# Revenio Group

**Extensive report** 

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## Holistic value creation on the horizon

Under the iCare brand, Revenio offers world-class tonometers, fundus imaging devices and perimeters. In recent years, the company has added software solutions to its offering, moving from being an equipment provider to a holistic eye diagnostics solution provider. The core business is growing very profitably, the market has sound growth drivers, and the company's products have strong competitive advantages. At the same time, the company is creating future growth by developing new growth initiatives, of which Revenio has an excellent track record. The valuation is also no longer unreasonable, which is why we are raising our recommendation on the company to Accumulate (was Reduce) and reiterating our target price of EUR 38.

### A strengthened global player in eye health technology

Revenio has renewed itself successfully from a niche player with one technology to a global supplier of ophthalmic devices and software solutions. iCare tonometers have become the market leaders in their segment thanks to their superior features, and the RBT technology patented by Revenio is becoming the industry standard. Alongside tonometers, iCare imaging devices have grown strongly while improving profitability. In recent years, the overall product range has been strengthened with software solutions that will enable a long-term transition from a leading-edge equipment manufacturer to a total solutions provider. However, the company is still at an early stage on this path, but promising openings have already been seen. We expect the company to eventually expand its product portfolio into the OCT market, which may happen quickly through an acquisition.

### Strong product portfolio contains several growth drivers both in the short and long term

Revenio's core product portfolio has a proven track record. iCare tonometers will continue to grow at a good level, although as the market slows, growth will shift more from devices to probes. Revenio's imaging devices are very competitive (in particular DRSplus and the Eidon product family), which we believe makes it likely for the company to double its current market share of around 5% in the medium term. Company growth is supported by deep moats against competition related to technologies' high barrier to competition (like patents), the brand and reputation, a generally slow-moving industry, and high threshold to enter the market. The current earnings drivers can take Revenio forward for another five years, but at the same time the company is maturing new growth drivers to take on the responsibility. The most notable of these are the HOME2 tonometers, ILLUME and AI solutions in imaging devices and software, and Oculo software. The risk level of the business is moderate due to the defensiveness of the industry and the company's strong competitive advantages. The most significant risks relate to the weakening of patent protection for RBT technology (potentially intensifying competition), the development of the company's own growth ambitions, and the success of the software strategy in the disruptive phase enabled by AI.

## Valuation is no longer a barrier to good long-term investment

Revenio's compelling growth story is on track as the core continues to perform excellently while the company develops new opportunities in a strategically sound way. The evidence of profitable growth and capital allocation is excellent, and the medium-term outlook for earnings growth remains very good. At the same time, the stock's long bear market has normalized the valuation and brought the expected return to a reasonably good level. The 2024 multiples (adj. P/E 30x, and adj. EV/EBIT 22x) are, in our view, already reasonable for a high-quality defensive growth company whose earnings growth isn't particularly dependent on global economic developments.

### Recommendation

Accumulate

(previous Reduce)

38.00 EUR

(previous EUR 38.00)

Share price:

34.66 EUR



## **Key figures**

	2022	2023e	2024e	<b>2025</b> e
Revenue	97	111	130	152
growth-%	23%	15%	16%	17%
EBIT adj.	30.9	34.0	39.5	47.2
EBIT-% adj.	31.8 %	30.5 %	30.5 %	31.1 %
Net Income	21.8	24.9	29.4	35.4
EPS (adj.)	0.86	0.98	1.15	1.38
P/E (adj.) P/B Dividend yield-%	44.6	35.3	30.1	25.1
	11.3	8.7	7.4	6.3
	0.9 %	1.2 %	1.6 %	2.1 %
EV/EBIT (adj.)	32.9	26.4	22.1	18.1
EV/EBITDA	30.6	24.5	20.7	17.0
EV/S	10.5	8.0	6.8	5.6

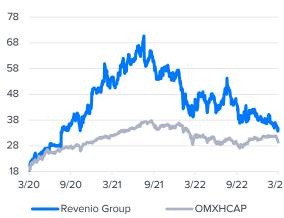
Source: Inderes

## Guidance

(Unchanged)

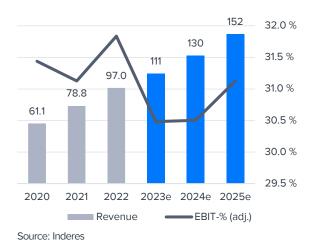
Revenio Group's exchange rate-adjusted net sales are estimated to grow strongly from the previous year and profitability is to remain at a good level without non-recurring items.

## Share price



Source: Millistream Market Data AB

### Revenue and EBIT %



### EPS and dividend



Source: Inderes

## M

## Value drivers

- Long-term growth outlook is strong
- Generally quite good predictability of the result and cash flow
- Strong competitive protection and growth drivers give support
- New products and software systems have attractive long-term growth potential
- Excellent track record of value creation
- Potential acquisitions (OCT)



## **Risk factors**

- Weakening of patent protection for the Icare tonometer after 2023
- Speed and success of the HOME product's ramp-up
- · Success in strong growth of imaging devices
- Success of growth investments (new products)
- High valuation level of the share poses a risk for investors

Valuation	<b>2023</b> e	<b>2024</b> e	<b>2025</b> e
Share price	34.7	34.7	34.7
Number of shares, millions	26.6	26.6	26.6
Market cap	921	921	921
EV	896	876	855
P/E (adj.)	35.3	30.1	25.1
P/E	37.0	31.3	26.0
P/FCF	39.5	28.9	25.9
P/B	8.7	7.4	6.3
P/S	8.3	7.1	6.1
EV/Sales	8.0	6.8	5.6
EV/EBITDA	24.5	20.7	17.0
EV/EBIT (adj.)	26.4	22.1	18.1
Payout ratio (%)	45.0 %	50.0 %	55.0 %
Dividend yield-%	1.2 %	1.6 %	2.1 %

Source: Inderes

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## Revenio Group in brief

Revenio is a global leader in ophthalmic devices and software solutions that focuses on solutions for eye care.

## **CAGR +26.7%**

Revenue growth in 2016-2022

## **CAGR +27.9%**

Adjusted EBIT growth in 2016-2022

## 97.0 MEUR (+23.1 % vs. 2021)

Revenue 2022

## 29.7 MEUR (30.6% of revenue)

**EBIT 2022** 

## 207

Personnel at the end of 2022

## 60% / 38% / 2%

Tonometers / Imaging devices / Software Revenue breakdown (Inderes estimate)

#### 2012-2015

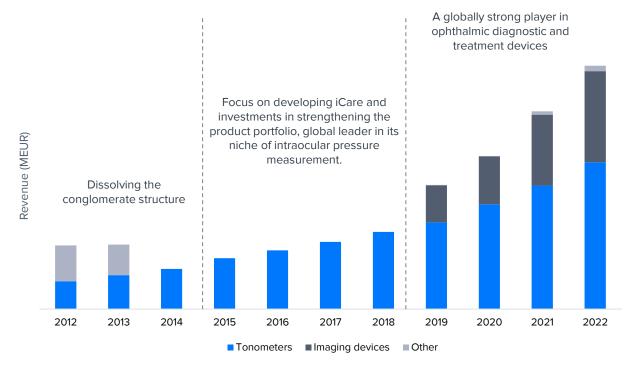
Structural change from a conglomerate to a health technology company

#### 2015-2019

- Focus on the development of iCare and investments in strengthening the product portfolio
- Global leader in own niche for eye pressure measurement

#### 2019-2022

- 2019 CenterVue acquisition and strengthening the offering especially in glaucoma
- A globally strong player in ophthalmic diagnostic and treatment devices
- Oculo acquisition in 2021 and expanding offering to software
- Thirona cooperation in 2022 and expansion to Al solutions



Source: Revenio Group / Inderes

## Company description and business model 1/4

## **Company description**

## Eye disease health technology company

Revenio Group is a Finnish leader in ophthalmic equipment and software solutions, with particular strengths in equipment and software solutions for the detection and treatment of eye diseases. The company's current offering covers all devices and software solutions needed for screening and treatment of glaucoma. The company's devices are also used to detect and treat diabetic retinopathy and macular degeneration. In its business, Revenio focuses on product development and sales and all manufacturing is outsourced.

Revenio has a long history as a conglomerate until the early 2010s. In 2012, the company launched a structural change from a conglomerate to a health technology company. The company divested its operations outside health technology and invested heavily in developing the iCare tonometers product portfolio and new development templates in screening for asthma and skin cancer. In connection with the 2020 strategy update, Revenio limited its focus purely to eye diseases, which put the abovementioned development templates outside the core business. The company is seeking strategic alternatives concerning these.

Revenio's extensive structural change was implemented successfully, and the company has a stable base on which to build future growth as a considerable player in the company's specialization area. During the structural change, the company's

market cap has grown from a good EUR 39 million to almost EUR 1 billion, which depicts the value creation of the restructuring and the company's expertise in allocating capital.

## Imaging devices started a new phase

In April 2019, a new chapter started in Revenio's story as the company grew from a niche player specialized in intraocular pressure measurement to a global player in eye diseases by acquiring the Italian CenterVue. Revenio does not report key figures for the different businesses, but we estimate that imaging devices accounted for around 35-40% of net sales last year.

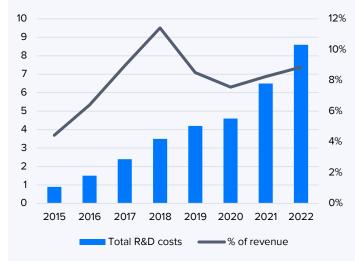
In 2021, the company expanded its offering into software with the acquisition of cloud-based eye care software platform Oculo. In 2022, the company launched iCare ILLUME, a screening solution utilizing the Oculo platform. Revenio's current solution is powered by Dutch Al provider Thirona but ILLUME as a platform is independent of the Al provider. This will allow the company to sign new Al partnerships and easily add them to its platform. Oculo and ILLUME are the first steps in Revenio's expansion from a pure hardware manufacturer to a total solutions provider, where software plays a major role.

