and incur costs in the healthcare system.
- *Increasing need for customer-centric solutions.* Increasing awareness and ability to seek information on various treatment methods improves patients' capability to expect and demand more advanced treatment methods, which, according to the Company's management, supports the demand for bioresorbable orthopedic implants.

The trends in the Company's addressable market are described in more detail in section "*Market and industry review – Growth of the market, market drivers and trends*".

The Company is planning to increase its market share in the market for cannulated screws particularly in the Unites States immediately after receiving the market approval for its RemeOs™ cannulated screws and in the markets for its other upcoming products as soon as the clinical trials are completed and the market approvals are received.

Clinical trial for the RemeOs™ cannulated screws successfully completed, Breakthrough Device Designation received, clear steps to expected FDA approval and commercialization

The development process of the Company's RemeOs™ cannulated screws started in 2010. The most important stages in the development and approval process of these products have been the following:

[14] Source: (cannulated screws, K-wires and IM-nails): GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact); Source: (spinal cage): Global Interbody Fusion Cage Market Research Report 2021. QYResearch.

[15] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[16] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[17] Source: United Nations Department of Economic and Social Affairs, Population Division (2020). World Population Ageing 2020 Highlights: Living arrangements of older persons (ST/ESA/SER.A/451).

- feasibility studies and animal studies of various magnesium alloys during 2010–2015;
- preclinical studies with alloys based on magnesium, calcium and zinc during 2015–2018;
- clinical trial during 2018–2020; and
- pre-submission package submitted to the FDA in 2020.

In March 2021, the FDA granted the Company's RemeOs™ cannulated screws the Breakthrough Device Designation status. The FDA has the following eligibility criteria for this designation:

1) The device provides for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human disease or conditions; and

2) a) represents breakthrough technologies;
   b) no approved or cleared alternatives exist;
   c) offers significant advances over existing approved or cleared alternatives, including possibilities to reduce the need for inpatient treatment, improve the patient's quality of life, support the patient's self-treatment or increase long-term clinical efficiency; or
   d) device availability is in the best interest of the patients.[18]

The Company considers the Breakthrough Device Designation as a very significant factor that emphasizes the potential of the Company's product and is expected to have a positive effect on the market approval process of the product. Due to the Breakthrough Device Designation, the Company can have discussions with the FDA more regularly during the expected approval process. According to the Company's management, with the Breakthrough Device Designation, the Company can be better prepared to submit an application that satisfies FDA requirements than it would without the designation, and this is expected to have a significant positive effect on the market approval process. The process aiming for the market approval started in 2021 after the Breakthrough Device Designation was received. The Company's management estimates on the basis of the information available as at the date of this Offering Circular that the market approval will likely be granted in the first half of 2022.

According to the Company's management, the following factors will have an effect on timeline of the RemeOs™ products' registration process:

- The use of the implants and the surgical technique for healing fractures have already been well-known for decades.
- The alloy used in RemeOs™ implants is the only new component but comprises only magnesium, zinc and calcium, which are all natural elements in the human body.
- The purpose of the treatment is to promote the human body's natural healing process, not to provoke a biological or chemical reaction by introducing foreign substances into the human body, as for example, commonly is the case with medicines.

In addition to the cannulated screws, the Company is planning to apply for a market approval for the K-wires, intramedullary nails and spinal cages in the RemeOs™ product family in the future. K-wires are in the development phase, and the Company expects to start clinical trials on them in October 2021. The commercialization of the K-wires is expected to start in 2024. Intramedullary nails are in the feasibility study phase, and their commercialization is expected to start in 2026. Spinal cages are in the research phase and their commercialization is expected to start in 2027 or later. However, the timing of the commercialization of spinal cages is uncertain due to the early stage of their development.

The Company believes that the market approval processes for future products will be lighter than in the case of the cannulated screws for which the market approval process is ongoing at present, as the materials to be used in the planned products are expected to already be in clinical use by then. For more information on market approval processes in the future and the Company's estimates relating to them, see "*Business overview –Products – Commercialization plan for the new products in the United States – Registration of the products*".

Aim to be the first company to commercialize bioresorbable REE free metal implants in the United States

According to the Company's management, there are no bioresorbable metal implants with a market approval in the United States market. Bioretec expects its RemeOs™ cannulated screws to be the first REE[19] free bioresorbable metal implant approved by the FDA and one of the first bioresorbable metal implants in the United States. The Company's management

[18] Source: Breakthrough Devices Program Guidance for Industry and Food and Drug Administration Staff Document issued on 18 December 2018.

[19] Rare earth element.

believes that being the first or one of the first companies to obtain market approval provides the Company with a very significant competitive advantage and a possibility to increase its market share rapidly.

The Company's management believes that some of the Company's competitors are also aiming to commercialize bioresorbable metal implants in the United States market. However, the Company's management believes that the Company's RemeOs™ metal alloy has clear advantages over the metal alloys of several competitors. For example, unlike the products of many competitors, the RemeOs™ metal alloy does not contain rare earth elements, which may have many adverse effects in the bodies of humans and animals. The Company's management believes that the commercialization of competing bioresorbable metal implants would also have, in part, a positive effect on the Company's business, and the presence of competitors would accelerate the increase in awareness and skills related to bioresorbable metal implants among surgeons.

The Company's management believes that the largest companies in the market for orthopedic products are not developing bioresorbable metal implants or seeking approval for them in the United States market. The Company's management believes that the largest producers of medical devices are typically unwilling to commercialize new types of products manufactured from new materials, as the commercialization of new types of products exposes large companies to significant risks. Significant risks to the large companies include the reputational risk and the risk of legal proceedings. The reputational risk refers to the risk that the adverse effects of an individual product may damage the reputation of the company's other products. The risk of legal proceedings refers to the higher risk of legal claims in connection with the introduction of new products. Due to the reputation risk and the risk of legal proceedings, among others, the largest companies in the market of orthopedic products often prefer to acquire smaller companies with innovative products already in the market and proven to be good, instead of developing new types of products themselves. For more information on risks and acquisition activity in the market for orthopedic devices, see "*Market and industry review – Competitive landscape*".

Expected high sales margin enables scalability when volumes increase

The Company's management expects the sales margin of the RemeOs™ products to be high. When reviewing the pricing of upcoming cannulated screws, K-wires, IM-nails and spinal cages, the Company's management has used the average prices of the products in the same product category currently available in the market as the basis for the pricing of the RemeOs™ products. Despite the RemeOs™ products having clear advantages over the products currently used in the market, pricing the Company's upcoming products in line with existing products is considered as a rational approach. This aims to facilitate the introduction of the new products to the market and ensure the compensability of the products.

Based on the Company's internal estimates of the direct production costs and the average prices of the products in the market at present, the Company estimates that it can reach a gross margin of over 85 per cent for the RemeOs™ products depending on the market and the RemeOs™ product. For example, the gross margin for the RemeOs™ cannulated screws in expected to be approximately 97 per cent in the United States and approximately 89 per cent in Europe.

The manufacturing of the Company's products is based on general industrial processes, and the Company's management believes that it is easy to scale up production capacity with moderate investments. The special features of the production process include the requirement of high cleanliness and the regulatory requirements for the production process. The Company has long-term experience in satisfying corresponding requirements in connection with the production of its products that are already in the market.

Experienced team implementing the commercialization plan

In the expected commercialization of its RemeOs™ and hybrid composite products, the Company aims to use its own sales network to be established in the United States as a part of the commercialization plan, and to use distributors in the rest of the world. In the United States market, the cornerstones of the planned sales process are its sales organization and Key Opinion Leaders. The sales people in the Company's own sales organization provide a communication channel and services for the hospitals. Key Opinion Leaders are experienced surgeons, who lead the way in the proliferation of new technologies in their own area of specialty. The Company's Scientific Advisory Board provides a channel for influencing these Key Opinion Leaders (see " – *Personnel and organization – Scientific Advisory Board*"). For more information on the Company's commercialization plan, see " – *Products – United States commercialization plan of the new products*".

The Company's commercialization plan is implemented by a team of the Company's key employees with experience in global commercialization of products in orthopedic product families. Bioretec has developed, obtained market approval and commercialized a significant number of orthopedic products. The Company's product portfolio includes, for example, a large number of products with the CE marking, seven bioresorbable product families used for bone and soft tissue fixation and 241 implants. In addition, a large portion of the products in its present product families are approved by the FDA in the United States, and they also have national approvals in several other countries. In addition, the Company's management

has developed in their previous positions several successful products, which have resulted in the sale of four companies or businesses, three demergers and six licensing agreements. In terms of their background, the Company's key individuals, including the Management Team and the Board of Directors, as well as the Scientific Advisory Board, are, among others, Masters of Science in Material Technology, Masters of Science in Business Administration and Doctors of Medical Science. In addition, the Company's Board of Directors includes several internationally recognized experts in orthopedics and biotechnology. For example, Michael Piccirillo, a member of the Company's Board of Directors, is a founding partner of the Swiss company VALUGEN GmbH, the former director of clinical training at NuVasive, one of the industry's largest companies in the United States, and former director of AOSpine and AOTrauma, two of the most important associations in the industry. In addition to the Board of Directors and the Management Team, the Company has a Scientific Advisory Board with internationally merited world-class surgeons as its members. The background of the members of the Board of Directors and the Management Team is described in more detail in section "*Board of Directors and Management Team*". Further information on the members of the Scientific Advisory Board is presented in section " *– Personnel and organization – Scientific Advisory Board*".

The Company's business objectives

This section contains forward-looking statements, which include risks and uncertainties. Bioretec's actual results may differ materially from those presented in the forward-looking statements due to factors discussed in other sections of the Offering Circular, particularly in sections "Risk factors", "Certain additional information – Forward-looking statements" and "Operating and financial review – Key factors affecting the results of operations". All business objectives mentioned in this section are only targets, and should not be considered as forecasts, estimates or calculations of the Company's financial position in the future.

The Company's Board of Directors has confirmed the following business objectives. The business objectives comprise business targets and financial targets.

Business targets

The Company's business targets are:

- achieve Breakthrough Device Designation for RemeOs™ cannulated screws and initiate the process for sales approval for the cannulated screws (achieved in March 2021);
- submission of market approval application in Europe (Q3/2021)
- submission of market approval application in the United States (Q4/2021)
- start clinical trials of the RemeOs™ K-wires (H2/2021);
- receive market approval for the RemeOs™ cannulated screw and start commercialization in the United States (H1/2022);
- receive market approval for the RemeOs™ cannulated screw and start commercialization in Europe (H2/2022);
- start clinical trials of the RemeOs™ intramedullary nail (2023);
- receive market approval for the RemeOs™ K-wires and start commercialization (2024); and
- receive market approval for the RemeOs™ intramedullary nail and start commercialization (2026).

Financial targets

The Company's financial targets are:

- reach revenue of more than EUR 100 million in a global USD 7 billion total addressable market by 2027; and
- reach positive cash flow from operating activities by the end of 2025.

Bioretec's vision

Bioretec's vision is to become a globally recognized medical device company and a leader in bioresorbable metal implants.

Bioretec's strategy

To achieve its business targets, the Company has defined a strategy based on the following cornerstones: expansion into new high-potential market areas, maintaining world-class talent and capabilities in the organization and focusing on attaining strong profitability. The figure below illustrates the cornerstones of the Company's strategy.

Bioretec's strategy

The cornerstones of the Company's strategy are described in more detail below.

Expansion into high potential market segments

The first cornerstone of the Company's strategy is expansion into market segments with high potential by accelerating the expansion of its portfolio into the market for load-bearing trauma products and products applied in the repair of the back. Expansion into market segments with high potential comprises three phases, which are described below.

Commercialization of the RemeOs™ cannulated screws in the United States

The intention is to start commercialization is the United States, as the United States is the largest individual market for orthopedic trauma products in the world (for more information on the size of markets, see "*Market and industry review – Size and characteristics of the market*"). Starting the implementation of the commercialization plan in the United States is also important for the reason that if Bioretec succeeds in implementing the commercialization plan as planned, Bioretec believes it will be the first company to introduce bioresorbable metal implants free of rare earth elements in the United States.

The Company expects on obtain market approval in the United States for the first product in the RemeOs™ product family, cannulated screws, in the first half of 2022. For the United States, the Company's has selected as its commercialization strategy an operating model based on own sales personnel and the use of Key Opinion Leaders. With its global Scientific Advisory Board, the Company strives to find local Key Opinion Leaders, i.e. leading physicians, who can open doors to selected hospitals and medial communities. For more information on the Company's commercialization plan see section "*– Products – Commercialization plan for the new products in the United States*".

The Company sees that gaining a significant position in the market for cannulated screws in the United States would provide a springboard both for the expansion into other geographic regions, which in the Company's view typically follow the example of the United States, and into other bioresorbable metal implants once a significant amount of good experiences are gained from the first product series.

Commercialization of RemeOs™ cannulated screws in Europe

In addition to the successful entry to the United States market, the Company is planning to introduce the cannulated screws in the RemeOs™ product family in Europe in the second half of 2022. The Company's management considers Europe to be the second important market of the Company after the United States. The commercialization of the RemeOs™ cannulated screws is expected to start after the Company has obtained the expected CE marking for them. In addition to the CE marking, the commercialization requires compliance with local regulations in each country where the product is sold. According to the management, due to the differing local regulations and unconnected market areas, among other things, the most feasible approach is to implement the commercialization in Europe by using third-party distributors. The Company's management believes that, by utilizing distributors, it is possible to commercialize the RemeOs™ cannulated screws quickly after obtaining the CE marking. For more information on the commercialization plan, see also "*– Products – Commercialization plan for the new products in Europe*".

Development and commercialization of other products in the RemeOs™ product family

In addition to the bioresorbable metal-based cannulated screws, the Company has also started product development of other implants based on the same metal alloy. The Company believes that the magnesium alloy used in the RemeOs products is their most important differentiating factor and competitive edge. Due to this, the development of products based on the same magnesium alloy is considered beneficial. The commercialization of other RemeOs™ products is also of strategic importance to the Company, as expansion of the RemeOs™ product family is also expected to increase the Company's addressable market significantly. The Company expects to commercialize the K-wire in the RemeOs™ product family in 2024, the intramedullary nail in 2026 and the spinal cage in 2027 or later. For more information on products in the development phase "*– Products – New products – Products in the development phase*".

Maintaining world class talent and capabilities in the organization

The Company's management sees the competence of its personnel as one of the most important factors for the long-term success of the Company. For example, research, product development and sales play a very important role in the Company's business, and personnel with a high level of competence play a significant role in each of these functions. According to the management, it is material that the Company nurtures a winning culture, which commits the current employees and attracts more individuals with a high level of competence to the Company. The Company believes that its high level competence will continue to help it in attracting more world-class talent to its organization.

Focus on achieving high profitability

The third cornerstone of the Company's strategy is to focus on high profitability. In addition to rapid growth in sales, the Company considers reaching a high level profitability in its business as an important priority. Despite the expected increase in the revenue, the Company plans to keep its organization lean and operating costs as low as possible. The Company's management believes that the planned lean organization enables the expected high gross margin of the RemeOs™ products to lead to a high EBITDA, operating profit and net result in the future.

Products

Bioretec focuses on the development of bioresorbable implants used in pediatric and adult orthopedics, and it develops, produces and commercializes innovative bioresorbable orthopedic implants and implant materials used for repairing bone and soft tissue. Bioretec's existing product portfolio comprises biopolymer products available for applications in pediatrics, trauma surgery and sports medicine. In addition to the existing polymer products, Bioretec develops new products based on a magnesium alloy and hybrid composite, some of which are in the commercialization phase and some in the development phase.

Traditionally, bone and soft tissue defects have been treated mainly using metal-based implants, which are not bioabsorbed naturally inside the body after the bone and soft tissue has healed. Metal-based implants may need to be removed with another surgical operation, which exposes the patient to new risks, such as infections, weaker healing of the wound, refractures, damage to tissue or nerves, post-operation bleeding or failure in the removal of the implant.[20] In addition, the operation required for removing the implant results in significant extra costs for the healthcare system. In the case of children, all non-bioresorbable implants used in the treatment of bone and soft tissue defects must be removed, as children's bones and tissue are still growing and their natural growth is prevented if the tissue contains foreign materials disturbing growth.

With adult patients, instead of the removal operation, the metal implants may be left in the human tissue after the original tissue defect has healed, but this may cause various disadvantages to the patient. Magnetic resonance imaging is no longer possible in the affected tissue area, as the metal implant results in distortion of the scanned images, making it impossible to examine the tissue area, and in extreme situations, the magnetic force may tear the implant out of the tissue. If bone tissue is repaired with a metal plate, for example, and a new trauma occurs in the bone area, the metal implant in the bone tissue may result in more serious damage to the bone tissue. Particularly in long bones, such as the tibia and the femur, problems occur in the development of bone quality if the non- bioresorbable metal plate used for repairing the bone is left in place to support the bone. Bone needs pressure to recover its natural strength, and if the metal plate bears the load on behalf of the bone, the bone does not regain its normal strength. The use of Bioretec's biopolymer products already in the market is limited to applications where the implant is not required to have load-bearing capability, as the strength properties of the biomaterials used in these products is not suitable for load-bearing indications. At present, Bioretec is developing products based on new generation bioresorbable metal, which can also be used in load-bearing applications.

[20] Source: Reith et al. BMC Surgery (2015) 15:96 DOI 10.1186/s12893-015-0081-6.

The higher strength properties enable access to completely new product areas and particularly to the repair of long load-bearing bones, such as the femur and the tibia.

According to the Company's management, Bioretec's products offer significant benefits both to patients and the healthcare system, and through this, to society at large. As the implants manufactured by Bioretec are bioresorbable, there is no need to remove them from the human body with a separate removal operation. Therefore, the Company's management believes that Bioretec's products have the potential to, in addition to decreasing costs in healthcare, shorten queues for surgical operations in the public healthcare system.

Products on the market

As at the date of this Offering Circular Bioretec has a comprehensive portfolio of products with the CE marking; seven bioresorbable products used in bone and soft tissue fixation, 241 implants, 4 surgical tool trays and 99 surgical tools. In addition, a large portion of the Company's products in its present product portfolio have FDA approval in the United States and national approvals in several other countries. In slightly more than a decade, over 300,000 units of Bioretec's products have been sold globally. Bioretec's products have several applications in surgical operations, and new applications are continuously developed in cooperation with the surgeons.

Bioretec's polymer products that are already in the market are available for applications in pediatrics, trauma surgery and sports medicine that do not require high load-bearing capability, as they are used in surgical operations of small bones and soft tissue. The use of the products is limited to these applications in which mechanical properties do not play a particularly significant role, as the strength properties of the biomaterials used in these products are not suitable for load-bearing indications.

Implants included in Bioretec's product portfolio are slowly bioabsorbed and gradually transfer stress to the healing bone, and therefore, they do not cause so called stress shielding, which can slow down the renewal of the bone and lead to resorption of the bone, or osteolysis.[21] The implant is slowly bioabsorbed and, at the same time, gradually transfers stress to the healing bone, which supports the patient's healing process and decreases the risk of long-term complications. The implants are bioresorbable and ultimately they are completely reabsorbed in the bone, and therefore, there is no need to remove them with a separate removal operation.

Bioretec's product portfolio includes the following products as at the date of this Offering Circular:

- Activa IM-Nail™
- ActivaPin™
- ActivaNail™
- ActivaScrew™
- ActivaScrew™ Cannulated
- ActivaScrew™ Interference
- ActivaScrew™ Interference TCP

Activa IM-Nail™

Activa IM-Nail™ is a completely bioresorbable pediatric intramedullary nail used in the treatment of fractures in the forearm of children and young people. Activa IM-Nail™ can be used in operations on the narrow intramedullary canal requiring elasticity from the implant. The elasticity of Activa IM-Nail™ allows the installation of the implant from a location that does not result in harm to the epiphyseal of the child.

Bioretec started a new clinical trial on Activa IM-Nail™ in the first quarter of 2021. The purpose of the trial is to support the expansion of the indications of Activa IM-Nail™. The product has been used in the first pediatric wrist operations, and the study continues as planned. The clinical follow-up study of Activa IM-Nail™ is also being continued as planned, but the COVID-19 pandemic has slowed down the study. New clinical trials on Activa IM-Nail™ will also be carried out after the commercialization of Bioretec's new products in the RemeOs™ product family. The new clinical trials aim to increase the product's indications. The use of Activa IM-Nail™ in pediatrics will likely continue after the RemeOs™ product family has been launched.

ActivaPin™ and ActivaNail™

ActivaPin™ is a bioresorbable implant used for upper and lower limb fractures and in osteotomies that features patented Self-Locking SL™ technology and a grooved surface design. These properties ensure rotational stability and stability of

[21] Source: Mervi Puska, Allan J. Aho ja Pekka K. Vallittu, Biomaterials in bone repair, Finnish Medical Journal Duodecim, 2013;129(5), p. 489–96.

the product after the operation. The implant supports the bone's regeneration when the bone is fractured or operated intentionally using osteotomy. Simply put, ActivaPin™ is a small pin holding pieces of bone together while they naturally regenerate.

ActivaNail™ is an ActivaPin™ with a nail head, which provides additional support compared to ActivaPin™. These implants are suitable particularly for the fixation of bone fractures, osteotomies and cartilage, and they can be used for numerous indications.

After the new products in the RemeOs™ product family are launched, they will likely replace ActivaPin™ and ActivaNail™, which are bioresorbable versions of products used widely in the market, and due to this, they face a significant amount of competition.

ActivaScrew™ and ActivaScrew™ Cannulated

ActivaScrew™ is an absorbable surgical implant used in fracture treatment, osteotomy, arthrodesis and bone graft surgery. The patented Auto-compression™ technology is a special feature of ActivaScrew™. The technology leads to changes in the dimensions of the screw in the conditions prevailing in the human body. The diameter of the screw increases, locking the screw in place, and its length decreases, maintaining long-term compression in the fracture line.

ActivaScrew™ Cannulated is similar to ActivaScrew™, but it has an axial channel in its center. Due to the channel, the screws can be installed using an insertion adapter, which simplifies the installation and also allows arthroscopic installation. Arthroscopic refers to endoscopic operations eliminating the need for open surgery. ActivaScrew™ Cannulated screws also utilize the Auto-compression™ technology, and they are used in operations on lower and upper limbs.

New products in the RemeOs™ product family will likely replace ActivaScrew™ and ActivaScrew™ Cannulated in the future. However, the products will be used in pediatrics for a while in parallel with the products in the RemeOs™ product family after their launch.

ActivaScrew™ Interference and ActivaScrew™ Interference TCP

ActivaScrew™ Interference is indicated for the fixation of ligament or tendon to bone, or a bone-tendon to bone, and it is used particularly in the fixation of various ligament grafts. The screw uses patented Self-Locking SL™ technology. The technology increases the diameter of the screw, which reduces the risk of unstable fixation. The screw can be used in several parts of the body, such as the knee, shoulder, ankle, foot, elbow and hand.

ActivaScrew™ Interference TCP is a biocomposite interference screw containing tricalcium phosphate. ActivaScrew™ Interference TCP is also indicated for fixation of ligament or tendon to bone, or a bone-tendon to bone. Due to its composite material, ActivaScrew™ Interference TCP has excellent biological compatibility with the natural components of the bone. The osteoconductive TCP particles in the surface of the screw allow immediate initiation of the bone growth effect after the operation.

The products in the Active Interference product family will likely be maintained in Bioretec's product portfolio after the commercialization of the new products in the RemeOs™ product family due to the competitive advantage provided by their unique properties. Limited investments will be made to increase the indications of the products and/or their further development.

New products

General

Bioretec's new products include the bioresorbable magnesium-based implants in the RemeOs™ product family, which are indicated for treatment of bone and soft tissue defects in applications requiring load-beating capability in adult patients, such as large bone fractures.

For over a century, the aim with orthopedic implants used to ensure healing in the stabilization of bone and soft tissue defects has been to use materials that bear loads while the injury heals without causing a rejection or infection (foreign-body reaction), i.e. materials that are biocompatible. Traditionally, mainly stable metallic and polymeric biocompatible materials have been, and are still, used for this purpose, including steel, titanium and PEEK polymer.

Biodegradable metal has been an interesting topic in the markets for almost a decade because its mechanical strength is considerably higher than that of, for example, biodegradable polymer products, and on the other hand, because implants manufactured from biodegradable metal do not require removal surgeries, which is often the case with traditional metal implants. The higher mechanical properties also enable entry into wholly new product areas and, especially, into the areas of repairing long, load-bearing bones (such as the femur and the tibia) for which it was not previously possible to produce naturally and safely bioresorbable implants. To provide the mechanical properties required in bioresorbable implants,

Bioretec has acquired and developed biomaterials that include a load-bearing property, in addition to being bioresorbable, biocompatible and bioactive. Bioretec has studied the suitability of different magnesium alloys and conducted various animal tests between 2010 and 2015. In the business acquisition completed in 2019, Bioretec acquired the entire share capital of BRI.Tech, and consequently began developing bioresorbable load-bearing metal implants. RemeOs™ is Bioretec's patented new generation bioresorbable metal, comprising naturally occurring essential metals in the human body: magnesium, zinc and calcium. In the global markets, excluding the United States, there are also bioresorbable metal products manufactured by other companies, but these products contain materials that are foreign to the human body, such as rare-earth elements (REE).

The first-year monitoring period of a clinical trial of the RemeOs™ cannulated screw was completed in 2020. The clinical trial has produced promising results with regard to the material's safety and applicability. The high mechanical properties of the material and its bioresorbable properties are well suited to load-bearing clinical indications. The material has been created as a result of eight years of long-term development, and according to Bioretec's management, it forms an important milestone in material research, as it may enable the use of biodegradable materials in load-bearing applications. Due to the characteristics of RemeOS™ implants, the surgery techniques used in their installation are equivalent to existing surgery techniques in contrast to Bioretec's existing Activa family products, which, due to their softer material, require the use of special surgery techniques. The strength of the RemeOs™ implants will be closer to traditional metal implants than existing polymer products. Based on the clinical trial and laboratory studies conducted RemeOs™ implants have been found to completely resorb into bone in the human body in approximately two years (depending on the implant size) and thus they eliminate the need for implant removal through surgery. This also reduces the risk of long-term complications.

The RemeOs™ magnesium alloy is protected with patents with respect to pediatric uses in the United States and China, in addition to which Bioretec has a new patent application pending concerning all patient groups. In the Company's new patent application, the composition of the alloy's main components is similar to the existing patent for pediatric use, but manufacturing process and impurity profile, which are key to reach the desired degradation features, differ from other patents in the area. The alloy and its profile under the new patent application enables the Company to manufacture the products at clearly lower costs compared to the previous patent, making the product commercially viable and profitable. The new pending patent application is the actual patent providing protection on the RemeOs™ magnesium alloy. A freedom to operate analysis is used to determine whether the product may infringe on someone else's patent claims. Bioretec has commissioned an analysis from an external party to ensure its freedom to operate with respect to the RemeOs™ magnesium alloy in the United States and Europe. Thus, the freedom to operate analysis supports the company's view that its RemeOs™ products do not infringe on existing patents.

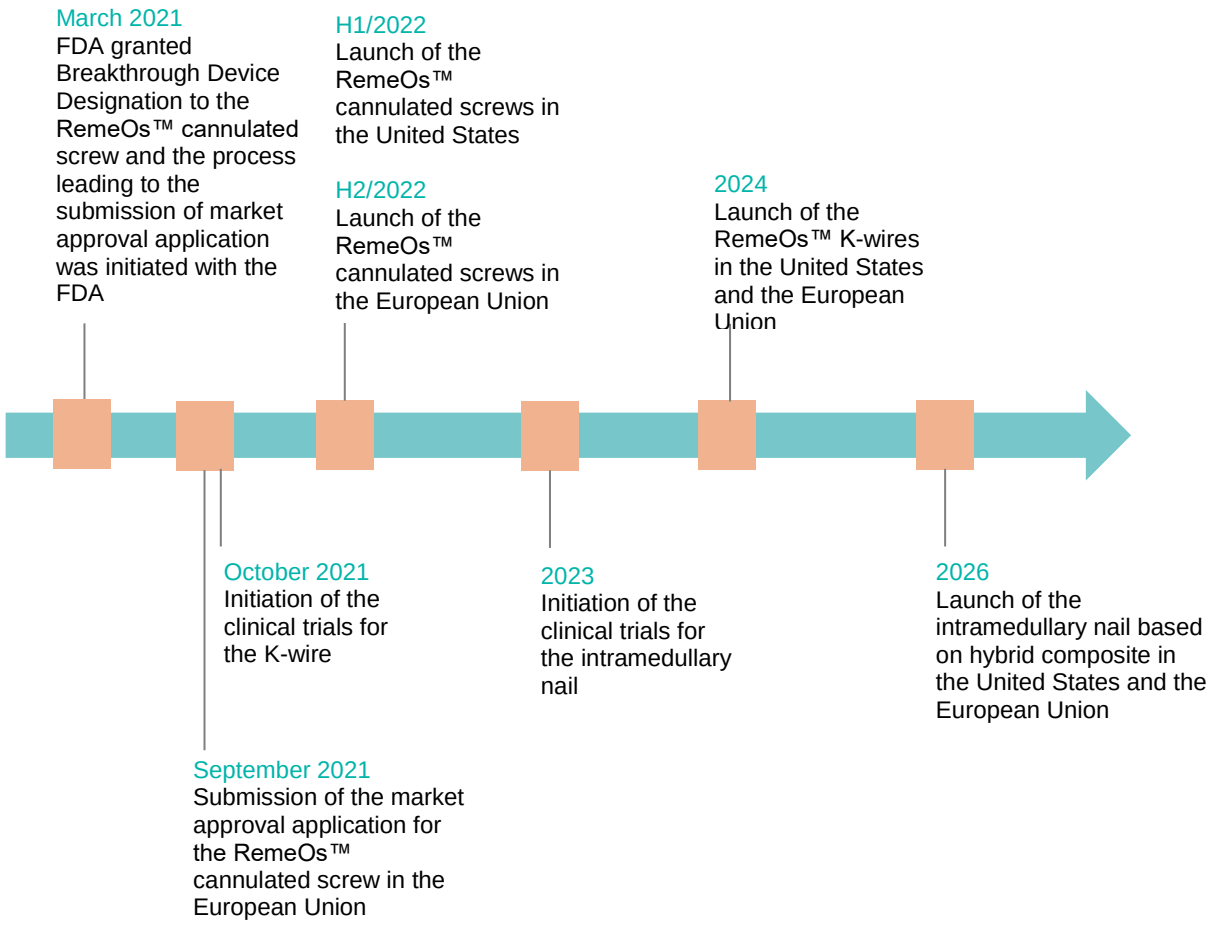
Bioretec has also developed a product combination where biometal and biocomposite materials are combined in a unique way (hybrid composite technology). The aim in the development of hybrid composite products is to combine the best properties of both materials and thus enable the use of biodegradable bone correction implants in the most challenging product areas, such as long bones in adults (e.g. femur and tibia), which will, according to Bioretec's management, further increase Bioretec's market potential. Bioretec has submitted a patent application concerning the hybrid composite material to EPO in August 2019[22] and to the World Intellectual Property Organization in August 2020[23].

Bioretec has invested heavily in the development of new products and products that complement its existing product family. Bioretec aims to launch several of them on the market in the coming years. The first product of the future to be commercialized will be cannulated screws based on the magnesium alloy material acquired in the BRI.Tech acquisition. Bioretec plans to be the first in the world to introduce to the market a load-bearing intramedullary nail and a spinal cage, both of which are made from a bioresorbable hybrid composite material based on a magnesium alloy, once its products based on the magnesium alloy material have been commercialized. Bioretec's target is to test and commercialize its new generation products according to the plan described below.

[22] Application no. EP3782657 - COMPOSITE MATERIAL, IMPLANT COMPRISING THEREOF, USE OF THE COMPOSITE MATERIAL AND METHOD FOR PREPARING A MEDICAL DEVICE.

[23] Application no. WO/2021/032882 - COMPOSITE MATERIAL, IMPLANT COMPRISING THEREOF, USE OF THE COMPOSITE MATERIAL AND METHODS FOR PREPARING THE COMPOSITE MATERIAL AND A MEDICAL DEVICE.

Bioretec's product development and commercialization plan for 2021–2026



Benefits of the new products

According to Bioretec's management, the biometal technology based on bioresorbable magnesium and the hybrid composite containing magnesium and biocomposite further developed by the Company will aim to address the necessary requirements for a biomaterial that can also be used in orthopedic implants for adults in the areas of trauma surgery and the spine and, in particular, the treatment of long bones, such as femur and tibia. According to Bioretec's management, these requirements are that the material:

- provides a good structural support, i.e. is suitable for the treatment of load-bearing bone fractures;
- is bioabsorbed in a controlled way, i.e. permits natural bone growth and gradually transfers stress to the bone which is important for strengthening it;
- is bioactive, i.e. forms a strong bond between the bone and the implant, increasing bone generation;
- is safe, i.e. biocompatible;
- is synthetic, being composed of natural compounds and elements, which means there is no risk or fear of transmitted diseases or rejection reactions; and
- is cost-efficient.

Thanks to the above-mentioned properties of Bioretec's materials, new surgical techniques are not required compared to the ones used with stable implant materials. According to Bioretec's management, this will speed up the commercialization of the RemeOs™ cannulated screw products, as doctors will not need to alter the surgical techniques and treatment methods they have already learned. By using products that are naturally absorbed in human tissue in orthopedic corrective surgery, the patient's recovery can be sped up and the costs of healthcare can be lowered.

In the use of Bioretec's new products, Bioretec's management sees particularly the following benefits for patients, surgeons and the healthcare system:

1) Unique,[24] patented bioactive metal alloy, which comprises only magnesium, zinc and calcium, which are natural elements in bones, and promote bone formation and healing. The metal alloy is REE free and does not contain substances harmful to the body.
2) Suitability for load-bearing applications due to their rigidity and strength.
3) Full bioresorbability eliminating the need for removal operations and the risk of complications relating thereto.
4) Gradual bioresorption supporting the healing process, where the load on the bone increases gradually.
5) Application and methods are consistent with traditional metal implants, which eliminates the need for retraining surgeons.
6) Application of bioresorbable products allows the surgeons to focus on value-creating primary operations instead of removal operations.
7) The mechanical features allow similar fixation as used for traditional metal implants.
8) More efficient utilization of the resources of the healthcare system.

The development of bioresorbable metals and implants to heal, correct and regenerate tissue has been considered revolutionary in clinical use.[25] By controlling the mechanical, strength and corrosion/resorption properties of the bioresorbable (metal) implants, surgeons now have new implants at their disposal that create benefits for the patient in surgical procedures, when one takes into account that these implants promote the healing process. Bioresorbable implants enable the complications related to traditional implant materials to be avoided, and it has been said that the ongoing development of bioresorbable metals will revolutionize several clinical applications in the near future.[26] The view of the Company's management on the key disadvantages of titanium and steel implants and, on the other hand, on the key benefits of the RemeOs™ implants are presented above in the section "*– Bioretec's strengths – RemeOs™ products are an excellent and clinically proven effective solution for the treatment of bone fractures.*".

The Company's RemeOs™ implants have undisputed benefits compared to the majority of its competitors' products, and thus several competitive advantages. These benefits are:

1) a magnesium-based alloy containing zinc and calcium is stable in the first days of implantation, which slows down the resorption process;
2) the aforementioned alloy only causes a small risk of complication due to hydrogen generation compared to compounds with a quicker degradation process; and
3) a clean magnesium-zinc-calcium alloy that contains no other metals and is REE free offers additional safety for the patient and the surgeon as well as for further development of the product, as the alloy is REE free and therefore safe.[27]

According to studies, it is recommended that a very low corrosion rate is considered in certain clinical indications.[28] In these indications, either a metal composite alloy with a higher corrosion resistance can be used, in which case the implant will resorb slowly or only partially, or a surface treatment or alternatively various coatings should be used to protect the magnesium alloy if its properties include a higher corrosion rate. In the latter case, the surface treatment or the coating should be absorbed or degraded entirely so that the implant or its coating will not leave any foreign substances in the bone or the body.[29] The RemeOs™ implants that are planned to be commercialized at a later stage and which are made from a hybrid composite material, which consists of bioresorbable magnesium or magnesium alloy strengthened with biocomposites, will combine the best properties of both materials, especially in the growth of new bone tissue. Such RemeOs™ implants may be well suited to indications where rapid osteointegration is required (such as in the spine), as well as when long-term but not permanent support is necessary.[30]

It has been recommended that the development of and research on RemeOs™ products based on hybrid composite materials be continued swiftly due to their useful properties, such as their bioactive properties that promote the ossification

[24] According to the management, other companies do not use metal alloys comprising of the same ingredients in the same proportion.

[25] Source: Third-party report.

[26] Source: Third-party report.

[27] Source: Third-party report. Anastasia Myrissa, Simone Braeuer, Elisabeth Martinelli, Regine Willumeit-Römer, Walter Goessler, Annelie Martina Weinberg, Gadolinium accumulation in organs of Sprague–Dawley® rats after implantation of a biodegradable magnesium-gadolinium alloy, Acta Biomaterialia, Volume 48, 2017, p. 521-529.

[28] Source: Third-party report. Especially in smaller bones, too fast corrosion process may cause a great amount of gas. (source: Wang JL, Xu JK, Hopkins C, Chow DH, Qin L. Biodegradable Magnesium-Based Implants in Orthopedics-A General Review and Perspectives. Adv Sci (Weinh). 2020;7(8):1902443. Published 2020 Feb 28. doi:10.1002/advs.201902443.

[29] Source: Third-party report.

