

Annual Report 2019

OPT^oMED

Optomed 2019

Optomed is a Finnish medical technology company and a leading manufacturer of handheld fundus cameras globally.

Optomed combines handheld fundus cameras with software and artificial intelligence with the aim to transform the diagnostic process of blinding eye-diseases such as rapidly increasing diabetic retinopathy.

In its business, Optomed focuses on the research and development of fundus cameras and related software solutions in Finland and the company's products are sold through different sales channels in over 60 countries. The company has an extensive portfolio of 55 international patents protecting the technology.

In 2019, Optomed's revenue reached EUR 15.0 million and pro forma revenue amounted to EUR 14.5 million. At the end of 2019, Optomed employed 108 professionals.

OPTOMED

15.0

Net sales 2019
(MEUR)

14.5

Net sales 2018
(Pro forma, MEUR)

60

Sales countries
globally

55

International
patents

108

Professionals 2019



Optomed's story

Our solution to a growing problem

Rapidly growing diabetes increases vision problems and the need for eye screening

Sight is our most precious sense. Most of what we learn is through our eyes and we fear losing our vision more than any other sense. Studies have shown that vision impairment is often associated with various negative health outcomes and poor quality of life.¹⁻²

Approximately 425 million people are suffering from diabetes globally, and the number has been rising rapidly in middle- and low-income countries. This number is estimated to increase to around 628 million people by 2045, which is 10 percent of global population.³





Effective eye screening and treatment prevents blindness.

Diabetic retinopathy is the leading cause of vision loss in working-age adults (20-65-year-olds). One-third of diabetics have some degree of diabetic retinopathy. However, all diabetics are in need of regular screening as the disease is asymptomatic in early stages. Over 80 percent of diabetes related blindness could be avoided by effective eye screening and appropriate treatment. Due to the limited number of ophthalmologists and eye screening services, majority of diabetics globally do not have access to regular eye screenings.¹

Our mission is to enable eye screenings for all by bringing them to primary care, closer to the patients.

Global operations in growing markets

Optomed is a world leading manufacturer of innovative and affordable fundus cameras and

screening software solutions with integrated artificial intelligence for image analysis.

Our cameras, software and AI services are sold to hospitals and other healthcare organizations via our OEM customers (private label customers), distribution network and direct sales organization in over 60 countries globally.

The global fundus camera market is expected to grow by approximately 4.1 percent annually between 2017 and 2024, but the global handheld fundus camera market is expected to grow even more, by approximately 11.3 percent per year.

Expanding into new markets

Optomed's medium-term target is to deliver a double-digit annual organic revenue growth and we prioritize investments in growth.

To achieve our targets, we focus our efforts on expanding our sales to new customer segments and new geographical markets.

Our main goal for the next years is expanding to the large USA market, which alone represents over 40 percent of the total fundus camera market.

In 2020, we will also bring a new screening product to the market, integrating AI analysis service into our handheld camera. The product will be launched in 2020 and will greatly help our efforts in bringing eye screening to primary care.

Our values, meaningfulness, innovation, ambition and expertise drive our growth and are the core of our actions.

¹⁾ J.Zaba. *Journal of Behavioral Optometry, Volume 22, 2011.*

²⁾ *Making Eye Health a Population Health Imperative: Vision for Tomorrow. National Academies of Sciences, Engineering, and Medicine. National Academies Press (US); 2016 Sep 15.*

³⁾ WHO (2017). *Prevention of blindness from diabetes mellitus.*

⁴⁾ Seth R Flaxman et al., *Global causes of blindness and distance vision impairment 1990-2020: a systematic review and meta-analysis. Lancet Glob Health, October 2017.*

Key figures 2019

Net sales 2019 (MEUR)

15.0

Gross margin (%)

66.4

Adjusted EBITDA (MEUR)

-0.2

Equity ratio (%)

57.2

Cashflow from operating activities (MEUR)

0.2

R&D Expenditure (MEUR)