In 2022, Revenio Group's net sales totaled EUR 97.0 million and EBIT was EUR 29.7 million. The company employs over 200 people mainly in Finland, Italy, and the US. The company annually spends some 10% of its net sales on product development.

### Development of revenue and profitability



#### R&D costs and % of revenue



## Company description and business model 2/4

### **Product portfolio**

Revenio can offer a one-stop solution for devices needed for eye disease screening and diagnostics and the company is one of the main global players in this area. As a rule, these products have strong competitive protection, which is based on patents, regulatory approval, respected brands within eye diseases, and software and algorithms related to the products. Revenio's key product areas are:

- iCare tonometers and their probes are the cash cow of Revenio. The tonometers are based on an extensively patented rebound tonometer (RBT) technology, which is still gaining market share from outdated tonometry. Probe sales for the devices brings solid and increasing income to the company.
- HOME2 that is part of the iCare tonometer product family is a tonometer intended for pressure measurement by the patient themselves, which creates new markets for iCare's RBT technology. The product is still in the early stages of growth, but we expect it to become an essential driver of net sales growth in the coming years. However, a major breakthrough still takes time.
- With the CenterVue acquisition, the product portfolio expanded to devices needed for imaging of the fundus and perimeter visual field testing that are used in the diagnostics and treatment of glaucoma, macular degeneration, and diabetic retinopathy. The strengths of the products now sold under the iCare brand lie especially in imaging technologies, the quality of images and

- ease of use. Imaging devices (in particular Eidon and DRSplus) have managed to strongly increase their still small market share, especially in the US, in recent years.
- With the Oculo acquisition, Revenio expanded its product range to software in March 2021. Oculo is an Australian software platform for eye care that combines clinical communication, telehealth, remote patient monitoring and data analytics capabilities. Oculo is still sold as a standalone software product, particularly in Australia, and Revenio has also leveraged the platform and expertise in its ILLUME solution. However, revenues are low for the time being.
- The iCare ILLUME screening solution was launched in spring 2022 and combines images taken with Revenio's iCare DRSplus imaging device with Thirona's (partner) artificial intelligence. The earnings logic of the solution is based not only on equipment but also on monthly payments (revenue sharing with Thirona). The solution will initially be sold in Europe, while expansion to the US will require FDA approval along with AI.
- Outside the strategy are Ventica, developed for the diagnosis and monitoring of asthma in children, and the Cutica hyperspectral camera, an imaging technology for skin cancer screening licensed by Revenio. The company is looking for potential interested parties to continue the business outside the group for Cutica and Ventica, as the products don't fall within the target area of the company's strategy.

## Revenio's main products

#### iCare tonometers

(iCare IC100 and iCare IC200)



## **HOME** meters for home use

(ICare HOME product family)



#### Disposable probes



## Devices for fundus imaging

(ICare Eidon AF and iCare DRSplus)





#### **Perimeters**

(iCare COMPASS and iCare MAIA)



## Oculo software platform



## ICare ILLUME screening solution







## **Partners**



**OEM** companies and subcontractors





Doctors, key opinion leaders (KOL) and hospitals





Inventors and universities

## **Operations**

Product development Procurement, logistics, maintenance. customer support, quality assurance

Sales and

marketing



Developing and managing quality and responsibility



### Resources

Software and algorithms



Patents, IP rights, regulatory approval



Reputation and brand in eye diseases



### **Business idea**

Development and sales of easy-to-use and efficient screening and diagnostics devices and software solutions for eye diseases

## **REVENIO**

- > Extensive product offering in eye diseases
- Modern product portfolio with proven competitiveness
- > Strongly growing markets











Online store (iCare)

**Tonometers** 

~39%

(2022 estimate)

## Customer segments

Ophthalmologists



Opticians and optometrists



First aid stations and health centers



Glaucoma patients

## **Products**

iCare tonometers

HOME meters for home use





Perimeters

Oculo software platform

ICare ILLUME screening solution

**Income streams** 

(Ventica asthma device)

(Cutica skin cancer device)



#### Costs



Product development ~10% of net sales



Material and manufacturing costs ~30% of net sales



Sales and marketing



Administration

>200 employees (2022)

~ EUR 64 million (2022)



Disposable probes ~21% (2022 estimate)



Imaging devices ~38% (2022 estimate)



Development subsidies (Ventica and Cutica)



Net sales 97.0

**EBIT 29,7 MEUR** (2022 actual)

**MEUR** 

Software solutions (2022 estimate)



## Company description and business model 3/4

## **Strategy**

### **Building on strong drivers and growth markets**

Revenio's strategy relies on a market that has underlying structural long-term growth drivers and based on the company's technological competitive advantage Revenio has very good preconditions to continue growing faster than the market. The main long-term growth driver is globally increasing eye diseases as the population ages. Key diseases for Revenio that become more common as the population ages are glaucoma, diabetic retinopathy, and macular degeneration. The market for ophthalmic diagnostics devices is around USD 3.3 billion globally and its device sales is estimated to grow by some 5-6% annually.

### **Acquisitions create new opportunities**

Revenio was looking for an acquisition target in ophthalmopathy for several years with which to expand its offering in eye disease solutions where the company's core competence and strongest distribution channels are. The acquisition of CenterVue in spring 2019 was an excellent fit for Revenio's strategy, and the deal was done at a bargain price. With the deal Revenio gained another strong pillar next to iCare tonometers, a more dispersed technology portfolio, and the company is also now able to offer all products for screening, diagnosing, and treating glaucoma. Packaging of various products is one competitive factor that Revenio has lacked compared to its larger competitors.

In our view, growth in imaging devices has been at

an excellent level since the acquisition (estimated at around 18% CAGR), while Revenio has been able to significantly increase product coverage with its own expertise and distribution channels. We estimate that the 5% synergies expected by Revenio from the acquisition over the following 1-3 years in procurement, manufacturing and sales have materialized even better than anticipated. Now the focus could be on expanding into the optical coherence tomography (OCT) market, where the same strategy could work well and the overall supply could strengthen again.

## Digital strategy brings new software solutions

Revenio's strategy is to expand its offering beyond ophthalmic devices to include supporting software. This is driven by megatrends such as an aging population, which means that the capacity required to treat the growing number of eye diseases is currently inadequate. Another major underlying megatrend is the growing importance of telehealth. These have created the need for more effective clinical collaboration between health professionals by linking up to create systems that enable diagnoses and communication between patients and doctors more efficiently.

The software solutions will also enable Revenio to make even more extensive use of the data generated by iCare's fundus imagers, perimeters and tonometers to support clinical decision-making. In response to these trend, Revenio, with a strong focus on devices, launched its software strategy in 2021 with the acquisition of Oculo, a company specializing in the development of software for secure, quick sharing of clinical imaging, referrals

and other clinical communications between healthcare professionals.

The Oculo platform has been leveraged in Revenio's ILLUME solution, to be launched in spring 2022, which combines fundus images taken with the company's iCare DRSplus imaging device and partner Thirona's artificial intelligence. The use of Al is also a big trend for the future, but so far it has focused on the diagnosis of diabetic retinopathy. In the future, Al is also likely to be used to screen for other eye diseases, such as glaucoma and macular degeneration. Preliminary research shows that in the longer term, fundus imaging may also have the potential to screen for neurological and cardiovascular diseases.

In the 2022 financial statements, the company commented that the first system delivery is already underway, with several pilots underway. Sales of the ILLUME solution will initially focus on Europe. In the US, the company is awaiting FDA approval for its solution, which requires clinical trials and authorization for the combination of device and Al (DRSplus and Thirona). In Europe, it's sufficient that the studies have been carried out separately for the device and the algorithm, and both have been approved. Revenio's aim is to expand its ILLUME solution, particularly in the United States. There, the company is pursuing two different growth strategies. In the first arm of the strategy, the company aims to maximize its device sales by ensuring that the iCare DRSplus device works with as many Al providers as possible. In this case, however, the company won't be able to enjoy a steady income stream.

## Company description and business model 4/4

In the second arm of the strategy, the company sells its complete solution (the device and the ILLUME platform with a partner's algorithm), which allows the company to participate in ongoing revenue streams.

#### Core product portfolio is in good shape

Revenio has a strong core product portfolio and a proven track record of highly competitive technology. The company still has significant organic growth potential in its competitive core areas, particularly in imaging. Renewing of the product portfolio and displacement of competing intraocular pressure measurement technologies have been visible in continued strong growth for iCare. In our view, the next generation of iCare tonometers will be launched in the next few years, as patent protection for iCare's key technologies will be weakened this year. By developing new features, the company can extend its competitive advantage. So far, iCare has no direct significant competitor in RBT technology, although there has been a long wait for competitors. Reichert has had a competing solution (Tono-Vera Vet) for a long time on the veterinary side, but there has been no product for humans. Revenio has also not observed any change in the veterinary market, where the company's market position remains very strong and the business extremely profitable.

The imaging devices product portfolio is also highly competitive and on a strong footing. New products and product innovations for fundus imaging have been very successful, with DRSplus and Eidon Ultra Wide Field (UWF) currently leading the way.

However, in the field of imaging, the technology is aging faster due to its rapid development (the life cycle of RBT technology is likely to be decades). For imaging devices, we expect current products to be highly competitive for 3-5 years, but maintaining a competitive advantage will require continued investment and success in product development.

In the medium term, we expect the growth rate of core products to slow down from historical levels. This is why broadening the product range and expanding from a simple device supplier to a total solution provider is critical in the long term. We see this as a sensible strategic move, although so far the software strategy has been more of a burden on the bottom line. However, the situation is good because the company is in a good position to continue to grow organically with its current products while investing in new software solutions. In the big picture, the hardware side is and will remain at the forefront of product development. According to the company, about one third of product development is allocated to software and two thirds to hardware. For hardware, we expect product development to focus on developing nextgeneration versions of current products and new solutions for eye diseases.

## Developing the product portfolio in future

The clearest place to expand Revenio's product range is in our opinion optical coherence tomography (OCT) that is part of the imaging market. The share of this of the around USD 1.3 billion imaging market is around EUR 500 million and so far, Revenio has no offering in this segment.