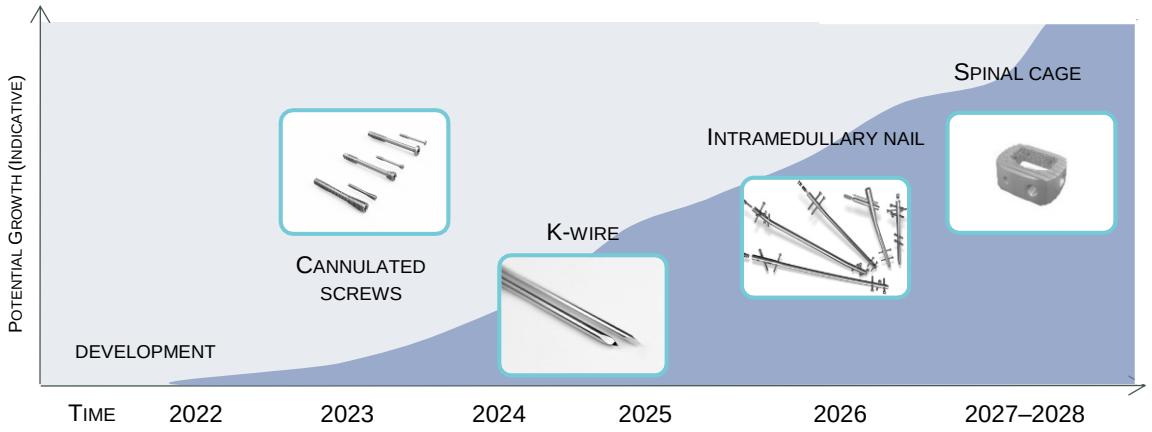
[30] Source: Third-party report.

of the bone.[31] The magnesium-based hybrid composite material in Bioretec's RemeOs™ products holds great potential in assisting reossification.[32]

Products in the commercialization phase

Bioretec aims to commercialize products based on new technologies according to the plan presented below.

Bioretec's commercialization plan for 2022–2028



RemeOs™ cannulated screws

Bioretec plans to introduce the RemeOs™ cannulated screws to the market as the first of its products to be made from the magnesium alloy. Cannulated screws have been selected as the first product to be commercialized because of the fairly large market size and low risks relating to the products. There are three types of RemeOs™ cannulated screws. The first screw is partially threaded, the second is a headless partially threaded cannulated compression screw and the third is a headless fully threaded cannulated compression screw. All three screws will be commercialized in different thicknesses and lengths. The indications for the cannulated screws will be the fixation and repair of bone fractures. The products will generally be applied to the hand, arm, knee, ankle and foot. The more detailed applications will be defined in connection with the market approval application process.

First studies on the cannulated screws were completed in 2020, and the preclinical studies were conducted between 2015 and 2018. The cannulated screws have already completed the first-year monitoring period of a clinical trial. In this clinical trial, no complications related to the RemeOs™ screw were detected, such as loosening of the screw, or adverse effects caused by the screw such as increased amounts of magnesium or calcium in the patient's' blood, and the screw was proven to be suitable for the fixation of medium-sized malleolar fractures. Complete consolidation of the fractures was achieved within 12 weeks in all the patients participating in the study, and radiographic imaging showed that the head of the screw was fully resorbed within 52 weeks for 90 per cent of the patients. Overall, the RemeOs™ screw was found to be an excellent and safe alternative to non- bioresorbable metal screws, and its use was found to eliminate the need for the screw removal surgery. The study also provided indications that after 52 weeks, bone density at the location of the screw had increased, suggesting RemeOs™ screws had osteoconductive properties.[33]

The FDA granted the Company's magnesium-based RemeOs™ cannulated screws the Breakthrough Device Designation in March 2021. The FDA has established a system for Breakthrough Device Designation to ensure the introduction of new innovative products to the market. Products approved in the system are required to provide significant benefits to the patients and the healthcare system. The FDA has the following eligibility criteria for this designation:

1) The device provides for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human disease or conditions; and

[31] Source: Third-party report.

[32] Source: Third-party report.

[33] The clinical study was conducted at the Department of Orthopaedics and Trauma of the Medical University of Graz from July 2018 until October 2019. The clinical study was conducted in accordance with the ISO 14155:2011 Good Clinical Practice standard and the Declaration of Helsinki of the World Medical Association (WMA).

2) a) represents breakthrough technology;
   b) no approved or cleared alternatives exist;
   c) offers significant advances over existing approved or cleared alternatives, including possibilities to reduce the need for inpatient treatment, improve the patient's quality of life, support the patient's self-treatment or increate long-term clinical efficiency; or
   d) device availability is in the best interest of the patients. [34]

The system aims to shorten the total time needed for granting a market approval to the product by opening continuous mutual communication between the market approval applicant and the FDA. The parties process the key matters and obstacles related to the application for market approval together to ensure smooth processing of the application for market approval. The Company initiated this process in March 2021 and as at the date of this Offering Circular the Company estimates, based on the available information, that the market approval process will be quicker than usual due to the Breakthrough Device Designation and that it will last approximately 6–12 months and will thus be completed in the first half of 2022. In addition, the Company intends to submit a market approval application concerning the cannulated screw (application for a CE marking) in the European Union in autumn 2021. The sales of magnesium-based cannulated screws are planned to commence in 2022 in Europe and the United States.

Products in the development phase

RemeOs™ K-wire

The second product family the Company intends to commercialize are K-wires (*Kirschner wires*) made from the same magnesium alloy as the Company's RemeOs™ cannulated screws. K-wires are sterilized, sharpened, smooth metal pins. They are widely used in orthopedics and other types of medical and veterinary surgery. K-wires are generally used in the hand, foot, elbow and wrist. They come in different sizes and are used to hold bone fragments together or to provide an anchor for skeletal traction. The wires are sometimes driven into the bone through the skin (percutaneous pin fixation) using a power or hand drill.

The preliminary studies concerning the RemeOs™ K-wire were completed between 2015 and 2018. As at the date of this Offering Circular the K-wire products are in the product development phase and a clinical study concerning the K-wire is intended to be launched in October 2021. Development costs relating to K-wires is estimated to be approximately EUR 1 million in the future. According to current plans, the Company aims to launch the sales of the RemeOs™ K-wires in Europe and the United States in 2024.

Hybrid composite IM nails

After commercializing its second bioresorbable metal product, Bioretec aims to bring to the market bioresorbable and bioactive intramedullary nails (IM nails) to be used for treating fractures in long bones, i.e. the femur and tibia, in adults; these nails will be made from a hybrid composite material based on magnesium and biocomposites. In the hybrid composite, the magnesium alloy acts as a rigid core material around which a surface us formed using a continuous winding biocomposite tape around the core, giving the implant the required strength to withstand pulling, bending and rotation. The magnesium alloy used in the hybrid composite material is the same as the one used in the RemeOs™ cannulated screws, and on the other hand, the biocomposite tape used in the material is commercially available. Therefore, the materials used in the IM nails will be clinically tried and tested. IM nails are products of higher risk category and therefore their prices are expected to be higher than RemeOs™ cannulated screws and K-wires.

Preliminary studies concerning IM nails were completed during 2020. As at the date of this Offering Circular the Company has started in vitro studies with research phase prototypes and conducted the first preliminary implementation trials on sheep. The clinical studies of hybrid composite based IM nails are planned to be conducted in 2023–2025. The Company expects the development costs of IM nails to be approximately EUR 3 to 13 million in the future. According to current plans, the Company aims to launch the sales of the hybrid composite IM nails in Europe and the United States in 2026.

Hybrid composite spinal cage

To maximize its long-term commercialization potential, as well, Bioretec's long-term aim is to introduce a bioresorbable and bioactive spinal cage for repairing spinal discs. In this indication, a spinal disc is repaired by placing the spinal cage between the vertebrae around the damaged disc and allowing bone to grow through it, so it eventually becomes a part of the spine. The mechanical properties of the hybrid composite material developed by the Company are optimal for this indication, and its bioactive, osteoconductive and osteopromotive properties promote the formation of a bone bridge between the affected vertebrae. The Company has used the same technology in its prototypes as in the IM nail being

[34] Source: Breakthrough Devices Program Guidance for Industry and Food and Drug Administration Staff Document issued on December 18, 2018.

developed by the Company, i.e. the magnesium alloy that acts as a rigid core, surrounded by a biocomposite that strengthens it.

The spinal cage implant is still in the research phase and, according to current plans, animal trials are intended to be conducted in 2023–2024 and clinical trials in 2025–2026. The development costs of the spinal cage are estimated to be approximately EUR 3 to 16 million in the future. According to its current plans, Bioretec aims to introduce the spinal cage to the market in 2027, at the earliest. However, the timing of the commercialization of the spinal cage implants is uncertain due to them being in the early development phase.

Commercialization plan for the new products in the United States

General

Bioretec plans to commercialize the new generation magnesium and hybrid composite based RemeOs™ range products first in the United States, followed by Europe. After this each product would be commercialized in the rest of the world. The commercialization of the products is planned to be commenced in the United States because the country is the single largest market for orthopedic trauma products in the world (for more information on market sizes, see "*Market and industry review – Size and characteristics of the market*"). Another key reason for launching the commercialization plan in the United States is the fact that, if it succeeds in executing its commercialization plan as intended, Bioretec believes that it will become the first company to introduce bioresorbable metal implants that are REE free to the US market. As at the date of this Offering Circular, Bioretec's management believes that no market approvals have been granted in the United States for any such bioresorbable metal implants. Success in the commercialization plan would enable Bioretec to gain a head start against its competitors, allowing it to win market share in the US before the introduction of competing products to the market.

Bioretec's commercialization plan for its new products in the United States can be summarized as follows:

- recruiting a sales and marketing manager in the United States;
- establishing a local subsidiary and distribution center in the United States;
- recruiting local sales personnel;
- committing Key Opinion Leaders to advocate for the products in selected hospitals and medical communities;
- continuing clinical studies on the new products in order to gain more evidence and to expand applicable indications;
- launching sales in selected hospitals in the United States and later expanding sales to other hospitals.

Registration of the products

The registration process for the RemeOs™ products in the United States can be described through three phases. These phases are the classification of the medical device, the pre-submission process and the application for a market approval. The RemeOs™ cannulated screws have undergone the FDA's pre-submission process, and the feedback received on the products during this process has been positive. The RemeOs™ cannulated screws are Class II devices in a classification of I–III, where Class I devices are the least risky and Class III devices pose the biggest risk. The market approval process to be applied to the RemeOs™ cannulated screws will be De Novo, i.e. a novel device with no predicates on the market. The phases of the registration process, the product classes and the various market approval processes in the United States are described in more detail below in the section "*– Regulatory environment and standards – Approvals required for the products – Approval process in the United States*". Further information on the advantages of the RemeOs™ products in the registration process according to the management are presented in section "*– Bioretec's strengths – The clinical trials of the RemeOs™ cannulated screws have been completed successfully, Breakthrough Device Designation has been awarded, providing clear steps toward the expected FDA approval and commercialization*".

In February 2020, Bioretec submitted a request to the FDA for the Breakthrough Device Designation, which the FDA granted to the Company's RemeOs™ cannulated screws in March 2021. The FDA has created the Breakthrough Device Program with the aim of securing the entry of new, innovative products to the market. The products that are accepted under this program are expected to provide for significant benefits to patients and the healthcare system. The aim of the program is to shorten the total time it takes to approve a product for marketing by opening up a continuous dialogue between the applicant and the FDA. In this process, the parties discuss the key aspects and issues related to the market approval application to ensure smooth processing of the application. The Company initiated this process in March 2021 and as at the date of this Offering Circular the Company estimates, based on the available information, that the market approval process in the United States will be completed in the first half of 2022. The Breakthrough Device Designation and the criteria for granting it are presented in more detail below under "*– Regulatory environment and standards – Approvals required for the products*".

The Company believes that the market approval process for subsequent products will be lighter than the current process for the cannulated screws. This is due to the fact that the material in the subsequent planned products will already be in clinical use at the time, due to which the studies conducted on the already registered RemeOs™ cannulated screw (predicate device) can be used as evidence of the safety of the material. The Company's management estimates that the market approval process to be applied to the RemeOs™ K-wire will be 510(k), and the market approval processes applied to the RemeOs™ IM nail and spinal cage will be De Novo or PMA (the key differences in the market approval processes are described below in the section "*– Regulatory environment and standards – Approvals required for the products – Approval process in the United States*".

Sales and marketing

Bioretec's commercialization strategy is based on limited and carefully selected product segments. To obtain a solid foundation for the development of new products and technologies, Bioretec uses a Scientific Advisory Board comprising internationally renowned medical experts and Key Opinion Leaders to support its product development (for further information, see "*– Personnel and organization – Scientific Advisory Board*"). With the support of the board, the Company aims to find local Key Opinion Leaders, i.e. leading doctors and medical professionals, to assist in gaining access to selected hospitals and medical communities. As part of its commercialization plan in the US, Bioretec intends to grow its Scientific Advisory Board by one or two new members in order to increase opportunities to find and commit Key Opinion Leaders. Early-stage clinical experiences and evidence will be collected through Key Opinion Leaders so as to expand product recognition and use.

The sales and marketing measures for the new products must take into account of the special characteristics of the industry. In the orthopedic implant industry, it is important to produce further clinical evidence on a continuous basis to achieve the best market potential. For the afore-mentioned reason, the Company plans to continue conducting new follow-up studies in the United States. The clinical follow-up studies generate added value by increasing product recognition through scientific publications and marketing material, and they enable the expansion of the product into new indications. According to the management, the most effective way of ensuring the new products' market penetration after obtaining market approval is to select regional Key Opinion Leaders and to induct them in the use of the products so they act as trendsetters for the end users, i.e. the medical communities. The Key Opinion Leaders are usually doctors who are top-level experts in their field and who thus have an opportunity to interact with the medical communities. These Key Opinion Leaders will be the first to be inducted, and efforts will be made to produce clinical evidence and scientific articles or case studies based on this evidence with them. This additional material will help develop wider use of the product among other customers in the region.

The end users, i.e. doctors, and the medical communities composed of them will play a key role in the adoption of Bioretec's products, as well as in expanding their use and increasing their recognition. In addition, feedback will be collected from doctors on Bioretec's products, and this feedback will be used in the development of surgical techniques, the expansion of indications and future product development. In addition to the aforementioned, the Company will also market the products at fairs, conferences and training events together with the Key Opinion Leaders. Convincing and committing these Key Opinion Leaders will thus play a significant role in the commercialization and marketing of Bioretec's products. Committing the Key Opinion Leaders will require the Company to succeed in convincing them of the benefits and safety of its products and of the added value the products create, such as the clinical functionality and patient benefits of the products and the reduction of healthcare expenses. Bioretec intends to begin selling its products initially to selected key hospitals in the United States, after which it plans to expand sales of the products to other hospitals as experiences and clinical evidence increase.

As part of Bioretec's commercialization plan for its new products in the United States, Bioretec plans to establish its own distribution center, with storage facilities for up to 2 months' supply, and instead of an external sales partner, its own sales organization in the United States. The product portfolio of external distribution partners often includes lots of various products of different types. In practice, this has been found to occasionally lead to distributors aiming at maximizing the profitability of their operations by focusing their resources on the sale and marketing of products that do not require special competence or induction of surgeons into their use. The commercialization of Bioretec's new generation products will require the induction of surgeons into their properties and the benefits they offer compared to traditional implants already in routine use. For this reason, Bioretec estimates that establishing its own sales organization and recruiting own sales personnel will be a more effective way of selling the new products than using the networks of external distribution partners. Through its own sales organization, Bioretec aims to have the personnel selling its products focus fully on the commercialization of the new product selection and the induction of surgeons, thus increasing Bioretec's control over the sales of its products. In addition, when external distributors are used, a significant share of the margin on the product is retained by the distributors, as they are traditionally paid about 40–60 per cent of the final price of the product. By selling its products directly to end customers, Bioretec will retain the entire margin for its own benefit and will thus, according to the Company's management, be able to grow its operating income more rapidly.

Bioretec aims to recruit one sales representative for each key hospital or key sales region. The Company intends to recruit a sales organization consisting of about 10 people in the United States during 2022 and to grow the number of personnel to around 35 employees by 2026. In addition to the sales personnel, Bioretec will recruit warehouse employees at its distribution center in the United States. In addition, the Company estimates that it will grow the number of personnel participating in product development by five people by 2026.

The establishment of an own sales organization in the United States will require the founding of a new subsidiary in the US. Before commercializing the first product, Bioretec plans to establish a new wholly-owned subsidiary in the United States through which it intends to carry out all operational activities in the country. For example, sales planning will be carried out in the new subsidiary, according to the current United States commercialization plan. However, the manufacture of the products, the procurement of the instruments used for applying the products and the delivery of a sufficient volume of products to the distribution center in the United States will be carried out through the Finnish parent company, Bioretec.

The establishment of a sales and distribution organization will require Bioretec to make significant financial investments. The establishment of a sales organization will require the Company to allocate more financial resources than it would when building a network of external distributors. Bioretec estimates it will need around EUR 10–15 million of external financing to implement its commercialization plan in the United States if the commercialization plan proceeds as planned. As the investment grows, the financial risk related to the investment will naturally increase as well. Although the establishment of an own sales and distribution organization will require larger financial resources and thus expose the Company to a higher financial risk than the building of an external distribution network, and although the establishment of an own sales and distribution organization will also likely be more time-consuming, Bioretec estimates that the benefits of establishing an own sales and distribution organization will outweigh the risks it poses. The Unites States is a single large market where the establishment of an own sales and distribution organization is more cost-effective than in Europe, for example, where establishing several separate sales organizations in several different countries would require large financial investments that, in the Company's view, would outweigh the benefits of such an arrangement.

Pricing of the new products

Bioretec's management expects the upcoming RemeOs™ products to be high-margin products. When estimating the pricing of the upcoming cannulated screws, K-wires, IM nails and spinal cages, the Company's management has used the average prices of products of the same product category sold currently on the market as a basis for the prices of the RemeOs™ range. Despite the clear advantages of the RemeOs™ products compared to the products currently available in the market, the Company estimates that using the prices of currently available markets as a basis for pricing its future products is the most sensible approach. High prices could lead to e.g. delays in reimbursements, therefore using the current average prices aims to facilitate the entry of the products to the market and ensure that the products are reimbursed by insurance companies. At the same time, this reduces the risk of overpricing the products. The aim of the pricing is to offer surgeons and better product for the same price.

According to the management, it is also important that the products become reimbursable by insurance, especially in the United States, because this directly affects demand, and as the products are reimbursable, the decision-makers can base their decision purely on medical factors. The degree to which they are reimbursed is a key factor in determining the pricing of the new products. The reimbursement system refers to the process under which commercial insurance companies or the state reimburse for a product or service provided by healthcare professionals. After receiving FDA approval, the products must meet the following three criteria in order to be eligible in US reimbursement system:

1) *Coding.* The US reimbursement system uses a coding system to standardize the compensability. In order for the product to be compensable, it must have an existing reimbursement coding.
2) *Coverage.* The coverage is dependent of the payer. Typical determinants are whether or not the type of technology used is necessary and what is covered typically by the insurers.
3) *Payment.* If the two previous criteria are met, a dollar amount is assigned for the product.

According to the management, the RemeOs™ products are well-positioned relative to the US reimbursement system, as this system includes specific codes for surgeries and the products used in these surgeries are covered by the reimbursement system. As the pricing of the RemeOs™ products is based on the average pricing of existing products, the RemeOs™ products are automatically reimbursed, as they are assigned an existing coding, are interchangeable in the scope of coverage, and the cost of operations conducted with the products does not change significantly. Furthermore, the Breakthrough Device Designation assigned for the cannulated screw would allow a higher price point lasting four years after the initial launch of the product.

Based on the Company's internal estimates of the direct manufacturing costs of the products and the average prices of products currently available on the market, the Company believes it can achieve a sales margin of more than 85 per cent on the RemeOs™ products, depending on the market and the product, and for example in the United States, the sales

margin on a RemeOs™ cannulated screw is expected to be about 97 per cent. The production costs for the RemeOs™ cannulated screw are expected to be approximately between EUR 5 and 15 per unit, and the average price for corresponding products in the United States is currently approximately USD 600.

Commercialization plan for the new products in Europe

General

Bioretec plans to commercialize the new generation magnesium and hybrid composite based RemeOs™ range products first in the United States, followed by Europe. After this each product would be commercialized in the rest of the world. The Company's management considers Europe to be its second most important market after the United States. The commercialization of the RemeOs™ cannulated screws in Europe is expected to begin after the Company has obtained a CE marking for the screws as expected. Bioretec intends to introduce the magnesium-based cannulated screws to the European Union market as the first product from the RemeOs™ range in the second half of 2022.

Registration of the products

The sale of medical devices in the European Union requires that the devices are certified with a CE marking in accordance with the Directive 93/42/EEC or the MDR.[35] The CE marking is used to certify that a device complies with the requirements set out for it in regulations. The registration process is described in more detail below in the section "*– Regulatory environment and standards – Approvals required for the products– Approval process in the European Union*".

A CE marking allows a registered product to be brought to the market in all Member States of the European Union. In addition to the CE marking, commercialization will require compliance with the national legislation of each state in which the product is sold. The Company intends to submit a CE marking application concerning the cannulated screw in the European Union in autumn 2021 (for more details, see "*Business overview – Products – New products – Products in the commercialization phase*"). Bioretec estimates that the aforementioned market approval process conducted with the FDA will also speed up the obtaining of a CE marking in the European Union because, following the process with the FDA, the Company will possess all the necessary documentation for the CE marking, and thus the Company estimates that it will not need to conduct further studies on the product during the CE marking application process. The Company estimates that the process of obtaining a CE marking will last about 12 months from start to finish.

Sales and marketing

Contrary to the United States, the distribution of Bioretec's new RemeOs™ products in Europe will be conducted through an external distribution network. As stated above, the commercialization of medical devices in the European Union requires compliance with the national legislation of each state in which the product is sold, in addition to a CE marking. Furthermore, the European Union is divided into several separate market areas. According to the Company's management, the most sensible approach to commercialization in Europe is to use external distributors due to, among other factors, divergent local regulations and fragmented market areas. The Company estimates that it would be expensive to establish several individual sales organizations in several European states relative to the benefits this would yield. According to the Company's management, the use of distributors will also enable quick commercialization of the RemeOs™ cannulated screws after the CE marking is obtained, as the distributors would acquire the products to their own stock and sell them from the stocks.

Based on the Company's internal estimates of the direct manufacturing costs of the products and the average prices of products currently available on the market, the Company expects a sales margin of about 89 per cent on the RemeOs™ cannulated screw.

Production

Production facilities

Bioretec's business premises, product development premises and cleanrooms used in production are located in Tampere, Finland. There are certain requirements in Bioretec's sector for the facilities where the Company's products are manufactured. Bioretec's products are manufactured in cleanrooms in which the amount of airborne particles is controlled. Cleanrooms are classified into nine classes by the maximum concentration of particles according to the ISO 14644-1:2015

[35] The MDR is applicable in the European Union as of 26 May 2021, when the transition period ends. The Regulation will replace Council Directive 93/42/EEC concerning medical devices, which was previously in force, and therefore as of 26 May 2021, CE markings will only be granted in accordance with the MDR.

standard[36]. Class ISO 1 places the most stringent requirements for cleanliness in premises, while Class ISO 9 places the lowest requirements. The manufacture of Bioretec's products requires ISO 8 certified cleanrooms.

The Company's production line's current production capacity is 24 thousand implants per year in one shift.

Bioretec's lease agreement for its present production facilities will expire during 2021. As at the date of this Offering Circular, Bioretec is building new business and production premises to leased premises in Tampere. Bioretec estimates that the construction of the new business and production premises will require total investments of about 300 thousand euros in the first half of 2021 (see also "– *Material investments*"). If the move proceeds according to schedule, production will be fully moved into the new business premises during August 2021. Bioretec aims to minimize possible challenges in delivery capability by increasing inventories of new products to cover demand during the move.

Production process and raw materials

The manufacturing process of Bioretec's products includes several different stages. When receiving the raw materials used in its products, Bioretec performs a delivery inspection on the raw materials. If the delivery inspection confirms that the raw materials fulfil the requirements set for them, they will be transferred to the production process, which is conducted entirely within the Company. The manufacture of Bioretec's products requires equipment designed for this purpose, which Bioretec fully owns and some of which has been modified to suit the Company's particular needs. Some of the stages of the production process are critical for the manufacture of the product. Problems or errors arising in critical stages of the process could cause delays in the production of Bioretec's products. The products are subjected to several different inspections during the various stages of the production process to ensure their quality, and the production processes are validated and verified to ensure that they are functional and replicable.

Once a product has undergone the multi-stage production process, it is packaged in its primary packaging. After this it is sterilized. The sterilization of Bioretec's existing products has been outsourced to an external party, but the sterilization of the new generation magnesium-based products will be conducted in-house by the Company. The sterilization will be conducted with cost-efficient dry heat technology. Once the product is sterilized, it is packed in the sales package. Before being released for sale, each product batch is further subjected to a batch release inspection.

There are plenty of suppliers for the instruments used in the installation of Bioretec's products and the product packaging materials and labels, both in Finland and abroad. However, Bioretec is dependent on the suppliers of the raw materials used in its products. With respect to the raw materials used in Bioretec's current biopolymer products, the Company uses two different suppliers with which it has an established supplier relationship. As for the raw materials used in the magnesium-based products, there is a greater risk involved in their availability than in the case of the current biopolymer products. Bioretec manages the risk related to the availability of raw materials by entering into sourcing agreements with several suppliers so that it is not dependent on an individual supplier for the availability of the raw materials it uses.

In addition to the sourcing agreements, Bioretec concludes quality agreements with the suppliers of the raw materials used in its products. Every raw material is subjected to the industry's standard quality inspection when it is received by the Company. Raw materials are also subjected to various control stages in the production phase of the product. The products are also inspected using batch release inspections before they are handed over.

The costs of the production process for the magnesium-based products is very low relative to the sales price of the end product, and therefore there is no significant pricing risk in the magnesium-based products. The costs of the processes used to manufacture the current biopolymer products, relative to the sale price of the products, are significantly higher than those of the magnesium-based products. Therefore the biopolymer products involve a higher risk than the magnesium-based products that changes in the costs of the process could also impact the profitability of the end product. Bioretec manages the risk related to the prices of raw materials by agreeing on longer-term contracts with the suppliers of raw materials, when possible. Moreover, the manufacturing process of the biopolymer products is more complex and more time-consuming than that of the magnesium-based products, and thus more expensive.

For more information on the risks involved in production and sourcing agreements, see "*Risk factors – Risks related to the development, manufacture and commercialization of products*".

[36] ISO 14644-1:2015 Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness by particle concentration.

Sales and customers

General

The information on the distribution channels of Bioretec's products and the geographic breakdown of the sales only concerns Bioretec's existing biopolymer products, as Bioretec's new generation products based on magnesium and hybrid composite are still in the commercialization or development phase. In the United States, the new generation products are planned to be sold directly to the end customers.

As a part of the United States commercialization plan for Bioretec's new magnesium-based products, Bioretec plans to establish its own distribution center and sales organization in the United States. Bioretec estimates that the establishment of an own sales organization is the most efficient way for the Company to implement commercialization in the United States. When using an external distributor, the distributor keeps a significant portion of the product's margin. By selling its products directly to the end customers, Bioretec keeps the entire margin for its own benefit. Bioretec's commercialization strategy of new products in the United States is described in more detail in section "*– Products – New products – Commercialization plan for the new products in the United States*". In Europe, the distribution of the new products will take place through a third-party distribution network, as the Company considers that the establishment of individual sales organizations in several European countries would be expensive as comparted to the benefits achievable from such sales organizations. The commercialization plan for Europe is described in more detail in section "*– Products – New products – Commercialization plan for the new products in Europe*".

Distribution channels for existing products

Distribution under the Bioretec brand

Bioretec sells its existing biopolymer products under its own brand through regional distributors. Historically, Bioretec has sold its products directly to end customers in certain market areas, but as at the date of this Offering Circular, Bioretec does not have agreements on selling products directly to the end customers. In each country, Bioretec always estimates the most efficient way to approach the market from the perspective of commercial success. While direct sales to the end customers are considered the most efficient way to distribute the products, they also require significant financial investments.

The Company has entered into distribution agreements on the sales of its products in approximately 40 countries, and new distribution agreements are negotiated continuously. A challenge in the management of country-specific distribution networks is to find the most suitable distribution partner for each region. The Company continuously reviews the performance of the distributors and evaluates alternative distribution partners in different countries, and it changes the distribution partner, if necessary. The most important criteria for the selection of the local distributor are:

- proven ability to understand the local market;
- experience in selling corresponding products in the region;
- coverage and quality of sales resources in the region;
- the suitability of the Company's products for the distributor candidate's sales portfolio (local distributors often represent the products of several customers, and in an ideal case, Bioretec's products complement the distributor's product offering and do not compete with the products of the other customers); and
- the distributor's reliability and solvency.

To protect itself from possible foreign exchange rate risks associated with international delivery agreements, Bioretec strives to conclude agreements with its distributors nominated mainly in the euro. For more information on the risk arising from fluctuations in foreign exchange rates, see section "*Risk factors – Risks related to Bioretec's business operations – Fluctuation in exchange rates may have an adverse effect on Bioretec*".

Private Label distribution

Another distribution model used by Bioretec is the Private Label distribution model, in which Bioretec enters into a delivery agreement with the customer according to which it manufactures the customer's products and packages them using the customer's own brand. In these cases, Bioretec is stated as the manufacturer of the product on the package markings. As at the date of this Offering Circular, Bioretec had entered into one Private Label distribution agreement in the United States and one in China. Bioretec is continuously negotiating potential new Private Label distribution agreements. The purpose of the Private Label distribution model is to increase the sales volume of Bioretec's products. Such agreements are usually entered into with large international players that do not focus in their business on the development of their own products, but instead complement their product portfolio by entering into this type of agreements with smaller and innovative companies that are engaged in product development. From a strategic perspective, Private Label agreements may also

result in industrial transactions, where the distribution partner decides to acquire the manufacturer of the products in its entirety.

Geographic breakdown of sales

Bioretec's products are used all around the world. The Company has entered into distribution agreements for its products in approximately 40 countries, and new distribution agreements are negotiated continuously. At present, the Company's largest export countries with distribution partners are Russia and China, which accounted for 47 per cent of the Company's net sales in 2020. The table below sets forth geographic breakdown of Bioretec's net sales.

	For the three months ended 31 March		For the year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)		(unaudited)			
Europe[(1)]	179.1	162.6	697.0	733.5	593.9
The United States	20.5	19.9	68.0	117.9	56.1
Rest of the world	319.3	185.1	734.0	895.0	934.8

(1) Includes Russia.

Customers and key stakeholders

Bioretec's existing biopolymer products are used all around the world. The Company's customers include public and private hospitals and healthcare districts. In Europe, the products are usually acquired through public procurement processes, and the competitive tenders are typically implemented centrally for each healthcare district. In the United States, private hospitals play a larger role in the market. At present, Bioretec's customer base comprises private hospitals in the United States and Europe, in which Bioretec's products are used in special healthcare, such as sports medicine. At present, the Company's largest export countries with distribution partners are Russia and China, which accounted for 47 per cent of the Company's net sales in 2020. The centralized purchases typical in Europe and the United States are not as common in Russia and China, where physicians and hospitals purchase products from several providers in a more decentralized manner.

In addition to the actual customer, i.e. the hospital or healthcare district, the surgeons using the products also have power over the purchase decisions, as the surgeons' opinions and recommendations on the products are usually taken into account when making decisions on the purchases. In the private sector, the purchase decisions may even be based solely on the surgeons' opinions, whereas on the public sector there are further deciding factors, such as the price of the product. Traditionally, surgeons tend to avoid risks associated in the products they use, and for this reason, they prefer to wait for positive feedback on and experiences in the use of the products before adopting the new products. Due to this, the Company's management believes that Key Opinion Leaders, clinical evidence and training provided to the surgeons will play an important role in the marketing of the products. Key Opinion Leaders are experienced surgeons who lead the way in the proliferation of the new technologies in their own area of specialty. The Key Opinion Leaders are trained first, and Bioretec strives to produce with them clinical evidence and scientific articles or example cases based on such evidence. Additional material produced in this way helps to develop wider awareness of the product among the customers. The Company's Scientific Advisory Board with internationally merited world-class surgeons as its members provides the Company a channel for influencing the Key Opinion Leaders (for further information, see "*– Personnel and organization – Scientific Advisory Board*".

In addition, it is important that the new products become reimbursable under insurances, as reimbursability has a direct impact on the demand for the products, and when products are reimbursable, the decision-makers can base their decisions on a purely medical assessment. Consequently, insurance companies and insurances are essential to the demand generated for new products. For further information on insurances and compensability in product pricing, see "*Products – New products – Commercialization plan for the new products in the United States – Pricing of the new products*".

Bioretec mainly uses its distribution network for selling its products. Bioretec supports the marketing and sales activities of its distributors, but the distributors take care of the actual customer acquisition. As a part of the commercialization plan for its magnesium-based products in the United States, Bioretec plans to establish its own distribution center and sales organization in the United States. Unlike in the case of the sales of the present biopolymer products, Bioretec plans to focus the sales of its magnesium products on larger centers and hospitals in the United States. As Bioretec plans to distribute its magnesium-based product by itself, this will also require Bioretec to acquire new customers continuously. In the United States, Key Opinion Leaders will have a material role in the acquisition of new customers. For more information

on Bioretec's strategy for the commercialization of its new products in the United States, see section "– *Products – Commercialization plan for the new products in the United States*".

Research and development

Bioretec has an existing product portfolio with market approvals and sales. This product family include products for the segments of trauma, sports medicine and pediatric surgery. The products are screws, pins, nails and instruments used for their installation. In addition to the existing biopolymer products, Bioretec develops new products based on magnesium alloy and hybrid composite. In addition to the development of completely new products, Bioretec also strives to develop its existing products so as to increase the diversity of their indications. The expansion of the indications does not require financial investments to the same extent as the development of completely new products, as it entails finding new indications for the existing products.

Each product developed by Bioretec passes through the same product development process with the following phases: 1) feasibility study, 2) product development with verification and validation as its material parts, 3) transfer to production and 4) final verification and registration. All activities in each stage are documented and stored in the product's Design History File (DHF).

The feasibility study includes analysis of the product's commercial potential and suitability for production, review of the existing intellectual property rights and the possibility of patenting the product, definition of the product's manufacturing process and preliminary regulatory strategy, initiation of risk identification and production of preliminary prototypes. The product's design inputs are also defined in the feasibility study. The last steps in the feasibility study are the preparation of the Business Opportunity Evaluation and the first product review.

The product development phase includes the preparation of the product development plan, manufacturing of the first prototypes for official tests, further development of the product, update of the risks associated with the product, preliminary biological and clinical reviews, finalization of the product design and its tests and the decision on the final production technique. The product development phase also includes 3D and 2D modelling of the product, design of the product's package and its labels, development of the surgical techniques used in the installation of the product, assessment of the product's biological and clinical properties and further review of the risks associated with the product.

At the end of the product development phase, a verification and validation plan is prepared for the final form of the product, including the production technology, package and sterilization. The final tests and evaluations of the product are carried out in accordance with this plan, and the results are documented carefully and added in the Design History File. If the product's model or design is changed materially after this, the change is implemented using a separate revision process.

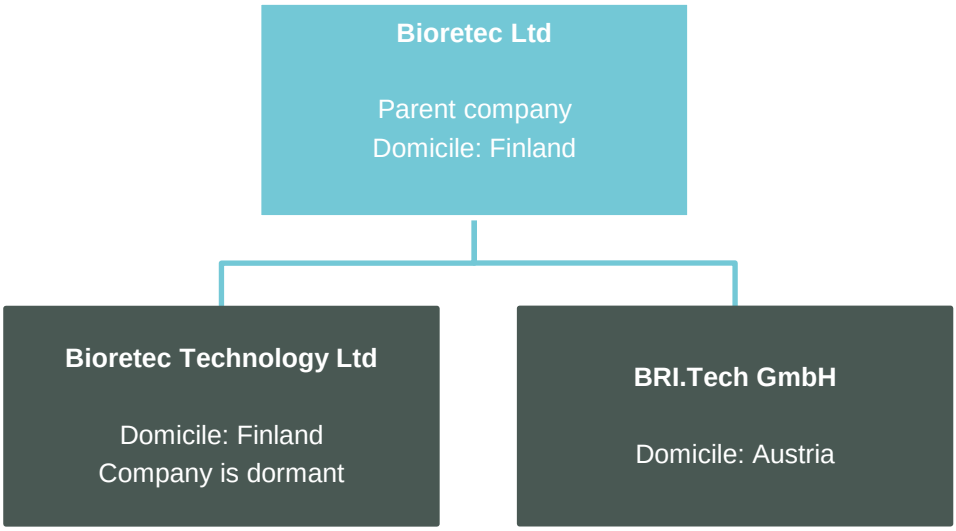
When a product is transferred into production, its quality is verified with several tests, the production processes are validated and the final risk assessment is carried out for the product. After this, the final verification is carried out on the product and the applications for market approval are submitted to the competent authorities.

With its product development, Bioretec aims to expand its product offering into various product segments also in the future. The long-term target of the product development is to introduce to the market hybrid composite materials and the first products manufactured from them, such as a completely bioresorbable intramedullary nail for adults and a completely biodegradable spinal cage. According to the management, Bioretec aims to focus its product development efforts on products that are estimated to be the most profitable on the basis of their revenue potential relative to the product development investments and size of the market.

Group structure and significant subsidiaries

The Bioretec group comprises the group's parent company Bioretec Ltd together with its wholly-owned subsidiaries Bioretec Technology Oy and BRI.Tech GmbH. On 7 May 2021, Bioretec's Board of Directors decided on a merger plan, under which the subsidiary Bioretec Technology Ltd will be merged into the group's parent company. The merger is pending as at the date of this Offering Circular. The chart below presents Bioretec's group structure as at the date of this Offering Circular.

Group structure



Personnel and organization

The table below presents the average number of personnel at Bioretec for the periods indicated.

	1 January–31 March		1 January–31 December		
	2021	2020	2020	2019	2018
Number of employees	24	24	23	23	21

There has been no material change in the number of Bioretec's personnel between 31 March 2021 and the date of this Offering Circular. The Company's management estimates that, particularly due to the commercialization plan of the Company's products, the number of its employees will increase from the present 24 to approximately 70 by 2026 (for more information, see "*– Products – Commercialization plan for the new products in the United States*").

Bioretec's Board of Directors has established an option program of the key individuals with the purpose of providing a long-term system for committing the Company's key individuals. For more information on the option program of the key individuals, see section "*Board of Directors and Management Team – Incentive schemes and restrictions on disposal of Shares*".

Scientific Advisory Board

In addition to the Management Team and the Board of Directors, Bioretec has a Scientific Advisory Board, comprising internationally renowned medical experts and experienced surgeons. At the date of this Offering Circular, the members of the Scientific Advisory Board are:

Professor, Dr. Klaus Dresing (MD, Ph.D). Professor Dresing has over 30 years of experience from trauma surgery and he has, for the most of his career, worked as Assistant Medical Director in Clinic for Trauma Surgery, Orthopedics and Plastic Surgery at the University of Medicine Goettingen Germany. Dresing has acted as the principal investigator in numerous clinical studies.