2.7

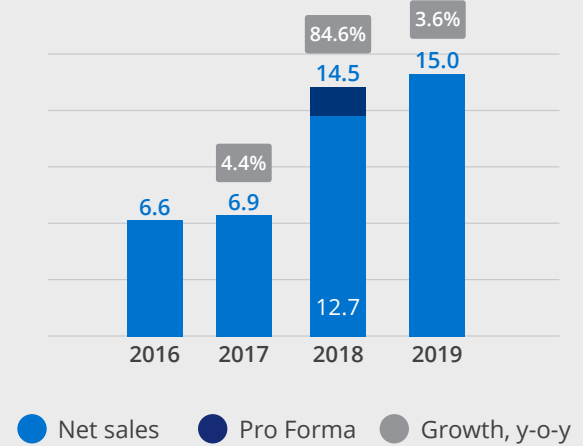


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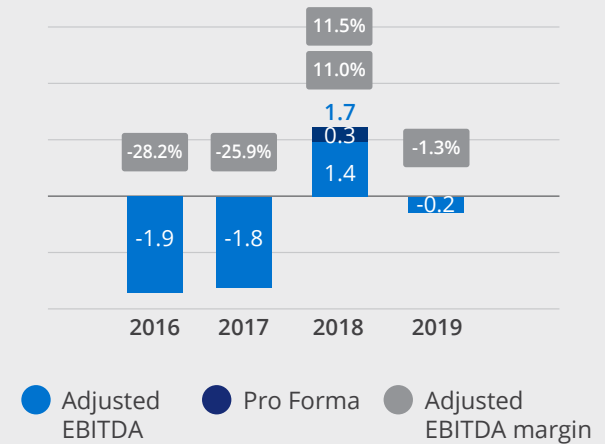
Our IPO on the Nasdaq Helsinki main list was oversubscribed.



Net sales (MEUR)



Adjusted EBITDA and margin



CEO Review

We are accelerating our growth in new markets

The year 2019 was an important year for Optomed with several highlights, including a very successful market expansion of our handheld fundus camera, Aurora, opening of several complimentary sales channels for our products and over-subscribed initial public offering (IPO) on Nasdaq Helsinki's main list. We now have the right products as well as the funds needed to grow and expand our business to new markets and customer segments globally. Based on the Aurora market expansion, our Distributor channel sales grew by 21.2 percent and our private label distribution (OEM) by 13.8 percent and we started several direct sales projects with our





Global demand for AI based diagnostics is growing year by year.

cameras and artificial intelligence based eye screening solutions. Our software segment performed well, and revenue grew by 9.5 percent. This growth was mainly driven by success in the healthcare sector, especially in the last quarter. Optomed group total revenue growth for 2019 was 3.6 percent.

During the year we expanded our distribution network to reach over 60 countries in the EMEA and APAC regions. Our new Aurora camera was registered in several new key markets, including Japan and Russia. In the second quarter we also signed a new strategic OEM partnership with one of the leading global brands in the ophthalmology equipment business. This new OEM camera called the “Signal”, was launched to the market in September 2019, adding again one new important sales channel for Optomed globally. Our direct sales team won new diabetic retinopathy (DR) screening projects in Asia, Middle East and Africa, and part of these projects already started to materialize as revenue during the year. The eye screening projects, var-

ious pilots, clinical validation studies and other commercialization activities led to strategically important early customers for our Artificial Intelligence (AI) based solutions. AI is still in the very early stages of commercialization in ophthalmology, but it is gaining momentum and being incorporated into different healthcare systems in all main markets.

China is an important market for Optomed. We have our own subsidiary there with 15 employees in sales and marketing. In 2019, our business to the public healthcare sector remained stable and predictable, but we faced challenges in our private healthcare business with one large private screening operator postponing their camera orders from 2019 to the second half of 2020. We expect the coronavirus outbreak to have a negative effect on our revenue, especially in the first half of the year. Despite these challenges, we believe that the fundamentals for demand of our screening solutions in China are strong, and also the private healthcare sector will recover in the near future. Our expected highlights in China for

2020 are our Aurora camera CFDA-registration (China Food and Drug Administration) and launch, as well as our large screening operator's recovery back to their normal order cycles.

We expect handheld cameras to continue gaining market share as one of the fastest growing product categories within the global fundus camera market, and large new screening programs for diabetic retinopathy continue to emerge especially in Asia, Middle East, Africa and Latin America. Private screening operators often choose to purchase handheld cameras instead of traditional desktop machines because of mobility, ease of use and lower investment cost. Also because of the limited amount of ophthalmologist resources available, AI continues to gain clinical and commercial acceptance around the world. We believe that we have the right products and a good position to capitalize on this opportunity in the coming years. In the first half of 2020 we will focus on our growth strategy and take actions to expand our activities into new markets, such as

the United States. We are also investing heavily on the development of our first, fully integrated AI camera, that can screen various eye diseases easier, faster and more accurately than ever before. We expect to launch this product in 2020.

Today, Optomed is a well-recognized medical technology company listed on Nasdaq Helsinki and a world-leading manufacturer of handheld fundus cameras. In combination with software and artificial intelligence, our cameras can make eye screening more efficient and improve the availability and access to screening. Our mission together with our partners and customers is to stop the growth of avoidable blindness globally by bringing high quality and cost-effective eye examinations to primary care.