This would be a logical place for expansion, and we expect Revenio to expand into the area in the medium term either through own product development or an acquisition. Through M&A, expansion could be rapid if the pieces fall into place.

After the strategy renewal, Revenio's focus is also officially on eye diseases, and we expect the company to divest the Cutica and Ventica templates or find a partner for them that could develop the products further with a license-based model. In any case, the weight of these products in Revenio's market value is very small.

### Artificial intelligence is a threat and an opportunity

We believe that the wider application of software and Al in fundus imaging is both a threat and an opportunity for Revenio. The risk is that if a company doesn't invest in the software capabilities of its devices. Al and software will take an even greater share of the value of the care pathway device. Devices will be needed anyway, but the revenue and scalability that Al brings is very attractive in the long term. In the long term, the biggest winners in the industry are likely to be those who manage to create the best comprehensive solution and the ecosystem around it. Revenio aims to do this with a state-of-the-art camera and a seamless end-to-end solution, where the partner's Al does its work in the cloud and the data moves through the medical chain on the Revenio platform.

## **Evolution of Revenio's products**

	Product area	Installed device base	Price range (for customer)	Net sales 2022 estimate	Gross margin profile	Development stage	Weight in valuation
	iCare tonometers	>100,000	€2,500-5,000	~33 MEUR	>80%	Growing	Very high
business J	iCare HOME2	>8,000	€1,500-2,500	<5 MEUR	>70%	Commercializatio n / growth	High
Core bu	iCare probes	>35 million / year (volume)	< €1	>20 MEUR	>60%	Growth	Very high
	Imaging devices	>7,000	€14,000-50,000	>36 MEUR	>70%	Growth	Very high
Strategic examination	Ventica	-	>€2000	€0	>70%	Clinical evidence	Negligible
	Cutica	-	-	€0	-	Product development	Negligible

All figures are based on Inderes' estimates and assessments



iCare IC100 and IC200



iCare HOME2



iCare probes

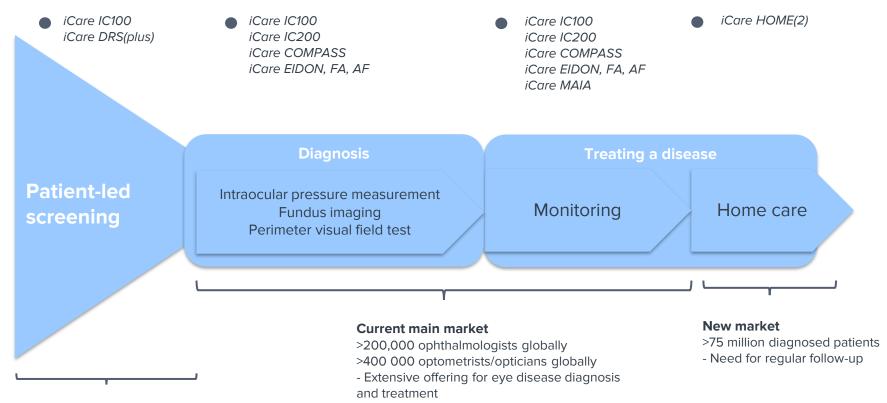


iCare DRSplus



iCare COMPASS

## Revenio's products as part of eye diseases screening and treatment



## **Developing market**

- >150 million people suffering from glaucoma<sup>1</sup>
- >150 million people suffering from diabetic retinopathy<sup>2</sup>
- >170 million people suffering from macular degeneration<sup>3</sup>
- Screening becoming more common will create new demand
- Opticians, general practitioners and nurses as users

## Investment profile

#### Investment profile

Revenio's investment profile is nearly flawless. The company is in excellent shape and the CenterVue acquisition offers it several growth drivers in a more diversified portfolio. With the acquisition of Oculo and the Thirona collaboration, the company is also expanding into software and Al solutions, increasing its long-term potential. Revenio has an excellent track record of implementing a growth strategy that creates shareholder value and an ability to allocate capital both to M&A transactions and own product development. Developing iCare into top form and creating a plausible strategy that focuses on eye diseases have created considerable shareholder value over the past decade.

Revenio's market is based on healthy underlying long-term growth drivers where the key factor is increasing eye diseases as the population ages. Device sales in the sector is expected to grow by 5-6% p.a. In our view, Revenio has the potential to clearly outperform the overall market growth, especially as imaging devices are set to grow strongly in market share in the coming years. The company's historical performance supports this view.

Revenio's investor profile is also supported by exceptionally deep competitive moats related to competitive protection of technologies, brand and reputation, a generally slow-moving industry and a high barrier to entry. iCare's RBT technology will see important patents expire in 2023, but even after that the latest generation of products will have patented functionality and a strong competitive advantage. In imaging devices, the company doesn't have the

same dominant position in its product category as iCare. However, the prospects for strong market share growth are very good.

Competitive products are clearly visible in Revenio's financial development. The company is highly profitable (2022 EBIT >30%) and with low investment needs, the company is generating strong and growing cash flows. The risk level of the business is moderate due to the defensiveness of the industry and the company's strong competitive advantages. The company continuously invests in product development to maintain its competitive advantages in the long term (around 10% of net sales).

In the long term, we find Revenio's ability to renew and build a comprehensive product offering that combines software and products within the target segment of eye diseases interesting. In the area of eye diseases, the company is still a medium-weight challenger compared to the giants in the sector (like Carl Zeiss Meditec). The current strategy and product portfolio has good elements for iCare rising to a clearly bigger size class and become one of the more significant players in the sector over the next decade. This would require continuous product development investments and expansion into the OCT market that is lacking from the product palette at the moment through an acquisition.

## Risk profile

The risk level of Revenio's business operations is exceptionally low for a growth company. The rate of change in the industry is slow, demand is defensive, and the product portfolio is relatively dispersed. Net sales is quite dispersed geographically even though

the weight of the US is high (~ 50%). Profitability is at an excellent level, the cost structure is efficient, and the business model does not tie up considerable amounts of capital. We believe the main risks are related to the sustainability of the company's competitive advantages in the long term as patent protection weakens. In the medium term, Revenio's new growth initatives must also succeed if the story of profitable growth is to continue well into the future. In our view, these include the HOME product family, software solutions (Oculo) and Al solutions (ILLUME / Thirona).

## Issues to follow in the company's strategy

In our opinion, the following matters are essential for the implementation of Revenio's strategy in the next couple of years are:

- In the short term, key to Revenio's growth and profitability is its ability to sustain the growth in tonometer sales and strong growth in imaging devices (strong market share gains).
- The long-term growth of tonometers is defined by the ability of iCare's RBT technology to continue taking over market shares quickly and competitor's expansion into RBT products.
- A successful ramp-up of the iCare HOME product is essential so that the company can maintain iCare's growth in the medium term.
- Success of the software strategy and building the ecosystem.
- Possible expansion into Optical Coherence Tomography, OCT technology in imaging devices in the medium term.

## **Investment profile**

- 1. Strong track record of creating shareholder value and ability to allocate capital
- 2. Strongly growing market with structural long-term growth drivers
- **3.** Competitive products generate faster growth than general market growth
- 4. Strong moats as long-term barrier to competition
- 5. Strong cash flow enables investments in new growth iniatives

## **Potential**



- iCare's RBT technology continues displacing old products, there is still growth potential left
- Strong growth in imaging devices especially from the comparison period weakened by COVID
- Success of the iCare HOME (2) product
- Success of the software strategy would strengthen competitive advantages and margins
- Expansion into new areas in the target market of eye diseases

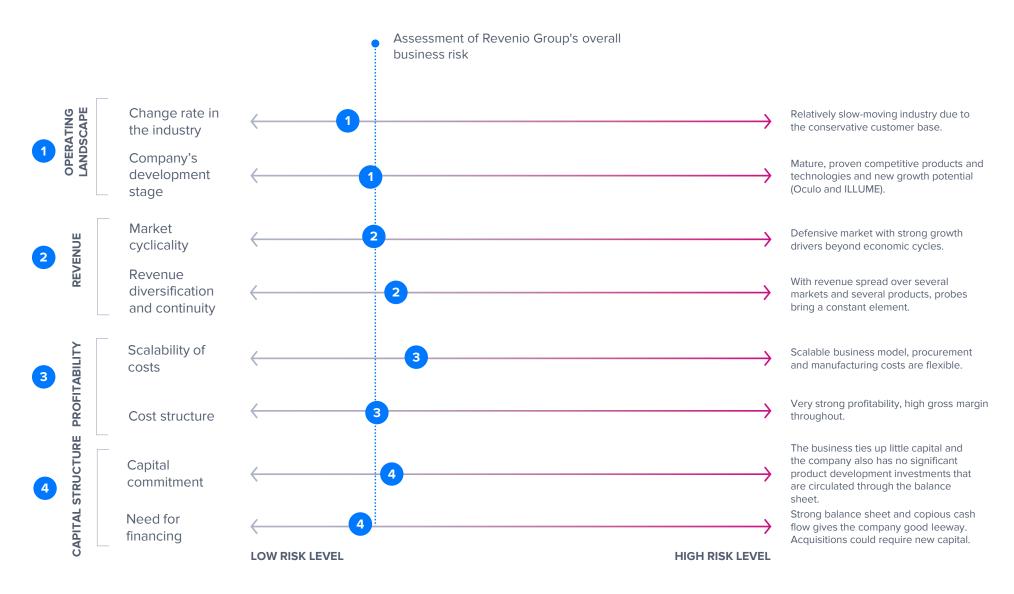
## **Risks**



- Competitors' expansion into RBT technology
- Weakening of the patent protection of products
- The volume of HOME product remaining low
- Failure in software/Al strategy
- High expectations, rising interest rates and valuation levels represent a significant risk for investors

Source: Inderes

## Risk profile of the business model



Source: Inderes 15

## **Tonometers 1/5**

### **Description of operations**

Revenio's iCare sells and markets easy-to-use, handheld tonometers that are painless to the patient and utilize the company's extensively patented rebound technology (RBT). The product and technology are based on MD, general practitioner Antti Kontiola's invention made in the 1990s. Descriptive for the industry is that it has taken 30 years for iCare technology to become an industry standard. Tonometers are used for the screening of glaucoma as part of its diagnosis as well as for its follow-up. iCare's growth has mainly been based on replacing old technologies (air-puff and applanation) in the use of ophthalmologists. In comparison to its competitors, iCare has been overwhelming in terms of accuracy, usability and cost. We estimate that ~60% of Revenio's net sales come from tonometers.