Professor, Dr. Peter Giannoudis (MD, Ph.D). Professor Giannoudis works as the section head and professor at the School of Medicine, University of Leeds and as an Honorary Consultant at Leeds General Infirmary. Throughout his career he has served in various positions of responsibility including, among others, as the President of the European Society Tissue Regeneration in Orthopedics and Traumatology (from 2018 onwards), Chair of the International Committee of Orthopaedic Trauma Association (USA, 2012–2018), Trustee of the British Orthopaedic Association (2017–2020), and as the Editor in Chief of the Injury Journal (from 2010 onwards).

Professor, Dr. Fan Liu (MD, Ph.D). Professor Liu has 40 years of experience from trauma surgery and is currently working as Vice President and as Chief and Professor in Department of Orthopedic Surgery at the Affiliated Hospital to Nantong University. Liu is the Vice President of the Chinese Orthopedic Association and the Chinese Association of Orthopedic Surgeons. He acts as the editor in a number of orthopedic journals and is a globally awarded scientific researcher.

Professor, Dr. Endre Varga (MD, Ph.D). Professor Varga is the Head of Trauma Deparment and Professor of Trauma Surgery at the University of Szeged. He has worked as a surgeon and a trauma surgeon since 1981, as an instructor (International AO/ASI instructor and ATLS instructor). Varga has published a vast amount of scientific articles and book chapters.

Professor, Dr. Rodrigo Pesantez (MD, Ph.D). Professor Pesantez is the Head of Orthopedic Trauma Department ad Fundacion Santa Fe de Bogota University Hospital. He is also the Chair of AO Trauma Latino America Board.

As a part of its commercialization plan in the United States, Bioretec aims to recruit one or two members to its Scientific Advisory Board to accelerate the process of finding and committing Key Opinion Leaders.

The members of the Scientific Advisory Board are eligible to participate in the incentive scheme aimed for the key personnel of the Company (see "*Board of Directors and the Management Team – Incentive schemes and restrictions on disposal of Shares – Incentive schemes*").

Values

Bioretec's vision is to be a global forerunner in the development, manufacturing and commercialization of bioactive and bioresorbable products used for repairing bone and soft tissue defects. Bioretec's mission is to develop and introduce novel, innovative, high-quality bioactive and bioresorbable surgical devices and techniques which improve patient healing, safety and cost-efficiency in clinical care. The Company's general mindset is to improve the patients' quality of life.

Bioretec's values are humanity, quality and innovation.

Humanity

All of Bioretec's products are developed and manufactured for improving the patients' quality of life. The Company follows high ethical and moral values in everything it does.

Quality

The Company is committed to providing its customers with high-quality and safe products and services according to the latest requirements and standards.

Innovation

Bioretec aims to be a reformer and technological leader in the market. The Company constantly seeks new technologies and solutions that fulfil unmet clinical needs.

Fixed assets

Medical devices are produced by using special equipment designed for this purpose. Some of the process equipment used in the Company's production process has been modified according to the Company's special needs. All process equipment used in the production process of the Company's products is owned by the Company, and the Company does not have any leased equipment in its production operations.

Intellectual property rights

Bioretec's intellectual property rights include patents, trademarks, licenses, domains and unregistered intellectual property rights, such as knowhow and trade secrets.

Bioretec has actively patented innovations related to its products. As at the date of this offering Circular, Bioretec has 10 active patent families, 34 existing patents and 6 pending patent applications. The patent families are reviewed continuously and new potential patent applications will be submitted if they are considered to provide strategically valuable protection for Bioretec's innovations. Bioretec's active patent families as at the date of this Offering Circular are specified in Annex A to this Offering Circular.

Bioretec has not patented innovations related to the production process of its products, as circumventing process patents is relatively simple in industrial operations. For this reason, Bioretec has decided to keep the knowhow related to the production processes inside the Company.

Bioretec has entered into licensing and royalty agreements with the inventors who have developed Bioretec's patents. Based on these agreements, Bioretec pays the inventors royalties, which are based on the net sales of the products which the patents concern. The agreements are in effect over the term of the patents. Bioretec has not entered into licensing agreements with external parties. The Company aims to keep its technical knowhow inside the Company to maintain its competitive position and ensure that it can efficiently protect its intellectual property rights, which are important for Bioretec.

The table below sets forth royalties paid by Bioretec for the indicated periods.

	For the three months ended 31 March		For the year ended December 31		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)			(unaudited)		
Pin and Nail products	0.1	0.7	2.4	2.9	4.0
CiproScrew products	-	-	-	-	0.1
Total royalty payments	**0.1**	**0.7**	**2.4**	**2.9**	**4.1**

Bioretec owns the internationally registered trademark RemeOs™. The trademark is registered in Finland, the European Union and China, in addition to which Bioretec has applied for the trademark's registration in the Unites States. In addition, Bioretec has the following unregistered trademarks: ActivaScrew™, ActivaScrew™ Cannulated, ActivaScrew™ Interference, ActivaScrew™ Interference TCP, ActivaPin™, ActivaNail™ Conical, Activa IM-Nail™, CoronButton™ Adjustable, CoronButton™ Fixed and CoronButton™ Ext. Bioretec aims to apply for the registration of new trademarks to the extent that it considers this beneficial to its competitive position and necessary for protecting its trademarks against misuse and infringement.

Bioretec's commercial success depends in part on its ability to obtain and maintain intellectual property rights related to its products. The Company strives to protect its current and future intellectual property rights actively. Local professional patent agencies manage the protection of Bioretec's patents in each country where Bioretec's products have been patented. For more information on risks related to intellectual property rights, see section "*Risk factors – Risks related to Bioretec's business operations – Bioretec's intellectual property rights may fail to provide adequate protection for the Company's products, and the Company may fail to obtain adequate new intellectual property rights or to protect its intellectual property rights*" and "*Risk factors – Risks related to Bioretec's business operations – Bioretec may unintentionally breach the intellectual property rights of third parties, and such breaches may result in legal actions, which may have an adverse effect on the Company's business*".

Regulatory environment and standards

The discussion below describes the regulatory environment in which Bioretec operates and which may have a material effect on Bioretec's business operations. The discussion in intended to provide the investors with an overview on the regulation applied to the Company, as well as on approvals, standards, approval processes and supervision applied to the Company and its process, and it should not be considered exhaustive.

The development, production and sales environment of medical devices is subject to a significant amount of regulation. Bioretec has market approvals for its bioresorbable orthopedic implants in approximately 40 countries. Bioretec's products are required to satisfy the statutory requirements based on the legislation of the country in which the products are sold. In addition, a significant amount of other regulation and standards are applied to the Company, relating to, for example, product development, product testing, the production process and its safety, production equipment, sterilization of the products, the Company's premises, product packages, package markings and distribution, import and export of the products, as well as the registration and commercialization of the products.

Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices (the Medical Device Regulation, "**MDR**") has been applied in the European Union from 26 May 2021. After the transition period ended on 26 May 2021, the regulation replaced the previously applied directive 93/42/EEC of the Council on medical devices in its entirety. Until the regulation came into effect, national legislation and directives were applied in parallel in the European Union, including Finland. The regulation is directly applicable, and harmonizes the legislation applied to medical devices in the entire European Union. In addition, new national legislation supplementing MDR is being prepared in Finland. As at the date of this Offering Circular, this regulatory process is still pending in the Parliament of Finland.

MDR imposed stricter regulatory requirements on Bioretec, and it has required certain changes in the Company's operations. For example, the regulation expanded the product offering included in the scope of its application, changed and expanded certain obligations of the manufacturers relating to, for example, various systems, clinical trials and equipment, changed the risk classifications of devices and as such, the assessment of the compliance of products, and changed the requirements on the clinical review.

For more information on the risks related to regulatory permits, supervision and regulatory environment, see "*Risk factors – Risks related to Bioretec's operating environment, industry and regulation – The production of medical devices is a highly regulated industry, and changes in legislation or case law relating to Bioretec or Bioretec's products may be adverse to Bioretec*" and "*Risk factors – Risks related to product development, production and commercialization of products – The*

loss of market authorizations for its products, failure to obtain new market authorizations or a longer-than-expected duration of application processes may have a material adverse effect on Bioretec's business".

Legislation governing the development and testing of the products

In order to prove that a medical device satisfies the statutory requirements applied to it, the device is subjected to clinical studies. The purpose of the clinical studies is to assess the device's safety and performance before introducing it to the market. The clinical studies aim to produce research evidence for making a competent assessment of the device's safety and its clinical benefits, i.e. its positive effects on the patient's health.

Conducting clinical studies is highly regulated. Regulations govern, for example, who can be subjected to a clinical studies, what are the responsibilities of the parties implementing the clinical studies, what are the prerequisites for starting a clinical study, how to report on the conclusion, temporary suspension or premature termination of clinical studies and how to report the results of the clinical studies and possible adverse incidents experienced during the clinical studies.

Under the MDR, an application shall be submitted to the competent authority of the relevant member state for initiating clinical studies. In Finland, the competent authority is the Finnish Medicines Agency ("**Fimea**"). The initiation of clinical studies requires a permit to be applied for from the Ethics Committee. The purpose of the Ethics Committee is to maintain and protect the dignity and rights of the people participating in clinical studies and ensure their safety during their entire participation in the clinical studies. In the United States, the initiation of clinical studies requires the Investigational Device Exception from the FDA. It is required both in Europe and the United States that people (patients) participating in clinical studies give their informed consent to participate in the clinical studies. The consent shall be given only after all aspects relevant for the subject's decision to participate have been explained to the person.

Clinical studies shall be planned, implemented and reported according to the best clinical research practices. The ISO 14155:2020 standard[37] describes the best clinical practices related to the planning, implementation, recording and reporting for the assessment of the safety or performance of medical devices. The standards establish the general requirements for the clinical studies for the purpose of, among other things, protecting the rights, safety and wellbeing of the people participating in the clinical studies, ensuring the scientific quality and credibility of the clinical studies and defining the areas of responsibility relating to the clinical studies. In addition, the World Medical Association (WMA) issued the Declaration of Helsinki[38] in 1964, establishing ethical principles for medical research on human subjects. The declaration concerns, among other things, the obligation to obtain informed consent from the person participating in the medical research before commencing the studies.

The clinical studies assess the efficiency of the product, and information on its possible adverse effects are collected in connection with studies, which are taken into account in the risk analysis in accordance with the ISO 14971:2019 standard[39] on medical devices. The standard defines the terminology, principles and processes for the risk management of medical devices. The purpose of the risk analysis process in accordance with the standard is to help the manufacturers of medical devices to identify hazards related to medical devices, assess risks associated with them and manage and monitor the risks efficiently. The standard requires that the manufacturers of the medical devices confirm objective criteria for the acceptability of the risks.

Approvals required for the products

General

Market approval must be obtained for a medical device from the local competent authority before it can be introduced on the market. In connection with the approval process, the manufacturer of the device is required to show that the product is safe, suitable for its intended purpose and effective for its indication. The approval processes vary by region. The approval processes applied in the European Union and in the United States are described below, as the Company's management considers these market areas as the most important for the Company after the commercialization of its RemeOs™ products.

[37] ISO 14155:2020 Clinical investigation of medical devices for human subjects – Good clinical practice.

[38] WMA Declaration of Helsinki – Ethical principles for medical research involving human subjects, approved in the 18th General Assembly of the Word Medical Association in 1964 in Helsinki and amended most recently in the 64th General Assembly of the Word Medical Association in Fortaleza in Brasil in 2013.

[39] ISO 14971:2019 Medical devices – Application of risk management to medical devices.

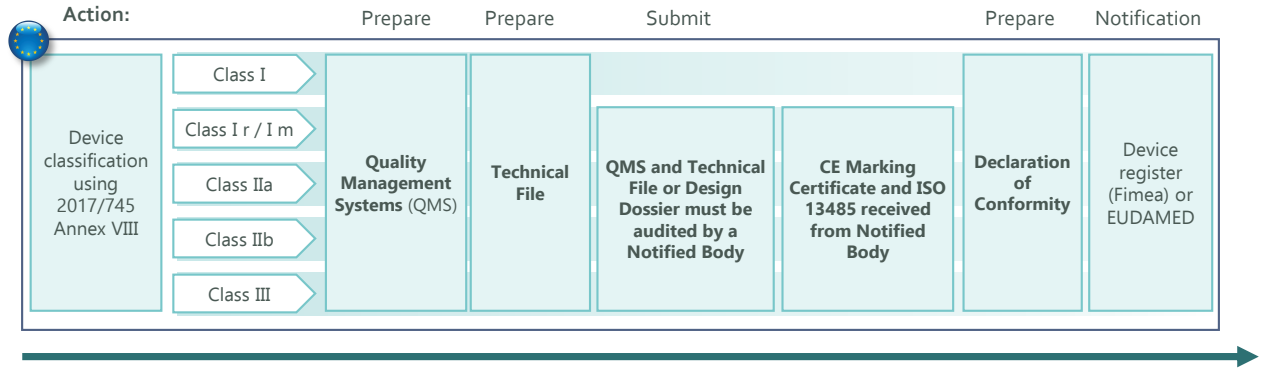
Approval process in the European Union

In the European Union, the sales of medical devices require that the devices have a CE marking in accordance with the MDR. The CE marking is used for declaring that the device complies with the statutory requirements applied to it. As the first step, the devices are classified. There are four classes (I, II a, II b and III), and the devices are assigned to these classes based on their intended use and inherent risks. Compliance of the medical devices is required to be assessed before the manufacturer can use the CE marking on the device. The procedure applied in the assessment of compliance is determined on the basis of the device's classification. Depending on the risk class, the notified body participates in the assessment of compliance. Depending on the risk class, the so called notified body may, for example, review the technical documents or some of them before the declaration of conformity can be signed. As a part of the conformity assessment process, the manufacturer of the medical devices is required to have a quality control system, which the notified body also reviews if it participates in the assessment of conformity.

In order to obtain the CE marking, the manufacturer of the device is required to provide a declaration of conformity, where it declares that the device complies with all statutory requirements applied to it. In order to assess compliance, the manufacturer of the product is required to prepare documents evidencing compliance with the requirements and measures carried out for assessing compliance. The CE marking means that the device is ready for introduction to the market. When a device has the CE marking, it is registered by submitting a notification of the device to the competent authority in the member state in which the manufacturer of the device is domiciled. In Finland, the competent authority is Fimea. The CE marking entitles to the registration of the device in all member states of the European Union.

The chart below illustrates the approval process for medical devices in the European Union.

Approval process for medical devices in the European Union



Approval process in the United States

In the United States, the market approvals for medical devices are granted by the FDA. The process of obtaining a market approval can be described through three phases: classification of the medical device, pre-submission phase and submission of the actual application for market approval. In the first phase, the product is classified. There are three classes (I, II and III), and the classification of the products is based on three factors. These factors are the risk caused to the patient/user, the intended use and the indications. The risk is lowest in Class I and highest in Class III.

The purpose of the pre-submission is to provide the FDA information on the product, based on which the FDA carries out a preliminary review of the product, provides the manufacturer of the product with feedback on whether the application complete so as to be submitted for final approval and recommends the suitable market approval process (510(k), De Novo or PMA. The notification process 510(k) is suitable for products in Classes I or II, which are "sufficiently similar" to an existing products as regards their intended use, technical properties and performance, i.e. they are comparable with already existing products. The De Novo process is only suitable for such new products that cannot be classified directly as Class I or II and for which there is no comparable product that would justify the 510(k) notification process. Prior to the introduction of the De Novo process, such products were classified directly as Class III, which is used for the products with the highest risk and requiring the PMA process. However, in the De Novo process, such new products may also be classified as Class I or II, which simplifies the registration process of new products. The market approval process applied impacts the duration and the costs of the process. The PMA process is the most lengthy and expensive process, the notification process 510(k) is the shortest and least expensive process, and the De Novo process is in between them. In

addition, small companies may obtain a reduction in the expenses of the market approval process if they satisfy the requirements of the FDA for a "small business" (so called "*Small Business Qualification and Certification*").[40]

The FDA has established the system for Breakthrough Device Designation to ensure the introduction of new innovative products to the market. Products approved under this system are required to provide significant benefits to the patients and the healthcare system. The FDA has the following eligibility criteria for this designation:

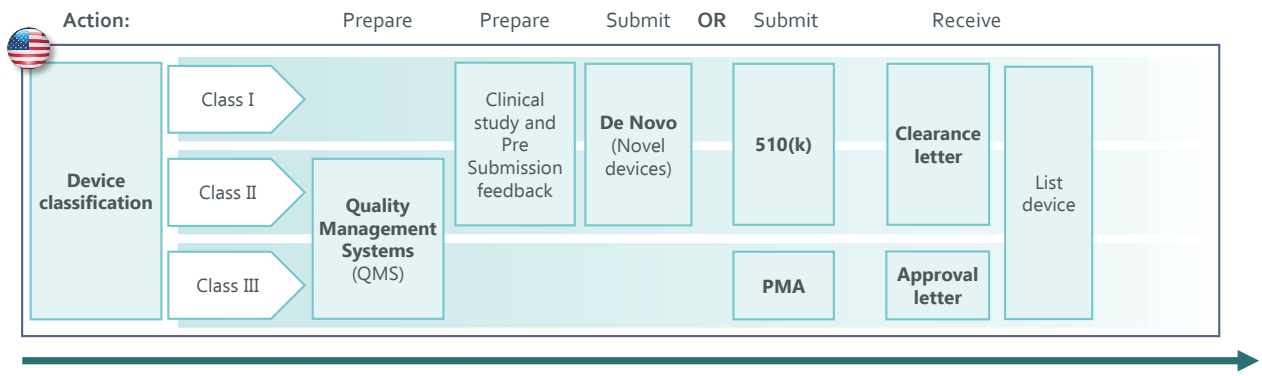
1) The device provides for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human disease or conditions; and

2)
   a) represents breakthrough technology;
   b) no approved or cleared alternatives exist;
   c) offers significant advances over existing approved or cleared alternatives, including possibilities to reduce the need for inpatient treatment, improve the patient's quality of life, support the patient's self-treatment or increate long-term clinical efficiency; or
   d) device availability is in the best interest of the patients. [41]

The system aims to shorten the total time needed for granting a market approval to the product by opening continuous mutual communication between the market approval applicant and the FDA. The parties together process the key matters and obstacles related to the application for market approval to ensure smooth processing of the application.

The graph below illustrates the approval process for medical devices in the United States.

Approval process for medical devices in the United States



Supervision and other regulation related to the products

Medical devices are also supervised after their introduction to the market. This post-market supervision aims to ensure the patient safety of the devices. The manufacturer is required to supervise and assess the experiences gained from the medical device after its manufacture and information related to the device's clinical review. Post-market supervision aims to ensure that the device's safety and performance remain intact over the device's expected total lifecycle, identified risks remain at an acceptable level at all times and arising risks are detected on the basis of factual evidence.

Under the MDR, the manufacturer of the medical device must maintain a system suitable for actively and systematically gathering, recording and analyzing relevant data on the quality, performance and safety of a device throughout its entire lifetime, and for drawing the necessary conclusions and determining, implementing and monitoring any preventive and corrective actions. Depending on the device's risk classification, the manufacturer of the device may be required under the MDR to carry out a safety review on the device at regular intervals, where the data gathered on the device in analyzed and possible preventive and corrective actions are described. The manufacturer of the medical device shall maintain, as required by the MDR, a risk and quality management system to ensure that the mass production of the devices satisfies the requirements defined in the MDR. In the orthopedic device industry, the FDA also supervises, for example the quality

[40] Source: Medical Device User Fee Small Business Qualification and Certification – Guidance for Industry, Food and Drug Administration Staff and Foreign Governments, 1 August 2018.

[41] Source: Breakthrough Devices Program Guidance for Industry and Food and Drug Administration Staff Document issued on December 18, 2018.

and compliance of a device over its total lifecycle using a total product lifecycle review (TPLC review), which includes the market approval, programs related to quality control and compliance and supervision.[42]

Incident reports also have an important role in post-market supervision. The obligation to report incidents can be considered as one of the most important obligations of the manufacturer after the medical device has been introduced on the market. The manufacturer shall report to the competent authority incidents which have or could have endangered human health and which result from the properties, weakening of performance or defects in the device, inadequacy of the information provided by the manufacturer or unwanted side effects. In the European Union, the incident reports are submitted to the competent authority, and in the United States, to the FDA. In Finland, the competent authority is Fimea.

Under the MDR, the competent authority is entitled to carry out audits on the compliance of the properties and performance of the products with requirements. These audit may include document reviews, physical investigations, laboratory examinations and visits to the manufacturer's premises. In Finland, Fimea is the competent authority responsible for supervision. Based on their audits, the competent authorities may require the implementation of corrective actions to the device, if they consider on the basis of their review that the device may result an unacceptable risk on the health or safety of people. In the United States, the FDA may carry out corresponding audits.

In addition, a significant amount of regulation and standards are applied to medical devices, covering, for example, the production process, safety of the production process, equipment and machines used in the production, sterilization of the products, production premises, product packages, package markings and distribution, import and export of the products. The quality of the products and raw materials is controlled in accordance with the ISO 13485:2016 standard[43] in several different production phases. The quality management system aims to identify and control risks related to the products and the raw materials used in them and implement efficient risk control methods. The production of medical devices requires, for example, cleanrooms in which the concentration of airborne particles is controlled. Cleanrooms are classified in accordance with the ISO 14644-1:2015 standard[44] into nine different cleanroom classes based on air cleanliness. The ISO 1 cleanroom class specifies the strictest requirements for the cleanliness of the premises, and the requirements are the lowest in the ISO 9 cleanroom class. For more information on Bioretec's production facilities, see "– *Production – Production facilities*", and for the production process and its phases, see "– *Production – Production process and raw materials*". The legislation also sets certain requirements for the packaging of the products, package markings and user instructions for the product. The product and its package must have the markings required by the regulations in each market area, and the package must contain user instructions for the product in order to ensure safe use of the product.

IT

Bioretec's most important IT systems relate to research and development, quality assurance, production management, payroll and payment processing. The most important systems for the Company's operations are its quality control system based on M-Files and its Enterprise Resource Planning System (ERP). The Company's present ERP has been, in part, developed for the Company's special needs. However, the Company's operations do not require a system developed for the Company's needs, and the Company could also replace its present ERP with an enterprise resource planning system directly available on the market. Other systems used by Bioretec are not modified or developed to account for the Company's special needs, and therefore, systems for replacing them would be available directly on the market, if needed. As such, Bioretec is not dependent on any specific system providers.

Material agreements outside the ordinary course of business

Bioretec is committed to repay the capital which as at 31 March 2021 was EUR 387,541.74[45] and the interest accrued thereto by the date of repayment to the convertible bond holders in the United States with the net proceeds received from the Offering. The Company and the convertible bond holders in the United States have agreed on ordering consultancy services relating to the commercialization of the new products in the United States from the convertible bond holders starting from October 2021. If the Listing is completed as planned and the Company repays the loans according to its commitment by mid-October 2021, the agreement will not be enforced. For more information on the agreements concerning the convertible bond loans, see "– *Agreements concerning convertible loans*" and "*Shares and share capital – Option rights and other special rights entitling to the Shares– Other special rights entitling to the Shares*".

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[42] Source: FDA. Available at https://www.fda.gov/about-fda/cdrh-offices/oht6-office- orthopaedic-devices-office-product-evaluation-and-quality. Refecenced on 19 March 2021

[43] ISO 13485:2016 Medical devices – Quality management systems – Requirements for regulatory purposes.

[44] ISO 14644-1:2015 Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness by particle concentration.

[45] The capital includes capitalized interest until 31 March 2016.

Other than stated above, during its operating history, Bioretec has not entered into agreements outside the ordinary course of its business which would result in significant obligations or rights for Bioretec as at the date of this Offering Circular.

Shareholders' agreements

Bioretec's present minority shareholders have entered into a shareholders' agreement concerning Bioretec, and the agreement will be terminated when the Listing is completed.

In addition, certain key shareholders have entered into a mutual shareholders' agreement, and the agreement will be terminated when the Listing is completed. For more information on the shareholders' agreements, see section "*Shares and share capital – Restrictions of disposal of Shares*".

Agreements concerning convertible loans

Based on the resolutions of Bioretec's General Meetings on 21 September 2011 and 21 December 2011, Bioretec has entered into agreements on convertible loans to finance the Company's business operations and to strengthen its equity. Bioretec is committed to repay the capital which as at 31 March 2021 was EUR 387,541.74[46] and the interest accrued thereto by the date of repayment to the convertible loan holders in the United States with the net proceeds received from the Offering. The Company and the convertible loan holders in the United States have agreed on ordering consultancy services relating to the commercialization of the new products in the United States from the convertible loan holders starting from October 2021. If the Listing is completed as planned and the Company repays the loans according to its commitment by mid-October 2021, the agreement will not be enforced. In addition, Bioretec intends to repay the capital of its other capital loans which as at 31 March 2021 was EUR 1,524,472.12 and interest accrued thereto by the date of repayment in their entirety with the net proceeds received from the Offering. The Company's capital loans and the interest accrued thereto by the estimated repayment date are in total approximately EUR 3.3 million (for more information, see "*Essential information on the Offering – Use of proceeds*"). Bioretec will prepare interim financial statements for the six months ending 30 June 2021 for implementing the repayment of the capital loans (for more information, see "*Shares and share capital – Company's planned Extraordinary General Meeting 2021*").

For more information on the agreements relating to the convertible bonds, see section "*Shares and share capital – Option rights and other special rights entitling to Shares – Other special rights entitling to Shares*".

The execution of the Offering is conditional on certain factors. For more information, see "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*".

Material investments

The most significant part of Bioretec's investments relates to product development, the commercialization of new products and the production capacity. The Company's management estimates that in order to reach its financial targets, the Company is required to invest, in addition to its present production line, in a second production line and approximately 5–10 new CNC machines. The total cost of the new production line is estimated to be approximately EUR 400 thousand (including a CNC machine), and the cost of new a CNC machine is estimated to be approximately EUR 250 thousand. For further information on the effect of the planned investments to the Company's results of operations, see "*Operating and financial review – Key factors affecting the results of operations – Factors affecting the Company's results of operations in the medium term – Operating expenses and investments*".

In addition, Bioretec is building as at the date of this Offering Circular new office and production premises to rental premises in Tampere due to the termination of the lease agreement for the current office and production premises (for more information, see "– *Production – Production facilities*"). Bioretec estimates that the total investments required for the building of new office and production premises will amount to approximately EUR 300 thousand in the first half of 2021.

Bioretec's investments in tangible and intangible assets amounted to EUR 91.0 thousand for the three months ended 31 March 2021 and EUR 31.6 thousand for the three months ended 31 March 2020. Bioretec's investments in tangible and intangible assets amounted to EUR 121.2 thousand for the year ended 31 December 2002, EUR 54.9 thousand for the year ended 31 December 2019 and EUR 52.8 thousand for the year ended 31 December 2018.

Bioretec has not made any material investments or made any resolutions on material investments in tangible or intangible assets between 31 March 2021 and the date of this Offering Circular.

[46] The capital includes capitalized interest until 31 March 2016.

Insurance

Bioretec maintains insurance coverage against various risks present in its business. Bioretec's insurance coverage includes statutory and voluntary insurances, which satisfy national and/or contractual insurance requirements. Bioretec's insurance coverage includes, among others, property damages, interruption of business (as a part of the property insurance), product liabilities related to Bioretec's products and general liability of the management and officers.

Product liability insurances with adequate coverage are expected in the Company's field of business. Bioretec's management believes that the Company's insurance coverage is appropriate and corresponds to the market practices both for the insured amounts and the coverage of the insurance policies to the extent that the insurances cover the largest risks in Bioretec's business and considering the costs of the insurance coverage and the potential risks in the business.

Legal and arbitration proceedings

Bioretec becomes involved from time to time in various claims and legal proceedings arising in the ordinary course of business. These proceedings relate to, for example, intellectual property rights and administrative proceedings.

As at the date of this Offering Circular, Bioretec's subsidiary BRI.Tech is involved in a patent dispute concerning patent EP2857536 in which EPO has on 10 May 2021 issued a decision invalidating BRI.Tech's patent. Bioretec plans to appeal the decision. According to Bioretec's management, the invalidation of the patent will not impact the registrations of the patent in the United States and China. In addition, the dispute only relates to the use of magnesium alloy in implants for pediatric indications. According to the management, the invalidation of the patent will not have an effect on the implementation of the commercialization plan for the Company's RemeOs™ products, as the Company has submitted a patent application concerning the RemeOs™ products, which is expected to provide global protection for the composition of the magnesium alloy used in the products. In the Company's new pending patent application, the composition of the alloy's main components is similar to the patent under dispute, but production process and impurity profile, which are key to reach the desired features, differ from other patents in the area. The alloy and its profile under the new patent application enables the Company to manufacture the magnesium alloy and products at clearly lower costs compared to the patent under the dispute, making the product commercially viable. The new pending patent application is the actual patent providing protection on the RemeOs™ magnesium alloy. In addition, Bioretec has ensured with an analysis carried out by an external party its freedom to operate as regards the RemeOs™ magnesium alloy in the United States and Europe. The freedom to operate analysis supports the Company's position that its RemeOs™ products do not breach any existing patents, including the abovementioned patent EP2857536, which is under the dispute.

Other than stated above, as at the date of this Offering Circular, there are no governmental, legal, arbitration or administrative proceedings against or affecting Bioretec or any of its subsidiaries (and no such proceedings are pending or threatened of which Bioretec is aware) during a period covering at least the previous 12 months which have or may have had in the recent past, individually or in the aggregate, a significant effect on the profitability or the financial position of Bioretec or of Bioretec and its subsidiaries.

MARKET AND INDUSTRY REVIEW

The discussion below includes market and industry information that are based on information derived from third-party sources and estimates made by the Company. Where the information is derived from a public source, the source is presented. The Company's estimates are based on non-public sources available to the Company and on the knowledge of the Company's management of the relevant industries and markets. For more information on the sources of market and industry information, see "Certain additional information – Third-party information".

Introduction

Bioretec develops, manufactures, and sells bioresorbable polymer-based orthopedic implants as well as develops, manufactures, and expects to sell in the future bioresorbable metal-based orthopedic implants. Orthopedic implants manufactured by the Company are used in the treatment of bone and soft tissue defects. Metal-based orthopedic implants are suitable for repairing bone defects, and polymer-based implants are used for repairing tissue and certain small bone defects. The Company's customers include public and private hospitals and health care districts. While the Company's products are sold through distributors at present, the Company also expects to start selling its products directly to the end customer at least in the United States. The Company has entered into distribution agreements for its products in approximately 40 countries.

Parts of the global orthopedic products market relevant to the Company are, for existing products, primarily the market for orthopedic sports medicine products and the market for orthopedic non-load-bearing trauma products. The Company's management estimates that the size of the market addressable with the Company's products belonging to the Activa product family currently on the market is approximately USD 300 million.

The Company's management estimates that its addressable market will grow significantly with the commercialization of its upcoming RemeOs™ products. For the Company's upcoming RemeOs™ products, the parts of the global market for orthopedic products relevant to the Company are the market for orthopedic trauma products and spine products. For the Company's upcoming RemeOs™ products, the addressable parts of the orthopedic trauma products market include the markets for cannulated screws, Kirschner wire (or K-wire) and intramedullary nails and of the spine products the market for spinal cages. The Company estimates that its RemeOs™ products' addressable market will grow in tandem with launch of new products and reach USD 7 billion in 2027 when the last planned RemeOs™ product has been launched.

Size and characteristics of the market

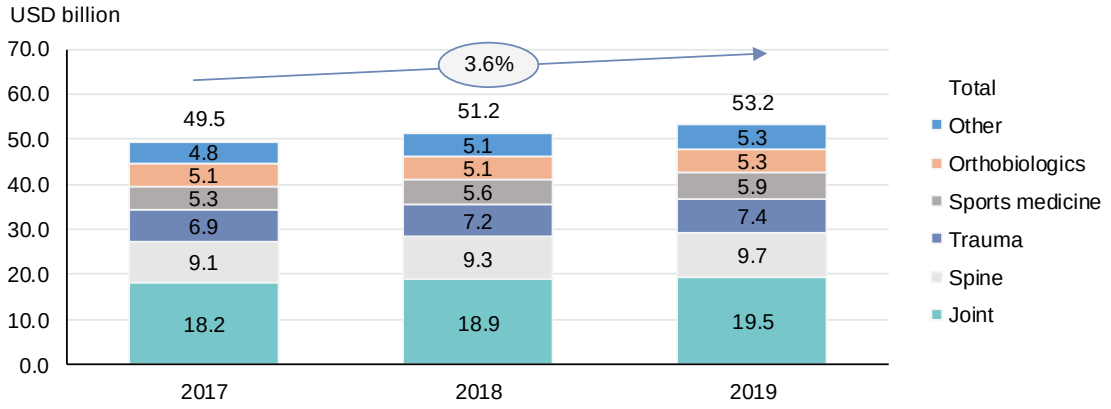
Overview of the market for orthopedic products

Orthopedic products include various devices, accessories, supplies or other objects used in the treatment and prevention of human musculoskeletal injuries and diseases. Orthopedic products include, for example, devices and accessories used for the repair of joints, bones, muscles and ligaments. Orthopedic products are mainly used in procedures requiring surgery, but many orthopedic products are also used in non-invasive treatment. Some orthopedic products are used in acute treatment, and some in non-acute treatments. Typical treatments include, for example, the repair of bone fractures in limbs, treatment of spinal disorders, procedures for repairing joints and various treatments of damage in ligaments.

Companies operating in the orthopedic market develop, manufacture and sell orthopedic products. Segments of the market for orthopedic products include joint products (artificial joints), spine products, trauma products, sports medicine products, orthobiological products and other products. In 2019, the global market for orthopedic products was USD 53.2 billion in revenue[47]. In 2017, the global market for orthopedic products was USD 49.5 billion, which means annual market growth was approximately 3.6 per cent between 2017 and 2019. The graph below illustrates the development of the global market for orthopedic products by segment between 2017 and 2019.

[47] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

Development of the global market for orthopedic products by segment between 2017 and 2019[48]



The segment distribution of the sales of orthopedic products was as follows[49]:

- Joint products (artificial joints) accounted for 36.9 per cent of the market in 2019. The product category includes implants, instruments and auxiliaries used in surgical operations for replacing or repairing joints in, for example, the hip, knee, shoulder, elbow or wrist.
- Spine products accounted for 18.3 per cent of the market in 2019. The product category includes implants, instruments and auxiliaries used in surgical operations for the treatment of, for example, degenerative disc disease, spinal disc herniation, scoliosis and vertebrae fractures.
- Trauma products accounted for 14.0 per cent of the market in 2019. The product category includes products and instruments used internally and externally for the treatment of bone fractures. The most important products are, among others, various screws, plates and wires used for preventing the fractured bone from moving.
- Sports medicine products accounted for 10.7 per cent of the market in 2019. The product category includes various implants and instruments, such as arthroscopes, cameras, products used for controlling fluids, screws and anchors.
- Orthobiological products accounted for 10.3 per cent of the market in 2019. The product category includes biological and biochemical products, such as allogeneic transplants, synthetic bone transplants and growth factors used in various sub-areas of orthopedics.
- Other products accounted for 9.8 per cent of the market in 2019. The product category includes products not covered by other product categories.

The United States is the largest geographical market area for orthopedic products. The United States accounts for approximately 62 per cent of the global market for orthopedic products.[50] Europe, the Middle East and Africa (EMEA) account for approximately 24 per cent of the market and the Asia-Pacific region for approximately 10 per cent of the market.[51] The high significance of the market in the United States results from the high price level of orthopedic products in the United States and the large number of musculoskeletal disorders and traumas.[52]

The market for orthopedic trauma products

The market for orthopedic trauma products is one of the largest segments for orthopedic products and the main market segment for Bioretec's present products and upcoming RemeOs™ products. The market for orthopedic trauma products includes devices and supplies that are used internally or externally mainly for the repair of bone fractures. Fractures are typically caused by accidents, falls or sports injuries. In addition, various diseases may result in fractures. There are several treatment methods available for fractures, and their usage varies, depending on, for example, the severity of the fracture.

[48] The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[49] The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[50] The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[51] The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[52] GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

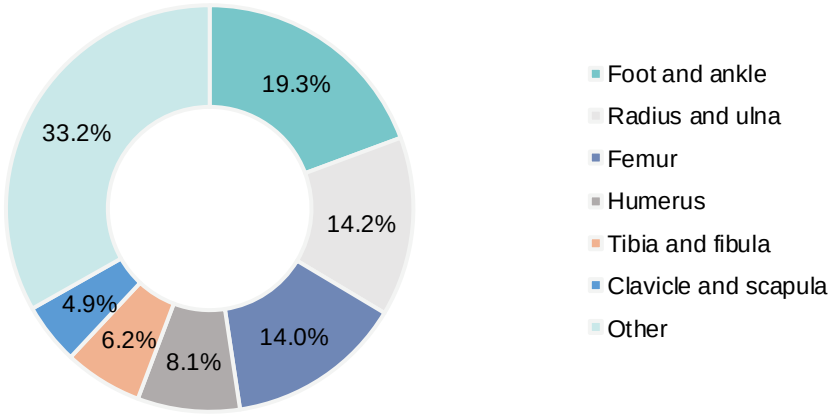
The main orthopedic trauma products include a variety of plates, screws and other products that keep the broken bone in the correct position to enable and promote ossification and healing of the bone.

The size of the market for orthopedic trauma products was approximately USD 7.45 billion in 2019, or approximately 14 per cent of the total market for orthopedic products.[53] North America is the largest geographical market area for orthopedic trauma products. Sales in North America account for approximately 50 per cent of the total sales in the market for orthopedic trauma products.[54] North America is expected to remain the most important market area also in the future.

The market for orthopedic trauma products can also be divided based on the material used in the manufacture of the product. Titanium and stainless steel are commonly used materials. In the United States, titanium is the most common material, with a market share of 55 per cent in trauma screws.[55] Stainless steel has a strong position particularly in the developing markets due to its lower price. In addition to titanium and stainless steel, various bioresorbable materials, such as biopolymers and biocomposites, are used in orthopedic trauma products, and their use is increasing constantly in the developed countries.