I want to sincerely thank all our investors, both institutional and private, as well as our employees, partners and customers for the trust and support of our mission and growth strategy.

Seppo Kopsala, CEO

Business model

Complete solutions for eye screening

In our business, we combine handheld fundus cameras with software and artificial intelligence. We are expanding into new markets through various sales channels and due to outsourced equipment manufacturing our business is scalable.

Optomed sells its cameras, screening software and integrated artificial intelligence via three different sales channels globally. Our sales channels include our OEM-customers; Volk Optical Inc., Carl Zeiss Meditech Inc., Haag-Streit Diagnostics ja Topcon Medical Systems Inc., which are all prominent international medical device manufacturers, as well as our global distribution network and our direct sales organization, which focuses on selling complete eye screening solutions.

Our end-customers are health care units, including hospitals, eye clinics, optician shops, pharmacies, primary care centers and private and national screening operators world-wide.

Via our comprehensive sales channels, we are able to sell our products and solutions to over 60 countries and our aim is to expand our sales channels even further. Additionally, we have a subsidiary in China focusing on sales and employing 15 people. We have outsourced our production to an international EMS partner,

that manufactures both Optomed branded products as well as cameras for our OEM-customers. Therefore, expanding the production and sales does not require major investments.

Optomed has two complimentary business segments, Devices and Software.

The Devices segment produces innovative and affordable, high-quality handheld fundus cameras. Currently, the product portfolio includes the following cameras for our four OEM-customers; Visuscout 100, Fundus Module 300, Signal, Pictor Plus and Pictor Prestige as well as products sold via our own brand; Optomed Aurora and Optomed Smartscope Pro.

The Software segment develops and sells screening software for diabetic retinopathy and cancer screening and designs software for our integrated artificial intelligence services. The Software segment also offers software consultation and sells other vendors' software for healthcare services in Finland.



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We believe that integrating artificial intelligence with hand-held cameras will revolutionize fundus screenings.

Both segments are needed for the global commercialization of AI based eye-screenings

In addition to handheld fundus cameras and screening software we offer our customers integrated AI services for diagnosing and grading various eye-diseases. With the help of AI, eye-screening services can be expanded globally to reach wider patient groups. We work closely with selected ophthalmic AI-algorithm providers, who have developed high-quality and clinically extremely well validated algorithms for the detection of diabetic retinopathy, age-related macular degeneration (AMD) and glaucoma. Furthermore, we develop our own AI-algorithms for example for the detection of neurological disorders. AI-based eye-screening services enables faster and more efficient eye screenings and they lower the cost of screening.

In 2020 we are launching a new handheld screening product, which integrates AI-services directly to the camera. This makes the screening process much faster and more efficient. We have identified a great demand for such a product in countries which have limited resources for diabetic eye screening. The product will advance our efforts in enabling eye screening for all by bringing them to primary care, closer to the patients.

Operating environment

Optomed is a leading player in a growing market

Optomed operates in the global fundus camera market. The market was estimated to be approximately 535 million USD in 2018 and the annual growth rate was around 4 percent. The handheld fundus camera market was expected to grow much faster than the overall market¹, around 11 percent annually. The research does not take into account the possible expansion of eye screening and fundus camera sales into new markets, such as primary care market.

¹Zion Market Research (2018).



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Through our comprehensive distribution channel we can sell our solutions in over 60 countries.

Preventing diabetic retinopathy is on the priority list of several global health care organizations, such as the World Health Organization (WHO) Vision 2020 initiative. The initiative recommends that all diabetics would have access to regular eye-screenings and the needed care in order to prevent blindness caused by diabetic retinopathy. Based on the increasing attention to the subject, several new private screening operators have emerged, especially in Asia and the USA and the overall demand for affordable eye screening solutions has increased globally.

In the recent years AI has taken a step from research to clinical practice in several countries. For example, the UK and USA have created reimbursement models for AI-based eye screening services and Singapore has incorporated AI as a part of their national eye screening program for diabetic retinopathy, AMD and glaucoma. We believe that AI will be an essential part of eye-screening programs globally in the near future.

Optomed operates in the health care market, where changes to processes and existing treatment guidelines are slow. In 2020, in accordance with our strategy we will focus on expanding our business by registering our products in new countries, expanding our distribution network, enforcing our sales and marketing team and focusing on the global launch of our AI-integrated handheld camera. These expansion activities support our goal of extending eye screenings to primary care and they will accelerate our revenue growth in the coming years.

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