#### **Main markets**

In addition to ophthalmologists, the users and customers of iCare products include opticians, optometrists, general practitioners, nurses and veterinarians. The company's HOME2 product also makes the patients themselves a potential customer. The main market is the US, which accounts for around 50% of the company's net sales. We estimate that Europe's share is around 30% and other markets around 20%. The company has an established market position in many western countries and through its distribution network is present in virtually all major markets. Consequently, the availability of untapped growth areas is limited or small in relation to the overall market.

We estimate that around 65% of iCare's net sales come from device sales and rest from disposable probe sales. We also estimate that approximately one tenth of the net sales is based on meters meant for veterinary and laboratory use (VET and LAB products). The HOME product family still accounts for a low share of sales, which we estimate at 5-10%. From a margins perspective, device sales (margins >80%) are more valuable than probe sales (margins >60%), but the latter provide important business continuity and have grown more strongly than device sales in recent years as usage has increased.

## Glaucoma and intraocular pressure measurement

Glaucoma is a symptomless eye disease, which is often detected by accident in an ophthalmologist's examination. Elevated intraocular pressure will unnoticeably damage the optic nerve, eventually also damaging vision. Glaucoma is one of the most important causes of blindness that can be prevented. A prerequisite for preventing the disease from progressing to blindness is its early detection, as well as careful treatment and followup, where intraocular pressure measurement plays an integral role. According to various estimates, there are some 80 million glaucoma patients worldwide. The number of undiagnosed people and those suffering from glaucoma without knowing it is estimated to be equal. The key driver for the number of glaucoma patients is the aging of the population. The average incidence of the disease in the population aged over 65 is around 4% and this population is expected to double by 2050, which would mean 45 million new glaucoma patients. The intraocular pressure measurement

method developed by iCare (RBT) will play an important role in screening, preventing and treatment of glaucoma.

#### **Business model**

iCare has a very scalable business model, which runs with a light organization. A considerable part of operations are generated by partners and the company focuses on core operations that are sales and product development. Continuity is brought into the business model by the sales of disposable probes.

We estimate the total production cost of iCare tonometers to be a couple of hundred euros in total depending on the model (IC100, IC200, HOME). We believe, the production cost of probes is under EUR 0.2 with new efficient production lines. According to our estimate, the average sales price of a tonometer to a distribution channel is over EUR 2,000 and approximately EUR 0.5 for probes. This is to say that the gross margin of the whole of iCare is somewhere in the 80% range. Very high distribution channel margins are typical for health care devices. Therefore, the average sales prices of iCare's devices for end customers have been in the range of 2500 to 5000 euros, and so the distributive trade margin is somewhere in the 40% to 50% range. However, there are significant differences between countries and products. The high margin of the distributor is explained by the distributor's critical role in the sales chain and the relatively small sales volumes of the devices.

## **Tonometers 2/5**

In addition to device sales, the sale of disposable probes used in iCare devices brings continuity to the business, accounting for an estimated 35% of sales. According to our estimate, an average iCare device in customer use consumes more than 320 probes per annum. Thus, with a lifetime of ten years and a price of around EUR 0.5 per probe, the sale of one device will generate more than EUR 1,500 in probe sales revenue for iCare over its lifespan. In the long term, probe sales could reach around 50% of net sales

### Production, distribution, and product development

The production of iCare's tonometers and probes has been outsourced to domestic subcontractors but the company owns part of the production equipment itself. iCare uses its own personnel for R&D and for managing the outsourced R&D service suppliers. With product development, the company tries to strengthen its product portfolio and patent new features for the devices, as well as chart new application areas for the RBT technology, for example, in the diagnostics of other eye diseases.

iCare's products typically have their own country-specific distributors for each target group. For human tonometers there is typically one distributor specialized in ophthalmologists and another in opticians. Tonometers for animals have their own distributors. In the US, iCare has built its own independent sales organization and has no distribution partner except for VET products. The distribution network has been optimized in recent years, together with the imaging devices.

## **Technology and competitors**

The generally approved IOP measurement standard is based on Goldmann's applanation method developed in the 1950s. The weaknesses of the method are the need to use anesthesia for the eye, need of calibration (reliability dependent on the user) and the training required for using the devices. In addition to Goldmann's applanation, the TonoPen (Reichert) based on applanation entered the market later on, which owing to its portability and small size competes with iCare. During its lifetime, iCare has won market share especially from TonoPen devices.

In technologies, another competitor of iCare is airpuff, an open technology which entered the market in the 1990s. The lifespan of air-puff as a technology seems to be short as it has not been successful in challenging iCare's RBT technology due to the size, precision, price, and patient experience of the device. After the COVID pandemic started air-puff lost popularity due to the hygiene challenges of the device which iCare does not have (disposable probes). This further strengthened the competitive advantage of Revenio's RBT technology.

Tonometers based on iCare's patented RBT technology and method are based on so-called rebound tonometry technology. In practice, in this method a very small and light-weight probe touches the cornea very quickly, during which the device analyses the deceleration of the probe and the speed of its rebounding from the cornea. The key benefits of the technology are 1) painless for the patient (no anesthesia), 2) quick measurement 3) ease of use and easy to learn to use (no calibration,

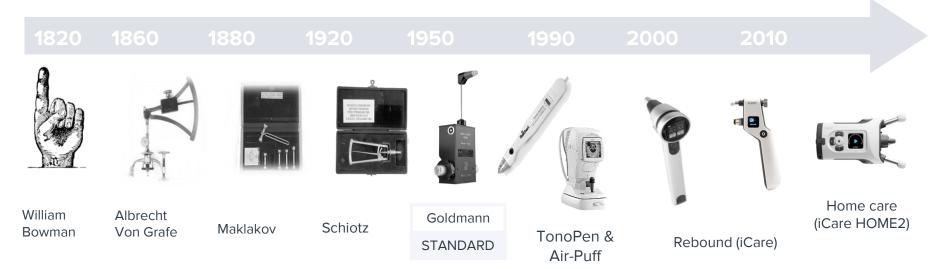
easy to maintain), and 4) small size and portability of the device. iCare's technology has in several studies been found to achieve the accuracy of the standard of the field, the Goldmann method, or to be even more reliable. Ease of use and quick training is a central advantage when the meters are sold to customer groups other than ophthalmologists.

In the development curve of IOP measurement technologies, iCare is displacing methods based on applanation and air-puff in developed countries and is leaping straight ahead of applanation and air-puff in developing countries.

We believe iCare is now a market leader in the area with a market share of some 30%. iCare's key competitors are large device manufacturers typically with an extensive product offering in eye diseases. Individual players are, e.g., the US Reichert (owner Ametek, NYSE: AME), the British Keeler (owner Halma Plc. LSE: HLMA) and the Japanese Topcon (TSE: 7732). These manufacturers make both applanation and air-puff devices, and Reichert has also launched a device for the VET side based on RBT technology. In the devices delivered by these competitors, IOP measurement may be one part of a wider device entity whose total price can be tens of thousands of euros. If the ophthalmologist has to use anesthesia for the eye in the examination in any case, the use of applanation is natural, and iCare's meter is not needed. Many ophthalmologists are, however, using iCare's easy-to-use and portable device next to the applanation method.

## Intraocular pressure measurement technologies

## **Evolution of IOP measurement**



## iCare compared to other technologies

Features	iCare RBT	TonoPen applanation	Topcon air-puff	Reichert air- puff	Goldmann applanation	Reichert RBT** (for veterinarians)
Price range	EUR 2,500- 5,000	EUR 1,800- 3,000	EUR 6,000- 9,000	EUR 4500- 9,000	EUR 200-1,200	EUR 3,100-3,600
Accuracy*	+/-1.2-2.2	+/-1.8-3.1	+/-4	+/-4	0	+/-1.2-2.2
Portable	Yes	Yes	No	No	No	Yes
Calibration	No	Yes/No	Yes	Yes	Yes	No
User training	5-10 min	<30 min	<20 min	<20 min	> 2 weeks	<15 min
Patient's experience	Painless	Unpleasant (anesthesia)	Unpleasant (air- puff)	Unpleasant (air- puff)	Unpleasant (anesthesia)	Painless

<sup>\*</sup>Compared to Goldman measurement \*\*Reichert is the first that has launched a competitive device with RBT technology So far, the device is only for veterinarians but likely to be launched on a wider market later.

Source: iCare, Inderes

## **Tonometers 3/5**

### **Patents and competitive protection**

iCare's technology and products are protected by more than 20 patents related to method and mechanics. An important basic patent for iCare expired in the US in 2019, which has enabled a competing product that is similar to the company's original TA-01 product to enter the market. The first competitor to utilize RBT technology is Reichert that launched its Tono-Vera Vet product in February 2021 in the US for veterinarians. The device is also expected to enter the wider market once Reichert receives the required regulatory approvals for the product. However, so far no competing product has been announced. We believe Reichert's product is based on iCare's old RBT technology, which has weaker features than iCare's current models and the device is also priced higher than iCare's products. The threat of the device for Revenio is small but it shows that challengers are entering the RBT market. This is both a threat and opportunity. It is positive that Revenio is no longer the only player that is driving the implementation of RBT technology and creating markets for the technology.