Approximately 5 million bone fractures occur every year in the United States alone, and the number has increased in recent years. Most of the fractures occur in the bones of the limbs. The graph below illustrates the distribution of fractures by bone in the United States in 2019:

Distribution of fractures by different bones in the United States in 2019[56]



Markets for specific product categories addressable by RemeOs™ products

Bioretec's first products in RemeOs™ product family are trauma screws of various models and sizes. The management of the Company expects that, in the future, the RemeOs™ products will also include K-wires as well as intramedullary nails and spinal cages manufactured from a hybrid composite based on magnesium and biocomposite. Trauma screws, K-wires and intramedullary nails are included in the orthopedic trauma products and spinal cages in the products used for repairing the spine. The Company estimates that its RemeOs™ products' addressable market will grow as the Company expects to launch new products and reach USD 7 billion in 2027 when the last planned RemeOs™ product has been launched. The more detailed plan for expanding the Company's product portfolio is presented in section "*Business overview– Products – New products*" of this Offering Circular.

[53] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

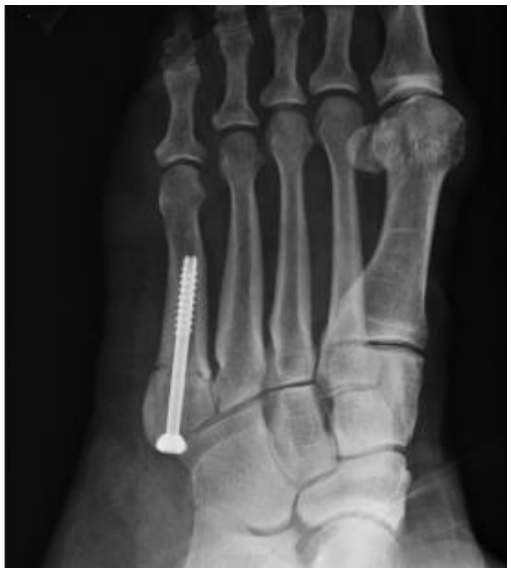
[54] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

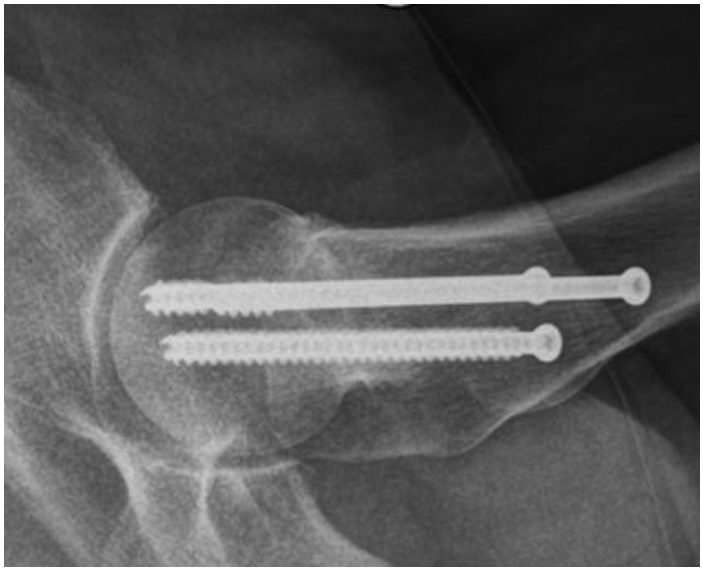
[55] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[56] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact)

Trauma screws

Most often, trauma screws are cannulated (hollow) screws, which are drilled in the bone to prevent the movement of the bone or bones and enable and promote the ossification and healing of the bone. The cannulated stem of the trauma screws enables the use of K-wires or other guidewires to assist drilling, which in turn enables higher accuracy in the installation of the screws. Trauma screws are used for repairing various types of bone fractures. The images below illustrate the use of cannulated screws.[57]





In 2019, the global market for trauma screws was, measured in units, approximately 3.0 million screws, and measured by sales, approximately USD 1.2 billion.[58] The North American market accounts for approximately 37 per cent of the number of units and approximately USD 557 million, or approximately 45 per cent, of sales of the total market.[59] Of this, the US market accounts for approximately USD 487 million.[60] In the view of the Company's management, the market for trauma screws is a low-risk market which is one of the reasons why the Company has decided to commercialize the cannulated screw as the first product from RemeOs™ product family.

Trauma screws are manufactured from various materials depending on, in part, the indication and the materials' costs. In the United States, manufacturing material varied as follows in 2019[61]:

- Titanium: approximately USD 268 million, or approximately 55 per cent of sales.
- Stainless steel: approximately USD 148 million, or approximately 30 per cent of sales.
- Bioresorbable materials, such as bioresorbable polymers and biocomposites: approximately USD 72 million, or approximately 15 per cent of sales.

In the view of the Company's management, the RemeOs™ cannulated screws will be particularly competitive as compared to the non-load-bearing bioresorbable trauma screw already in market, as well as compared to the trauma screws made of titanium and stainless steel, due to their bioresorbable features, for example. The benefits of RemeOs™ implants and

[57] Image sources: DeVries, J. G., Cuttica, D. J., & Hyer, C. F. (2011). Cannulated screw fixation of Jones fifth metatarsal fractures: a comparison of titanium and stainless-steel screw fixation. The Journal of foot and ankle surgery, 50(2), 207-212; Schaefer, T. K., Spross, C., Stoffel, K. K., & Yates, P. J. (2015). Biomechanical properties of a posterior fully threaded positioning screw for cannulated screw fixation of displaced neck of femur fractures. Injury, 46(11), 2130-2133.

[58] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[59] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[60] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[61] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

disadvantages of titanium and steel implants are described in more detail in section "*Business overview – Bioretec's strengths – RemeOs™ products are an excellent and clinically proven effective solution for the treatment of bone fractures*".

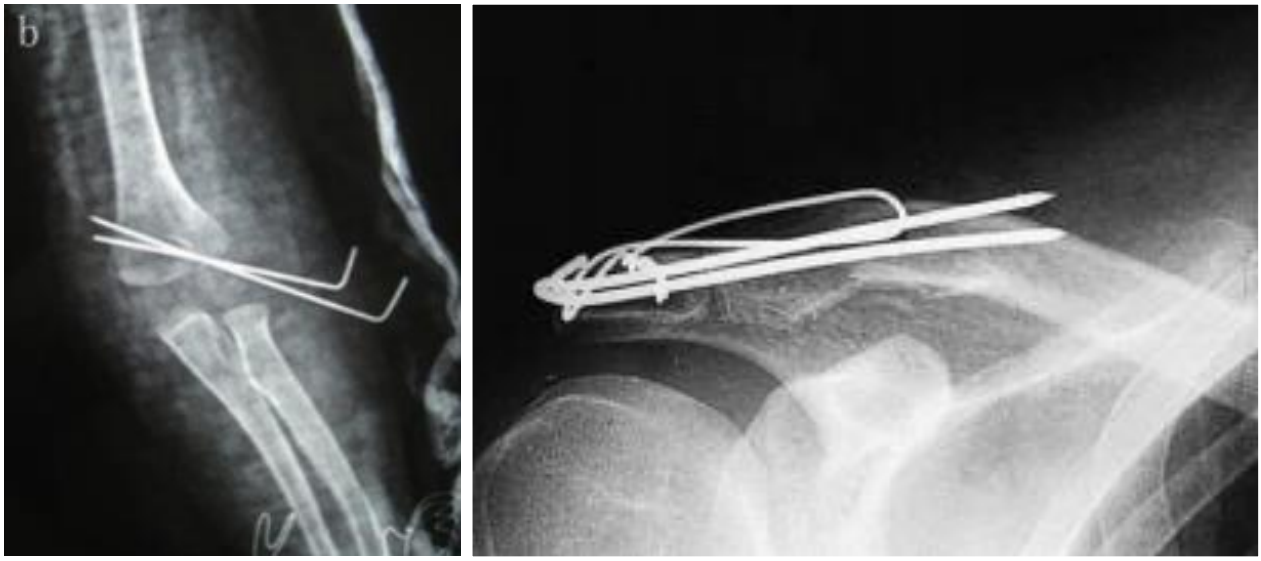
Trauma screws are used in the treatment of fractures of various bones. For example, in the United States, the utilization rate of trauma screws in treatment varies by the fractured bone as follows[62]:

- collar bone or scapula – 30 per cent of the cases;
- humerus – 20 per cent of the cases;
- femur – 25 per cent of the cases;
- ulna or radius – 25 per cent of the cases;
- tibia or fibula – 15 per cent of the cases;
- bones of the feet or ankle – 15 per cent of the cases; and
- other bones – 55 per cent of the cases.

The percentages above refer to the share of fractures treated in hospitals.

Kirschner wires

Kirschner wires (or K-wires) are smooth and sharp wires with multiple purposes in orthopedics. K-wires can be used, for example, for fixing a bone temporarily during surgical operations, as the main fixing product in small and moderate fractures, or for guiding trauma screws into the right position. K-wires are some of the most simple and affordable orthopedic trauma products. At present, K-wires are typically manufactured from titanium and stainless steel, and they are left in the bone to support ossification until the bone has completely healed. The image below illustrates K-wires and their use.[63]



In 2019, the global market for K-wires, was, measured in units, approximately 3.3 million units, and measured by sales, approximately USD 100 million.[64] The North American market accounts for approximately 57 per cent of the number of units and approximately 58 per cent of sales of the total market.[65] In the view of the Company's management, the market

[62] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[63] Image sources: Li, W. C., & Xu, R. J. (2012). Comparison of Kirschner wires and AO cannulated screw internal fixation for displaced lateral humeral condyle fracture in children. International orthopaedics, 36(6), 1261-1266; Flinkkilä, T., Ristiniemi, J., Hyvönen, P., & Hämäläinen, M. (2002). Surgical treatment of unstable fractures of the distal clavicle: a comparative study of Kirschner wire and clavicular hook plate fixation. Acta Orthopaedica Scandinavica, 73(1), 50-53.

[64] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[65] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

for K-wires is a low-risk market and even though the size of the market is smaller, in the view of the Company's management it is suitable for acquiring additional volume.

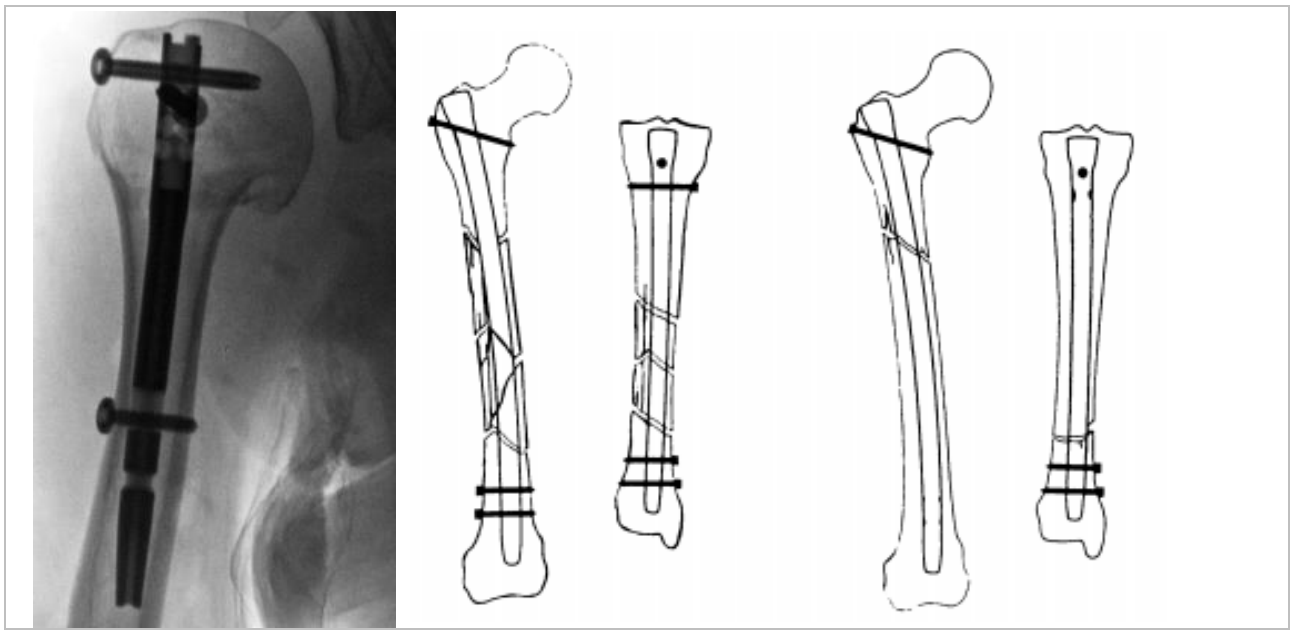
K-wires are used for several purposes, and due to this, they are used widely. For example, in the United States the utilization rate of K-wires varies by the fractured bone as follows[66]:

- collar bone or scapula – 20 per cent of the cases;
- humerus – 65 per cent of the cases;
- femur – 60 per cent of the cases;
- ulna or radius – 65 per cent of the cases;
- tibia or fibula – 65 per cent of the cases;
- bones of the feet or ankle – 65 per cent of the cases; and
- other bones – 55 per cent of the cases.

The percentages above refer to the share of fractures treated in hospitals. While the figures above also include other wires than K-wires, K-wires represent the clear majority of the wires used.

Intramedullary nails

Intramedullary nails are long nails, which are inserted in a surgical operation into the medullary cavity to stabilize the fractured bone. Intramedullary nails may be cannulated or non-cannulated, and they have apertures for the locking screws. Intramedullary nails are used particularly in the treatment of fractures of long bones. At present, intramedullary nails are mainly manufactured from titanium or stainless steel. The image below illustrates intramedullary nails and their use.[67]



In 2019, the global market for intramedullary nails was, measured in units, approximately 2.1 million units, and measured by sales, approximately USD 2.7 billion.[68] The North American market accounts for approximately 43 per cent of the number of units and approximately 65 per cent of sales of the total market.[69] In the view of the Company's management, the market for intramedullary nails is a higher-risk market and thus not suitable for early entry with new materials.

[66] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[67] Image sources: Dilisio, M. F., Nowinski, R. J., Hatzidakis, A. M., & Fehringer, E. V. (2016). Intramedullary nailing of the proximal humerus: evolution, technique, and results. Journal of shoulder and elbow surgery, 25(5), e130-e138; Kempf, I., Grosse, A., & Beck, G. (1985). Closed locked intramedullary nailing. Its application to comminuted fractures of the femur. JBJS, 67(5), 709-720.

[68] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[69] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

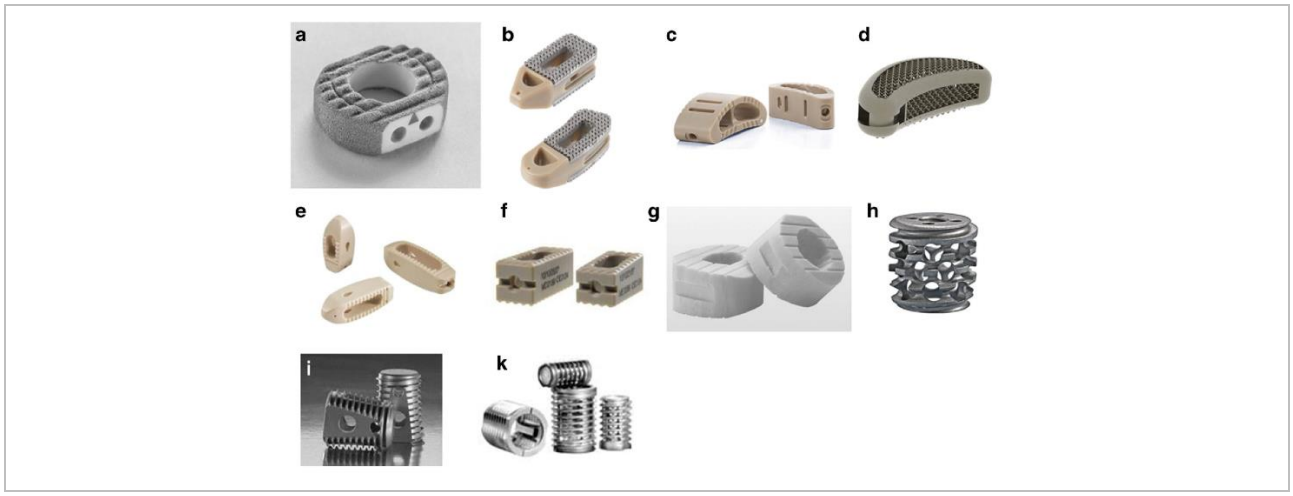
Intramedullary nails are used in the treatment of several types of fractures. For example, in the United States the utilization rate of intramedullary nails varies by the fractured bone as follows[70]:

- collar bone or scapula – 50 per cent of the cases;
- humerus – 40 per cent of the cases;
- femur – 40 per cent of the cases;
- ulna or radius – 55 per cent of the cases;
- tibia or fibula – 55 per cent of the cases;
- bones of the feet or ankle – 50 per cent of the cases; and
- other bones – 55 per cent of the cases.

The percentages above refer to the share of fractures treated in hospitals.

Spinal cages

A spinal cage, or interbody fusion cage, is a cylindrical or rectangular, often threaded, device used for connecting two vertebrae for the treatment of, for example, the symptoms of spinal disc degeneration. The purpose of connecting the vertebrae is to prevent the vertebrae from moving and thus to alleviate back pain. The image below illustrates the spinal cage.[71]



A spinal cage is an advanced and quite costly orthopedic product. In 2019, the market size for spinal cages was approximately USD 2 billion.[72] In the view of the Company's management, the risk level of the market is equal or higher compared to the market for intramedullary nails but the market is very large and thus, in the view of the Company's management, enables value maximisation.

Growth of the market, market drivers and trends

Due to several structural factors, the market for orthopedic trauma products is a growing market. The biggest driver in the market for trauma products is the number of bone fractures. In particular, the increasing share of the aging population is expected to result in an increase in the number of bone fractures in the future. The number of fractures is expected to increase by approximately 2.7 per cent per year between 2019 and 2030.[73] The graph below illustrates the expected increase in the number of fractures in the United States and Germany between 2019 and 2030.

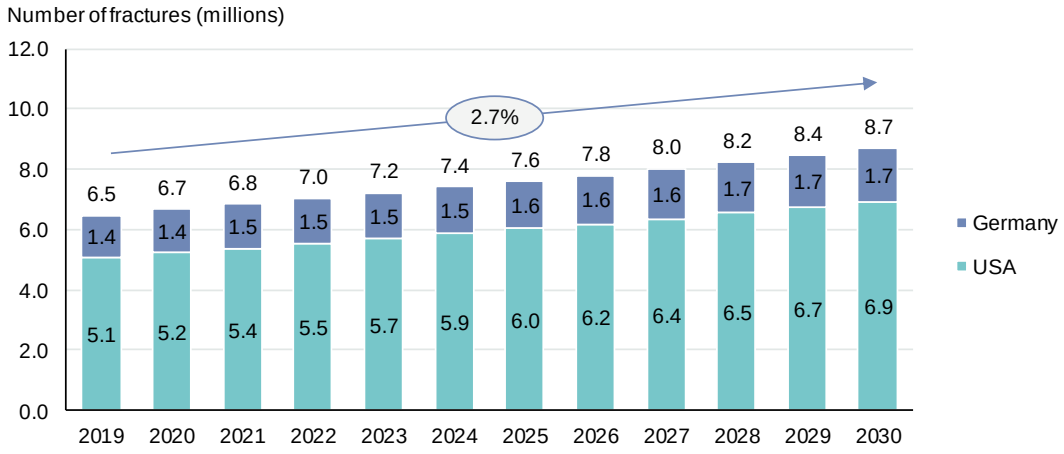
[70] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[71] Image source: K. Al-Riyami, G. Gnanasegaran, T. Van den Wyngaert, J. Bomanji, Bone SPECT/CT in the postoperative spine: a focus on spinal fusion, European Journal of Nuclear Medicine and Molecular Imaging 2017.

[72] Source: Global Interbody Fusion Cage Market Research Report 2021. QYResearch.

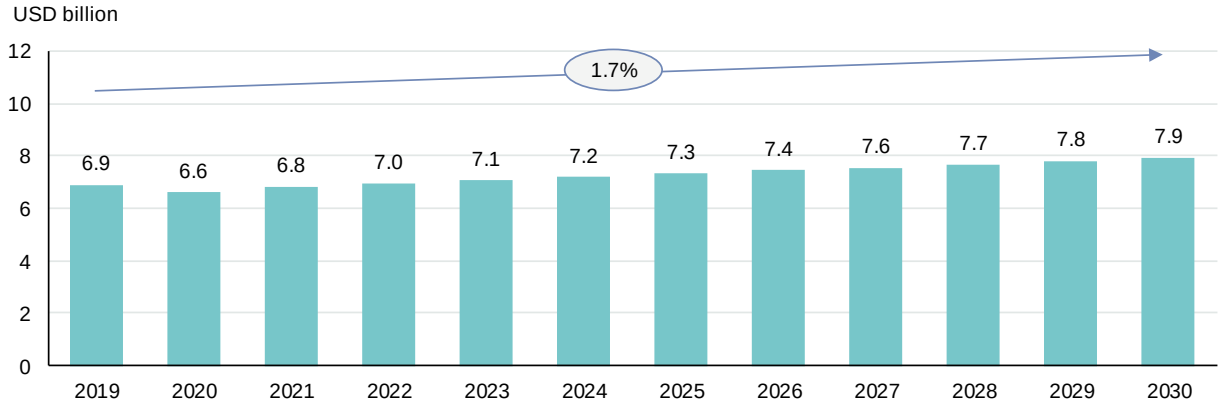
[73] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

Expected increase in the number of fractures in the United States and Germany between 2019 and 2030[74]



The utilization rate of orthopedic trauma products in the treatment of fractures is not expected to change in the near future. However, a moderate decline is expected in the average sales price of orthopedic trauma products in the future.[75] Due to this, the market for orthopedic trauma products is expected to grow slightly slower than the increase in the number of fractures.[76] The market for orthopedic trauma products is expected to grow by approximately 1.7 per cent per year between 2019 and 2030. The graph below illustrates the expected development of the market for orthopedic trauma products between 2019 and 2030. The Company believes that the market for orthopedic trauma products is relatively stable due to the steady number of fractures.

Expected development of the market for orthopedic products between 2019 and 2030[77]



Impact of the COVID-19 pandemic on the demand for orthopedic trauma products

The spread of the COVID-19 pandemic since the beginning of 2020 and the restrictions imposed as the result of it are estimated to have impacted and continue to impact the demand for orthopedic trauma products in a negative way.

[74] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[75] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

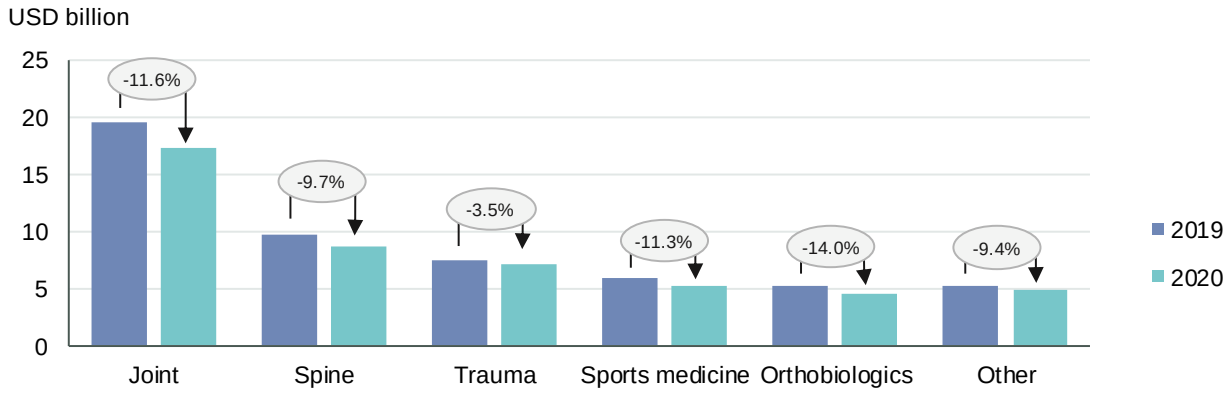
[76] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[77] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact). The market size presented in the graph differs from the market size of USD 7.45 billion in 2019 presented before due to the different methodologies used in the sources.

However, the impact on the demand for trauma products has been relatively moderate as compared to, for example, the pandemic's impact on the demand for orthopedic products as a whole. Trauma products are used to treat bone fractures, and therefore most of surgical operations cannot be postponed until a later date. The impact of the COVID-19 pandemic on the demand for orthopedic products is expected to continue in 2021.[78] The number of orthopedic procedures is expected to start recovering to a normal level after the first half of 2021, and the net sales of the industry are expected to stabilize to a normal level in 2022.[79]

The graph below illustrates the development of net sales by segment between 2019 and 2020.

Development of net sales from orthopedic products by segment between 2019 and 2020[80]



Ageing population

The main growth driver in the demand for orthopedic trauma products is the increasing share of the ageing population. Globally, in 2020, the number of people aged over 65 years was 727 million, and the number is expected to increase to over 1.5 billion by 2050.[81] As such, the number of people older than 65 years is expected to more than double by 2050. The share of people older than 65 years in the global population is expected to increase from 9.3 per cent in 2020 to 16.0 per cent in 2050.[82] Ageing people face a higher risk of bone fractures, and therefore, the ageing of the population is expected to increase the demand for orthopedic trauma products and correspondingly, increase the size of the market.

Increase of bone and musculoskeletal disorders

With the ageing population, various bone and musculoskeletal disorders are expected to increase significantly. For example, osteoporosis is much more common in older people than younger ones.[83] People with osteoporosis have a significantly higher risk of bone fractures, as even a small hit or fall can lead to fractures in their bones.[84] With the increase in the share of the ageing population, bone and musculoskeletal disorders are expected to increase, which would result in an increase in the number of bone fractures and consequently, increase the demand for orthopedic trauma products.

[78] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[79] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[80] Source: Orthoworld 2020 Projections. ORTHOWORLD, Inc. 2020.

[81] Source: United Nations Department of Economic and Social Affairs, Population Division (2020). World Population Ageing 2020 Highlights: Living arrangements of older persons (ST/ESA/SER.A/451).

[82] Source: United Nations Department of Economic and Social Affairs, Population Division (2020). World Population Ageing 2020 Highlights: Living arrangements of older persons (ST/ESA/SER.A/451).

[83] Source: Stanford Health Care. Available at https://stanfordhealthcare.org/medical-conditions/back-neck-and-spine/osteoporotic-fractures.html. Referenced on 28 March 2021.

[84] Source: Stanford Health Care. Available at https://stanfordhealthcare.org/medical-conditions/back-neck-and-spine/osteoporotic-fractures.html. Referenced on 28 March 2021.

Increase of accidents resulting in bone fractures

Sports and several other outdoor activities include an elevated risk of bone fractures. The popularity of various extreme sports has experienced exponential growth during the last decades.[85] These sports present a significantly higher risk of bone fractures.[86] An increase in the popularity of an active lifestyle and outdoor sports would likely result in an increase in bone fractures, and consequently, increase the demand for orthopedic trauma products.

Favorable reimbursement practices and increase in the number of insurances

According to the Company's view, positive changes in compensation practices and wider insurance coverage have had a positive impact on the demand for orthopedic trauma products, particularly in the United States. In recent years, the share of people without health insurance has significantly declined in the United States.[87] The increasing number of insurances makes more advanced orthopedic products, in particular, available to a larger group of people, which may increase the demand for orthopedic products. Changes in the reimbursement practices under insurance policies have also positively impacted the market for orthopedic trauma products in recent years.[88]

Increased demand for advanced orthopedic implants

According to the understanding of the Company's management, the use of bioresorbable orthopedic implants has increased in recent years, and this development is expected to continue in the future. Many surgeons like to use bioresorbable orthopedic implants, as bioresorbable orthopedic implants are often beneficial to the healing of the patient and their use eliminates the need for removal by surgery. Players in the health care sector continuously strive to decrease the need for patients to visit hospitals and health care centers and to shorten the duration of their visits. In the case of elderly people, in particular, surgical operations are very risky, and the aim is to limit their number as much as possible. New and more advanced solutions, such as bioresorbable orthopedic implants, are one of the most important means for solving the increasing problem of limited resources in health care.

Increased need for customer-centric solutions

According to the understanding of the Company's management, the authorities and players in the health care sector are increasingly focusing on the development of more customer-centric solutions and improving the quality of services. In the era of social media, patients are more aware of the best available solutions, which increases their ability to expect and demand the best possible solutions and treatments. This trend puts pressure on the authorities and the providers of health care services to enable the deployment of more advanced solutions. According to the Company's management estimate, this trend supports the demand for, for example, bioresorbable metal-based implants.

Competitive landscape

General competitive landscape in the market for orthopedic products

Hundreds of companies are active in the market for orthopedic products.[89] Of these, seven companies had revenue of more than 1 billion in 2019. These companies are DePuy Synthes Inc. (a subsidiary of Johnson & Johnson), Stryker Corporation, Zimmer Biomet Holdings Inc., Smith & Nephew Plc., Medtronic Plc, Arthrex Inc. and NuVasive Inc. In 2019, the combined revenue of these companies amounted to USD 34 billion, or 65 per cent of the total revenue in the entire market.[90]

The largest players in the market for orthopedic trauma products are, to a large extent, the same companies as in orthopedic products in general. In 2019, the largest four companies in terms of their sales of orthopedic trauma products were DePuy Synthes Inc., Stryker Corporation, Zimmer Biomet Holdings Inc. and Smith & Nephew Plc. In 2019, the total

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[85] Source: Laver, L., Pengas, I. P., & Mei-Dan, O. (2017). Injuries in extreme sports. Journal of orthopaedic surgery and research, 12(1), 1-8.

[86] Source: Laver, L., Pengas, I. P., & Mei-Dan, O. (2017). Injuries in extreme sports. Journal of orthopaedic surgery and research, 12(1), 1-8.

[87] Source: United States Census Bureau. Health Insurance Coverage in the United States: 2019. Available at https://www.census.gov/library/publications/2020/demo/p60-271.html. Referred on March 28, 2021.

[88] Source: GlobalData Report 2020, Trauma Fixation (Orthopedic Devices) - Global Market Analysis and Forecast Model (COVID-19 market impact).

[89] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[90] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

revenue of these four companies accounted for approximately 69 per cent of the entire market for orthopedic trauma products.[91] The combined revenue of the two largest companies, DePuy Synthes and Stryker Corporation, were approximately 55 per cent of the total revenue of the entire market.

Even though the market is concentrated to a large extent between a small number of large players, small companies play a significant role in the market for orthopedic products as innovators. According to the understanding of the Company's management, the largest companies in the industry avoid the development and commercialization of innovative products, as the introduction of new innovative products in the market may expose them to significant risks. The main risks are reputational risk and litigation risk. The reputational risk refers to the significant negative impact possible problems associated with new products can have on the reputation of the company commercializing the product. The litigation risk refers to situations where problems associated with new products may lead to legal claims against the company that commercialized the product. This risk is particularly high in countries such as the United States, where such claims may be pursued as class actions including several people, as the claims for damage presented to the company which commercialized the product may be very significant in such proceedings. The possible costs resulting from class actions are higher in the case of large companies, as class actions are often targeted at large companies due to their higher ability to compensate for damages.

Competitive landscape of metal-based bioresorbable orthopedic implants

According to the understanding of the Company's management, in addition to Bioretec, there are very few companies which develop, manufacture and market or expect to market bioresorbable metal-based orthopedic implants. According to the understanding of the Company's management, the following companies are active in the market for bioresorbable metal-based orthopedic implants:

- Syntellix Ag, a German company whose magnesium-based bioresorbable metal implants have a CE marking. Syntellix Ag's bioresorbable metal implants do not have a market approval in the United States as yet, but the company is believed to be aiming for it. In addition, Syntellix Ag's metal alloy contains rare earth metals, which may have adverse effects in the patient's body[92].
- Medical Magnesium GmbH, a German company whose magnesium-based bioresorbable metal implants have a CE marking. Medical Magnesium GmbH's bioresorbable metal implants do not have a market approval in the United States as yet. In addition, Medical Magnesium GmbH's metal alloy contains rare earth metals, which may have adverse effects in the patient's body[93].
- U&I Corporation, a South Korean company whose bioresorbable metal implants are based on an alloy of magnesium and calcium. U&I Corporation's products have a CE marking and a market approval in South Korea. U&I Corporation is a medium-sized company in the market for orthopedic products, and it has several other products in addition to the biodegradable metal implants.
- Eontec Co. Ltd., a Chinese company whose bioresorbable metal implants are 100% magnesium. Eontec's metal implants have a CE marking and a market approval in China. The product with the CE marking is meant for cranial surgery and not for load-bearing applications.
- nanoMAG® LLC, a US company whose bioresorbable metal implants based on an alloy of magnesium and manganese are in the development phase.

The table below sets forth key features of the bioresorbable metal-based implants of the Company and its competitors.

[91] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[92] Source: Anastasia Myrissa, Simone Braeuer, Elisabeth Martinelli, Regine Willumeit-Römer, Walter Goessler, Annelie Martina Weinberg, Gadolinium accumulation in organs of Sprague–Dawley® rats after implantation of a biodegradable magnesium-gadolinium alloy,Acta Biomaterialia, Volume 48, 2017, Pages 521-529, ISSN 1742-7061; Rim, KT. Effects of rare earth elements on the environment and human health: A literature review. Toxicol. Environ. Health Sci. 8, 189–200 (2016). https://doi.org/10.1007/s13530-016-0276-y.

[93] Source: Anastasia Myrissa, Simone Braeuer, Elisabeth Martinelli, Regine Willumeit-Römer, Walter Goessler, Annelie Martina Weinberg, Gadolinium accumulation in organs of Sprague–Dawley® rats after implantation of a biodegradable magnesium-gadolinium alloy,Acta Biomaterialia, Volume 48, 2017, Pages 521-529, ISSN 1742-7061; Rim, KT. Effects of rare earth elements on the environment and human health: A literature review. Toxicol. Environ. Health Sci. 8, 189–200 (2016). https://doi.org/10.1007/s13530-016-0276-y.

Key features of the bioresorbable metal-based implants of the Company and its competitors[94]

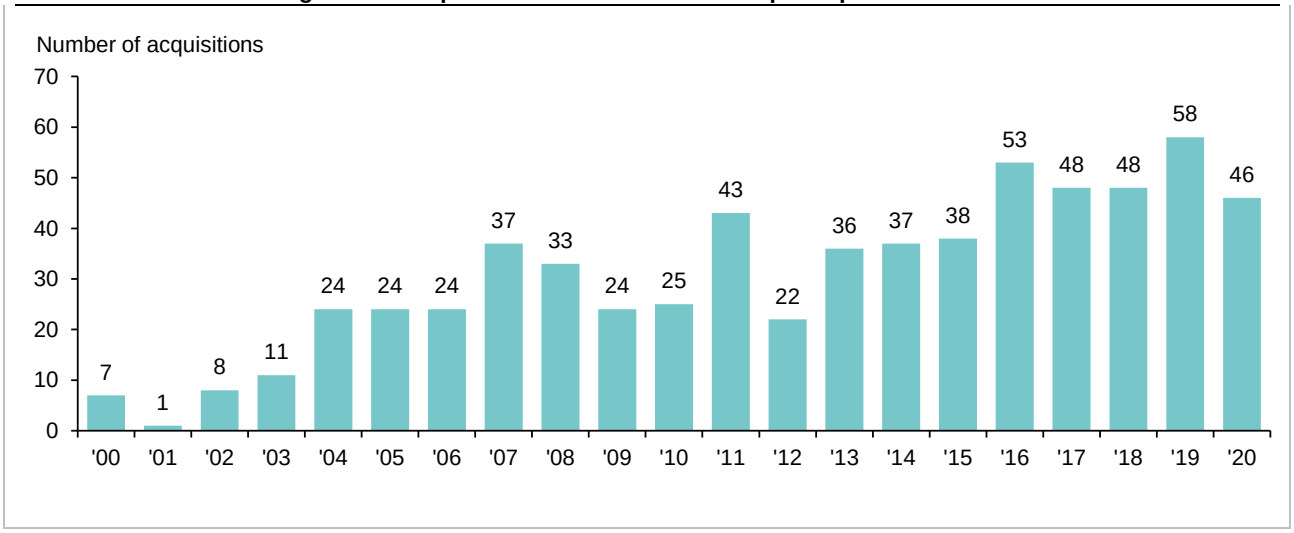
	bioretec		medical magnesium	U&I	EON	nano MAG
Product name	RemeOs™	MAGNEZIX™	mm.X	resomet™	Biodegradable Mg-Alloy	BioMg™
Alloy	MgCaZn	MgYREZr	MgRE	MgCa	Mg	MgMn
REE free	✓	✗	✗	✓	✓	✓
Load bearing applications	✓	✓	✓	✓	✗	✓
US approval process ongoing	✓	✓	✗	✗	✗	✗
Other market approvals	Target to initiate CE process in Sep-2021	CE-mark	CE-mark	Approved in Korea CE through Chinese notified body	Approved in China CE-mark	-

According to the understanding of the Company's management, the largest producers of orthopedic products are not developing bioresorbable metal-based orthopedic implants at present.

Merger and acquisition activity in the market for orthopedic products

In recent years, one key characteristic of the market for orthopedic products has been the large number of mergers and acquisitions. In 2016–2020, 46–58 mergers and acquisitions were executed per year in the field of orthopedic products[95]. The graph below sets forth the number of mergers and acquisitions in the field of orthopedic products from 2000 to 2020.

Number of mergers and acquisitions in the field of orthopedic products from 2000 to 2020[96]



Typically, the large companies in the market for orthopedic products acquire smaller companies to add the products of the acquired company to their own portfolio, as acquisitions are an excellent means to expand in the market with new products while avoiding the reputation and legal risks related to the commercialization of new products (for more information, see above "*– General competitive landscape in the market for orthopedic products*").

[94] Source: The Orthopaedic Industry Annual Report for the year ended December 31, 2019, published in June 2020. ORTHOWORLD, Inc., 2020.

[95] Source: Orthopaedic Merger and Acquisition Activities, ORTHOWORLD Inc., updated in January 2021

[96] Source: Orthopaedic Merger and Acquisition Activities, ORTHOWORLD Inc., updated in January 2021.

SELECTED FINANCIAL INFORMATION

Historical financial information

The selected financial information below has been derived from Bioretec's unaudited interim financial information as at and for the three months ended 31 March 2021, drawn up to the extent required by Section 4.4 of the First North Rules, including unaudited comparative figures as at and for the three months ended 31 March 2020 and Bioretec's audited consolidated financial statements as at and for the year ended 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018. Bioretec has prepared its consolidated financial statements in accordance with the FAS.

Bioretec's unaudited interim financial information as at and for the three months ended 31 March 2021 including unaudited comparative figures as at and for the three months ended 31 March 2020 and Bioretec's audited consolidated financial statements as at and for the year ended 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018 have been incorporated in this Offering Circular by reference. Save for Bioretec's audited consolidated financial statements as at and for the year ended on 31 December 2020 including audited comparative consolidated financial information as at and for the years ended on 31 December 2019 and 31 December 2018 incorporated in this Offering Circular by reference, no part of this Offering Circular has been audited.

In its audit report for the financial year ended 31 December 2020, Bioretec's auditor has drawn attention to the note "Going Concern" in the financial statements. According to the audit report, Bioretec Ltd incurred a loss of EUR 2,138,875.43 for the period ended 31 December 2020. As explained in the notes to the financial statements, Bioretec Ltd's internal financing is not sufficient to cover operating costs, and its business operations require additional financing also during the coming accounting period. According to the auditor, these matters indicate a material uncertainty relating to Bioretec Ltd's ability to continue as going concern. The auditor's opinion is not modified in this respect.

Consolidated income statement	For the three months ended 31 March		For the year ended 31 December		
	2021	2020	2020	2019	2018
(EUR thousand)	(unaudited)			(audited)	
Revenue	519.4	368.2	1,499.3	1,746.5	1,585.0
Change in stocks of finished and work-in-progress products (+/-)	-24.1	-7.2	137.2	-50.6	8.3
Other operating income	0.0	0.0	1.5	4.9	0.8
Materials and services					
Raw materials and consumables					
Purchases during the financial year	-145.0	-145.7	-539.4	-376.3	-366.0
Inventory increase (+) or decrease (-)	82.4	74.0	97.1	-15.4	-73.4
External services	-24.2	-9.7	-93.1	-58.6	-57.3
Total materials and services	**-86.8**	**-81.4**	**-535.4**	**-450.2**	**-496.7**
Personnel expenses					
Wages and salaries	-442.6	-409.6	-1,533.9	-1,494.2	-1,398.7
Social security expenses					
Pension expenses	-67.5	-71.5	-206.3	-268.0	-233.3
Other personnel costs	-12.2	-14.1	-39.7	-28.8	-32.5
Total personnel expenses	**-522.2**	**-495.2**	**-1,779.9**	**-1,791.0**	**-1,664.5**
Depreciation and amortization					
Planned depreciation	-15.6	-14.2	-58.5	-51.5	-35.4
Depreciation of group goodwill	-19.8	-19.9	-79.7	-79.7	-0.4
Total depreciation and amortization.	**-35.4**	**-34.1**	**-138.1**	**-131.1**	**-35.9**
Other operating expenses	-392.0	-273.2	-1,109.4	-1,065.8	-999.0
Operating profit (loss)	-541.1	-523.0	-1,924.8	-1,737.4	-1,602.0
Financial income and expenses					
Other interest and financial income					
From others	0.0	5.2	13.2	30.7	31.0
Interest and other financial expenses					
For others	-1.4	-332.0	-346.6	-27.7	-483.0
Profit (loss) before taxes	-542.5	-849.9	-2,258.3	-1,734.4	-2,054.0
Income taxes					
Taxes for the period	0.0	-0.1	-0.5	-0.5	0.0
Profit (loss) for the period	-542.5	-850.0	-2,258.8	-1,734.9	-2,054.0

Consolidated balance sheet	As at 31 March		As at 31 December		
	2021	2020	2020	2019	2018
(EUR thousand)	(unaudited)			(audited)	
ASSETS					
Non-current assets					
Intangible assets					
Intangible rights	166.3	162.0	172.1	168.7	149.1
Goodwill	217.8	297.4	237.6	317.3	0.9
Advance payments	0.2	0.0	0.2	0.0	0.0
Total intangible assets	**384.3**	**459.4**	**409.9**	**486.0**	**150.0**
Tangible assets					
Machinery and equipment	200.6	161.6	209.0	142.7	46.4
Prepayments and in-progress acquisitions	111.7	0.1	30.6	26.0	55.6
Total tangible assets	**312.3**	**161.8**	**239.7**	**168.7**	**102.0**
Total non-current assets	**696.6**	**621.2**	**649.6**	**654.7**	**252.1**
Current assets					
Inventories					
Materials and semi-products	313.0	207.4	230.6	133.4	148.8
Finished products	417.5	297.2	441.6	304.4	355.0
Total inventories	**730.5**	**504.6**	**672.2**	**437.8**	**503.8**
Short-term receivables					
Trade receivables	283.1	249.0	205.8	387.0	387.4
Other receivables	221.8	95.1	90.4	87.8	93.3
Accrued income	174.5	13.1	1.4	8.9	7.7
Total short-term receivables	**679.4**	**357.2**	**297.5**	**483.7**	**488.3**
Cash and cash equivalents	1,630.3	3,297.9	2,273.1	58.0	1,231.8
Total current assets	**3,040.1**	**4,159.7**	**3,242.8**	**979.5**	**2,223.9**
TOTAL ASSETS	**3,736.8**	**4,780.9**	**3,892.4**	**1,634.2**	**2,476.0**

Consolidated balance sheet	As at 31 March 2021	As at 31 March 2020	As at 31 December 2020	As at 31 December 2019	As at 31 December 2018
(EUR thousand)	(unaudited)			(audited)	
EQUITY AND LIABILITIES					
Equity					
Share capital	3,748.6	9,221.3	3,748.6	9,221.3	9,221.3
Share issue	4.2	0.0	609.6	0.0	0.0
Other reserves					
Reserve for invested unrestricted equity	658.6	17,008.2	0.0	12,754.9	12,316.9
Other funds total	**658.6**	**17,008.2**	**0.0**	**12,754.9**	**12,316.9**
Profit (loss) for previous years	-2,998.1	-23,239.3	-739.3	-21,504.4	-19,450.4
Profit (loss) for the period	-542.5	-850.0	-2,258.8	-1,734.9	-2,054.0
Equity total	**870.8**	**2,140.1**	**1,360.1**	**-1,263.1**	**33.8**
Liabilities					
Non-current liabilities					
Loans from financial institutions	48.6	64.4	65.3	109.7	166.3
Capital loans	1,912.0	1,930.8	1,912.0	1,930.8	1,930.8
Non-current liabilities total	**1,960.6**	**1,995.1**	**1,977.3**	**2,040.4**	**2,097.1**
Current liabilities					
Loans from financial institutions	74.2	66.7	75.7	66.7	33.3
Advances received	24.8	10.9	22.5	0.2	0.0
Trade payables	426.8	203.4	118.6	272.9	98.9
Other liabilities	30.1	27.5	45.9	146.0	37.8
Accruals	349.6	337.2	292.1	371.1	175.1
Current liabilities total	**905.4**	**645.7**	**554.9**	**856.9**	**345.1**
Total liabilities	**2,866.0**	**2,640.8**	**2,532.3**	**2,897.3**	**2,442.2**
TOTAL EQUITY AND LIABILITIES	**3,736.8**	**4,780.9**	**3,892.4**	**1,634.2**	**2,476.0**

Consolidated cash flow statement	For the three months ended 31 March		For the year ended 31 December		
	2021	2020	2020	2019	2018
(EUR thousand, unless otherwise indicated)	(unaudited)		(audited)		
Cash flow from operating activities (A).	-586.8	-484.5	-1,998.2	-1,217.8	-1,539.0
Cash flow from investments (B)	-91.0	-31.6	-121.2	-54.9	-52.8
Cash flow from financing (C).....	35.0	3,755.9	4,334.5	99.0	2,409.1
Change in cash and cash equivalents (A+B+C) increase (+) / decrease (-)**.....**	**-642.8**	**3,239.9**	**2,215.1**	**-1,173.8**	**817.4**
Cash and cash equivalents at the beginning of the year.....	**2,273.1**	**58.0**	**58.0**	**1,231.8**	**414.4**
Cash and cash equivalents at the end of the year	**1,630.3**	**3,297.9**	**2,273.1**	**58.0**	**1,231.8**

Key figures	As at and for the three months ended 31 March		As at and for the year ended 31 December		
	2021	2020	2020	2019	2018
(EUR thousand, unless otherwise indicated)	(unaudited)		(unaudited, unless otherwise indicated)		
Revenue.....	519.4	368.2	1,499.3[(1)]	1,746.5[(1)]	1,585.0[(1)]
Sales margin.....	408.5	279.5	1,102.6	1,250.6	1,097.4
Sales margin, %.....	78.6%	75.9%	73.5 %	71.6%	69.2%
EBITDA	-505.7	-488.9	-1,786.6	-1,606.2	-1,566.2
EBIT	-541.1	-523.0	-1,924.8[(1)]	-1,737.4[(1)]	-1,602.0[(1)]
Net profit (loss).....	-542.5	-850.0	-2,258.8[(1)]	-1,734.9[(1)]	-2,054.0[(1)]
R&D spend on total costs, %	37.0%	17.9%	23.6%	17.3%	14.1%
Equity ratio, %.....	23.5%	44.9%	35.1%	-77.3%	1.4%
Net debt (cash)	404.5	-1,236.1	-220.1	2,049.1	898.6
Cash and cash equivalents at the end of the period.....	1,630.3	3,297.9	2,273.1[(1)]	58.0[(1)]	1,231.8[(1)]
Personnel at the end of the period.....	24	24	23	23	21

(1) Audited.

Reconciliation of alternative key figures

Key figures	As at and for the three months ended 31 March		As at and for the year ended 31 December		
	2021	2020	2020	2019	2018
(EUR thousand, unless otherwise indicated)	(unaudited)		(unaudited, unless otherwise indicated)		
Sales margin					
Revenue	519.4	368.2	1,499.3(1)	1,746.5(1)	1,585.0(1)
Change in stocks of finished and work-in-progress products (+/-)	-24.1	-7.2	137.2(1)	-50.6(1)	8.3(1)
Other operating income	0.0	0.0	1.5(1)	4.9(1)	0.8(1)
Materials and services	-86.8	-81.4	-535.4(1)	-450.2(1)	-496.7(1)
Sales margin	**408.5**	**279.5**	**1,102.6**	**1,250.6**	**1,097.4**
Sales margin, %	**78.6%**	**75.9%**	**73.5%**	**71.6%**	**69.2%**
EBITDA					
EBIT	-541.1	-523.0	-1,924.8(1)	-1,737.4(1)	-1,602.0(1)
Depreciation and amortization	-35.4	-34.1	-138.1(1)	-131.1(1)	-35.9(1)
EBITDA	**-505.7**	**-488.9**	**-1,786.6**	**-1,606.2**	**-1,566.2**
Equity ratio					
Equity total at the end of the period	870.8	2,140.1	1,360.1(1)	-1,263.1(1)	33.8(1)
Total liabilities at the end of the period	3,736.8	4,780.9	3,892.4(1)	1,634.2(1)	2,476.0(1)
Advances received at the end of the period	24.8	10.9	22.5(1)	0.2(1)	-(1)
Equity ratio %	**23.5%**	**44.9%**	**35.1%**	**-77.3%**	**1.4%**
R&D spend on total costs					
Research and development expenses	-351.4	-143.4	-715.4	-517.4	-381.2
Personnel expenses	-522.2	-495.2	-1,779.9(1)	-1,791.0(1)	-1,664.5(1)
Depreciation	-35.4	-34.1	-138.1(1)	-131.1(1)	-35.9(1)
Other operating expenses	-392.0	-273.2	-1,109.4(1)	-1,065.8(1)	-999.0(1)
R&D spend on total costs, %	**37.0%**	**17.9%**	**23.6%**	**17.3%**	**14.1%**
Net debt (cash)					
Cash and cash equivalents	-1,630.3	-3,297.9	-2,273.1(1)	-58.0(1)	-1,231.8(1)
Long-term loans from financial institutions	48.6	64.4	65.3(1)	109.7(1)	166.3(1)
Capital loans	1,912.0	1,930.8	1,912,0(1)	1,930.8(1)	1,930.8(1)
Interest-bearing short-term liabilities	74.2	66.7	75.7(1)	66.7(1)	33.3(1)
Net debt (cash)	**404.5**	**-1,236.1**	**-220.1**	**2,049.1**	**898.6**

(1) Audited.

Definitions and calculation of key figures

Key figure		Definition or calculation
Sales margin	=	Revenue + other operating income - change in inventories - materials and services
Sales margin, %	=	Sales margin / Revenue x 100
EBITDA	=	Revenue + other operating income - change in inventories - materials and services -personnel expenses - other operating expenses
EBIT	=	Revenue + other operating income - change in inventories - materials and services -personnel expenses - other operating expenses - depreciation and amortization
Net profit (loss)	=	Revenue + other operating income - change in inventories - materials and services -personnel expenses - other operating expenses - depreciation and amortization – net financial expenses - income taxes
R&D spend on total costs, %	=	Research and development expenses / (personnel expenses + depreciation + other operating expenses) x 100
Equity ratio, %	=	Total equity at the end of the period / (Total liabilities at the end of the period - advances received at the end of the period) x 100
Net debt (cash)	=	Non-current interest-bearing liabilities + current interest-bearing liabilities – cash and cash equivalents
Cash and cash equivalents	=	Cash and cash equivalents at the end of the period

Purpose of use of key figures

Key figure	Purpose of use
Sales margin	Sales margin reflects the Company's performance in producing products and services
Sales margin, %	Sales margin as a percentage of revenue
EBITDA	EBITDA is an internal metric of the Company's performance
EBIT	EBIT is an internal metric of the Company's performance
Net profit (loss)	Net profit reflects net income to owners of the Company
R&D spend on total costs, %	R&D spend on total costs reflects the relative amount of the Company's research and product development inputs and is a metric for the Company's management in monitoring the research and product development activities
Equity ratio, %	Equity ratio reflects the level of financial risk and is a useful metric for the Company's management in monitoring the capital required by businesses
Net debt (cash)	Net debt reflects Bioretec's net debt position and is a metric for management in monitoring the financial need for business
Cash and cash equivalents	Cash and cash equivalents at the end of the period reflects the situation of the treasury and is a metric for management in monitoring the financial need for business

OPERATING AND FINANCIAL REVIEW

The following discussion of Bioretec's operating results and financial position should be read together with the sections "Certain additional information – Presentation of financial and certain other information" and "Selected financial information" as well as Bioretec's audited consolidated financial statements for the year ended 31 December 2020, including audited comparative figures for the years ended 31 December 2019 and 31 December 2018, and the interim report incorporated in this Offering Circular with reference.

The information presented below is based on Bioretec's audited consolidated financial statements for the year ended 31 December 2020 prepared according to the FAS, including audited comparative figures for the years ended 31 December 2019 and 31 December 2018, as well as Bioretec's interim figures for the three months ended 31 March 2020 prepared to the extent required by the section 4.4 of rules of the First North, including comparative figures for the three months ended 31 March 2020.

The discussion below includes forward-looking statements, which involve risks and uncertainties. Bioretec's actual results may differ materially from those contained in such forward-looking statements as a result of several factors discussed below and elsewhere in this Offering Circular, particularly in the sections "Risk factors" and "Certain additional information – Forward-looking statements".

Overview

Bioretec is a Finnish medical device company focusing on the development of bioresorbable implants for pediatric and adult orthopedics. Bioretec develops, manufactures and commercializes innovative biodegradable and bioresorbable orthopedic devices and materials used for repairing defects in bones and soft tissue. Bioretec's business model is based on its personnel's experience and expertise on materials and their processing gathered over decades. Bioretec is in the growth phase, and it invests significantly in the sales and marketing of its new and unique products and continuously develops its product portfolio and distribution channels. Bioretec's products are used all over the world (for more details, see "*Business overview*").

For the three months ended 31 March 2021, Bioretec's revenue amounted to EUR 0.5 million (EUR 0.4 million for the three months ended 31 March 2020), and its operating profit amounted to EUR -0.5 million (EUR -0.5 million for the three months ended 31 March 2020). For the financial year 2020, Bioretec's net revenue amounted to EUR 1.5 million (EUR 1.7 million for the financial year 2019 and EUR 1.6 million for the financial year 2018), and its operating profit amounted to EUR -1.9 million (-1.7 million for the financial year 2019 and EUR -1.6 million for the financial year 2018). The majority of Bioretec's revenue is generated from exports. For the three months ended 31 March 2021, approximately 6 per cent of the revenue was generated in Finland and approximately 94 per cent in other parts of the world (approximately 5 and 95 per cent for the three months ended 31 March 2020) and for the financial year 2020, approximately 6 per cent of the revenue was generated in Finland and approximately 94 per cent in other parts of the world (approximately 5 and 95 per cent for the financial year 2019 and approximately 5 and 95 per cent for the financial year 2018). At present, the Company's largest export countries with distribution partners are Russia and China, which accounted for 47 per cent of the Company's revenue in 2020.

Bioretec employed 23 people on average during the financial year 2020 (23 people during the financial year 2019 and 21 people during the financial year 2018).

Key factors affecting the results of operations

The Company has incurred a significant amount of losses during its operating history. The Company's loss for the period amounted to EUR 0.5 million for the three months ended 31 March 2021, EUR 0.9 million for the three months ended 31 March 2020, EUR 2.3 million for the year ended 31 December 2020, EUR 1.7 million for the year ended 31 December 2019 and EUR 2.1 million for the year ended 31 December 2018. The Company expects that it will incur significant expenses and operating losses for several years. The Company expects its cash flow from operating activities to turn positive by the end of 2025.

Several internal and external factors, many of which are beyond Bioretec's control, have impacted Bioretec's results and will continue to do so in the future. The Company anticipates that its quarterly and annual results of operations will be impacted in the near future, by, among other things, the sales volume of the Activa product family, the timing of the market approvals applied for the RemeOs™ product family and success in the commercialization of the products and, as a result of it, the development of revenue, as well as the timing, development and amount of the expenses resulting from R&D efforts and commercialization of the new products. Due to these factors, the Company believes at present that the comparability of the development of its results of operations between different periods cannot be used as indications of its development in the future.

The three paragraphs below describe the key factors affecting the Company's results of the operations during three different periods of time:

- "At present" refers to the Company's present and historical operations during the review periods. The Company has sold and will continue to sell bioresorbable orthopedic implants manufactured from biopolymers. The Company sells the implants produced by it through distributors in approximately 40 countries. The Company's products are used in repairing bone and soft tissue defects. The Company's revenue amounted to EUR 1.5 million in 2020. Key factors affecting the Company's results of operations at present are described in section "– *Factors affecting the Company's results of the operations at present*".
- "Medium term" refers to the Company's planned operations from the second half of 2021 to the end of 2024. During this period of time, the Company plans to commercialize its RemeOs™ cannulated screws first in the United States and Europe and, after that, in other parts of the world. In addition to the cannulated screws, the Company also expects to continue the development of other RemeOs™ products. Key factors affecting the Company's results of operations in the medium term are described in section "– *Factors affecting the Company's results of the operations in the medium term*".
- "Long term" refers to the Company's planned operations after 2024. The target of the Company's management is to reach revenue of EUR 100 million by 2027 and turn the cash flow from operating activities positive by the end of 2025. The Company also plans to continue the development of other RemeOs™ and hybrid composite products. The Company expects to receive market approval for K-wires and start their commercialization in the end of 2024. The Company expects to receive market approval for intramedullary nails and start their commercialization in 2026. The Company expects to receive market approval for spinal cages in 2027 at earliest and start their commercialization after that. Key factors affecting the Company's results of operations in the long term are described in section "– *Factors affecting the Company's results of the operations in the long term*".

Factors affecting the Company's results of operations at present

Sales of the products in the Activa product family

The Company's present revenue consists of the sales of implants in the Activa product family manufactured from biopolymer, which has a significant effect on the Company's results at present. The products in the Activa product family are described in section "*Business overview – Products – Products on the market*". The Company's revenue amounted EUR 1.5 million in 2020, EUR 1.7 million in 2019 and EUR 1.6 million in 2018. In 2020, the global COVID-19 pandemic had a negative effect on the Company's revenue. As at the date of this Offering Circular, the Company has not accrued and does not accrue revenue from selling products in the RemeOs™ product family.

Personnel expenses

The Company's largest cost item is personnel expenses. The Company's personnel expenses amounted to EUR 1.8 million in 2020, EUR 1.8 million in 2019 and EUR 1.7 million in 2018. In 2020. The Company employed 23 employees on average in 2020. According to the Company's management, personnel expenses for 2019 and 2020 include a significant amount of expenses related to the development of RemeOs™ products.

Other operating expenses

The Company's other operating expenses amounted to EUR 1.1 million in 2020, EUR 1.1 million in 2019 and EUR 1.0 million in 2018. At present, the other operating expenses mainly include expenses of the business premises, IT costs, marketing costs, consulting costs and certain expenses related to research and development. According to the Company's management, other operating expenses for 2019 and 2020 include a significant amount of expenses related to the development of RemeOs™ products.

Materials and services

The Company's purchases of materials and services amounted to EUR 0.5 million in 2020, EUR 0.5 million in 2019 and EUR 0.5 million in 2018. The Company's purchases mainly consist of purchases of raw materials, instruments, packaging materials and components. The purchases relate to the sales of products in the Company's Activa product family. The direct production costs of the products in the Activa product family are typically 31 per cent of the sales price.

Factors affecting the Company's results of operations in the medium term

Progress of the commercialization of the RemeOs™ cannulated screws

The Company expects to receive the market approval for the RemeOs™ cannulated screws in the first half of 2022. The Company plans to start building a sales organization in the United States during the second half of 2021 in order to be ready to start selling the RemeOs™ cannulated screws in the United States immediately after the market approval is granted. The Company expects to receive the CE marking required for commercialization in the EU during the second half of 2022 and start commercialization in the EU with the help of distributors immediately after receiving the CE marking. The Company expects the gross margin of its RemeOs™ cannulated screws to be approximately 97 per cent. In Europe, the gross margin of the cannulated screws is expected to be approximately 89 per cent. The Company's results of operations are dependent on the speed and scope of the commercialization and sales of its RemeOs™ products. To support the commercialization, the Company expects to continue clinical studies to gather additional evidence and widen the indications.

In addition to the market approvals, the Company expects that positive experiences of early users of the products will have a significant effect on the success of the commercialization and the development of sales volumes. Due to the importance of the positive experiences and examples, the Company expects moderate development of the sales in the early phase, until awareness of the product and its properties increases and a larger number of physicians and hospitals start using the product.

Development of the sales of the Company's current products

Despite the commercialization of the RemeOs™ products, the Company expects to keep its current products in the Activa product family available in the market in the medium term. In particular, the Company believes that the demand for Activa IM-Nail and Activa Interference™ products will continue after the introduction of RemeOs™ products, and it plans to make carefully targeted investments in the product development of these products to widen their indications. The Company has ongoing clinical trials aiming to widen the indications of the Activa IM-Nail™ products, mainly in pediatrics. On the other hand, the Company considers the present competitive situation of the ActivaNail™, ActivaPin™ and ActivaScrew™ products as highly competitive, and furthermore, it believes that new RemeOs™ products will replace these products during the coming years. For more information on the current products and future plans for them, see also "*Business overview – Products – Products on the market*".

Operating expenses and investments

In the medium term, the most significant expenses and investments in the Company's business operations will be sales and marketing expenses, product development expenses and investments in the production capacity. According to the plan of the Company's management, sales and marketing expenses will be the Company's largest cost item in the medium term.

The Company is planning to establish its own sales network in the United States. The building of the network is expected to begin in the second half of 2021, when the Company plans to recruit a Head of Sales in the United States. The Company is also planning to start the recruitment of sales representatives in the second half of 2021. In the medium term, the Company estimates to recruit about 30 sales representatives in the United States. The costs relating to the recruitment of the sales representatives mainly comprise the base salary, social security costs and sales provisions. In addition, for example seminars and training events result in additional costs. The Company's sales organization and the commercialization strategy of the RemeOs™ products is described in more detail in section "*Business overview – Products – Commercialization strategy for the new products in the United States*".

In addition to the sales network in the United States, the Company is planning to increase the number of its personnel particularly in the product development and production, but also in the administration and sales in Finland. Taken as a whole, the Company is planning to increase the number of personnel from the present 24 employees to about 70 employees in the medium term.

The development and research relating to the upcoming products in the RemeOs™ product family and some products in the Activa product family will incur product development expenses to the Company. The product development of the RemeOs™ cannulated screws is completed, but the Company expects research and development costs related to them for acquiring additional clinical evidence and indications to support their commercialization. According to the Company's plans, the development and clinical trials of the products in the RemeOs™ product family will result in expenses of approximately EUR 10–15 million in 2021–2026. The majority of the product development expenses will result from the clinical trials of products developed in the RemeOs™ product family after the cannulated screws.

The Company is planning to make some investments in its production capacity in the medium term. The timing and amount of the investments will depend on the progress of the commercialization plan for the RemeOs™ products. The Company is moving to new production facilities in Tampere during 2021. The production capacity of the Company's production line is approximately 24 thousand implants per year in one shift, corresponding to the sales of approximately EUR 10 million. The most significant bottleneck in the Company's manufacturing process comes from the CNC machines, which are used to machine the metal to its final shape. The Company believes that it can increase the capacity of its present production line to the production volume corresponding to revenue of approximately EUR 50 million at a later phase. This would require adding three new CNC machines to the production line. The Company's management estimates that in order to reach the targeted revenue of EUR 100 million in 2027, the Company is required to invest, in addition to its present production line, to a second production line and approximately 5–10 new CNC machines. The total cost of a completely new production line is estimated to be approximately EUR 400 thousand (including one CNC machine), and the cost of new CNC machines is estimated to be approximately EUR 250 thousand per machine.

Factors affecting the Company's results of the operations in the long term

Development of the sales of RemeOs™ cannulated screws

According to the plan of the Company's management, the RemeOs™ cannulated screws will be sold in the United States, Europe and other parts of the world in the long term. In the long term, the Company plans to strive to increase the sales of the RemeOs™ cannulated screws in all of these market areas. The Company's management considers that the global market potential for the cannulated screws is very large. Due to the factors mentioned above, the Company expects that the long term development of the sales of the cannulated screws will have a material effect on the revenue of the Company and the results of its operations.

Development and commercialization of other RemeOs™ products

In the long term, the Company plans to introduce to the market K-wires, intramedullary nails and spinal cages in the RemeOs™ product family. After receiving the necessary market approvals for its new products, the Company plans to commercialize the products using the same sales channels it expects to use for selling the RemeOs™ cannulated screws. Receiving market approvals for the new products and their successful commercialization would expand the Company's addressable market significantly (for more information, see "*Market and industry review – Size and characteristics of the market* – Markets *for specific product categories addressable by RemeOs™ products*".

Recent events

In the view of Bioretec's management, significant changes have not occurred in Bioretec's results of operations and financial position between 31 March 2021 and the date of this Offering Circular.

Future prospects

The discussion below includes forward-looking statements that involve inherent risks and uncertainties. Bioretec's actual results of operations and financial position could differ materially from those contained in such forward-looking statements as a result of several factors, and especially due to the on-going COVID-19 pandemic, discussed below and elsewhere in this Offering Circular, particularly in the sections "Risk factors" and "Certain additional information – Forward-looking statements". Such forward-looking statements should be treated with caution.

The Company expects to continue selling the products in its Activa product family in the near future. The Company's management expects that the possible subsidence of the global COVID-19 pandemic will result in the recovery of the market for the Activa products to its pre-pandemic level during 2022. Furthermore, the Company expects to start building a sales network for the upcoming RemeOs™ products in the Unites States by incorporating a subsidiary in the United States and hiring a Head of Sales and several sales representatives in the United States. In addition, the Company plans to start the clinical trials on the RemeOs™ K-wires in the second half of 2021. In early 2021, the Company's RemeOs™ cannulated screws were granted the Breakthrough Device Designation by the FDA, and as a result of this, it initiated the process aiming to the market approval in the United States. The Company strives to receive the market approval for its RemeOs™ cannulated screw in the United States in the first half of 2022 and in Europe in the second half of 2022. The Company's business objectives are described in more detail in section "*Business overview – The Company's business objectives*".

Research and development

Bioretec has an existing product portfolio with existing market approvals and revenue. In addition to its existing biopolymer products, Bioretec develops new products based on magnesium alloy and hybrid composite. In addition to the development

of completely new products, Bioretec strives also to develop its existing products so that their indications become wider. Expansion of the indications does not require as high financial efforts as the development of completely new products, because the expansion of the indications means finding new indications for the existing products.

Bioretec aims to expand its product offering to various product segments through product development also in the future. According to the management, Bioretec strives to focus its product development efforts in the coming years on products, which are estimated to be the most profitable in relation to product development costs and market size.

Bioretec's research and development expenses amounted to EUR 351.4 thousand for the three months ended 31 March 2021 and 143.4 thousand for the three months ended 31 March 2020. The research and development costs amounted to EUR 715.4 thousand for the year ended 31 December 2020, EUR 517.4 thousand for the year ended 31 December 2019 and EUR 381.2 thousand for the year ended 31 December 2018. According to the management, Bioretec may decide to capitalize its research and development expenses in its balance sheet in the future.

Key items of the income statement

Revenue

Revenue consists of the sales of biopolymer products to the customers and distributors all around the world. Revenue is recognized in accordance with the accrual basis when the products have been handed over to the customer. Indirect taxes and discounts are subtracted from the revenue.

Materials and services

Materials and services mainly consist of purchases of materials during the financial year, which mainly include the costs of raw materials, components and product packages used in the production, and external services, such as costs relating to quality control and certification. The expenses are recognized in accordance with the accrual basis when the Company has received the production inputs.

Personnel expenses

Personnel expenses include the wages and salaries of Bioretec's employees and pension expenses and other social security expenses related to them.

Depreciation and amortization

Depreciation and amortization consist of planned depreciation and amortization of intangible and tangible assets.

Other operating expenses

Other operating expenses mainly consist of research and development expenses, rents and expenses of business premises, software and ICT costs, sales, marketing and travel expenses and administrative expenses. The expenses are recognized in accordance with the accrual basis at the time when they are incurred.

Operating profit (-loss)

Operating profit (loss) is calculated by adding other operating income and change in the stocks of finished and work-in-progress products to the revenue, and by subtracting materials and services, personnel expenses, impairments, depreciation and amortization and other operating expenses from this amount.

Financial income and expenses

Financial income and expenses consist of interest expenses, other financial expenses and reversals of impairment.

Income taxes

Bioretec has not paid income tax because the Company's business has been unprofitable. Unrecognized tax losses transferred from preceding years are estimated to be approximately EUR 3 million.

Profit (loss) for the financial year

Loss for the financial year is calculated by subtracting total financial income and expenses and income taxes from operating loss.

Results of operations

The following describes Bioretec's results of operations for the three months ended 31 March 2021 and 31 March 2020, as well as for the years ended 31 December 2020, 31 December 2019 and 31 December 2018. The review focuses on the following items of the income statement: revenue, operating profit (loss) and result for the period.

	For the three months ended 31 March		For the year ended 31 December		
	2021	2020	2020	2019	2018
(EUR million)	(unaudited)			(audited)	
Revenue	0.5	0.4	1.5	1.7	1.6
Operating profit (loss)	-0.5	-0.5	-1.9	-1.7	-1.6
Result for the period	-0.5	-0.9	-2.3	-1.7	-2.1

Revenue

Three months ended 31 March 2021 as compared to three months ended 31 March 2020

Bioretec's revenue amounted to EUR 0.5 million for the three months ended 31 March 2021, reflecting an increase of EUR 0.1 million as compared to the revenue of EUR 0.4 million for the three months ended 31 March 2020. The increase was mainly due to the growth of sales in Asia.

The year ended 31 December 2020 as compared to the year ended 31 December 2019

Bioretec's revenue amounted to EUR 1.5 million for the year ended 31 December 2020, reflecting a decrease of EUR 0.2 million as compared to the revenue of EUR 1.7 million for the year ended 31 December 2018. The change was mainly due to the disruption caused by the COVID-19 pandemic in the global economy and the Company's export markets.

The year ended 31 December 2019 as compared to the year ended 31 December 2018

Bioretec's revenue amounted to EUR 1.7 million for the year ended 31 December 2019, reflecting an increase of EUR 0.2 million as compared to the revenue of EUR 1.6 million for the year ended 31 December 2018. The increase was mainly due to the positive development of sales in Europe and Asia.

Operating profit (loss)

Three months ended 31 March 2021 as compared to three months ended 31 March 2020

Bioretec's operating loss amounted to EUR -0.5 million for the three months ended 31 March 2021. Bioretec's operating loss amounted to EUR -0.5 million for the three months ended 31 March 2020. The operating loss did not change significantly between the review periods.

The year ended 31 December 2020 as compared to the year ended 31 December 2019

Bioretec's operating loss amounted to EUR -1.9 million for the year ended 31 December 2020, reflecting a change of EUR 0.2 million as compared to the operating loss of -1.7 million for the year ended 31 December 2019. The change was mainly due to a decrease in revenue. Research and development costs increased in the review period, but taken as a whole, other operating costs remained at the same level due to the impacts of the COVID-19 pandemic on the travel and marketing expenses.

The year ended 31 December 2019 as compared to the year ended 31 December 2018

Bioretec's operating loss amounted to EUR -1.7 million for the year ended 31 December 2019, reflecting a change of EUR 0.1 million as compared to the operating loss of -1.6 million for the year ended 31 December 2018. The increase in the loss was mainly due to the increase in the personnel expenses, as well as the increase in other operating expenses which was mainly due to the increase in the research and development expenses, as well as the increase in the depreciation and amortization.

Profit (loss) for the financial year

Three months ended 31 March 2021 as compared to three months ended 31 March 2020

Bioretec's loss for the period amounted to EUR -0.5 million for the three months ended 31 March 2021, reflecting a change of EUR 0.4 million as compared to the loss for the period of EUR -0.9 million for the three months ended 31 March 2020. The change was mainly due to a decrease in financial expenses.

The year ended 31 December 2020 as compared to the year ended 31 December 2019

Bioretec's loss for the financial year amounted to EUR -2.3 million for the year ended 31 December 2020, reflecting a change of EUR 0.5 million as compared to the loss for the financial year of EUR -1.7 million for the year ended 31 December 2019. The change was mainly due to the increase in the operating loss and the increase in the financial expenses. The increase in financial expenses was due to the growth funding round concluded during the year 2020. The expenses of the funding round have been recorded in the income statement for the year 2020 as financial expenses.

The year ended 31 December 2019 as compared to the year ended 31 December 2018

Bioretec's loss for the financial year amounted to EUR -1.7 million for the year ended 31 December 2019, reflecting an improvement of EUR 0.3 million as compared to the loss for the financial year of EUR -2.1 million for the year ended 31 December 2018. The improvement of the result was mainly due to the decrease in the interest expenses and other financial expenses. The decrease in financial expenses was due to the growth funding round concluded during the year 2018. The expenses of the funding round have been recorded in the income statement for the year 2018 as financial expenses.

Financial position

Non-current and current assets

Bioretec's total assets amounted to EUR 3.7 million as at 31 March 2021 and EUR 4.8 million as at 31 March 2020. Bioretec's total assets amounted to EUR 3.9 million as at 31 December 2020, EUR 1.6 as at 21 December 2019 and EUR 2.5 million as at 31 December 2018.

Non-current assets

The table below sets forth Bioretec's non-current assets as at the dates indicated.

	As at 31 March		As at 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	(unaudited)			(audited)	
Intangible assets					
Intangible rights	166.3	162.0	172.1	168.7	149.1
Goodwill	217.8	297.4	237.6	317.3	0.9
Advance payments	0.2	0.0	0.2	–	–
Total intangible assets	**384.3**	**459.4**	**409.9**	**486.0**	**150.0**
Tangible assets					
Machinery and equipment	200.6	161.6	209.0	142.7	46.4
Prepayments and in-progress acquisitions	111.7	0.1	30.6	26.0	55.6
Total tangible assets	**312.3**	**161.7**	**239.7**	**168.7**	**102.0**
Total non-current assets	**696.6**	**621.2**	**649.6**	**654.7**	**252.1**

Bioretec's total non-current assets amounted to EUR 696.6 thousand as at 31 March 2021, reflecting a change of EUR 75.4 thousand as compared to EUR 621.2 thousand as at 31 March 2020. The increase on the non-current assets was mainly due to the investments related to the new office and production facilities.

Bioretec's non-current assets amounted to EUR 649.6 thousand as at 31 December 2020, EUR 654.7 thousand as at 31 December 2019 and EUR 252.1 thousand as at 31 December 2018.

Intangible assets included in the non-current assets decreased by EUR 76.1 thousand between 31 December 2020 and 31 December 2019 due to the amortization of consolidated goodwill. On the other hand, tangible assets increased by EUR

71.0 thousand due to the investments in machinery and equipment. Taken as a whole, non-current assets did not change significantly between 31 December 2020 and 31 December 2019.

The increase of EUR 402.6 thousand between 31 December 2019 and 31 December 2018 was mainly due to the goodwill recognized by the Company, increase in the intangible rights related to the RemeOs™ product family and investments in equipment and machinery. The increase was partially offset by the decrease in advance payments and in-progress acquisitions.

Current assets

The table below sets forth Bioretec's current assets as at the dates indicated.

	As at 31 March		As at 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	(unaudited)			(audited)	
Inventories					
Materials and work-in-progress	313.0	207.4	230.6	133.4	148.8
Finished products	417.5	297.2	441.6	304.4	355.0
Total inventories	**730.5**	**504.6**	**672.2**	**437.8**	**503.8**
Short-term receivables					
Trade receivables	283.1	249.0	205.8	387.0	387.4
Other receivables	221.8	95.1	90.4	87.8	93.3
Accrued income	174.5	13.1	1.4	8.9	7.7
Total short-term receivables	**679.4**	**357.2**	**297.5**	**483.7**	**488.3**
Cash and cash equivalents	1,630.3	3,297.9	2,273.1	58.0	1.231.8
Total current assets	**3,040.1**	**4,159.7**	**3,242.8**	**979.5**	**2.223.9**

Bioretec's total current assets amounted to EUR 3.0 million as at 31 March 2021, reflecting a change of EUR 1.2 million as compared to EUR 4.2 million as at 31 March 2020. The change in current assets was mainly due to the decrease in cash and cash equivalents, which was mainly due to the negative cash flow from operating activities.

Bioretec's current assets amounted to EUR 3.2 million as at 31 December 2020, EUR 1.0 million as at 31 December 2019 and EUR 2.2 million as at 31 December 2018.

The increase of EUR 2.3 million between 31 December 2020 and 31 December 2019 was mainly due to the increase in inventory and cash and cash equivalents. The increase was partly offset by the decrease in trade receivables.