In other markets, iCare's patent protection lasts until 2023-2025, which we consider to be the first realistic window of opportunity for a more widespread market entry of competing RBT devices. However, iCare has continuously strengthened its patent protection by patenting new features, so patent expiry does not allow copying certain features of the new generation products (IC100 and IC200). We expect that generation of competition in RBT technology is not likely to lead to significant price erosion. The price sensitivity of the customers is limited and developing the devices is rather expensive. In addition, RBT technology becoming

more common would probably speed up the market moving away from air-puff and applanation, which could also support iCare as its competitiveness remains strong.

Key factors protecting iCare from competition next to the patents are IPRs related to technology, reliability and the brand, quality, regulatory approvals, distribution channels and doctors' high threshold to adopt new methods. The calculation method of iCare's meter also involves iCare's own algorithm, which means full copying of the device in terms of measuring results is practically impossible also after patent protection ends. The company has built a strong reputation among ophthalmologists thanks to quality and reliability of its products and operations, as well as a distribution channel to customers which are important competitive factors.

We do not expect that a new competing technology generation will be created for the rebound technology over the next decade. It's more likely that after iCare's patent protection expires, the current competitors that are specialized in eye diseases will launch competing products based on the rebound technology on the markets. Like iCare, these operators would have ready distribution channels and a strong brand.

## **HOME** product family

## Home measuring as a product category

The HOME product intended for self-measurement by the patient opens a new market for iCare that utilizes existing technology and customers. The device has been in the market since 2014, after which governmental permits have been applied for and recognition has been built for the product. The product received a sales permit in the US in early 2017. The new enhanced HOME2 product was launched in spring 2021 and received FDA approval in early 2022. A milestone for the HOME product was the Medicare reimbursement in the US in summer 2019, which brought home measurement within the scope of reimbursement. The idea of the HOME product is based on the follow-up of intraocular pressure as a time series, which is based on measurements made by the patient at home. This provides a much more accurate picture of variations in the intraocular pressure compared to individual doctor's visits and the doctor gains more insight into the effectiveness of medication.

In the HOME product concept the treating doctor loans the patient a device with which the patient can measure their own intraocular pressure at home. The results can be delivered directly to the treating doctor through Revenio's cloud service. With home measurement the patient's intraocular pressure can be monitored as a time series at different times of the day. The patient is also spared several expensive doctor's visits

We estimate that the sales volume of the HOME product initially was a few hundred devices per year because sales in the initial stages have mainly been delivery of individual devices for test use. Volume growth in recent years has been slower than we anticipated, but we estimate that volumes are now in the thousands of units per year. Stronger growth still waits for home measuring becoming more popular when a single clinic could order devices in bulk. However, even during the COVID pandemic, home measuring has not gained significant popularity in the industry where changes typically are very slow.

## **Tonometers 4/5**

Ultimately, a major breakthrough may require changes in treatment practice ("best practice treatment"), and these changes often take years, even if the benefit to the patient is clear. The proliferation of telecare concepts could contribute to the growth of HOME. The change has been further slowed down by Revenio having to create the market almost by itself. As far as we know, there is no comparable product from competitors.

## **HOME's growth drivers**

The ramp-up of the HOME product was a multi-year process where iCare created the market for its product. The HOME product has significant long-term potential, and it can, in the best-case scenario, become bigger than the company's basic device business. HOME's growth drivers in the long term are:

- The sales potential of the devices per an ophthalmologist or clinic is manifold compared to iCare's basic devices because the devices ca be bought to be lent by patients. Instead of individual devices, the sales batches can be, for example, 5 to 10 items. The patients can also purchase the device themselves.
- In home use, devices break down at a much higher rate, which means higher sales volumes with replacement devices.
- Home measurement means more frequent measurements and thus a higher probe consumption.
- The communication between the patient and the doctor takes place through iCare's own cloud service, which strengthens competitive protection and customer loyalty. Utilizing the measurement data accumulated in the cloud service also opens

new opportunities for glaucoma treatment and research for the company.

Revenio received FDA approval for the renewed HOME 2 product in early 2022. The new product has been well received in the market, but the company has been rather cautious in its comments on the development of HOME2 sales. Our growth estimates for the HOME product family have historically proved to be overly optimistic and have gradually declined.

## **HOME's competitors**

Other players have also recognized the potential that lies in continuous IOP measurement. This has generated at least two competing technologies that are trying to resolve the same problem as iCare but with a slightly different approach. According to our research, none of these have, however, been able to break through to the markets over several years.

One competitor is the Swiss Sensimed, whose tonometer Triggerfish is based on a contact lens, that constantly monitors intraocular pressure. In addition to the contact lens, a receiver is attached around the patient's eye and another device hangs on the neck. Sensimed's advantage compared to iCare is that it can monitor IOP as a continuous time series and in any posture by the patient. The results are analyzed using Sensimed software and the product has FDA approval (2016). Sensimed's challenge compared to iCare is that it only measures change in IOP, but it doesn't determine the pressure in millimeters of mercury, which is the measurement standard. Thus, the results of the device cannot be compared, for example, with the industry standard Goldmann, which poses a challenge for the interpretation of the results. The expense of using the device is also high compared to iCare. Due to

these reasons, we believe that Sensimed has not been able to get a good start on the market. Sensimed has devoted considerable resources to advancing research into eye pressure monitoring, which has helped to create market demand for the iCare HOME.

German company Implandata has developed an eye pressure implant called EyeMate. The technology is based on an implant surgically placed in the eye during cataract surgery, which makes it an expensive and inconvenient solution. The product received a "Breakthrough Device" designation from the FDA in spring 2021, and the latest generation of the product also carries the CE mark. We also understand that EyeMate hasn't made significant progress to the commercial stage, but after FDA approval, EyeMate is worth following.

## **Market potential**

## Market potential of basic meters

The market potential of tonometers is based on the around 80 million people who are known to suffer from glaucoma and another 80 million people who suffer from the disease without knowing it. iCare's growth is still based on displacing competing technologies especially in ophthalmologists' use as part of glaucoma treatment, monitoring and diagnosis. The screening of glaucoma and emergence of screening mechanisms will introduce new, larger user groups for the devices in society, such as opticians, general practitioners and nurses. In glaucoma treatment, home care and IOP monitoring by self-measurement of the patient will also open up a new and significant market potential for iCare.

## **Tonometers 5/5**

iCare's RBT technology has close to one-third of the USD 200 million tonometer market. In terms of the RBT technology, we estimate that the market will grow over the next 5-10 years when the openness of the technology increases the supply, and the increasing importance of hygiene weakens the competitiveness of air-puff and applanation methods further. In particular, we expect air-puff (estimated at >100 MUSD market) to lose significant share to RBT technology as the three decades of gradual market upheaval continues even after the acceleration brought about by COVID.

iCare's current market share of virtually 100% in rebound technology (RBT), made possible by patent protection, is slowly being eroded as the market is shared by other rebound device manufacturers. We believe that, as the category leader in RBT, iCare has the potential to capture well over 50% of the market in the long term, so there is still a lot of potential.

We estimate the total market potential of iCare's rebound technology to be in the range of EUR 100-200 million per year (excluding the HOME product) in the long term (2022 estimated net sales around 54 MEUR, of which probes more than 20 MEUR). According to our calculations iCare's sales per ophthalmologist on the mature Finnish market is around EUR 1,000 per year. The global number of ophthalmologists is around 200,000 (no growth) and assuming a 50% penetration in ophthalmologists for RBT technology the potential is around EUR 100 million. According to our estimates other user groups (optometrists/opticians 400,000 and general practitioners) represent as large as market potential for iCare as

ophthalmologists in the long term. This year we estimate that iCare's devices will be used to make some 45 million measurements (probe consumption 2023e). When this figure is compared to the number of glaucoma patients (75 million) and the global need for screening, the company's potential in the global market can still be considered very significant. We emphasize that these are indicative calculations, rough estimates that mainly try to perceive the overall market.

## Significant markets are still maturing

In some individual markets like the Nordic countries, iCare has taken possession of the entire market in glaucoma treatment from competing technologies. iCare still has a lot of growth potential based on replacing other technologies in the rest of the world. iCare's markets are roughly divided into three parts according to their development stage.

- In the more mature markets like the Nordic countries and Japan, the growth according to our understanding is at a single-digit level. In these markets, net sales is already strongly dependent on replacement device and probe sales.
- In many large countries (such as the US, France, Germany, UK, South Korea, Australia and Brazil), the company still has markets to conquer, but pockets of growth are limited (e.g. very low market share in France). Overall, we estimate double-digit growth.
- iCare also has several somewhat unexplored markets in developing countries, in which there is considerable potential for growth. These markets include China and India. The company has now

invested in China, but one challenge is the preference for domestic companies in the public sector. But the country still has potential.

In growing and new markets, iCare's key growth driver is device sales. In mature markets, growth is driven by probe sales, which follow the growth of the device base with a lag as usage increases.

## Market potential of home care devices

When diagnosed with glaucoma, the continuous follow-up of intraocular pressure as part of the patient's treatment is important in order to stop the progress of the disease and for finding out the correct medication. iCare HOME offers an easy and cost-efficient solution for the continuous monitoring of intraocular pressure. In the business model of the HOME product, an ophthalmologist will purchase several HOME devices, which are lent to patients for home use. In practice one ophthalmologist may acquire several devices for themselves to be lent to patients. From this perspective, the device sales potential is manifold compared to iCare's basic models.

The sales volume is, however, very dependent on how common a practice home use will become and how quickly. It's therefore very difficult to assess the sales potential of HOME at this stage. All 80 million diagnosed patients are potential users, which means a market potential of tens of millions of euros for the probes alone. Due to HOME's early development stage, we do not find it expedient to assess the market size at this stage but we can say that it is significant considering iCare's size class.

## **Imaging devices 1/4**

#### **Basics**

CenterVue that Revenio acquired in April 2019 is an Italian company focusing on eye disease diagnosis and treatment and specializing in fundus imaging devices founded in 2008. Revenio's imaging devices are CenterVue's technology that now are found under the iCare brand. The devices use confocal imaging technology that, unlike conventional fundus imaging, generates a high-resolution color image of the ocular fundus. This helps make the correct diagnosis, in treatment and monitoring. Fundus imaging can be used to diagnose, manage, and prevent several eye diseases like diabetic retinopathy, glaucoma, and macular degeneration.