The change of EUR 1.2 million between 31 December 2019 and 31 December 2018 was mainly due to the decrease in cash and cash equivalents.

Equity and liabilities

The table below sets forth Bioretec's equity and liabilities as at the dates indicated.

	As at 31 March		As at 31 December		
	2020	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	(unaudited)			(audited)	
Total equity	**870.8**	**2,140.1**	**1,360.1**	**-1,263.1**	**33.8**
Non-current liabilities total	1,960.6	1,995.1	1,977.3	2,040.4	2,097.1
Current liabilities total	905.4	645.7	554.9	856.9	345.1
Total liabilities	**2,866.0**	**2,640.8**	**2,532.3**	**2,897.3**	**2,442.2**
Total equity and liabilities	**3,736.8**	**4,780.9**	**3,892.4**	**1,634.2**	**2,476.0**

Equity

Bioretec's equity amounted to EUR 0.9 million as at 31 March 2021, reflecting a change of EUR 1.2 million as compared to EUR 2.1 million in 31 March 2020. The change in equity was mainly due to the loss for the period.

Bioretec's equity amounted to EUR 1.4 million as at 31 December 2020, EUR -1.3 million as at 31 December 2019 and EUR 33.8 thousand as at 31 December 2018.

The increase of EUR 2.6 million in the equity between 31 December 2020 and 31 December 2019 resulted from directed share issues. Bioretec reduced its share capital to cover losses by EUR 5,472,696.89 with the decision registered on 1 December 2020. For more information, see "*Shares and share capital – Shareholder rights – Dividends and other distribution of funds*".

The change of EUR 1.3 million in the equity between 31 December 2019 and 31 December 2018 was mainly due to the loss for the previous financial year (EUR 2.1 million) and the decrease in the loss for the present financial year (EUR 0.3 million). The decrease in the equity was partly offset by increases in reserve for invested unrestricted equity (EUR 0.4 million).

Non-current liabilities

Bioretec's non-current liabilities amounted to EUR 2.0 million as at 31 March 2021. Bioretec's non-current liabilities amounted to EUR 2.0 million as at 31 March 2020. Non-current liabilities did not change significantly between 31 March 2021 and 31 March 2020.

Bioretec's non-current liabilities amounted to EUR 2.0 million as at 31 December 2020, EUR 2.0 million as at 31 December 2019 and EUR 2.1 million as at 31 December 2018. Bioretec's non-current liabilities did not change significantly between 31 December 2020 and 31 December 2019 or between 31 December 2019 and 31 December 2018.

Current liabilities

Bioretec's current liabilities amounted to EUR 0.9 million as at 31 March 2021, reflecting an increase of EUR 0.3 million as compared to EUR 0.6 million as at 31 March 2020. The increase in current liabilities was mainly due to the increase in trade payables.

Bioretec's current liabilities amounted to EUR 554.9 thousand as at 31 December 2020, EUR 856.9 thousand as at 31 December 2019 and EUR 345.1 thousand as at 31 December 2018.

The decrease of EUR 302.0 thousand in the current liabilities between 31 December 2020 and 31 December 2019 was mainly due to the decrease in trade payables, other liabilities and accruals.

The increase of EUR 511.8 thousand in the current liabilities between 31 December 2019 and 31 December 2018 was mainly due to the increase in trade payables, other liabilities and accruals.

Off-balance sheet liabilities

	For the three months ended 31 March		For the year ended 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	(unaudited)			(audited)	
Nominal amounts of open lease agreement commitments	18.4	20.4	16.3	12.9	12.9
Lease commitments for business premises	966.6	188.0	1,013.5	188.0	187.9
Total lease agreement liabilities	985.0	208.4	1,029.8	200.9	200.8
Other commitments	20.4	25.6	30.4	23.8	22.8
Loans on which a business mortgage has been given					
Loans from credit institutions	83.0	159.6	99.7	176.3	199.7
Company mortgages	440.0	440.0	440.0	440.0	440.0
Unrecorded interest accrued on capital loans	1,342.7	1,224.2	1,266.3	1,210.2	1,102.9
Total off-balance sheet liabilities	**2,871.1**	**2,057.8**	**2,866.2**	**2,051.2**	**1,966.2**

Liquidity and capital sources

Cash flows

The table below sets forth Bioretec's cash flows for the periods indicated:

	For the three months ended 31 March		For the year ended 31 December		
	2021	**2020**	**2019**	**2018**	**2018**
(EUR thousand)	(unaudited)			(audited)	
Cash flow from operating activities	-586.8	-484.5	-1,998.2	-1,217.8	-1,539.0
Cash flow from investments	-91.0	-31.6	-121.2	-54.9	-52.8
Cash flow from financing	35.0	3,755.9	4,334.5	99.0	2,409.1
Change in liquid assets	**-642.8**	**3,239.9**	**2,215.1**	**-1,173.8**	**817.4**

There have not been any significant changes in Bioretec's cash flows between 31 March 2021 and the date of this Offering Circular.

Cash flow from operating activities

Bioretec's cash flow from operating activities was EUR -586.8 thousand for the three months ended 31 March 2021, reflecting a change of EUR 102.3 thousand as compared to EUR -484.5 thousand for the three months ended 31 March 2020. The change was mainly due to the change in the working capital.

Cash flow from operating activities was EUR -2.0 million for the year ended 31 December 2020, reflecting a change of EUR 0.8 million as compared to EUR -1.2 million for the year ended 31 December 2019. The change was mainly due to the weaker cash flow before the changes in working capital and the increase in the current non-interest bearing liabilities.

Cash flow from operating activities was EUR -1.2 million for the year ended 31 December 2019, reflecting a change of EUR 0.3 million as compared to EUR -1.5 million for the year ended 31 December 2018. The most significant factor in the positive development was the change in the current non-interest bearing liabilities.

Cash flow from investments

Bioretec's cash flow from investments was EUR -91.0 thousand for the three months ended 31 March 2021, reflecting a change of EUR 59.4 thousand as compared to EUR -31.6 thousand for the three months ended 31 March 2020. The change was mainly due to the investments related to new office and production facilities.

Cash flow from investments was EUR -121.2 thousand for the year ended 31 December 2020, reflecting a change of EUR 66.3 thousand as compared to EUR -54.9 thousand for the year ended 31 December 2019. The change was mainly due to the investments in tangible and intangible assets.

Cash flow from investments was EUR -54.9 thousand for the year ended 31 December 2019, reflecting a change of EUR 2.1 thousand as compared to EUR -52.8 thousand for the year ended 31 December 2018. Cash flow from investments did not change significantly between the review periods.

Cash flow from financing

Bioretec's cash flow from financing was EUR 35.0 thousand for the three months ended 31 March 2021, reflecting a change of EUR 3,720.9 thousand as compared to EUR 3,755.9 thousand for the three months ended 31 March 2020. During the comparison period, two directed share issues were carried out were the aggregate subscriptions amounted to EUR 4,248.2 thousand.

Cash flow from financing was EUR 4.3 million for the year ended 31 December 2020, reflecting an increase of approximately EUR 4.2 million as compared to EUR 99.0 thousand for the year ended 31 December 2019. The increase was mainly due to the paid share issues of EUR 4.6 million. The increase was partly offset by the repayment of short-term loans (EUR 0.1 million) and the interest and other payments included in the financial expenses (EUR 0.3 million).

Cash flow from financing was EUR 99.0 thousand for the year ended 31 December 2019, reflecting a change of approximately EUR 2.3 million as compared to EUR 2.4 million for the year ended 31 December 2018. The change was mainly due to paid share issues being EUR 2.6 million smaller than in the comparative period, drawn short-term loans (EUR 0.1 million) and change in the paid interest and financial expenses (EUR 0.2 million).

Liquidity

Bioretec's sources of liquidity consist mainly of cash and cash equivalents shown in the balance sheet as well as external financing. Bioretec's cash and bank equivalents amounted to EUR 1.6 million as at 31 March 2021 (EUR 3.3 million as at 31 March 2020). Bioretec's cash assets consist of liquid bank deposits.

Bioretec's interest bearing debt consists mainly of capital loans, loans from financial institutions and instalment debt. Bioretec's total interest-bearing debt amounted to EUR 2.0 million as at 31 March 2021 (EUR 2.1 million as at 31 March 2020), and its total net debt was EUR 0.4 million (EUR -1.2 million as at 31 March 2020). The below table sets out the Company's interest bearing debt:

	As at 31 March 2021	Accrued unrecorded interest as at 31 March 2021
(EUR thousand)		
Capital loans		
Business Finland	1,381.6	606.9
Convertible loans	530.5	735.7
Loans from financial institutions[1]		
Finnvera loan	83.0	-
Instalment debt	39.7	-

(1) The principal and interest from the Finnvera loan matures quarterly, and the principal and interest for the instalment debt matures monthly.

Restrictions on the use of capital sources

As at the date of this Offering Circular, the Company has entered into agreements with the State Treasury on the product development loans granted by Business Finland. The balance sheet as at 31 March 2021 includes loans from the State Treasury in the amount of EUR 1.4 million.

The loans from the State Treasury include a capital loan of EUR 1.4 million from TEKES (current name, Business Finland) received by the Company in 2015. The loan is a capital loan as defined in the Finnish Companies Act, whose interest and principal are subordinate to all other debts in the liquidation and bankruptcy of the Company, and whose principal may be otherwise repaid and interest paid only in so far as the sum total of the unrestricted equity and all of the capital loans of the company at the time of payment exceeds the loss on the balance sheet to be adopted for the latest financial period or the loss on the balance sheet from more recent financial statements. The capital loan is unsecured and the loan term is eight years. According to the terms and conditions of the loan, the loan is not repaid during the first five years, after which

it will fall due in annual instalments. The interest accrued on the loan is the base rate confirmed by the Ministry of Finance from time to time minus 1 percentage point, however 3 per cent at minimum.

Unrecorded interest accrued on the capital loans from Business Finland amounted to EUR 607 thousand in total as at 31 March 2021.

The terms and conditions of the loan are based on the general loan terms and conditions of Business Finland. They include special terms and conditions and limitations relating to, among other things, expenses that can be covered by the loan capital, monitoring and reporting of the projects for which the loan was granted and limitations to the sales, transfer or disposal of the financed project and the business or intellectual property rights based on it. Measures relating to the project's results, including mergers and acquisitions, require, as a general rule, prior consent from the party that granted the loan.

Based on the resolutions of Bioretec's General Meetings on 21 September 2011 and 21 December 2011, Bioretec has entered into agreements on convertible loans to finance the Company's business operations and strengthen its equity. Bioretec's shareholders have granted to the Company a convertible loan of EUR 0.5 million with a fixed interest rate of 12 per cent. The interest of the convertible loan may be paid or the principal may be otherwise repaid only in so far as the sum total of the unrestricted equity and all of the capital loans of the Company at the time of payment exceeds the loss on the balance sheet to be adopted for the latest financial period or the loss on the balance sheet from more recent financial statements.

Unrecorded interest accrued on Bioretec's convertible loans amounted to EUR 736 thousand as at 31 March 2021.

Bioretec is committed to repay the capital of EUR 387,541.74[97] as at 31 March 2021, and the interest accrued thereto by the date of repayment to the convertible loan holders in the United States with the net proceeds received from the Share Issue. The Company and the convertible loan holders in the United States have agreed on ordering consultancy services relating to the commercialization of the new products in the United States from the convertible loan holders starting from October 2021. If the Listing is completed as planned and the Company repays the loans according to its commitment by mid-October 2021, the agreement will not be concluded (for more information, see "*Business overview – Material agreements outside the ordinary course of* business").

In addition, Bioretec intends to repay the capital of its other capital loans which as at 31 March 2021 was EUR 1,524,472.12 and interest accrued thereto by the date of repayment in their entirety with the net proceeds received from the Share Issue. The Company's capital loans and the interest accrued thereto by the estimated repayment date are in total approximately EUR 3.3 million (for more information, see "*Essential information on the Offering – Use of proceeds*"). Bioretec will prepare interim financial statements for the six months ended 30 June 2021 for effecting the repayment of the capital loans (for more information, see "*Shares and share capital – Company's planned Extraordinary General Meeting 2021*"). The completion of the Offering is conditional on certain factors. For more information, see "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*".

	As at 31 March 2021	Accrued unrecorded interest as at 31 March 2021
(EUR thousand)		
Capital loans		
Business Finland	1,381.6	606.9
US convertible loans	387.5	232.7
Other convertible loans	142.9	503.1

[97] The capital includes capitalised interest accrued until 31 March 2016.

Net debt

The table below sets forth breakdown of Bioretec's net debt as at the dates indicated:

	As at 31 March		As at 31 December		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	(unaudited)		(audited, unless otherwise indicated)		
Cash and cash equivalents	-1,630.3	-3,297.9	-2,273.1	-58.0	-1,231.8
Long-term loans from financial institutions	48.6	64.4	65.3	109.7	166.3
Capital loans	1,912.0	1,930.8	1,912,0	1,930.8	1,930.8
Interest-bearing short-term liabilities	74.2	66.7	75.7	66.7	33.3
Net debt (cash)	**404.5**	**-1,236.1**	**-220.1[(1)]**	**2,049.1[(1)]**	**898.6[(1)]**

(1) Unaudited.

Bioretec's cash and cash equivalents amounted to EUR 1.6 million as at 31 March 2021 (EUR 3.3 million as at 31 March 2020). Bioretec's cash and cash equivalents consist of liquid bank deposits.

Bioretec's interest-bearing debt mainly consists of capital loans, loans from financial institutions and instalment debt. Bioretec's total interest-bearing debt amounted to EUR 2.0 million as at 31 March 2021, and its total net debt was EUR 0.4 million.

Financing required for investments

Bioretec has not made any significant investments or decisions on significant investments between 31 March 2021 and the date of this Offering Circular.

The lease agreement for Bioretec's present production facilities will expire during 2021. As at the date of this Offering Circular, Bioretec is building new office and production facilities on leased premises in Tampere, and it plans to move in them in August 2021. Bioretec estimates that the investments required for the building of the new office and production facilities will be approximately EUR 300 thousand in the first half on 2021.

Bioretec expects to finance the above mentioned planned capital expenditures mainly with its existing cash and cash equivalents.

Financial risk management

Bioretec's financial risk management aims to minimize negative impacts of changes in the financial markets on its consolidated income, balance sheet and cash flows. Bioretec's financing and risk management related to the financing are managed centrally in the parent company by the CEO and the CFO. In addition to liquidity risk, the Company is exposed to credit and counterparty risk and foreign exchange risk in its business operations.

The summary below describes Bioretec's financial risks, as well as the targets and measures for their management.

Liquidity risk

Liquidity risk refers to a situation, where the Company's business operations cannot be continued due to the lack of financing. The Company believes that the completion of the Offering in the intended schedule ensures sufficient liquidity for at least the next 12 months. The long term plan is to turn the Company's cash flow from operating activities positive by the end of 2025.

Credit and counterparty risk

Credit risk arises from the potential failure of a counterparty to meet its contractual payment obligations. Commercial trade receivables as well deposits with financial institutions expose the Company to credit risk. The Company monitors the counterparty risk associated with trade receivables by using credit limits. For deposits, the Company's practice is to use recognized and reliable counterparties with a good credit rating.

Foreign exchange rate risk

Foreign exchange risk arises when the Company has payments or receivables nominated in foreign currencies. In the present operating model, the Company's invoicing is in the euro, but some purchases are denominated in foreign currencies. Due to the small amount of purchases in foreign currencies, the Company does not use currency hedging for

the management of foreign exchange rate risk. The Company plans to expand its operations to the United States in the coming years. The expansion of the operations, if materialized, will increase the amount of items nominated in foreign currencies in the Group's foreign currency (USD) exposure, and therefore, may lead to a need to manage the foreign exchange risk with, for example, foreign currency hedges.

Dividends and dividend policy

The Company's business has been unprofitable so far, and due to this, it has not distributed any dividends. In the near future, the Company expects to focus on financing its growth strategy and development of its business. The Company does not expect to distribute dividends in the short or medium term. In the long term, the Company's dividends and their distribution is linked to the Company's results of operations and financial position.

Pursuant to the Finnish Companies Act, if the share capital has been reduced for loss coverage, the unrestricted equity of the company may be distributed to the shareholders during the three years following the registration of the reduction only in accordance with the creditor protection procedure as provided in the Finnish Companies Act. Bioretec reduced its share capital to cover losses by EUR 5,472,696.89 with a decision registered on 1 December 2020. Therefore, Bioretec cannot distribute dividends or otherwise distribute unrestricted equity prior to 1 December 2023 otherwise than in compliance with the creditor protection procedure as provided in the Finnish Companies Act. See "*Shares and share capital –Shareholder rights – Dividends and other distribution of funds*".

BOARD OF DIRECTORS AND MANAGEMENT TEAM

General

Pursuant to the provisions of the Finnish Companies Act, the control and management of Bioretec are divided between the General Meeting of the Shareholders and the Board of Directors. The ultimate decision-making authority lies with the shareholders at the Annual General Meeting, which appoints the members of the Board of Directors and the Company's auditor. The Board of Directors is responsible for the administration and the proper organization of the operations of the Company. The duties and accountability of the Board of Directors are determined primarily under Company's Articles of Association and the Finnish Companies Act. The procedure and rules of the Board of Directors of Bioretec are described in the charter adopted by the Board of Directors. The Company's Chief Executive Officer (the "**CEO**") and the possible deputy CEO are appointed by Bioretec's Board of Directors. In addition, the Management Team assists the CEO in the operations of the Company.

Corporate governance

In addition to the applicable legislation governing limited companies, Bioretec complies with the Code of Conduct and other policies defined by it. After the listing, Bioretec will also comply with the First North Rules.

Board of Directors

Pursuant to the Articles of Association of Bioretec, the Company's Annual General Meeting elects a minimum of three and a maximum of seven board members. The term of office of board members expires at the end of the Annual General Meeting first following their election. The Board of Directors constitutes a quorum when more than half of its members are present. Members with a conflict of interest are excluded when determining the quorum.

In addition to the duties defined in laws and regulations and Bioretec's Articles of Association, the duties of Bioretec's Board of Directors include the following:

- to guide and supervise Bioretec's management and operations;
- to decide on significant matters pertaining to Bioretec's operations;
- to review and approve Bioretec's half-yearly reports, reports by the Board of Directors and financial statements;
- to approve Bioretec' strategy, business plans and certain Bioretec's policies and practices, as well as to supervise their application;
- to decide on significant business acquisitions, investments and divestments; and
- to define Bioretec's dividend policy.

Bioretec's Board of Directors convenes according to a schedule agreed in advance and as needed. The Board of Directors receives up-to-date information on Bioretec's operations, finance and risks in its meetings. In addition its members, the CEO and the CFO attend in the meetings of the Board of Directors. Minutes are kept of all meetings of the Board of Directors.

Bioretec aims to increase the number of the members of the Board of Directors possibly in 2021. The Board of Directors is planning to invite the Extraordinary General Meeting to convene by 30 September 2021. The Extraordinary General Meeting would possibly elect new members to the Board of Directors, if the Company succeeds to find suitable candidates for the position. For more information on the planned Extraordinary General Meeting, see "*Shares and share capital – Company's planned Extraordinary General Meeting 2021*".

The table below sets forth the members of Bioretec's Board of Directors as at the date of this Offering Circular:

Name	Position	First elected to the Board of Directors
Tomi Numminen	Chairman of the Board	2016
Michael Piccirillo	Member of the Board	2019
Hans Rosén	Member of the Board	2017
Pekka Simula	Member of the Board	2020
Sarah Fisher	Member of the Board	2021

Tomi Numminen (born 1971) has served as the Chairman of Bioretec's Board of Directors since 2019 and a member of the Board of Directors since 2016. Numminen served as Bioretec's CEO in 2016–2019. In addition, Numminen serves as the Chairman of the Board of Labrox Oy and Endicum Ltd. During the five previous years, Numminen has served as a member of the Board of Directors of BBS-Bioactive Bone Substitutes Plc, Aucor Oy and Ocuspecto Oy. Numminen holds a Master's degree in Business Administration from Turku School of Economics. Numminen is a Finnish citizen.

Michael Piccirillo (born 1959) has served as a member of Bioretec's Board of Directors since 2018. In addition, Piccirillo serves as the CEO of Symgery Inc and VALUGEN GmbH. Previously, Piccirillo has served as the director responsible for the training of surgeons at NuVasive Inc. Piccirillo has long experience on committing Key Opinion Leaders and surgeons, building network of Key Opinion Leaders and planning the training for surgeons. Piccirillo holds a Bachelor of Science degree in Microbiology from the University of London, a marketing diploma from Chartered Institute of Marketing and a Bachelor's degree in Business Administration from the Warwick University. Piccirillo is a citizen of Switzerland and the United Kingdom.

Hans Rosén (born 1960) has served as a member of Bioretec's Board of Directors since 2018. In addition, Rosén serves as the CEO and a member of the Board of Directors of Theradex (Europe) Ltd and as a member of the Board of Directors of Theradex Oncology Norway AS, Theradex Oncology AB and Neoventor Medicinsk Innovation AB. During the previous five years, Rosén has also acted as the CEO and a member of the Board of Directors of Vivolux AB. Rosén holds a Master of Science degree in Industrial Engineering and Management from Chalmers University of Technology. Rosén is a Swedish citizen.

Pekka Simula (born 1974) has served as a member of Bioretec's Board of Directors since 2020. In addition, Simula serves as a member of the Board of Directors of Neurotar Ltd, Finnish Bioindustries FIB, MediSapiens Ltd and Sartar Therapeutics Ltd, as well as a member of the Board of Directors and the CEO of Meles Consulting Ltd. During the previous five years, Simula has also served as the CEO of Herantis Pharma Plc, Laurantis Pharma Ltd and BioCis Pharma Oy and the Chairman of the Board of Directors of Finnish Bioindustries FIB. Simula holds a Master's degree in Technology from the Helsinki University of Technology. Simula is a Finnish citizen.

Sarah Fisher (born 1978) has served as a member of Bioretec's Board of Directors since April 2021. In addition, Fisher serves as the Global Public Health Financing Lead at Johnson & Johnson, a member of the Supervisory Board in University of Amsterdam Ventures Holding BV and WillemPie, a member of the Advisory Board of Growth Science LLC and Castor EDC and a member of the Management Team of Self Safe Sure. Fisher holds a Post Graduate Diploma in Global Business from the University of Oxford, Master of Business Administration, Entrepreneurship degree from Babson College and Master of Science degree in Nutritional Epidemiology and Public Health from Wageningen University. Fisher is a citizen of the United States.

Committees of the Board of Directors

The Board of Directors may establish permanent committees to assist the Board of Directors in the preparation and performance of its tasks and duties, and decide on their size, composition and duties. As at the date of this Offering Circular, Bioretec does not have any committees.

Bioretec's Board of Directors is planning to establish the Audit Committee and the Compensation Committee. In addition, the Company plans to possibly later establish the Shareholder's Nomination Board, possibly already in the Extraordinary General Meeting planned to be held in autumn 2021 (for more information, see "*Shares and share capital – Company's planned Extraordinary General Meeting 2021*"). According to the plan, the Nomination Board would consist of the Chairman of the Company's Board of Directors and the representatives of its three largest shareholders.

The committees of the Board of Directors would not have independent power of decision in matters pertaining to the Board of Directors' authority. Instead, they would assist the Board of Directors by preparing these matters for the decision of the Board of Directors. The committees would regularly report their activities to the Board of Directors.

The CEO and the Group Management Team

The CEO is responsible for the management, guidance and supervision of Bioretec's business operations. In addition, the CEO is responsible for the day-to-day executive management of Bioretec in accordance with the instructions and orders given by the Board of Directors. In addition, the CEO shall ensure that Bioretec's accounting practices comply with the relevant laws and that its financials have been arranged in a reliable manner. The duties of the CEO are governed primarily by the Finnish Companies Act. The CEO shall provide the Board of Directors and its members with the information necessary for the performance of the duties of the Board of Directors.

The Board of Directors appoints and dismisses the CEO. The Board of Directors decides on the terms and conditions of the CEO's employment, and they are defined in a written service agreement. In addition, the Board of Directors decides on the remuneration of the members of the Management Team.

The duty of Bioretec's Management Team is to support the CEO in the planning of the operations and operational management. In addition, the Management Team prepares possible investments, business acquisitions and development projects. Bioretec's Management Team convenes regularly, and it comprises the directors of the major service units.

The table below sets forth the members of the Management Team as at the date of this Offering Circular.

Name	Position	Member of Management Team since
Timo Lehtonen	CEO	2019
Minna Ahlstedt-Soini	Production Director	2013
Lauri Hokkanen	Director, Marketing and Sales	2020
Kimmo Lähteenkorva	Chief Technology Officer	2017
Mari Ruotsalainen	Director, QA & RA	2004
Johanna Salko	Chief Financial Officer	2021

Timo Lehtonen (born 1975) has served as Bioretec's CEO since 2019. In addition, Lehtonen serves as a member of the Board of Directors of Naturans Oy. Lehtonen holds a Master of Science degree in Technology from the Helsinki University of Technology. Lehtonen is a Finnish citizen.

Minna Ahlstedt-Soini (born 1966) has served as Bioretec's Production Director since 2015 and a member of the Management Team since 2013. Ahlstedt-Soini has a Master's degree (University of Applied Sciences) in Strategic Leadership of Technology-based Business and a Bachelor's degree in Industrial Management and Engineering from Häme University of Applied Sciences, a Bachelor's degree in Biotechnology from Helsinki-Vantaa Engineering College (EVTol) and a degree of laboratorian from Helsinki IV Health-care School. Ahlstedt-Soini is a Finnish citizen.

Lauri Hokkanen (born 1986) has served as Bioretec's Sales and Marketing Director since 2020. Hokkanen has a Bachelor's degree in nursing from Pirkanmaa University of Applied Sciences and a QBA degree from the Institute of Marketing in Helsinki. Hokkanen is a Finnish citizen.

Kimmo Lähteenkorva (born 1965) has served as Bioretec's CTO and a member of the Management Team since 2017. Lähteenkorva holds a Master of Science degree from the Tampere University of Technology and an Executive MBA degree from Tampere University of Applied Sciences. Lähteenkorva is a Finnish citizen.

Mari Ruotsalainen (born 1974) has been Bioretec's Director of QA & RA since 2018 and a member of the Management Team since 2004 (with a limited membership in 2014–2018). In addition, Ruotsalainen has served as the representative of Bioretec's management as defined in the ISO 13483 standard since 2004 and the person responsible for regulatory compliance according to the MDR's Article 15[98] since 2021. Previously, Ruotsalainen has served as Bioretec's Quality and Regulatory Affairs Manager in 2008–2018. Ruotsalainen holds a Master's degree in Food Chemistry from the Biochemistry training programme of University of Turku. Ruotsalainen is a Finnish citizen.

Johanna Salko (born 1967) has served as Bioretec's CFO since February 2021. In addition, Salko serves as a member of the Board of Directors of A.N.Automaalaus Oy. During the previous five years, Salko has served as a deputy member of the Board of Directors of CANPACK Finland Oy and Salcomp Manufacturing Oy. Salko holds Master of Science degree on Economics and Business Administration from the Pori unit of Turku School of Economics. Salko is a Finnish citizen.

Business Address

The business address of the Board of Directors, the President and CEO and the members of the Management Team is Bioretec Oy, Hermiankatu 22, FI-33720 Tampere, Finland.

Statement on Bioretec's Board of Directors and the management

Pekka Simula has previously served as the CEO of Herantis Pharma Plc and its wholly-owned subsidiary BioCis Pharma Oy, which applied for bankruptcy in 2017.

Timo Lehtonen has been subpoenaed as a defendant in a trade secret trial in 2020. The trial is in process and is not connected with Bioretec's business.

Other than stated above, as at the date of this Offering Circular, none of the members of the Board of Directors or the Management Team or the CEO have during the five previous years:

- been convicted in relation to fraudulent offences or minor offences;
- held an executive function, been included in the executive management, or been a member of the administrative management or supervisory bodies of any company, or acted as a general partner with individual liability in a limited partnership at the time of or preceding any bankruptcy, receivership, administration of an estate or liquidation; or

[98] Person responsible for regulatory compliance according to Regulation (EU) 2017/745 Article 15.

- been subject to any official public incrimination and/or sanctions by any statutory or regulatory authorities (including any designated professional bodies) or been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of a company or from acting in the management or conduct of the affairs of any company.

There are no family relationships between the members of the Board of Directors, the CEO and the members of the Management Team.

Conflicts of interest

Provisions regarding the conflicts of interest of the management of a Finnish company are set forth in the Finnish Companies Act. Pursuant to Chapter 6, Section 4 of the Finnish Companies Act, a member of the Board of Directors may not participate in the handling of a contract between himself or herself and the company. Further, a member of the Board of Directors may not participate in the handling of a contract between himself or herself and a third party, if he or she is expected to gain from it significant benefit, which may be in conflict with the company's interests. This provision also applies to any other legal act, legal proceeding or other similar matter. Further, this provision also applies to the CEO.

To the knowledge of Bioretec, the members of the Board of Directors, the CEO or the members of the Management Team do not have any conflicts of interests between their duties relating to Bioretec and their private interests and/or their other duties, except for the Shares held by them directly or indirectly.

Based on the independence review, the members of the Board of Directors are considered to be independent of Bioretec and its management and major shareholders, except for Tomi Numminen, who is not independent of Bioretec due to the consultancy agreement entered into with him on 1 May 2021 (for more information, see *"– Remuneration of the management – Remuneration of the Board of Directors*").

Holdings of Shares by members of the Board of Directors and the Management Team

As at the date of this Offering Circular, the members of Bioretec's Board of Directors, CEO and members of the Management Team hold 12,291 Shares, representing approximately 0.11 per cent of Bioretec's Shares and votes.

The table below sets forth the number of Shares held by the members of Bioretec's Board of Directors and Management Team as at the date of this Offering Circular:

Name	Position	Shares, total	Shares, %
The Board of Directors			
Tomi Numminen	Chairman of the Board	0	0
Michael Piccirillo	Member of the Board	0	0
Hans Rosén	Member of the Board	0	0
Pekka Simula	Member of the Board	6,000	0.06
Sarah Fisher	Member of the Board	0	0
The Management Team			
Timo Lehtonen	CEO	0	0
Minna Ahlstedt-Soini	Production Director	4,957	0.05
Lauri Hokkanen	Director, Marketing and Sales	667	0.006
Kimmo Lähteenkorva	Chief Technology Officer	0	0
Mari Ruotsalainen	Director, QA & RA	667	0.006
Johanna Salko	Chief Financial Officer	0	0

The table below sets fort the number of option rights held by the members of Bioretec's Board of Directors and Management Team as at the date of this Offering Circular:

Name	Position	Total number of option rights	Number of Shares which can be subscribed for with the option rights
The Board of Directors			
Tomi Numminen	Chairman of the Board	10,000,000	666,666
Michael Piccirillo	Member of the Board	1,000,000	66,666
Hans Rosén	Member of the Board	1,000,000	66,666
Pekka Simula	Member of the Board	1,000,000	66,666
Sarah Fisher	Member of the Board	0	0
The Management Team			
Timo Lehtonen	CEO	10,000,000	666,666
Minna Ahlstedt-Soini	Production Director	0	0
Lauri Hokkanen	Director, Marketing and Sales	3,000,000	200,000
Kimmo Lähteenkorva	Chief Technology Officer	4,000,000	266,666
Mari Ruotsalainen	Director, QA & RA	0	0
Johanna Salko	Chief Financial Officer	0	0

Remuneration of the management

Remuneration of the Board of Directors

Pursuant to the Finnish Companies Act, the General Meeting decides upon the remuneration paid to the members of the Board of Directors and the basis for it. On 22 April 2021, the Bioretec's Annual General Meeting decided that the Chairman of the Board of Directors will receive monthly remuneration of EUR 2,500 and each other member of the Board of Directors will each receive a monthly remuneration of EUR 1,500 for the term starting at the end of the Annual General Meeting and ending at the end of the Annual General Meeting in 2022. In addition, Bioretec's Annual General Meeting decided that the Company can enter into a consultancy agreement with Tomi Numminen on consulting services related to the commercialization of the Company's products in the United States, despite that he is elected as a member of the Board of Directors. The consulting fee to be paid under the consultancy agreement can be EUR 7.500 per month at maximum. On 1 May 2021, the Company entered into a consultancy agreement with Numminen, under which he is paid a monthly consulting fee of EUR 7,500.

The table below sets forth the remuneration paid to the members of the Board of Directors for the periods indicated.

	1 January to 31 March 2021	1 January to 31 December 2020	1 January to 31 December 2019	1 January to 31 December 2018
(EUR thousand)				
Fees of the Board of Directors	50	223	213	107

In addition to the resolutions made by the Annual General Meeting on 22 April 2021 mentioned above, there have been no material changes in the compensation of Bioretec's Board of Directors between 31 March 2021 and the date of this Offering Circular.

Remuneration of the members of the Management Team and the CEO

The Board of Directors decides upon the remuneration the CEO and the Management Team and the basis of it. The CEO and the members of the Management Team have a statutory pension insurance.

The term of notice of the members of the Management team varies between two and six months. In addition, Bioretec is entitled to terminate the employment agreement with an immediate effect without obligation to work. If Bioretec terminates the employment agreement of a member of the Management Team with an immediate effect without obligation to work, the member is entitled to receive one-time compensation corresponding his or her salary for the notice period. In addition,

the CEO Timo Lehtonen is entitled in certain cases to receive a severance fee corresponding his total salary for six months, if Bioretec terminates his agreement.

The table below sets forth the salaries and rewards paid to the CEO and the members of the Management Team for the periods indicated.

	1 January to 31 March 2021	1 January to 31 December 2020	1 January to 31 December 2019	1 January to 31 December 2018
(EUR thousand)				
CEO				
Salary and fees of the CEO	38	163	156	193
Management Team				
Salary and fees of the Management Team.....	121	440	352	337

There has been no material changes in the remuneration of Bioretec's CEO and Management Team between 31 March and the date of this Offering Circular.

Incentive schemes and restrictions on disposal of Shares

Incentive schemes

The Board of Directors decides upon the individual incentive scheme for the members of the Management Team annually in connection with the preparation of the budget based on the proposal prepared by the CEO.

Option rights marked with identifier 2018-1

Bioretec's Board of Directors has established the option program 2018-1 for its key individuals, which aims to operate as a long-term incentive and commitment plan of the Company's key individuals. The Board of Directors has decided on granting option rights on 20 November 2018 based on the authorization granted by Company's Annual General Meeting on 25 April 2018. Based on the authorization, a maximum of 20,000,000 Shares can be issued. The option rights are a discretionary and one-time awards under the incentive scheme. The option rights do not constitute a part of the employment or service agreement of the option holder, and they are not deemed as salary or a fringe benefit. Bioretec's Board of Directors decides upon the distribution of option rights to the key individuals employed by the Company or recruited new key individuals. Under the option program, the option rights are issued without consideration.

Bioretec's Board of Directors has decided on 20 November 2018 to issue option rights entitling to a maximum of 20,000,000 Shares to certain key individuals of the Company. The terms and conditions of the option rights were amended by the resolution of Bioretec's General Meeting on 22 April 2021 and with the consent of the option holders with the effect that 15 option rights entitle to subscribe for one new Share or Share in the possession of the Company, and the option rights granted under the option program will entitle to subscribe for a maximum of 1,333,333 new Shares or Shares in the possession of the Company. Depending on the option group, the subscription period of the option rights have started on 1 January 2019, 1 January 2020 or 1 January 2021, and the subscription period of all option groups will end on 31 December 2023. As at the date of this Offering Circular, no Shares have been subscribed for under this option program.

The option rights can be transferred and pledged freely when their subscription period has started. For more information on the option program, see "*Shares and share capital – Option rights and other special rights entitling to Shares – Option rights*".

Option rights marked with identifier 2020-1

Bioretec's Board of Directors has established the option program 2020-1 for its key individuals, the members of its Scientific Advisory Board and the members of its Board of Directors, which aims to operate as a long-term incentive and commitment plan of the key individuals, the members of its Scientific Advisory Board and the members of the Board of Directors. The Board of Directors decided upon granting option rights on 13 January 2021 based on the authorization of the Company's Annual General Meeting held on 26 June 2020. Based on the authorization, a maximum of 26,000,000 Shares can be issued. The option rights are a discretionary and one-time part of the incentive program. The option rights do not constitute a part of the employment or service agreement of the option holders, and they are not deemed as salary or a fringe benefit. The Board of Directors decides who will receive option rights. However, the General Meeting decides on granting option rights to the members of the Board of Directors, if the option rights are granted as a compensation for the board membership. Under the option program, the option rights are issued without consideration.

Bioretec's Board of Directors has decided on 13 January 2021 to grant option rights entitling to a maximum of 9,000,000 Shares to the Company's certain key individuals and members of the Scientific Advisory Board. In addition, Bioretec's Extraordinary General Meeting held on 22 January 2021 decided to grant option rights entitling to a maximum of 3,000,000 Shares to certain members of the Board of Directors. The terms and conditions of the option rights were amended by the resolution of Bioretec's Board of Directors 22 April 2021 with the effect that 15 option rights entitle to subscribe for one Share of the Company, and the option rights granted on 13 January 2021 entitle to subscribe in aggregate up to 600,000 new Shares of the Company and option rights granted on 22 January 2021 in aggregate up to 200,000 new Shares of the Company. Depending on the option group, the subscription period of the option rights will start on 1 January 2022, 1 January 2023 or 1 January 2024, and the subscription period of all option groups will end on 31 December 2026.

The option rights may not be transferred or pledged without the consent of the Company's Board of Directors. For more information on the option program, see "*Shares and share capital – Option rights and other special rights entitling to Shares – Option rights*".

Restrictions on the disposal of Shares

Bioretec's present minority shareholders have entered into a shareholders' agreement concerning Bioretec (the "**Shareholder Agreement**"). The Shareholder Agreement includes bans on the selling and pledging of the Shares, under which the shareholders commit not to pledge, sell or otherwise transfer their Shares to another shareholder or a third party without the consent of the Company's Board of Directors otherwise than what is agreed in the Shareholder Agreement. The Shareholder Agreement will be terminated upon the completion of the Listing.

The restrictions on the disposal of the Shares are described in more detail in section "*Terms and condition of the Offering – General terms and conditions of the Offering – Lock-up*".