The imaging device product family covers four product areas: 1) glaucoma diagnosis, 2) diagnosis and monitoring of macular degeneration, 3) diagnosis and monitoring of diabetic retinopathy (DR), and 4) cataract diagnosis. Revenio's product offering that used to focus on glaucoma expanded into several eye diseases with the acquisition. Revenio now has a comprehensive product range and strong technological expertise in these areas of eye disease.

In terms of the care pathway, the imaging device product family covers everything from patient-led screening to diagnosis and disease treatment. DRS products mainly act as helping devices in screening for opticians while the more expensive EIDON product family and COMPASS product are used to help diagnosis and treatment among ophthalmologists. The MAIA product is mainly used

to support disease treatment. Revenio's product portfolio extensively covers screening, diagnosis and treatment of eye diseases linked with aging. Especially in terms of glaucoma, the company can now offer a one-stop solution for its customers.

#### **Business model**

Imaging products are offered for opticians' screening use (basic products like DSRplus) and more sophisticated and clearly higher price class products are sold for ophthalmologist use. We estimate the end-customer price of the devices to be between EUR 14,000 and 50,000. The company can deliver a maintenance package with the device entity but the share of continuous income is low. We estimate that the company has an installed base of more than 12,000 devices.

Next to conventional device sales, relatively many software licenses are sold on the imaging side where the share of the software of the order can be as much as 20%. This naturally raises the gross margins of the business. Revenio sells licenses with the devices with the help of which the images can be transferred directly to the patient management system. This makes the devices easier to use but the devices can also be used without a license. In addition, Revenio sells extended guarantees for the devices. However, there is no actual recurring revenue in the devices, and they don't, e.g., translate into "probe sales".

The production of imaging devices, like tonometers, is outsourced and Revenio has achieved significant cost synergies from production since the

CenterVue acquisition. CenterVue's gross margins were around 62% before the merger, but we understand that they have already risen to 70% (tonometers are as high as ~80%). The market for fundus imaging devices is inherently more competitive and manufacturing the devices is inherently more expensive (e.g. lenses), but Revenio has been able to increase production efficiency and software sales, especially with the DRSplus product. These factors have clearly raised the gross margins.

CenterVue operates like Revenio in the US with its own sales organization and elsewhere through distributors. As the target groups are the same, significant synergies in sales and marketing have been achieved. In recent years, the operations have been brought together under the iCare brand, and the reception has been very positive. With a broader offering, Revenio is an increasingly relevant customer also for large operators, which supports both sides. Previously Revenio was able to offer an excellent solution for one rather small segment but now the company is a credible player in a wider area. The same reasons would support further portfolio expansion.

#### **Markets**

The growth drivers in imaging devices are connected to glaucoma, macular degeneration, diabetic retinopathy, and to some extent cataract becoming more common. The combining factor in diseases becoming more common is the aging of the population. In glaucoma, the growth drivers for imaging devices are similar to tonometers.

## **Imaging devices 2/4**

For diabetic retinopathy, the growth is driven by the need for diabetics to have their eyes examined regularly, which means a huge need for screening. The driver is a strong increase in diabetes: 8.4% of adults suffered from diabetes in 2014 while the share in 1980 was 4.7%. Currently an estimated 422 million people are suffering from diabetes (source: WHO) of whom some 35% suffer from diabetic retinopathy. In 2040, the number of diabetics is estimated to grow to 642 million, which supports market growth. Globally an estimated 196 million people suffer from macular degeneration and the number is expected to grow to 299 million by 2040. The driver again is the aging of the population.

The global market of imaging devices is around USD 1.3 billion of which Revenio's current product offering covers a share of some USD 800 million. Of this, around USD 500 million is for fundus imaging and USD 300 million for perimeters. Optical coherence tomography (OCT) is outside the current offering whose market value is around USD 500 million. We believe this would be a logical expansion area for Revenio's product offering, and the company has been actively exploring various opportunities (acquisition/product development). In the medium term, we believe Revenio will offer devices also in this segment.

The US is an important market, and its share of total sales is around 50%. The fundus imaging market is expected to grow at a compound annual growth rate of just over 5% in the medium term, depending on the source. The long-term potential of imaging

devices is enhanced by the possibility of detecting other diseases through fundus imaging, but the market is still at an early stage.

The key customer segments for imaging devices are ophthalmologists, optometrists, and opticians. The customer base focuses on ophthalmologists just like in tonometers. Also of interest are the US primary care units, which may become more active in screening for diabetic retinopathy, especially with the advent of Al-enabled reimbursement. In addition, imaging devices have considerable potential in pharmaceutical companies that need new research equipment for clinical research required by authorities. Possible agreements with pharmaceutical companies could be significant especially for the MAIA product.

## **Technology**

iCare's technology leadership in, e.g., confocal imaging devices is protected by over 20 patents and the company has filed several patent applications. Like Revenio, the company has spent some 10% of its net sales of product development and currently the ratio is possibly even higher in imaging devices. Key strengths in imaging technology is linked to the ease of use of the devices ("auto focus"), the precision of imaging, clearer colors ("True-color"), and speed. The products stand out especially in the level of automation and image quality. The customer's decision to buy is often driven by the fact that old equipment is difficult to use and doesn't provide sufficient image quality.

In imaging the competing devices are primarily laser-based devices which results in reddish images. iCare's True-color confocal technology that shows the actual colors inside the ocular fundus has no direct competitors. Confocal technology can separate the ocular fundus clearly better than competing solutions. iCare DRSplus is a confocal imaging system for the fundus that uses white LED light to generate true-color images with high details. This practically brings a new standard to an efficient and working image of the ocular fundus. In addition, the imaged pupil can be smaller than before, which means the image can be taken from all patients. DRSplus is fast and automated, which makes it attractive.

### **Main products**

On the imaging side, Revenio currently has two clear cash cows. The first is iCare DRSplus, which has sold very well in recent years. In terms of features and quality, the product is highly competitive in the low price range of equipment. Its success is also supported by the fact that its target group is also wider than normal (opticians, general practitioners, pharmacies, etc.). The previous version CenterVue DRS, launched in 2011, was the company's most important product in its history, and the redesigned DRSplus is Revenio's best-selling single imaging device.

## Imaging market and Revenio's imaging products

## Breakdown of the imaging market (MUSD)



- Fundus imaging
- Measurement of field of vision
- Optical coherence tomography (OCT)

## Main use purposes:

1) glaucoma diagnosis, 2) diagnosis and monitoring of macular degeneration, 3) diagnosis and monitoring of diabetic retinopathy (DR), and 4) cataract diagnosis.

## **Fundus imaging**



Price range EUR 14,000-20,000

iCare DRS+ (and DRS)



Price range EUR 30,000-40,000

iCare EIDON (Ultra-Widefield)

Confocal imaging technology that enables true colors and easy-to-use automation.

## + perimeter visual field testing



Price range EUR 30,000-40,000

iCare COMPASS



Price range EUR 40,000-50,000

iCare MAIA

iCare EIDON and MAIA products combine fundus imaging and automated perimeter visual field testing.

## **Imaging devices 3/4**

Another cash cow recently has been the iCare EIDON product family, whose competitiveness improved significantly with the Ultra Widefield module (launch at the end of 2021). In 2022, the EIDON product family sold very well, and we believe that as a product family, its sales were the highest for imaging devices in 2022.

Revenio hasn't published a breakdown of its imaging devices net sales by product or product family, but we estimate that the iCare EIDON product family is the largest with around 45-50% of net sales. We estimate that the single most important product is the iCare DRSPlus (40% ballpark), so together these fundus imaging devices dominate sales in the business. In perimeters (field of vision measurement), Revenio's position is significantly weaker, and we estimate that the iCare COMPASS product family accounted for about 10% of sales and iCare MAIA for about 5% of sales. The difficulty with perimeters is apparently caused by the larger Zeiss, whose equipment has reached the "standard position". The figures are rough estimates based on assumptions of delivery volumes, average prices, and division of the device portfolio. They should be approached with caution.

## Competitive situation and market shares

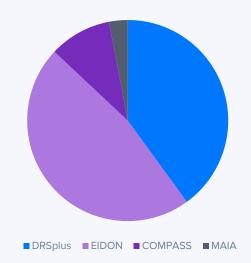
Revenio's overall market share in the relevant imaging devices market is around 5%, which is low in relation to the quality of the company's product range. Of course, the share is higher in strong areas for the company, but it's not yet a constraint to growth anywhere. The company has managed to increase its market share significantly, reflecting its competitive product range. Since the acquisition of CenterVue, we

estimate that imaging devices have grown at an annual rate of about 18%, compared to an apparent market growth rate of about 5% (somewhat confounded by COVID years). Revenio's goal is to grow significantly faster than the market in imaging devices, and the company has succeeded in this.

In general, the market for imaging devices is fragmented and there is no superior player on the market. The biggest is Carl Zeiss Meditec whose market share is possibly around 20%. Important players are Optos, the Japanese NIDEK and Kowa, as well as Topcon, Canon, and Heidelberg Engineering. There is also Optovue and Optopol in OCT technology and Optomed of Finland, the market leader in handheld fundus cameras. iCare is one of the top ten players in imaging.

The competitive situation varies considerably in the different segments of the market. The key difference is in perimeter visual field testing where Zeiss dominates the market with a 50% market share. In our view, the iCare COMPASS product could have considerable market potential in this segment because the product would have a clear competitive edge compared to other devices due the technology related to following the eye. This is, however, a very conservative market, and Zeiss defends its market position aggressively. In our view, Revenio's market share in this segment remains very low, even though the iCare COMPASS product should have excellent features for its price range.

## Inderes' estimate of the breakdown of iCare imaging net sales by product family (2022)



Source: Inderes Revenio has not reported net sales division between the product families, so the figures are only indicative at best.