Directorships and partnerships

The members of Bioretec's Board of Directors and Management Team and the CEO hold or have held the following directorships and/or have been a partner in the following partnerships in the five years prior to the date of this Offering Circular:

Name	Present directorships/partnerships	Previous directorships/ partnerships
Board of Directors		
Tomi Numminen	Labrox Oy Endicum Ltd	BBS-Bioactive Bone Substitutes Plc Aucor Oy Ocuspecto Oy
Michael Piccirillo	VALUGEN GmbH Symgery Inc	NuVasive Inc
Hans Rosén	Theradex (Europe) Ltd Theradex Oncology Norway AS Theradex Oncology AB Neoventor Medicinsk Innovation AB	Vivolux AB
Pekka Simula	Neurotar Ltd Finnish Bioindustries FIB Sartar Therapeutics Ltd MediSapiens Ltd Meles Consulting Ltd	Herantis Pharma Plc Laurantis Pharma Ltd BioCis Pharma Oy
Sarah Fisher	University of Amsterdam Ventures Holding BV WillemPie Growth Science, LLC Castor EDC Self Safe Sure	-
CEO and Management Team		
Timo Lehtonen	Naturans Oy	-
Minna Ahlstedt-Soini	-	-
Lauri Hokkanen	-	-
Kimmo Lähteenkorva	-	-
Mari Ruotsalainen	-	-
Johanna Salko	A.N. Automaalaus Oy	CANPACK Finland Oy Salcomp Manufacturing Oy

OWNERSHIP STRUCTURE

Major shareholders

The following table sets forth the shareholders owning individually or through a sphere of control at least 5 per cent of the Shares in Bioretec and voting rights attached to the Shares, pursuant to information available to Bioretec on the date of this Offering Circular. Obligations to notify and disclose major holdings and proportions of voting rights pursuant to the Finnish Securities Markets Act only apply to issuers whose shares have been admitted to trading on a regulated market and to shareholders of such issuers and thus such obligations do not apply to Bioretec or its shareholders.

Shareholder	Shares, total	Shares, %	Votes, %
Innovestor Kasvurahasto I Ky	1,317,650	12.3	12.3
Helsingin yliopiston rahastot	917,966	8.5	8.5
EAKR-Aloitusrahasto Oy	606,370	5.6	5.6
Springvest Oy	539,468	5.0	5.0
Major shareholders, total	3,381,454	**31.5**	**31.5**
Other shareholders	7,366,404	68.5	68.5
Total	**10,747,858**	**100**	**100**

No controlling shareholder

No shareholder of the Company has control over the Company as referred in Chapter 2, Section 4 of the Finnish Securities Market Act.

Other than the Offering, Bioretec is not aware of any arrangements the operation of which could result in a change of control in Bioretec.

No arrangements concerning voting rights

Bioretec has only one class of shares. In accordance with the Finnish Companies Act, one Share in Bioretec entitles to one vote at the General Meeting. Bioretec's current minority shareholders have entered into a shareholders' agreement concerning Bioretec which will be terminated upon the completion of the Listing. In addition, certain key shareholders have entered into a mutual shareholder agreement which will be terminated upon the completion of the Listing. For more information on shareholder agreements, see "*Shares and share capital – Restrictions on disposal of Shares*". The completion of the Offering is conditional on certain factors, please see "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*".

Bioretec is not aware of any arrangements or agreements concluded between its shareholders which could, after the Listing, affect the control or use of voting rights in the general meetings of Bioretec.

RELATED PARTY TRANSACTIONS

Bioretec's related parties include the parent company Bioretec Ltd and its subsidiaries. Related parties also include Bioretec's key management personnel and their close family members. The key management personnel includes the members of the Board of Directors, the CEO and the deputy CEO of Bioretec and the members of the Bioretec group's Management Team.

Members of the Company's Board of Directors and Management Team and the Company's CEO and information regarding their remuneration and incentive arrangements as well as their stock holdings and option rights are discussed in the section "*Board of Directors and Management Team*" of this Offering Circular.

The Company has purchased consulting services related to research and product development from Parivia Ltd, which is a related entity of Pertti Viitanen, who was at the time a deputy member of the Company's Board of Directors. The fees paid for the services during the accounting period from 1 January 2019 to 31 December 2019 were EUR 22 thousand. In 2020, the Company has purchased consulting services related to research and product development from Pertti Törmälä, who was at the time a member of the Company's Board of Directors. The fees paid for the services during the accounting period from 1 January 2020 to 31 December 2020 were EUR 12.5 thousand. On 1 May 2021, the Company has entered into a consultancy agreement with Tomi Numminen, who is Bioretec's current Chairman of the Board of Directors, on consulting services relating to the commercialization of the Company's products in the United States, of which a monthly consultancy fee of EUR 7,500 is paid.

Bioretec has granted a loan to its subsidiary BRI.Tech. The loan receivable as at 31 March 2021 was EUR 72 thousand, as at 31 December 2020 EUR 48 thousand and as at 31 December 2019 EUR 14 thousand. In addition, Bioretec Ltd has granted a loan to its subsidiary Bioretec Technology Ltd. The loan receivable as at 31 March 2021 was EUR 2 thousand.

The shareholders of Bioretec have granted a subordinated convertible loan of EUR 0.5 million to the Company. The loan has been discussed in the section "*Operating and financial review – Liquidity and capital sources – Restrictions on the use of capital sources*" of this Offering Circular.

There have not been any significant changes in Bioretec's related party transactions between 31 March 2021 and the date of this Offering Circular.

SHARES AND SHARE CAPITAL

General

As at the date of this Offering Circular, Bioretec's share capital amounts to EUR 3,748,592.19 and the total number of Shares issued is 10,747,858. As at the date of this Offering Circular, Bioretec does not hold its own Shares.

Bioretec has one share class. Each Share has equal voting rights and all Shares of the Company provide equal rights to dividend. There are no voting restrictions related to the Shares. The Shares do not have a nominal value. The Shares have been issued in accordance with Finnish laws and all Shares have been paid in full. The Shares are denominated in euros. The ISIN code of the Shares is FI4000480454. After the Listing, the Shares are freely transferable within the limits of the transfer restrictions described in the section "*Terms and conditions of the Offering – General terms and conditions of the Offering – Lock-up*".

The Board of Directors of Bioretec plans to propose for the Extraordinary General Meeting planned to be convened in autumn 2021 that the company form be changed to a public limited company (see "*– Company's planned Extraordinary General Meeting 2021*").

The Shares are entered in the book-entry securities system maintained by Euroclear Finland. The address of Eurocelar Finland is Urho Kekkosen katu 5 C, FI-00100 Helsinki, Finland.

Development of share capital

The following table sets forth the historical development of Bioretec's share capital and the number of Shares for the period between 1 January 2018 and the date of this Offering Circular:

Date of resolution	Transaction[1]	Subscription price per Share (EUR)	Number of shares	Number of shares after the transaction	Share capital (EUR)	Registration date
21 September 2011 (13 June 2016)	Share subscription[2]	0.50	4,284,191	52,070,228	9,221,289.08	12 January 2018
21 September 2017	Directed share issue[3]	0.10	17,863,794	69,934,022	9,221,289.08	13 February 2018
21 September 2017	Directed share issue[4]	0.10	6,105,328	76,039,350	9,221,289.08	4 June 2018
25 April 2018	Directed share issue[5]	0.10	6,000,000	82,039,350	9,221,289.08	14 November 2018
25 June 2018	Directed share issue[6]	0.10	11,010,000	93,049,350	9,221,289.08	14 November 2018
25 June 2018	Directed share issue[7]	0.10	8,970,000	102,019,350	9,221,289.08	31 December 2018
20 November 2018	Share subscription[8]	0.001	3,098,880	105,118,230	9,221,289.08	31 December 2018
9 April 2019	Directed share issue[9]	0.10	4,379,926	109,498,156	9,221,289.08	20 May 2019
12 December 2019	Directed share issue[10]	0.12	33,318,000	142,816,156	9,221,289.08	24 March 2020
12 December 2019	Directed share issue[11]	0.12	2,083,333	144,899,489	9,221,289.08	24 March 2020
21 February 2020	Share subscription[12]	0.001	5,108,038	150,007,527	9,221,289.08	24 March 2020
21 February 2020	Share subscription[13]	0.001	357,048	150,364,575	9,221,289.08	7 October 2020
21 September 2011 (13 June 2016)	Share subscription[14]	0.50	37,493	150,402,068	9,221,289.08	7 October 2020
19 November 2020	Reduction of share capital[15]	–	–	150,402,068	3,748,592.19	1 December 2020
21 September 2017	Share subscription[16]	0.10	6,586,477	156,988,545	3,748,592.19	5 February 2021

Date of resolution	Transaction[1]	Subscription price per Share (EUR)	Number of shares	Number of shares after the transaction	Share capital (EUR)	Registration date
20 November 2018	Share subscription[17]	0.001	1,696,320	158,684,865	3,748,592.19	16 April 2021
21 February 2020	Share subscription[18]	0.001	2,531,234	161,216,099	3,748,592.19	16 April 2021
22 April 2021	Reverse split – Directed share issue without payment[19]	–	1,771	161,217,870	3,748,592.19	23 April 2021
22 April 2021	Reverse split – Redemption of shares in relation to holdings and cancellation of shares [20]	–	-150,470,012	10,747,858	3,748,592.19	23 April 2021

(1) The purpose of the directed share issues carried by Bioretec has been to strengthen Bioretec's capital structure and financial situation. Share issues have been directed to Bioretec's shareholders, holders of capital loans, as part of Bioretec's funding rounds to individuals and entities as well as to former owner of BRI.Tech as part of the purchase of BRI.Tech's stock. Subscription prices of new Shares have been recorded to Bioretec's reserve for invested unrestricted equity in full in connection with the directed share issues and share subscriptions with the exception of sections 2 and 14 below where the subscription price was paid by offsetting capital and accrued interest of the capital loan, section 4 where the subscription price was paid by offsetting and section 9 where the subscription price was paid as contribution in kind.

(2) Holders of special rights subscribed for 4,284,191 new Shares in the Company on the grounds of special rights resolved by the General Meeting of Bioretec on 21 September 2011 (decision amended on 13 June 2016). Subscriptions were approved on 28 November 2017 and were registered in the Trade Register on 12 January 2018.

(3) Bioretec's General Meeting resolved on 21 September 2017 on directed share issue with payment where a maximum of 24,990,000 new Shares in the Company were offered. Subscriptions were approved for 17,863,794 new Shares on 1 December 2017 and they were registered in Trade Register on 13 February 2018.

(4) Bioretec's General Meeting resolved on 21 September 2017 on directed share issue with payment where a maximum of 6,105,328 new Shares in the Company were offered. Subscription price is EUR 0.10 per Share and the subscription price of Shares subscribed was paid by offsetting the capital and accrued interest of the capital loan of the subscriber (EUR 610,532.82 in total). Subscriptions were approved for 6,105,328 new Shares on 29 March 2018 and they were registered in Trade Register on 4 June 2018.

(5) Bioretec's General Meeting resolved on 25 April 2018 on directed share issue with payment where a maximum of 20,000,000 new Shares in the Company were offered. Subscriptions were approved for 5,000,000 new Shares on 25 June 2018 and for 1,000,000 new Shares on 28 September 2018 and they were registered in the Trade Register on 14 November 2018.

(6) On 25 June 2018, Bioretec's Board of Directors resolved, based on the authorization given by the Company's General Meeting on 25 April 2018, on a directed share issue with payment where a maximum of 20,000,000 new Shares in the Company were offered. Subscriptions were approved for 11,010,000 new Shares on 28 September 2018 and they were registered in the Trade Register on 14 November 2018.

(7) On 25 June 2018, Bioretec's Board of Directors resolved, based on the authorization given by the Company's General Meeting on 25 April 2018, on a directed share issue with payment where a maximum of 20,000,000 new Shares in the Company were offered. Subscriptions were approved for 8,970,000 new Shares on 21 November 2018 and they were registered in the Trade Register on 31 December 2018.

(8) Holders of option rights subscribed for 3,098,880 new Shares in the Company on the grounds of option rights resolved by the General Meeting of Bioretec on 20 November 2018. Subscriptions were approved on 21 November 2018 and were registered in the Trade Register on 31 December 2018.

(9) On 9 April 2019, Bioretec's Board of Directors resolved, based on the authorization given by the Company's General Meeting on 19 March 2019 on a directed share issue with payment where a maximum of 4,379,926 new Shares in the Company were issued. The subscription price is EUR 0.10 per Share and it is paid as contribution in kind so that the subscriber, the sole shareholder of BRI.Tech, in connection with the subscription, disposes its holdings in BRI.Tech to the Company. Disposal takes place as a share exchange.

(10) Bioretec's General Meeting resolved on 12 December 2019 on directed share issue with payment where a maximum of 33,327,000 new Shares in the Company were offered. Subscriptions were approved for 11,088,000 new Shares on 29 January 2020 and for 22,230,000 new Shares on 21 February 2020 and they were registered in the Trade Register on 24 March 2020.

(11) Bioretec's General Meeting resolved on 12 December 2019 on directed share issue with payment where a maximum of 33,327,000 new Shares in the Company were offered. Subscriptions were approved for 2,083,333 new Shares on 21 February 2020 and they were registered in the Trade Register on 24 March 2020.

(12) A holder of option rights subscribed for 5,108,038 new Shares in the Company on the grounds of option rights resolved by the Company's Board of Directors on 21 February 2020 based on the authorization given by the Company's General Meeting on 12 December 2019. The subscriptions were approved on 21 February 2020 and we registered in the Trade Register on 24 March 2020.

(13) A holder of option rights subscribed for 357,048 new Shares in the Company on the grounds of option rights resolved by the Company's Board of Directors on 21 February 2020 based on the authorization given by the Company's General Meeting on 12 December 2019. The subscriptions were approved on 11 September 2020 and were registered in the Trade Register on 7 October 2020.

(14) Holders of special rights subscribed for 37,493 new Shares in the Company on the grounds of special rights resolved by the General Meeting of Bioretec on 21 September 2011 (decision amended on 13 June 2016). Subscriptions were approved on 11 September 2020 and were registered in the Trade Register on 7 October 2020.

(15) Bioretec's General Meeting resolved on 19 November 2020 to reduce the Company's share capital by covering the Company's cumulated losses by EUR 22,500,000.00 as follows: 1) invested unrestricted equity fund in total of EUR 17,027,303.11 and 2) share capital in total of EUR 5,472,696.89.

(16) Holders of option rights subscribed for 6,586,477 new Shares in the Company on the grounds of option rights resolved by the General Meeting of Bioretec on 21 September 2017. Subscriptions were approved on 15 January 2021 and were registered in the Trade Register on 5 February 2021.

(17) Holders of option rights subscribed for 1,696,320 new Shares in the Company on the grounds of option rights resolved by the General Meeting of Bioretec on 20 November 2018. Subscriptions were approved on 19 March 2021 and were registered in the Trade Register on 16 April 2021.

(18) Holders of option rights subscribed for 2,531,234 new Shares in the Company on the grounds of option rights resolved by the Company's Board of Directors on 21 February 2020 based on the authorization given by the Company's General Meeting on 12 December 2019. Subscriptions were approved on 19 March 2021 and were registered in the Trade Register on 16 April 2021.

(19) Bioretec's Annual General Meeting resolved on 22 April 2021 on a reverse split in order to reduce the total number of Company's Shares. The Annual General Meeting resolved on a directed issuance of new Shares, without payment, so that after the issue, the number of Shares owned by each shareholder is divisible by 15. Shareholders owning a number of Shares not divisible by 15 before the share issue, had a right to receive Shares. The number of Shares issued for each such shareholder was the smallest number of new Shares needed to make the number of Shares owned by the shareholder divisible by 15. There was considered to be an especially weighty financial reason to deviate from the shareholders' pre-emptive right as the directed free share issue was arranged in order to enable the reverse split. A total of 1,771 new Shares were issued in the share issue. In connection with the reverse split, changes were made also to the terms and condition of option rights and other special rights issued by the Company (see "– *Option rights and other special rights entitling to Shares*"). New Shares and the changes made were registered in the Trade Register on 23 April 2021.

(20) Bioretec's Annual General Meeting resolved on 22 April 2021 on a reverse split in order to reduce the total number of Company's Shares. The Annual General Meeting resolved to redeem its own Shares in proportion to the number of Shares owned by shareholders so that 14 Shares are redeemed from each shareholder for each 15 Shares owned by the shareholder. In total 150,470,012 Shares were redeemed. Redemption was deemed to have taken place when the Shares issued in the free share issue were recorded in the Trade Register on 23 April 2021. The redemption was made without payment and it did not have an effect on the Company's equity. The Company's Board of Directors resolved on the cancellation of 150,470,012 shares redeemed on 22 April 2021. The cancellation was registered in the Trade Register on 23 April 2021.

Current authorizations

- Bioretec's Annual General Meeting has on 22 April 2021 authorized the Board of Directors of Bioretec to resolve on:
    - On a share issue for the purpose of an initial public offering in connection with applying for the company's share to be admitted to trading on Nasdaq First North Growth Market Finland. The authorization can be used in one or more tranches and in deviation of shareholders' pre-emptive rights. In total up to 14,000,000 new Shares can be issued pursuant to the authorization and that the Board of Directors was authorized to resolve on all the terms of the share issue. The authorization is valid until 30 September 2021.
    - The issuance of Shares, as well as the issuance of option rights and other special rights entitling to Shares pursuant to Chapter 10 of the Finnish Companies Act, as follows: Under the authorization, up to 2,400,000 Shares can be issued. The Shares or special rights entitling to Shares can be issued in one or more tranches, either against or without payment. The Shares issued under the authorization can be new Shares or Shares in the Company's possession. The authorization can be used for the financing or execution of acquisitions or other business arrangements, to strengthen the balance sheet and financial position of the Company, for implementing the Company's share-based incentive plans, or for other purposes determined by the Board of Directors. Under the authorization, the Board of Directors may resolve upon issuing new Shares, without consideration, to the Company itself. The Board of Directors was authorized to resolve on all terms for share issues and granting of special rights entitling to Shares

in the Company. The Board of Directors was authorized to resolve on a directed share issue and issuance of special rights entitling to Shares in deviation from the shareholders' pre-emptive right, provided that there is a weighty financial reason for the Company to do so. The authorization is valid until the end of the next Annual General Meeting, however, no longer than until 30 June 2022. The authorization shall revoke previous unused share issue authorizations except for the authorization the authorization granted by the Annual General Meeting held on 26 June 2020 authorizing the Option Program 2020-1.

- Bioretec's General Meeting has on 26 June 2020 authorized the Board of Directors of Bioretec to resolve on the issuance of special right entitling to Shares. Under the authorization, up to 26,000,000 Shares can be issued. Option rights marked with identifier 2020-1 have been issued under the authorization in question (see "*– Option rights and other special rights entitling to Shares – Option rights – Option program 2020-1*"). Under the authorization, on the date of this Offering Circular special rights entitling up to 800,000 Shares have been issued (taking into account the reverse split). Bioretec's Board of Directors has on 3 June 2021 resolved that in case special rights would be issued under the authorization in the future, the special rights would entitle the subscription of in aggregate up to 933,333 new Shares in the Company and that the authorization would otherwise remain unused.

Restrictions on disposal of Shares

Bioretec's present minority shareholders have entered into a Shareholder Agreement concerning Bioretec. The Shareholder Agreement includes bans on the selling and pledging of the Shares, under which the shareholders commit not to pledge, sell or otherwise transfer their Shares to another shareholder or a third party without the consent of the Company's Board of Directors otherwise than what is agreed in the Shareholder Agreement. The Shareholder Agreement will be terminated upon the completion of the Listing.

In addition, certain key shareholders have, under a mutual shareholders' agreement, undertaken not to transfer, directly or indirectly, any Shares, subscription rights, option rights, convertible loans or other instruments convertible to Shares without a prior consent of certain investors defined in the contract in ways other than those specified in the agreement. The agreement will be terminated upon the completion of the Listing.

Information on the restrictions on the disposal of the Shares are described in section "*Terms and conditions of the Offering – General terms and conditions of the Offering – Lock-up*".

Option rights and other special rights entitling to Shares

Option rights

Option program 2018-1

Bioretec's Board of Directors has decided on 20 November 2018, based on the authorization granted by the Company's Annual General Meeting on 25 April 2018, on issuance of option rights to certain key individuals of the Company ("**Option Program 2018-1**"). The objective of the Option Program 2018-1 is to operate as a long-term incentive and commitment plan of the Company's key individuals. Of option rights, 8,500,000 option rights were marked with identifier 2018-1A, 8,500,000 option rights with identifier 2018-1B, 1,500,000 option rights with identifier 2018-1C and 1,500,000 option rights with identifier 2018-1D. The Board of Directors has the right to convert option rights from option class into another. Under the option program, the option rights are issued without consideration.

Bioretec's Annual General Meeting has on 22 April 2021 decided to amend the terms and conditions of Option Program 2018-1 with a consent of the option holders as follows:

- After the amendment, 15 option rights, instead of one option right, entitle to subscribe one new Share of the Company or Share in the possession of the Company. Thus, option rights granted entitle to subscribe in aggregate up to 1,333,333 new Shares of the Company or Shares in the possession of the Company instead of 20,000,000 Shares.
- After the amendment, the new subscription price of Shares subscribed based on the option rights marked with identifiers 2018-1A and 2018-1B is EUR 1.5 per Share instead of the previous subscription price of EUR 0.10 per Share and the new subscription price of Shares subscribed based on the option rights marked with identifiers 2018-1C and 2018-1D is EUR 2.25 per Share instead of the previous subscription price of EUR 0.15 per Share.

The terms and condition of option rights were amended in connection with the reverse split (for more information, see "*– Development of share capital*"). The subscription price of Shares subscribed shall be credited to the Company's reserve

for invested unrestricted equity. The Board of Directors decides whether to grant new Shares or Shares in the possession of the Company for the subscriber.

The subscription period for the Shares related to the option rights is:

- Option rights 2018-1A from 1 January 2019 to 31 December 2023;
- Option rights 2018-1B from 1 January 2020 to 31 December 2023;
- Option rights 2018-1C from 1 January 2021 to 31 December 2023; and
- Option rights 2018-1D from 1 January 2022 to 31 December 2023.

As at the date of this Offering Circular, all 1,333,333 new Shares or Shares in the possession of the Company available for subscription under Option Program 2018-1 are still unsubscribed.

Option program 2019-1

Bioretec's Board of Directors has decided on 9 April 2019, based on the authorization granted by the Company's Annual General Meeting on 19 March 2019, on issuance of option rights to former shareholder of BRI.Tech, W&M GmbH ("**Option Program 2019-1**"). Option Program 2019-1 relates to the acquisition of BRI.Tech from W&M GmbH and the primary objective of the program is to strengthen the Company's financial position and competitiveness and to commit the subscriber to the Company. Under the option program, the option rights are issued without consideration.

Bioretec's Annual General Meeting has on 22 April 2021 decided to amend the terms and conditions of Option Program 2019-1 with a consent of the option holder as follows:

- After the amendment, 15 option rights, instead of one option right, entitle to subscribe one new Share of the Company. Thus, option rights granted entitle to subscribe in aggregate up to 2,429,616 new Shares of the Company instead of 36,444,250 Shares.
- After the amendment, the new subscription price of Shares subscribed based on the option rights is EUR 0.15 per Share instead of the previous subscription price of EUR 0.01 per Share.

The terms and condition of option rights were amended in connection with the reverse split (for more information, see "*– Development of share capital*"). The subscription price of Shares subscribed shall be credited to the Company's reserve for invested unrestricted equity.

The subscription period for the Shares related to the option rights is from 20 March 2019 to 31 December 2029.

As at the date of this Offering Circular, all 2,429,616 new Shares of the Company available for subscription under Option Program 2019-1 are still unsubscribed.

Option program 2020-1

Bioretec's Board of Directors has decided on 13 January 2021, based on the authorization granted by the Company's Annual General Meeting on 26 June 2020, on issuance of option rights entitling to the subscription of in aggregate up to 9,000,000 Shares of the Company to certain key individuals of the Company and members of the Scientific Advisory Board as well as proposed that the Company's General Meeting decides to issue option rights to certain members of the Board of Directors of the Company ("**Option Program 2020-1**"). The General Meeting has on 22 January 2021 decided to issue option rights entitling to the subscription of in aggregate up to 3,000,000 Shares in the Company to certain members of the Board of Directors of the Company. The objective of the Option Program 2020-1 is to operate as part of the incentive and commitment plan of the Company's key individuals, members of the Scientific Advisory Board and the members of the Board of Directors. The Board of Directors has the right to decide on to whom option rights shall be given. However, the General Meeting shall decide on granting option rights for the members of the Board of Directors in case option rights are granted as remuneration for membership in the Board of Directors.

Of option rights, 8,450,000 option rights were marked with identifier 2020-1A, 9,150,000 option rights with identifier 2020-1B and 8,400,000 option rights with identifier 2020-1C. Under the option program, the option rights are issued without consideration.

Bioretec's Board of Directors has on 22 April 2021 decided to amend the terms and conditions of Option Program as follows:

- After the amendment, 15 option rights, instead of one option right, entitle to subscribe one new Share of the Company. Thus, option rights granted on 13 January 2021 entitle to subscribe in aggregate up to 600,000 new Shares in the Company and option rights granted on 22 January 2021 in aggregate up to 200,000 new Shares of the Company.

- After the amendment, the new subscription price of Shares subscribed based on the option rights marked with identifier 2020-1A is EUR 2.25 per Share instead of the previous subscription price of EUR 0.15 per Share, the new subscription price of Shares subscribed based on the option rights marked with identifier 2020-1B is EUR 3.00 per Share instead of the previous subscription price of EUR 0.20 per Share and the new subscription price of Shares subscribed based on the option rights marked with identifier 2018-1C is EUR 3.75 per Share instead of the previous subscription price of EUR 0.25 per Share.

The terms and condition of option rights were amended in connection with the reverse split (for more information, see "*– Development of share capital*"). The subscription price of Shares subscribed shall be credited to the Company's reserve for invested unrestricted equity.

The subscription period for the Shares related to the option rights is:

- Option rights 2020-1A from 1 January 2022 to 31 December 2026;
- Option rights 2020-1B from 1 January 2023 to 31 December 2026; and
- Option rights 2020-1C from 1 January 2024 to 31 December 2026.

As at the date of this Offering Circular, option rights entitling to the subscription of 800,000 new Shares have already been issued and under the Option Program 2020-1 option rights entitling to the subscription of 933,333 may still be issued. As at the date of this Offering Circular, the subscription period of Option Program 2020-1 has not yet started an thus, all 1,733,333 new Shares available for subscription under the program are still unsubscribed.

Other special rights entitling to Shares

Convertible bonds VVK 2011-1

Bioretec's General Meeting has on 21 September 2011 decided on the issuance of special rights entitling to the Shares of the Company. The decision has been amended on 13 June 2016 in connection with the consolidation of the Company's share classes so that all special rights entitling to the subscription of the Company's former A class shares entitle, after the amendment, to the subscription of the Company's B class shares. The Company's A class shares were converted to B class shares at the same time.

The Company has, based on the decision made by the General Meeting on 21 September 2011, entered into convertible capital loan agreements in order to finance its operations and strengthen its equity ("**Convertible bonds VVK 2011-1**"). Convertible bonds VVK 2011-1 and special rights related thereto have been issued to support the Company's growth strategy, improve the Company's future prospects and to strengthen the working capital. The bonds are capital loans referred to in Section 12 of the Finnish Companies Act and thus subordinated in accordance with the Finnish Companies Act. The bond holders have, based on the special rights relating to the Convertible bonds VVK 2011-1, right to convert the capital and interest accrued thereto to the Shares of the Company as described below.

Bioretec's Annual General Meeting has on 22 April 2021 decided to amend the terms and conditions of Convertible bonds VVK 2011-1 with the consent of the bond holders as follows:

- After the amendment, each special right under the Convertible bonds VVK 2011-1 may be converted to the Company's Share in the way that each amount of EUR 7.5 of the capital of the capital loan granted to the Company or interest accrued thereto by the subscription date of the Share entitles the subscription of one new Share. The maximum amount of Shares available for subscription under each capital loan was divided by 15 and rounded to the closest Share.
- After the amendment, the subscription price per Share subscribed is EUR 7.5 instead of the previous subscription price of EUR 0.50.

As at 31 March 2021, the outstanding amount of capital of Convertible bonds VVK 2011-1 is EUR 120,597.51[99] and the interest accrued thereto is EUR 489,686.01 and the holders of Convertible bonds VVK 2011-1 thus have the right to convert the capital of the loan they have granted and interest accrued thereto to the Shares of the Company. In total up to 16,377 Shares can be subscribed under Convertible bonds VVK 2011-1.

Bioretec intends to repay all the capital loans granted to it and interest accrued thereto in their entirety with the net proceeds received from the Share Issue. The Company's capital loans and the interest accrued thereto by the estimated repayment date are in total approximately EUR 3.3 million (for more information, see "*Essential information on the Offering – Use of proceeds*"). Bioretec will prepare interim financial statements for the six months ending 30 June 2021 for implementing the

[99] The capital includes the capitalized interest until 31 March 2016.

repayment of the capital loans (for more information, see "*Shares and share capital – Company's planned Extraordinary General Meeting 2021*").

Convertible bonds VVK 2011-2 and CCL 2011-2

Bioretec's General Meeting has on 21 December 2011 decided on the issuance of special rights entitling to the Shares of the Company. The Company has, based on the decision made by the General Meeting on 21 December 2011, entered into convertible capital loan agreements in order to finance its operations and strengthen its equity ("**Convertible bonds VVK 2011-2**" and "**Convertible bonds CCL 2011-2**"). Convertible bonds VVK 2011-2 and CCL 2011-2 and special rights related thereto have been issued to support the Company's growth strategy, improve the Company's future prospects and to strengthen the working capital. The bonds are capital loans referred to in Section 12 of the Finnish Companies Act and thus subordinated in accordance with the Finnish Companies Act. The bond holders have, based on the special rights relating to the Convertible bonds VVK 2011-2 and CCL 2011-2, right to convert the capital and interest accrued thereto to the Shares of the Company as described below.

Bioretec's Annual General Meeting has on 22 April 2021 decided to amend the terms and conditions of Convertible bonds VVK 2011-2 and CCL 2011-2 with the consent of the bond holders as follows:

- After the amendment, each special right under the Convertible bonds VVK 2011-2 and CCL 2011-2 may be converted to the Company's Share in the way that each amount of EUR 7.5 of the capital of the capital loan granted to the Company or interest accrued thereto by the subscription date of the Share entitles the subscription of one new Share. The maximum amount of Shares available for subscription under each capital loan was divided by 15 and rounded to the closest Share.
- After the amendment, the subscription price per Share subscribed is EUR 7.5 instead of the previous subscription price of EUR 0.50.

As at 31 March 2021, the outstanding amount of capital of Convertible bonds VVK 2011-2 and CCL 2011-2 is in total EUR 409,862.35[100] and the interest accrued thereto is EUR 246,052.16 and the holders of Convertible bonds VVK 2011-2 and CCL 2011-2 thus have the right to convert the capital of the loan they have granted and interest accrued thereto to the Shares in the Company. In total up to 54,489 Shares can be subscribed under Convertible bonds VVK 2011-2 and CCL 2011-2.

Bioretec is committed to repay the capital of convertible loans granted by convertible bond holders in the United States marked with identifier CCL 2011-2, which as at 31 March 2021 was EUR 387,541.74[101], and the interest accrued thereto by the date of repayment with the net proceeds received from the Share Issue. The Company and the convertible bond holders in the United States have agreed on ordering consultancy services relating to the commercialization of the new products in the United States from the convertible bond holders starting from October 2021. If the Listing is completed as planned and the Company repays the loans according to its commitment by mid-October 2021, the agreement will not be enforced (for more information, see "*Business overview – Material agreements outside the ordinary course of business*").

Bioretec intends to repay all capital loans granted to it interest accrued thereto in their entirety with the net proceeds received from the Share Issue. The Company's capital loans and the interest accrued thereto by the estimated repayment date are in total approximately EUR 3.3 million (for more information, see "*Essential information on the Offering – Use of proceeds*"). Bioretec will prepare interim financial statements for the six months ending 30 June 2021 for implementing the repayment of the capital loans (for more information, see "*Shares and share capital – Company's planned Extraordinary General Meeting 2021*").

The execution of the Offering is conditional on certain factors. For more information, see "*Terms and conditions of the Offering – General terms and conditions of the Offering – Conditionality, execution and publishing of the Offering*".

Company's planned Extraordinary General Meeting 2021

The Board of Directors of the Company is planning on convening Bioretec's Extraordinary General Meeting in the autumn 2021. The Extraordinary General Meeting is planned to be convened on 30 September 2021 at the latest. The Extraordinary General Meeting would be convened to approve the Company's interim financial statements for period from 1 January 2021 to 30 June 2021 to be prepared in order to repay the capital loans (see "*Essential information on the Offering – Use of proceeds*" and "*Business overview – Agreements concerning convertible loans*").

At the Extraordinary General Meeting, new members would also possibly be elected to the Board of Directors, should the Company succeed in finding suitable persons for the job. In addition, the Company's Shareholder Appointment Committee

[100] The capital includes capitalized interest until 31 March 2016.

[101] The capital includes capitalized interest until 31 March 2016.

would possibly be established at the Extraordinary General Meeting (see "*Board of Directors and the Management Team – Committees of the Board of Directors*").

In addition, the Board of Directors is planning on proposing to the Extraordinary General Meeting that the company form be changed to a public limited company. Changing the company form from private to public requires, among other things, that the Company's equity amounts to at least its share capital. Bioretec's equity was less than its share capital as at 31 March 2021.

Shareholder rights

Dividends and other distribution of funds

Under the Finnish Companies Act, the shareholders' equity of a company is divided into restricted and unrestricted equity. Restricted equity consists of the share capital, the fair value reserve and the revaluation reserves according to the Finnish Accounting Act (1336/1997, as amended) as well as any possible reserve fund and share premium fund formed under the previous Finnish Companies Act (734/1978, as amended) effective prior to 1 September 2006.

In accordance with the prevailing practice in Finland, dividends on shares in a Finnish limited company, if any, are generally declared once a year. Dividends may be paid and unrestricted equity may be otherwise distributed after the General Meeting of Shareholders has adopted the company's financial statements and resolved on the amount of dividend or other distribution of unrestricted equity based on a proposal by the Board of Directors of the company. Pursuant to the Finnish Companies Act, the payment of a dividend or other distribution of unrestricted equity may also be based on financial statements other than those for the preceding financial year, provided that such financial statements have been adopted by the General Meeting of Shareholders. If the company has an obligation to elect an auditor pursuant to the law or its Articles of Association, such financial statements must be audited.

The payment of a dividend or other distribution of unrestricted equity requires the approval of the majority of the votes cast at a General Meeting of Shareholders of the company. Pursuant to the Finnish Companies Act, the General Meeting of Shareholders may also authorize the Board of Directors to resolve upon the payment of dividends and other distributions of unrestricted equity. The amount of dividend or other distribution of unrestricted equity cannot exceed the amount stipulated by the General Meeting of Shareholders.

Pursuant to the current Finnish Companies Act, a company may also distribute funds by reducing its share capital, which requires the approval of the majority of votes cast at a General Meeting of Shareholders of the company. A decision regarding the share capital reduction must be registered in the Trade Register within one month from the General Meeting of Shareholders of the company that resolved on such share capital reduction. Following the registration of the share capital reduction, a creditor hearing process may be commenced and the Trade Register will issue, upon application of the company, a notice to the creditors of the company. The reduction of the share capital may be registered if none of the creditors of the company has opposed the reduction of the share capital or the company has received a confirmatory judgment to the effect that the opposing creditors have either received payment for their receivables or a securing collateral has been placed by the company for the payments of such receivables.

Distributable funds include the net profit for the preceding financial year, retained earnings from previous financial years and other unrestricted equity, adjusted for the loss set forth in the statement of financial position and the amounts that the Articles of Association of the company require to be left undistributed. The amount of any dividend or other distribution of unrestricted equity is limited to the amount of distributable funds of the company stated in the financial statements upon which the decision to pay dividends or otherwise distribute unrestricted equity are based, subject to any material changes in the financial condition of the company since the financial statements were prepared. Distribution of funds, whether by way of dividend or other distribution of unrestricted equity, is prohibited if it is known, or it should be known, at the time such decision is made that the company is insolvent or that such distribution would cause the company to become insolvent.

Distributable funds are, where applicable, to be further adjusted for capitalized incorporation, research and certain development costs in accordance with the provisions of the Finnish Act on the Implementation of the Finnish Companies Act (625/2006, as amended). A parent company of a consolidated group of companies may not distribute more than the amount of distributable funds shown on the parent company's latest audited and adopted financial statements.

The dividend may not exceed the amount proposed or otherwise accepted by the Board of Directors, unless so requested at the General Meeting by shareholders representing at least one-tenth of all of the issued and outstanding shares in the company, in which case, the dividend can be no more than the lesser of (i) at least one-half of the profit for the preceding financial year less the amount that the Articles of Association of the company require to be left undistributed (if any); and (ii) the amount of distributable funds as described above. However, in such case, the dividend cannot exceed 8 per cent

of the total shareholders' equity of the company and the distributable amount must be adjusted for any dividends paid during the accounting period before the Annual General Meeting.

If the share capital of a company has been reduced for loss coverage, the unrestricted equity of the company may be distributed to the shareholders during the three years following the registration of the reduction only in accordance with the aforementioned creditor protection procedure. Bioretec has reduced its share capital for loss coverage by EUR 5,472,696.89 in a decision registered on 1 December 2020. Thus, Bioretec cannot pay dividends before 1 December 2023 or otherwise distribute the unrestricted equity other than by complying with the aforementioned creditor protection procedure.

All Shares in Bioretec carry equal rights to dividends and other distributions of funds (including distributions of assets in the event of the liquidation). Pursuant to the Finnish Companies Act, dividends and other distributions of funds are paid to the shareholders or their nominees entered in the shareholders' register on the relevant record date. Such register is maintained by Euroclear Finland through relevant account operators. No dividends are payable to shareholders not registered in the shareholders' register. The right to dividends expires within three years from the dividend payment date, after which the funds reserved for paying the dividends will remain with Bioretec.

Voting rights and general meeting of shareholders

General

Pursuant to the Finnish Companies Act, shareholders exercise their power to resolve on matters at general meetings of the shareholders. Pursuant to the Finnish Companies Act, the Annual General Meeting of the company must be held annually no later than six months from the end of the company's financial year. At the Annual General Meeting, the financial statements, including the income statement, statement of financial position and cash flow statement with notes thereto and consolidated financial statements, provided that consolidated financial statements are to be prepared pursuant to the Accounting Act (1336/1997), are presented to the shareholders for adoption. At the Annual General Meeting, shareholders also make decisions regarding, among others, use of profits shown in the statement of financial position, the discharge from liability of the members of the Board of Directors and the chief executive officer as well as the election of the members of the Board of Directors and the auditor, and their respective remuneration.

An Extraordinary General Meeting in respect of specific matters must be convened when deemed necessary by the Board of Directors, or when requested in writing by the auditor of the company or by shareholders representing at least one-tenth of all of the issued and outstanding Shares in the Company.

According to Bioretec's Articles of Association, the notice of general meetings of shareholders shall be delivered no earlier than one month and no later than one week before the record date for the general meeting of shareholders, and always no later than one week before the last date for advance notices of participation, by publishing it on Bioretec's website or by providing the notice to each shareholder by letter or email at the addresses entered into the shareholder register. In order to participate in the general meeting of shareholders, a shareholder must give advance notice of participation to the Company no later than the date given in the notice of the general meeting of shareholders, which shall not be earlier than ten days before the meeting. After the Listing, in accordance with the First North Rules, Bioretec shall publish the notice of general meeting of shareholder as a company release.

There are no quorum requirements for General Meetings of shareholders in the Finnish Companies Act or in the Articles of Association of Bioretec.

In order to have the right to attend and vote at a General Meeting of Shareholders, a shareholder must be registered at least eight Finnish business days prior to the relevant General Meeting of Shareholders in the register of shareholders maintained by Euroclear Finland in accordance with Finnish law. A beneficial owner of nominee-registered shares contemplating attending and voting at the General Meeting of Shareholders should seek a temporary registration in the register of shareholders maintained by Euroclear Finland by the date announced in the notice of the General Meeting of Shareholders, which date must be after the record date of the General Meeting of Shareholders. A notification for temporary registration of a beneficial owner into the shareholder register of the Company is considered notice of attendance at the General Meeting of Shareholders.

Voting rights

A shareholder may attend and vote at a General Meeting of Shareholders in person or through an authorized representative. However, pursuant to temporary legislation enacted due to the recent covid-19 outbreak, Finnish limited companies whose shares are admitted to trading on a regulated market or on a multilateral trading facility, such as Bioretec after the Listing, may choose to arrange a General Meeting of Shareholders without shareholders being present. Pursuant to the temporary legislation, a General Meeting of Shareholders may be arranged such that shareholders may participate

and vote in the General Meeting only though an agent. Where a company decides to arrange such a General Meeting of Shareholders, it shall make available to shareholders one or several agents, who may not be related parties of the company. Alternatively, a company may decide to arrange a General Meeting of Shareholders such that shareholders may participate and vote in the General Meeting only by mail-in voting, distance communication or other means of technical nature. The temporary legislation is in force until 30 June 2021.

Each Share entitles the holder to one vote at the General Meeting of Shareholders. At a General Meeting of Shareholders, resolutions are generally passed with the majority of the votes cast. However, certain resolutions, such as any deviations from shareholders' pre-emptive rights in respect of share offerings and directed repurchases of own shares, amendments to the Articles of Association and resolutions regarding mergers, demergers or liquidation of a company, require at least two-thirds of the votes cast and the shares represented at the General Meeting of Shareholders. In addition, certain resolutions, such as amendments to the Articles of Association that change the respective rights of shareholders holding the same class of shares or increase the redemption rights of a company or its shareholders require the consent of all shareholders, or where only certain shareholders are affected, require the consent of all shareholders affected by the amendment in addition to the applicable majority requirement.

Pre-emptive right

Pursuant to the Finnish Companies Act, shareholders of a Finnish company have a pre-emptive right, in proportion to their shareholdings, to subscribe for new shares in such company, unless the resolution of the General Meeting of Shareholders approving such issue, or authorizing the Board of Directors to resolve on such issue, provides otherwise. Pursuant to the Finnish Companies Act, a resolution that deviates from the shareholders' pre-emptive rights must be approved by at least two-thirds of all votes cast and shares represented at a General Meeting of shareholders. In addition, pursuant to the Finnish Companies Act, such a resolution requires that the company has a weighty financial reason to deviate from the pre-emptive rights of shareholders.

Certain shareholders resident in, or with a registered address in certain jurisdictions may not be able to exercise pre-emptive rights in respect of their shareholdings unless a registration statement, or an equivalent thereof under the applicable laws of their respective jurisdictions, is effective or an exemption from any registration or similar requirements under the applicable laws of their respective jurisdictions is available.

Right to share in any surplus in the event of liquidation

Pursuant to the Finnish Companies Act, upon the voluntary liquidation of the company, liquidators are required to cause the repayment of the company's known debts. Any net assets remaining after the repayment of debts are paid to the shareholders pro rata to their holdings of Shares.

Redemption provisions (squeeze-out)

Under the Finnish Companies Act, a shareholder with shares representing more than 90 per cent of all shares and voting rights attached to all shares in a company has the right to redeem remaining shares in such company for fair value. In addition, any minority shareholder that possesses shares may, pursuant to the Finnish Companies Act, require such majority shareholder to redeem its shares.

Conversion provisions

The Finnish Companies Act and Bioretec's Articles of Association do not contain conversion provisions regarding the Shares.

Takeover rules

After the Listing, Bioretec will be subject to compelling legislation, with regard to takeover rules concerning securities traded on a multilateral trading facility. The following is a summary of the Finnish compelling takeover rules applied on the multilateral trading facility and should not be considered exhaustive.

Regulation of the Finnish Securities Markets Act concerning a compulsory tender offer is not applicable to securities traded on a multilateral trading platform. The Finnish Securities Markets Act contains certain compelling rules applicable to a voluntary public takeover offer for shares traded on a multilateral trading platform and securities entitled to them. Such rules concern the consideration of the offer, equivalent treatment of holders of securities on which the offer is made, disclosure obligations and the obligation to ensure that the offeror can fulfil in full any cash consideration, if such is offered, and take all reasonable measures to secure the implementation of any other type of consideration.

The rules on compulsory public tender offers under the Securities Markets Act do not apply on the multilateral trading facility.

Pursuant to the Finnish Companies Act, a shareholder holding shares representing more than 90 per cent of all the shares and votes in a company has the right to redeem the remaining shares in the company at fair value (right of squeeze-out). In addition, a shareholder whose shares may be redeemed in the above mentioned manner is entitled to demand redemption from the majority shareholder entitled to exercise redemption (right of sell-out). Detailed rules apply to the calculation of the proportions of shares and votes discussed above.

Bioretec's Articles of Association contain no specific provisions on rights of squeeze-out or sell-out deviating from the Finnish Companies Act.

There have been no past tender offers for the Shares or equity securities of Bioretec.

FINNISH SECURITIES MARKETS

The following summary is a general description of the Finnish securities market and it is based on the laws in force in Finland as at the date of this Offering Circular. The following summary is not exhaustive. For shareholder rights and takeover rules, see "Shares and share capital – Shareholder rights" and "Shares and share capital – Takeover rules".

General of the First North marketplace

First North is a registered growth market for small and medium-sized enterprises. The same rules, applied to the issuers on the regulated main market, are not applied to the issuers of First North. Instead they adhere to rules with lower standards, which are applied to small growth companies. All the issuers, whose securities are admitted to trading on First North marketplace, have a Certified Adviser, who ensures that the rules are adhered to. Nasdaq Helsinki approves the application for admission to trading.

Nasdaq Helsinki maintains the First North marketplace. Nasdaq Helsinki is part of Nasdaq, Inc. group. In addition, Nasdaq, Inc. group maintains the First North marketplaces of Sweden, Denmark and Iceland. Nasdaq Nordic includes four local stock exchanges, which are located in Helsinki, Stockholm, Copenhagen and Reykjavík. The First North Rules are the same for all First North marketplaces. However, the rules include also marketplace specific rules (the supplements A–D of the First North Rules). The companies listed on these four marketplaces are presented on a shared list - the Nordic List -, of which requirements for listing are mainly harmonized apart for the exceptions specified in the supplements A–D of the First North Rules. The companies are presented based on industry and divided in sectors.

Trading and settlement on First North

Pursuant to the First North Rules, the trading rules of Nasdaq Helsinki apply to trading on First North.

The currency for trading in, and clearing of, securities on Nasdaq Helsinki is euro, with the tick size for trading quotations depending on the share price. All price information is produced and published in euro.

Nasdaq Helsinki uses the automated INET Nordic trading platform. INET Nordic is an order-based system in which orders are executed when price and volume information as well as other conditions match. Nasdaq Helsinki has three principal trading sessions: pre-open session, continuous trading and post-trading session. For shares, pre-open session begins at 9.00 a.m. and ends at 9.45 a.m. during which orders may be placed, changed or cancelled. The opening call begins at 9.45 a.m. and ends at 10.00 a.m. Continuous trading begins immediately after the opening call ends at 10.00 a.m. and trading continues at prices based on market demand until 6.25 p.m. when the closing call is initiated. Orders entered during the pre-open session and existing orders with several days' validity are automatically transferred into the opening call. Post-trading, during which contract transactions for shares can be registered as after-hours trading in confirmed prices within the price limits based on the trading day, takes place between 6.30 p.m. and 7.00 p.m.

Trades are primarily cleared by netting them in the system of a central counterparty (e.g. European Central Counterparty N.V.) and settling them in Euroclear Finland's data-processing system (Infinity system) on the second banking day after the trade date (T+2) unless otherwise agreed by the parties.

Regulation of the Finnish securities market

The securities market in Finland is supervised by the FIN-FSA. One of the principal statutes governing the Finnish securities market is the Finnish Securities Markets Act, which contains regulations with respect to company and shareholder disclosure obligations and public tender offers, among other things. The Finnish Ministry of Finance and the FIN-FSA have issued more detailed regulations pursuant to the Finnish Securities Markets Act. Furthermore, MAR, which is directly applicable within the EU, contains provisions on the disclosure obligation regarding inside information as well as prohibitions on insider dealing, unlawful disclosure of inside information and market manipulation. MAR also contains rules on, among other things, procedures relating to disclosure of inside information, maintenance of insider lists and disclosure of managers' transactions. The Prospectus Regulation contains regulations regarding prospectuses, including an obligation, subject to certain exceptions, to publish a prospectus where securities are admitted to trading on a regulated market or offered to the public. The FIN-FSA monitors compliance with these regulations.

The Finnish Securities Markets Act and MAR determine the minimum requirements for disclosure obligations for Finnish companies seeking to be admitted to trading on a multilateral trading facility. First North Rules also include disclosure obligations to companies whose security is traded in the First North marketplace. The issuer of a security traded on a regulated market or multilateral trading facility is obliged to regularly disclose financial information about the Company. According to the MAR, the issuer must inform the public, with some exceptions, of inside information directly concerning the issuer as soon as possible.

Requirements under the Finnish Securities Markets Act or other regulations applicable solely in a regulated market, such as, for example, the requirement to notify and disclose major holdings and proportions of voting rights, do not apply to those financial instruments traded in the First North marketplace.

The Finnish Penal Code (39/1889, as amended) criminalizes the breach of disclosure requirements, the misuse of inside information and market manipulation. Pursuant to MAR, Finnish Securities Markets Act and the Finnish Act on the Financial Supervisory Authority (878/2008, as amended), the FIN-FSA has the right to impose administrative sanctions to the extent the offence does not fall within the scope of the Finnish Penal Code. The FIN-FSA can, for example, issue a public warning or impose administrative fines or penalty payments for the breach of the provisions relating to disclosure requirements, public tender offer, insider lists, managers' transactions or market abuse. The disciplinary board of Nasdaq Helsinki may give a warning or note or impose a disciplinary fine or order the company to be removed from First North.

Finnish book-entry system

General

The book-entry system refers to a system in which physical share certificates have been changed to book-entries registered in book-entry accounts. The Finnish book-entry system is centralized at Euroclear Finland, which offers national clearing, settlement and registration services for securities. Euroclear Finland maintains a central book-entry register for both equity and debt securities. The business address of Euroclear Finland is Urho Kekkosen katu 5C, FI-00100 Helsinki, Finland. Being in book-entry form is mandatory for all securities subject to trading on a trading venue.

Euroclear Finland maintains a company-specific register of those shareholders who are registered in the book-entry system. The account operators, which consist of credit institutions, investment firms and other institutions licensed to act as account operators by Euroclear Finland, are entitled to make entries in the book-entry register and administer the book-entry accounts.

Registration

In order to hold entries in the book-entry system, a security holder must open a book-entry account with an account operator or agree with a custodian upon the holding of book-entries in a custodial nominee account. A foreigner, foreign entity or trust may hold book-entries. Such persons may also deposit book-entries in a custodial nominee account, where the shares are registered in the name of a custodial nominee account holder in the company's register of shareholders. A custodial nominee account must contain information on the custodial nominee account holder instead of the beneficial owner and indicate that the account is a custodial nominee account. Book-entry securities held on behalf of one or more beneficial owners may be registered in a custodial nominee account. In addition, the shares owned by a foreigner, foreign entity or trust may be deposited in a nominee-registered account, in which case the book-entry account is opened in the name of the account owner, but the custodian of the nominee registration is registered in the company's shareholders' register.

For shareholders who have not transferred their shares into book-entries, a joint book-entry account is opened with the issuer as registered holder. All transfers of securities entered in the book-entry system are executed as computerized book-entry transfers to the extent they are executed in the book-entry system. The account operator delivers a statement to the account holder regularly, at least four times a year, presenting entries made to the account since the last statement. The book-entry account holders also receive an annual statement of their holdings at the end of each calendar year.

Each book-entry account is required to contain specific information with respect to the account holder and other holders of rights to the book-entries entered into the account as well as information on the account operator administering the book-entry account. The required information also includes the type and number of book-entries registered as well as the rights and restrictions pertaining to the account and to the book-entries registered in the account. Euroclear Finland and the account operators are required to observe strict confidentiality. Certain information (e.g. the name and number of shares of each shareholder) contained in the register of shareholders maintained by Euroclear Finland must be made available to the public by Euroclear Finland and the relevant company, except in the case of custodial nominee registration. The FIN-FSA and the relevant company are entitled to certain information on the holdings of shares registered in a custodial nominee account upon request.

Each account operator is under strict liability with regard to errors and omissions in the book-entry registers maintained by it and for breaches of confidentiality. If an account holder has suffered a loss as a result of a faulty registration or some other error or defect and if the account operator has not compensated for this loss due to insolvency that is not temporary, the account holder is entitled to receive compensation from the statutory registration fund. The capital of the registration fund must not be less than EUR 20 million. The compensation to be paid to one injured party shall be equal to the amount of loss suffered by such injured party from a single account operator, subject to a maximum amount of EUR 25,000. The liability of the registration fund to pay damages in relation each incident is limited to EUR 10 million.

Custody of the shares and nominees

A non-Finnish shareholder may appoint an account operator (or certain other Finnish or non-Finnish organizations approved by Euroclear Finland) to act on its behalf. Shares held in a custodial nominee account do not entitle the account holder to exercise other rights of the owner vis-à-vis the issuer than the right to withdraw funds, to convert or exchange the book entry and to participate in an issue of shares or other book entries. In order to attend and vote at general meetings of shareholders, a beneficial owner may seek temporary registration to the shareholders' register if the shares entitle the owner to be registered in the shareholders' register on the record date of the general meeting of shareholders. Notifications regarding temporary registration must be given no later than at the date and time specified in the notice of the General Meeting of Shareholders.

Upon request by the FIN-FSA or the relevant company, a custodial nominee account holder must disclose the name of the beneficial owner of any shares registered in such custodial nominee's name, provided the beneficial owner is known, as well as the number of shares owned by such beneficial owner. If the name of the beneficial owner is not known, the custodial nominee account holder is required to disclose corresponding information on the representative acting on behalf of the beneficial owner and to submit a written declaration of the representative to the effect that the beneficial owner of the shares is not a Finnish natural person or legal entity. In the Finnish book entry system, e.g. Euroclear Bank S.A./N.V. and Clearstream act as account operators, and non-Finnish shareholders may hold their shares through their accounts with Euroclear Bank S.A./N.V. or Clearstream. A shareholder wishing to hold his/her shares in the book-entry securities system in his/her own name but who does not maintain a book-entry account in Finland is required to open a book-entry account at an account operator and a convertible euro account at a bank.

Compensation fund for investors and deposit insurance fund

The Finnish Act on Investment Services (747/2012, as amended "**Finnish Act on Investment Services**") sets forth a compensation fund for investors. Under this act, investors are divided into professional and non-professional clients. The fund does not compensate any losses by professional clients. The definition of professional client includes certain business enterprises and public entities, which are deemed to understand the securities markets and their associated risks. An investor may also provide notice in writing that, on the basis of his/her professional skills and experience in the securities markets, he/she is a professional client; however, natural persons are presumed to be non-professional clients.

Investment firms and credit institutions offering investment services must belong to the compensation fund. The compensation fund safeguards payment of clear and indisputable claims when an investment company or a credit institution has been declared bankrupt, is undergoing a restructuring process, or is otherwise, for a reason other than temporary insolvency, not capable of paying claims within a determined period of time. For valid claims, the compensation fund will pay 90 per cent of the investor's claim against each investment company or credit institution, up to EUR 20,000. The compensation fund does not provide compensation for losses due to decreases in stock value or bad investment decisions. Accordingly, investors continue to be liable for the consequences of their own investment decisions. According to the Finnish Act on the Financial Stability Authority (1195/2014, as amended), depositary banks must belong to a deposit guarantee fund, which is intended to safeguard payments of receivables in the depositary bank's account or receivables in the forwarding of payments that have not yet been entered into an account if the depositary bank becomes insolvent and the insolvency is not temporary. The customers of a depositary bank can be compensated by the deposit guarantee fund up to EUR 100,000. An investor's funds can be safeguarded either by the deposit guarantee fund or the compensation fund; however, an investor's funds cannot be safeguarded by both funds.

TAXATION

The tax legislation of the investor's tax domicile and Finland, being Bioretec's jurisdiction of incorporation, may have affect the income received from the Shares.

The following summary is a general description of the most significant Finnish tax consequences with respect to the acquisition, ownership and disposal of the Shares. The summary is based on the tax laws of Finland, including relevant case law as well as decisions and guidance issued by the Finnish Tax Administration as in effect at the date of this Offering Circular. The summary is subject to changes in the tax laws of Finland, including changes that could have a retroactive effect. The summary is not exhaustive and does not take into account or discuss the tax laws of any other country than Finland.

The summary does not address tax consequences applicable to shareholders that may be subject to special tax rules relating to, among others, different restructurings of corporations, controlled foreign corporations, income tax-exempt entities, or general or limited partnerships. Furthermore, the summary does not address tax consequences relating to investments belonging to business activities undertaken by natural persons, nor inheritance or gift taxation.

Prospective investors are advised to consult professional tax advisors to obtain information on the tax consequences of the acquisition, ownership and disposal of the Shares taking into consideration their specific circumstances.

General

Residents and non-residents of Finland are treated differently for Finnish tax purposes. Persons resident in Finland are subject to taxation in Finland on their worldwide income. Non-residents are only taxed on income from Finnish sources and on income attributable to a possible permanent establishment in Finland. However, tax treaties may limit the applicability of Finnish tax legislation and Finland's right to tax Finnish source income received by a non-resident.

Generally, a natural person is deemed to be a resident in Finland, if the person remains in Finland for a continuous period of more than six months, or if the permanent home and abode of such person is in Finland. However, a Finnish national who has moved abroad is considered to be resident in Finland until three years have passed from the end of the year of departure, unless it is proven that no substantial ties to Finland existed during the relevant prior tax year.

Earned income, including salary, is taxed at progressive rates. Capital income of a resident natural person not exceeding EUR 30,000 per calendar year is taxed at a flat rate of 30 per cent, and to the extent the amount of capital income exceeds EUR 30,000 in a calendar year, the exceeding amount is taxed at a rate of 34 per cent.

Corporate entities established under the laws of Finland are regarded as residents in Finland. Further, as of 1 January 2021, tax residency can be based on the place of effective management. Thus, foreign corporate entities having their key decisions concerning their daily business activities made in Finland can be treated as residents for Finnish domestic tax law purposes. However, the application of the rule to UCITS funds meant in chapter 1 section 2 paragraph 17 of the Mutual Funds Act (213/2019, as amended) and AIF funds meant in chapter 2 section 1 of the Alternative Investment Fund Managers Act (162/2014, as amended) that have been established or registered under the laws of another EEA-country is deferred until the beginning of 2023. Currently, the corporate income tax rate is 20 per cent, and the same rate is applied to taxation of income attributable to a Finnish permanent establishment of a non-resident.

Taxation of dividends and repayment of capital

General

A company listed on First North marketplace is considered a publicly listed company ("**Listed Company**") for Finnish dividend tax purposes.

Funds distributed from the reserve for invested unrestricted equity (so-called SVOP-reserve) of a Listed Company are treated as dividend income for tax purposes.

Finnish resident natural persons

85 per cent of dividend income received from a Listed Company by a resident natural person on shares belonging to the personal income source is taxable capital income of the recipient, while 15 per cent is tax-exempt.

Distribution of dividends by a Listed Company to resident natural persons is subject to advance tax withholding. Currently, the amount of the advance tax withholding is 25.5 per cent. The advance tax withheld by the distributing company is credited against the final tax payable by the shareholder for the dividend received.

When the shares on a nominee account are held by a Finnish resident natural person, the amount of the advance tax withholding is 50 per cent, if the identification information of the recipient of the dividends is not obtained by the dividend

distributing Listed Company or the registered authorized intermediary closest to the recipient of the dividend, or if the intermediary is not able to provide the Finnish Tax Administration with such information, as specified in further detail.

The resident natural person receiving the dividend is liable to verify the amount of dividend and the withholding on his pre-completed tax return and, if needed, to correct the amounts on the tax return.

Finnish corporations

Dividends paid by a Listed Company on the shares that are owned by another Finnish Listed Company are generally tax-exempt. However, if the shares are included in the investment assets of the shareholder, 75 per cent of the dividend is taxable income while the remaining 25 per cent is tax-exempt. Only banks, insurance companies and pension institutions may have investment assets.

Dividends received from a Finnish Listed Company by a Finnish corporation which is not a Listed Company are in general fully taxable income. However, in cases where the non-listed corporation directly owns 10 per cent or more of the share capital of the Listed Company, the dividend received on such shares is tax-exempt, provided that the shares are not included in the investment assets of the shareholder. If the shares are included in the investment assets of the shareholder, 75 per cent of the dividend is taxable income while the remaining 25 per cent is tax-exempt, irrespective of the share of ownership in the Listed Company.

When the shares on a nominee account are held by a Finnish corporation, the amount of the advance tax withholding is 50 per cent if the identification information of the recipient of the dividends is not obtained by the dividend distributing Listed Company or the registered authorized intermediary closest to the recipient of the dividend or if the intermediary is not able to provide the Finnish Tax Administration with such information, as specified in further detail.

Non-residents

Non-residents are subject to Finnish withholding tax on dividends paid by a Listed Company. The tax is withheld by the Listed Company distributing the dividend at the time of dividend payment, and no other taxes on the dividend are payable in Finland.

In general, the dividend withholding tax rate is 20 per cent for non-resident corporate entities and 30 per cent for all other non-residents as dividend recipients.

As an exception to the above, withholding tax is not applicable to dividends paid to non-resident companies meant in Article 2 of the Parent-Subsidiary Directive (2011/96/EU, as amended) (the "**Parent-Subsidiary Directive**") that are located in an EU member state, which have a direct minimum holding of 10 per cent of the capital of the dividend-distributing Finnish Listed Company, and which also fulfil the other conditions to grant the benefits of the Parent-Subsidiary Directive.

The withholding tax rate may also be reduced, or removed in full, on the basis of an applicable tax treaty. A reduced withholding rate in accordance with the applicable tax treaty can be applied, if the person beneficially entitled to the dividend has provided a valid tax at source card or other necessary clarification (name, date of birth, possible other official identification data, and the address in the country of residence) to the Listed Company prior to the payment of the dividend.

Furthermore, no withholding tax is applied if the dividend is paid to a corporation located in the EEA, provided that the recipient is regarded to be equivalent to a Finnish corporation meant in section 33d.4 of the Income Tax Act, or in section 6a of the Finnish Business Income Tax Act (360/1968, as amended), and that the dividend would be tax-exempt pursuant to the above-mentioned sections had it been received by a Finnish corporation. Additionally, it is required that the Directive on Administrative Cooperation in the Field of Taxation (2011/16/EU, as amended) or a treaty concerning administrative co-operation or exchange of information in tax matters is applicable to the home country of the dividend receiving corporation, and that the withholding tax cannot be fully credited in the country of residence of the dividend receiving corporation based on a double tax treaty concluded with Finland.

Dividends distributed on shares belonging to investment assets of the dividend receiving corporation are subject to special rules. In many cases a withholding tax at the rate of 15 per cent applies, if the recipient resides in an EEA country, or if the recipient is comparable to a Finnish pension institution and the requirements relating to exchange of information in tax matters, as well as other more specific requirements are fulfilled. A dividend may nevertheless be exempt from withholding tax, if the requirements of the above-mentioned exemption relating to the Parent-Subsidiary Directive and the minimum holding of 10 per cent are fulfilled. The withholding tax rate may also be reduced or removed on the basis of an applicable tax treaty.

As of 1 January 2021, the tax treatment of dividends payable on shares held in custodial nominee accounts has been amended. Currently, the withholding tax rate set forth in the relevant tax treaty may be applied to dividends payable on shares held in custodial nominee accounts, provided that the dividend distributing Listed Company or a registered

authorized intermediary has investigated with due care the recipient's country of residence and ascertained the applicability of the relevant tax treaty, as set out in further details in section 10 b of the Act on Taxation of Non-Residents (627/1978, as amended, **"Withholding Tax Act"**). Further, the dividend distributing Listed Company and a registered authorized intermediary are obligated to provide the Finnish Tax Administration with the required detailed identification information of the recipient of the dividends, as set out in further details in section 10 c of the Withholding Tax Act and section 15 e of the Assessment Procedure Act (1558/1995, as amended). If a tax treaty is not applicable, but the dividend distributing Listed Company or a registered authorized intermediary has obtained the required detailed identification information, the divided is taxable in accordance with the general rules, as explained above under this section *"Non-residents"*. If the required detailed identification information has not been provided, the dividends paid to shares held in a nominee account is subject to a withholding tax at the rate of 35 per cent. The recipient of the dividend may however apply for a withholding tax refund from to the Finnish Tax Administration to the extent that the above conditions for the application of a reduced withholding tax rate are met.

Under certain conditions, non-resident natural persons located in a country within the EEA may request that instead of taxation in accordance with final tax at source the provisions of the Act on Tax Assessment Procedure (1558/1995, as amended) are applied in which case the dividend taxation is carried out through assessment in the same manner as set out in section "– *Finnish resident natural persons*" above.

Capital gains from sale of the shares

Finnish resident natural persons

A capital gain arising from the sale of the shares which do not belong to the business activity of a Finnish resident natural person is taxed as capital income. A capital loss arising from the sale of the shares that do not belong to the business activity of the shareholder is deductible primarily from the resident natural person's capital gains and secondarily from the person's other capital income arising in the same year and during the following five tax years. Capital losses are not taken into account when assessing the capital income deficit for the tax year. If the proceeds of all assets sold by the resident natural person during the tax year do not, in aggregate, exceed EUR 1,000 (exclusive of sale proceeds from assets that may be sold tax-exempt pursuant to Finnish tax laws), the capital gains from the disposal of the shares are nevertheless exempt from tax. A capital loss is correspondingly not deductible, if the acquisition cost of the assets sold does not, in aggregate, exceed EUR 1,000.

The capital gain or loss is calculated by deducting the original acquisition cost and expenses related to acquiring the gain/loss (e.g. the selling expenses) from the sales price. Alternatively, a natural person can elect to apply a so-called presumptive acquisition cost, which is equal to 20 per cent of the sales price, or in the case of shares which have been held for at least ten years, 40 per cent of the sales price. If the presumptive acquisition cost is used instead of the actual acquisition cost, any expenses for acquiring the income are deemed to be included therein and cannot be separately deducted from the sales price.

Finnish corporations

If the shares are included in the personal income source of a corporation, a capital gain arising from the sale of the shares is taxable income. Capital gain or loss is calculated by deducting the acquisition cost remaining for tax purposes, and the expenses related to acquiring the capital gain, from the sales price. A capital loss arising from the sale of shares belonging to the personal income source is deductible from capital gains arising in the same source of income in the same tax year and during the subsequent five tax years.

The sales price for the shares included in the business income source of a corporation is as a general rule taxable business income. Correspondingly, the remaining acquisition cost of the shares for tax purposes, as well as the deductible costs relating to the disposal, are deductible business expenses upon the disposal of the shares. Confirmed tax losses in the business income source are in general deductible from taxable business income in the same tax year and the subsequent ten tax years in accordance with general rules concerning carrying forward tax losses. However, if the shares are included in other assets category within the business income source, which includes such assets that cannot be deemed as financial assets, current assets, investment assets or fixed assets, the losses are only deductible from capital gains arising from the other assets category in the same tax year and during the subsequent five tax years. Capital gains from disposal of the shares belonging to fixed assets in business income source can under certain strict conditions be tax-exempt, provided that the corporation disposing the shares has continuously, for at least one year, owned at least 10 per cent of the share capital in the company, and provided that also the other requirements for the exemption are met. Capital losses from disposals of the shares qualifying for tax exempt disposals are correspondingly non-deductible.

Should a deductible capital loss arise from the disposal of the shares included in fixed assets but not qualifying under the tax exemption, such capital loss may only be deducted from taxable capital gains arising from the sale of shares included in fixed assets in the same tax year and the subsequent five years.

Non-residents

Non-residents are in general not subject to Finnish tax on capital gains realized on the sale of the shares, provided that less than 50 per cent of the total assets of the company consist of real properties in Finland. Any capital gains arising from the sale of the shares belonging to a non-resident corporation's permanent establishment in Finland are taxed in the same manner as described in section "– *Finnish corporations*" above.

Finnish transfer tax

No transfer tax is payable in connection with the subscription of New Shares to be issued in the Offering. Further, no transfer tax is payable on transfers of shares which are subject to regular trading in a multilateral trading facility which is open for the public as meant in the Act on Trading in Financial Instruments (1070/2017, as amended) such as First North, provided that securities issued by the company have been admitted to trading on the application of the company or with its consent and the shares in question have been added to the book-entry system meant in the Act on the Book-entry System and Clearing (348/2017, as amended). The transfer tax exemption also requires that an investment firm, a foreign investment firm or other entity offering investment services, as defined in the Finnish Act on Investment Services, is a broker or a party to the transaction, or that the transferee has been approved as a trading party in the market in which the transfer is executed. Further, if the broker or the counterparty to the transaction is not a Finnish investment firm, Finnish credit institution, or a Finnish branch or office of a foreign investment firm or credit institution, the transfer tax exemption requires that the transferee submits a notification of the transfer to the Finnish Tax Administration within two months of the transfer, or that the broker submits an annual declaration regarding the transfer to the Finnish Tax Administration as set forth in the Act on Tax Assessment Procedure.

Certain separately defined transfers, such as those relating to equity investments or distribution of funds, are not covered by the transfer tax exemption. In addition, the exemption does not apply to transfers carried out in order to fulfil the obligation to redeem minority shares under the Finnish Companies Act, or if the consideration for the shares consists wholly or partially of work performance.

If neither the purchaser nor the seller is a tax resident in Finland or a Finnish branch office of any of a foreign credit institution, a foreign investment firm, a foreign fund management company, or of a foreign EEA alternative investment fund manager, the transfer of the shares is exempt from Finnish transfer tax.

If the acquisition or transfer of the shares does not fulfil the above criteria for a tax-exempt transfer, the applicable transfer tax is payable by the purchaser. In general, the transfer tax rate is 1.6 per cent of the sales price or value of other consideration for the transferring of the shares. However, no transfer tax is collected if the amount of the tax is less than EUR 10.

In case the purchaser is neither a tax resident in Finland nor a Finnish branch or office of a foreign credit institution, a foreign investment firm, a foreign fund management company, or of an EEA alternative investment fund manager, the seller must collect the transfer tax from the purchaser. If a Finnish investment firm, a Finnish credit institution or a Finnish branch or office of a foreign credit institution or investment firm acts as a broker, it is liable to collect the transfer tax from the purchaser and to pay the tax to the state.

LEGAL MATTERS

Krogerus Attorneys Ltd is the legal adviser to Bioretec on certain legal matters concerning the Offering. Borenius Attorneys Ltd is the legal adviser to the Sole Global Coordinator on certain legal matters concerning the Offering.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents have been incorporated by reference to this Offering Circular. They have been published on Bioretec's website at www.bioretec.com/ipo and can be accessed by clicking the below hyperlinks. The parts of the following documents that have not been incorporated by reference to this Offering Circular are either not relevant for investors in the Offering or are covered elsewhere in this Offering Circular.

Document	Information incorporated by reference
Interim report 1 January to 31 March 2021.	Financial information for the three-month period ended 31 March 2021 containing the comparative financial information for the three-month period ended 31 March 2020
Financial statements 2020.....	Consolidated financial statements for the year ended on 31 December 2020 including audited comparative consolidated financial information for the years ended on 31 December 2019 and 31 December 2018
Auditor's report	Auditor's report for the financial years ended 31 December 2020, 31 December 2019 and 31 December 2018

DOCUMENTS ON DISPLAY

In addition to the documents incorporated to this Offering Circular by reference, copies of the following documents are on display during the period of validity of this Offering Circular on the Company's website at: www.bioretec.com/ipo.

1. the Articles of Association of Company;
2. this Offering Circular; and
3. the documents incorporated by reference to this Offering Circular.

ANNEX A: BIORETEC'S PATENTS

The table below identifies active patent families and pending patent applications of Bioretec on the date of this Offering Circular:

Title	Additional title	Country	Patent number	Start date	Valid until	Contracts / Agreements
Porous medical device and method for its manufacture		United States	7,964,206	21 June 2011	24 December 2027	
Bioabsorbable band system		United States	7,648,504	9 September 2003	9 September 2023	
A method to enchange drug release from a composite material for implantation		United States	7,419,681	2 December 2004	2 December 2024	Consultancy and royalty agreement 1 per cent of the net sales
A bioabsorbable band system, a bioabsorbable band, a method for producing a bioabsorbable band, a needle system of bioabsorbable band and a locking mechanism		United States	8,512,379	20 August 2013	18 February 2030	
A bone fixation device	"Urapinni" (longitudinally grooved pin)	United States	9,078,714 B2	14 July 2015	24 October 2031	
		Austria	1864616 EPO	4 June 2007	4 June 2027	
		Switzerland		4 June 2007	4 June 2027	
		Germany		4 June 2007	4 June 2027	
		France		4 June 2007	4 June 2027	
		United Kingdom		4 June 2007	4 June 2027	
		Spain		4 June 2007	4 June 2027	
		Finland		4 June 2007	4 June 2027	
		Italy		4 June 2007	4 June 2027	
A bioabsorbable elongated member	"Relaksaatio-laajennuslukko" (molo)	Germany	1902680 EPO	4 September 2007	4 September 2027	
A medical device and its manufacture	"Mekaaninen aktiivisuus"	Finland	124190	5 December 2007	5 December 2027	
		United States	9,393,060 B2	19 July 2016	7 December 2031	

Title	Additional title	Country	Patent number	Start date	Valid until	Contracts / Agreements
		Switzerland	2127608 EPO	2 December 2008	2 December 2028	
		Germany		2 December 2008	2 December 2028	
		France		2 December 2008	2 December 2028	
		United Kingdom		2 December 2008	2 December 2028	
		Italy		2 December 2008	2 December 2028	
Bioabsorboitu, orientoitu, muotoutuva fixaatiomateriaali ja -levy		Finland	125678	26 August 2011	26 August 2031	
		Switzerland	2747799 EPO	27 August 2012	27 August 2032	
		Germany		27 August 2012	27 August 2032	
		France		27 August 2012	27 August 2032	
		United Kingdom		27 August 2012	27 August 2032	
		Italy		27 August 2012	27 August 2032	
		United States	US9855084	27 August 2012	27 August 2032	
Biocompatible material and device (SuperNail)		Switzerland	2569024 EPO	11 May 2010	11 May 2030	
		Germany				
		Finland				
		United States	9777148	3 October 2017	22 January 2032	
Composite material, implant comprising thereof, use of the composite material and method for preparing a medical device	Hybrid material/ structure	EPO	EP application 19397525.7	21 August 2019		
		PCT	PCT application 19397525.7	21 August 2019		

Title	Additional title	Country	Patent number	Start date	Valid until	Contracts / Agreements
Implant, a method for production thereof and use thereof	RemeOs	EPO	2857536B1[102]	3 October 2013	3 October 2033	For the countries in which the patent is valid, the licence fee will be paid of the net revenue as follows: Cumulative revenue from EUR 100,000 to EUR 3,000,000, licence fee 1.5% of the net revenue Cumulative revenue from EUR 3,000,000.01 to EUR 10,000,000, licence fee 1.0% of the net revenue Cumulative revenue from EUR 10,000,000.01 to EUR 30,000.000, licence fee 0.8% of the net revenue Cumulative revenue more than EUR 30,000.000.01, licence fee 0.5% of the net revenue until a licence fee of EUR 150,000 and after that 0.1% of the net revenue
		United States	9757174	3 October 2013	3 October 2033	
		China	CN105765095B	3 October 2013	3 October 2033	
		Poland	EP application 2857536[103]	3 October 2020		
		Slovenia		3 October 2020		
		Canada	Application 2925765	3 October 2020		
		Japan	Application 2016540128[104]	3 October 2020		
		WO	Application 2015049379 (A1)[105]	3 October 2020		
Implant, a method for production thereof and use thereof	New Mg-alloy	EPO	EP application 20397520.6	31 December 2021		

[102] EPO has on 10 May 2021 issued a decision invalidating the patent. Bioretec plans to appeal the decision. For more information, see "*Business overview – Legal and arbitration proceedings*".

[103] EPO has on 10 May 2021 issued a decision invalidating the patent. Bioretec plans to appeal the decision. For more information, see "*Business overview – Legal and arbitration proceedings*".

[104] The application is made under developer Annelie Weinberg's name. The patent is to be transferred to the Company's name after the patent is granted.

[105] The application is made under developer Annelie Weinberg's name. The patent is to be transferred to the Company's name after the patent is granted.

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