## **Imaging devices 4/4**

We believe the biggest players in fundus imaging are Optos and Topcon with market shares of around 20-30%. Zeiss, NIDEK and Heidelberg are also important players. The competitive landscape is much the same as in tonometers, where Revenio rose to the position of technology leader with its solution. On the imaging side, the company is clearly a challenger. However, based on the success of recent years, the growth outlook is very strong, at least until we see significant technological advances in products again.

We believe that our imaging device products are highly competitive, which will allow Revenio to grow many times faster than the market in the coming years. In our view, Revenio currently also has a strong competitive advantage in imaging devices, but its robustness is significantly less certain than in tonometers. With the relatively rapid development of imaging technology, the increasing importance of Al and software, and the relatively more competitive nature of the market, maintaining competitiveness requires ever better quality, lower prices, and more efficient manufacturing. As a result, Revenio is constantly called upon to innovate, both to win market shares and later to defend them.

For example, the lifecycle of an iCare DRS product is normally at least 7-10 years. The development of a new product takes at least three years considering regulatory approvals so new challengers are not expected at least right away. The industry is generally very slowlu moving and even a superior new technology easily requires a decade to reach a market share of over 50%. We can therefore be relatively confident that the current product portfolio will be very

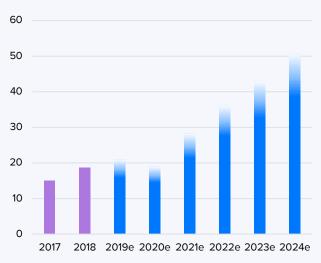
competitive in the medium term (3-5 years).

### An excellent acquisition bears fruit for a long time

The CenterVue acquisition was excellent for Revenio, but we also see a very good opportunity for the company to take the imaging device business to another level in the medium term. The main factors in our view are:

- CenterVue's product portfolio is competitive, but its market share is still predominantly low. Revenio has taken the company's sales and marketing to a new level, and the iCare brand is respected in the industry. A wider offering also enables negotiations with larger customers, which also emphasizes the cross-selling potential.
- The increased resources involved in Revenio and the strong growth in recent years will also allow heavier investment in product development, which will continue to support the development and expansion of the product range in the future.
- We consider it realistic to expect the market share of imaging devices to reach around 10% (2022: around 5%) in Revenio's currently relevant areas in the medium term. This would mean strong growth in net sales in the coming years.

### Net sales of imaging devices (MEUR)

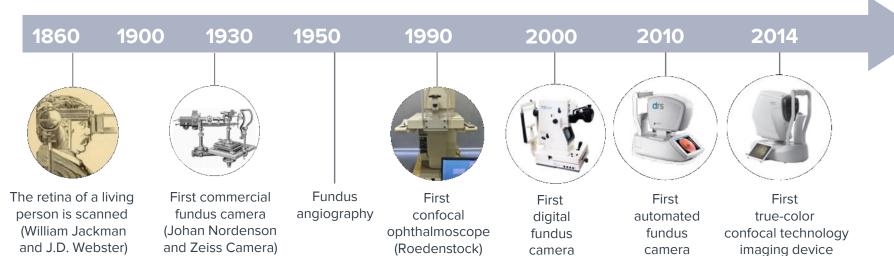


Source: Inderes, 2017-2018 CenterVue. Revenio has not reported the net sales breakdown between the different businesses, so the figures are subject to significant uncertainty.

## Technological development of fundus imaging

## **Evolution of fundus imaging**

## centervue



## **Biggest competitors in imaging devices**



CARL ZEISS MEDITEC









**HEIDELBERG** 



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## Software and digital strategy 1/3

## From equipment manufacturer to total solutions provider

The growth of the ophthalmic devices market has been driven for some time by the increasing prevalence of eye diseases, particularly as the population ages. As this trend continues, the shortage of ophthalmologists is becoming increasingly apparent. To address the growing need for treatment of eye diseases, more software and artificial intelligence will be needed to speed up and streamline treatment processes and do some of the diagnostic work. These developments are shifting part of the value of the eye imaging care pathway more and more from hardware to software and Al. In the long term, the biggest winners in the industry are likely to be those that manage to create the best overall solution and the ecosystem around it, enabling revenue streams from multiple stages of the care pathway.

Revenio's business has historically been predominantly device sales and therefore this trend is a clear risk for the company in the longer term. To respond to this development, Revenio expanded its strategy in 2021 to include the software side, with the aim of becoming more involved in eye care pathways. The first step on this path was the Oculo acquisition in March 2021. The Oculo eye care software platform will continue to be developed and sold as separate software, but the Oculo deal is first and foremost a product development project to acquire software expertise (which Revenio had little before the deal). Revenio has leveraged the expertise and platform from Oculo, in particular in its launch of the ILLUME

artificial intelligence platform, which combines Revenio's DRSplus imaging device with an Al algorithm from its partner Thirona.

We will first look at Oculo as a standalone software platform, and then delve into Revenio's Al strategy. In the big picture, the company aims to build a comprehensive eye care ecosystem that would enable the company to access multiple revenue streams across the care pathway.

### Oculo

### Software platform for eye care

Oculo is an Australian software platform for eye care that combines clinical communication, telehealth, remote patient monitoring and data analytics capabilities. The Oculo cloud-based software platform is transforming eye care by enabling and enhancing clinical collaboration, bridging disconnected data silos for sharing data and images and facilitating better and more costeffective patient care in the eye care market. In 2021, Oculo software was used by more than 3,200 optometrists and more than 770 ophthalmologists, who have processed more than one million patients with the software. The company has succeeded in rather quickly building a respectable number of users for the application in a conservative clientele.

Established in 2016, Oculo's net sales in 2020 was above EUR 1 million (excluding grant income) and the EBITDA approximately EUR -860,000. Revenio doesn't report Oculo's key figures separately, but we estimate that net sales for 2022 totaled just

over EUR 2 million. In its core business, the company has focused strongly on growth, software development and increasing the number of users. Billing has been low as the company has mainly sought to expand its network. The platform business does, however, scale well with growth. This is a long-term strategic investment, the success of which will be seen in 5-10 years.

Oculo's business is based on a scalable software platform and invoicing is continuous monthly billing in line with SaaS. Oculo's software platform combines the parties involved in eye care. The challenge has been that, e.g., optometrists and ophthalmologists are siloed in their own systems, and, for example, eye images are still distributed by fax or mail. This means breaks in communication and poor-quality images that have caused extra friction in the clinical pathway. Oculo has created an easy-to-use and efficient software platform that digitizes the referrals and images in the process.

## Market and competitive landscape

Oculo has quickly achieved a good market position in Australia with the help of large key customers (e.g. Specsavers). There is also plenty of market potential left in Australia, but the company has started to internationalize and has successfully expanded at least into New Zealand. When expanding to new markets, the company's strategy depends on the special features of the market. While the platform doesn't require major localization, it does require integration with the relevant systems in each country.

## Software and digital strategy 2/3

It is our understanding that Oculo has only a few direct competitors - otherwise faxing would probably be a thing of the past for ophthalmologists too. The challengers are for the time being smaller companies than Oculo. On the other hand, e.g., NewMedica funded by the NHS in Great Britain has developed a system to respond to the challenge, but this is NHS's own tool (only services funded by the NHS are included in the network). At least currently it would seem that Oculo has extensive market potential with limited competition. Oculo's market potential is difficult to assess because the company's earning potential is still a mystery even in Australia, where the company is furthest along. It is clear is that market size won't limit the growth potential of the very small Oculo for a long time to come.

### Oculo is part of a wider strategy for Revenio

Oculo offered Revenio important expertise and access to the future of the critical medical device software market, where the company's competitors have invested heavily for years. However, with Oculo's care pathway-focused approach, market entry can potentially be made with significantly lower investments. Furthermore, Oculo enables more comprehensive solutions for ophthalmologists to use the lcare HOME eye pressure monitor, which could be an important strategic factor in the future.

The financial impact of the Oculo acquisition has been reflected in particular in increased R&D investments in 2021 and 2022. Revenio has commented that in the future about a third of the company's R&D investments will be in software

(Oculo and ILLUME) and the rest in hardware. Oculo has virtually no variable costs, which is expected to improve the group's sales margin in the future. The company has previously estimated that Oculo would reach break-even as early as 2023, but we don't know if that target is still valid.

As the owner. Revenio hasn't been keen to take big losses, which is why the investment in selling Oculo as a standalone software has been modest by the standards of the group. We understand that Revenio has made a strategic decision not to aggressively sell Oculo as a standalone software at this stage, for example in the US (the largest market), because this would require significant integration and growth investments. Oculo's biggest strategic role for Revenio so far has been the development of the ILLUME artificial intelligence platform, which the company is utilizing to expand into the US. Eventually, the company intends to sell Oculo's own platform as part of the overall solution. In the big picture, we see that with Oculo's expertise, Revenio can create a complete solution that combines devices, a care pathway and the use of Al in diagnosis. Through this, Revenio has at least theoretically the potential to build an ecosystem with Al partners around the treatment of eye diseases. Al is a critical part of the whole.

## **Al** strategy

## Two pillars in the AI strategy

The widespread use of AI will significantly change the market in the coming years. Indeed, AI is already proven to be effective and competent in

the interpretation of fundus images, the diagnosis of eye diseases and opthalmologic processes. The use of Al algorithms in screening is already commonplace in some countries. Revenio wants to be part of this trend and for the company, this primarily means screening for diabetic retinopathy using the company's fundus cameras and a partner's Al. For diabetic retinopathy, the use of Al is being driven by, among other reasons, a reimbursement code in the US, which should make Al imaging a profitable business for many. However, as the years go by, Al will take over more and more of diagnostics because of its learning power and necessity. There is already a wide range of indications and many of them relate specifically to fundus imaging.

Revenio's own Al strategy has, in our view, two main pillars: 1) maximize device sales for all parties by enabling the integration of proprietary devices with multiple algorithm vendors and 2) seek to achieve Al revenue streams by selling comprehensive solutions (device and platform with a partner's algorithm connected). The optimal user experience is achieved by purchasing a comprehensive solution that gives the customer seamless access to images stored in the cloud and the patient's care pathway. This will also allow Revenio to generate significantly higher revenues than hardware sales alone in the long term. However, some countries may be difficult to expand into with the company's own platform and the Al partner, in which case simply maximizing device sales makes sense.

## Software and digital strategy 3/3

## Al-powered ILLUME solution is an important growth driver for the future

In spring 2022, Revenio launched the iCare ILLUME screening solution, which combines the company's DRSplus imaging device with the artificial intelligence of its partner Thirona. The images are taken with Revenio's DRSplus device, from where they are transferred via the ILLUME platform to Thirona's Al for analysis. Al screens the images for diabetic retinopathy and immediately creates a report of the findings. The ILLUME solution uses a platform developed by Oculo. The earning logic of the ILLUME solution is based on monthly payments and revenue sharing with Thirona. However, the exact sharing ratio is not known. The ILLUME platform is built in such a way that algorithms from other AI providers can also be connected to the platform, meaning that Revenio is not tied to Thirona.

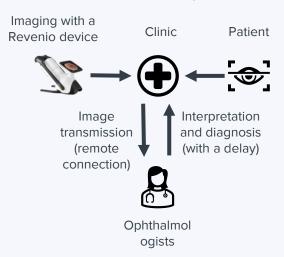
The solution will initially be sold in Europe, as expansion into the US will require FDA approval for the imaging device and Al combination. The company currently has FDA applications pending for a combination of DRSplus, ILLUME and an Al algorithm, and a combination of DRSplus and third-party Al algorithms.

The DRSplus also has the capability to upgrade software on existing equipment. It is still unlikely that optometrists, for example, will start screening widely for diabetic retinopathy, but for some clients the option may be attractive. This would naturally accelerate potential growth.

According to the company, the ongoing pilots have progressed well and by the end of 2022 the company had reached the first system delivery. In addition, the company had many customer pilots underway. However, in the big picture, finding the most appropriate business model and pricing for the solution is still in the early stages. The company is also continuing to identify the needs of its customer base. Thus, it's still partly open whether the Al solution will only assist clinical decision-making, whether Al will completely replace human decision-making (autonomous) or whether Al will assist decision-making in situations where humans are not capable of making decisions (e.g. big data sets).

The role of the ILLUME solution for Revenio's growth in the coming years is still small in our estimates, as there is no actual evidence of the business model working yet and the timeline for a potential breakthrough is a mystery. However, this is a very interesting new opportunity that significantly increases the company's long-term potential. In a good scenario, the Al solution could become a significant growth driver in the medium term, and we see the overall solution as one of the critical factors for Revenio's long-term development. We also estimate that growth would be highly profitable and scalable due to the transaction-based business model, ILLUME is an integral part of Revenio's strategy to use software to transform the company from a pure equipment manufacturer to a total solutions provider.

## Simplified description of traditional fundus screening (Revenio included for device sales only)



Simplified description of fundus screening with ILLUME (Revenio receives one-off revenue from devices as well as ongoing software revenue)



The image is automatically processed by AI (Thirona)

## Software and digital strategy



Key elements of Revenio's digital strategy

## Competence



Critical systems and software expertise from the Oculo acquisition

#### Solution

#### Oculo

- An eye care software platform that combines clinical communication, telehealth, remote patient monitoring and data analytics expertise
- Estimated net sales last year around EUR 2 million

#### **ILLUME**

- A complete solution for eye-base screening combining Revenio's DRSplus imaging device and a partner's Al algorithm (currently Thirona)
- Possibility to add other Al algorithms to the platform in the future
- The ILLUME platform is based on Oculo and the product development expertise of the Oculo team

## Sales strategy

Oculo is sold as standalone software, particularly in Australia and New Zealand, and will be sold as part of a complete solution in other markets in the future

> Continuous monthly income under a SaaS model

#### Alternative 1:

Revenio aims to sell a comprehensive solution (device and ILLUME platform using Revenio's partner's Al algorithm)

One-off income stream from the device and continuous input stream from the ILLUME platform and a revenue sharing model with the Al provider

#### Alternative 2:

Revenio only sells a device (DRSplus) to which multiple third-party Al algorithms can be connected

One-off income from hardware sales (including possibly some software licences)

Income streams

## Asthma device Ventica and skin cancer device Cutica

Asthma device Ventica and skin cancer device Cutica were dropped from Revenio's 2021 strategy update, which means that the company is actively seeking ownership options for these products. Revenio's R&D investments are focused on iCare. Even in a good scenario, Ventica and Cutica are a marginal part of Revenio's current market capitalization of around EUR 1 billion, so we will only deal with them superficially. As far as we can see, there have been no significant developments in either of them in recent years.

#### **Asthma device Ventica**

Ventica is a portfolio expansion made by Revenio in 2015 into diagnosis of asthma in children.

Ventica's idea is to introduce an accurate, easy-to-use and portable device which makes the screening, diagnosis and follow-up of asthma in infants and small children considerably easier. With Ventica, chronic obstructive pulmonary disease (COPD) is measured during the child's sleep by measuring the respiratory flow profile. Ventica is based on a wholly new concept, which cannot be directly compared with any existing measurement method.

Ventica's business model is based on device and disposable components sales. The measurement software and algorithm play a central role in the product. We believe the biggest R&D investments required by Ventica have been made. The technology and method have extensive patent protection until 2032–2033.

Clinical evidence is being built for Ventica with which a scientific base is being built for the product as well as sales arguments and reference values for how to interpret measuring results. The product received European sales permit or a CE marking in 2017 after which clinical tests were expanded.

The speed and success of sales ramp-up will depend on how quickly the new concept will be adopted among doctors. Commercialization began in Europe thanks to the CE marking. If possible, Ventica will probably move to the US market where registration is a heavier process. The company has to create its own market, which will make commercialization of the technology more challenging.

The closest comparison for Ventica is spirometry, which is generally used for measuring the functioning of the lung. There are plenty of devices in the market for the purpose. Spirometry, however, is not suitable for the measurement of young children or infants. The primary application area for the technology is small children where the clearest need for the product exists.

Asthma is the most common chronic disease in children. Approximately 335 million people around the world suffer from asthma. The disease typically begins in childhood, which creates the need for a product like Ventica. About 20% of children suffer from asthma symptoms, and 8% of children under school age suffer from asthma (source: Revenio/Ventica). Therefore, the market potential in Europe and in the US is tens of thousands of devices. Asthma is a global problem meaning that Ventica's market is also global.

Predicting and valuing Ventica is very difficult at this stage of its development, and we no longer give an estimate of its potential value. However, Ventica

hasn't taken any significant steps forward recently, so we estimate the value to be marginal relative to Revenio's market capitalization (around EUR 1 billion), even in a good scenario.

#### **Skin cancer device Cutica**

In early 2015 Revenio expanded its portfolio by making a license agreement on developing hyperspectral camera (HSC) technology for the diagnosis of skin cancer. The technology it uses has been developed by VTT, for which VTT grants licenses for various purposes. Revenio has licensed the technology for the diagnosis of skin cancer.

Cutica's idea is to bring a quick, easy-to-use and portable screening device to help detect skin cancers and their premalignant lesions to the market. The first commercial version of Cutica was released a few years ago and has undergone test measurements but has not yet been submitted for regulatory approval.

The potential market of skin cancer devices is even markedly larger than that of iCare or Ventica. The market potential is increased by the fact that melanoma is a lethal disease and rapidly becoming more common.

Revenio made a write-down of EUR 1.9 million in Q3'20 and EUR 0.6 million in Q4'21 to Cutica's capitalized product development costs due to a weaker outlook for future net sales expectations. With the write-downs, Cutica is now worth zero on the balance sheet, which also reflects the non-existent expectations for the product. Thus, Cutica's importance for Revenio is marginal.

## **Estimates 1/5**

## **Tonometers**

#### **Growth estimates**

We are using three parameters to forecast tonometer sales: basic device sales, HOME sales, and probe sales. Device sales are evaluated through the sales volume and average prices (the sales price to the distribution channel). We estimate probe sales through the size of the installed device base and average probe consumption. The estimate model is based on a set of individual data reported in the company's history, which is becoming increasingly difficult to maintain as the company's offering expands. So, there are rough and uncertain assumptions in the background, which is why we are not publishing separate estimate models for the different businesses.

In our estimates, we estimate iCare's traditional tonometer sales volume growth to be around 6% in 2022-2025 (CAGR-%). We believe that market growth has slowed significantly since the rate cut, but iCare's technology continues to gain market share from older technologies. In addition, price increases had a significant positive impact on growth, especially last year, and we expect some support in the coming years.

At the moment, the biggest opportunity relates to the development of the Chinese market. After years of waiting, Revenio received a sales license for its IC200 in China at the end of 2022 and the company established a subsidiary in the country. China is a difficult market in many ways: the regulatory environment is problematic, as the country tends to support local companies and seek to gain a

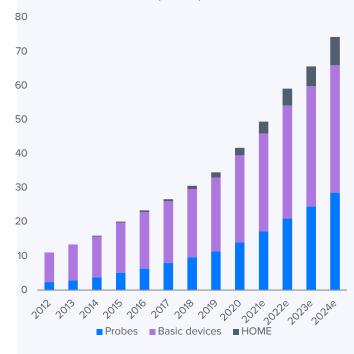
technological advantage. In public (or publicly subsidised) healthcare, procurement has to be done especially from local sources (quotas), which makes it difficult for Revenio to do business in the country. However, sales in the country have been low in recent years, which through the IC200 license, its own organization and the opening up of China after the COVID pandemic, creates the potential for a positive surprise in the country.

iCare's probe sales is a derivate of the growth of the device base. Probe sales has been growing faster than the device sales for a long time due to former device sales and increased use of the devices/probes. Our estimate is that one device in the device portfolio utilizes an average of over 320 probes per year, which means that iCare's devices are used for over 45 million measurements this year. We estimate the average price of the probes to be just over EUR 0.5, by which we estimate the probe revenue to exceed 35% of the revenue of tonometers. We estimate probe revenue to grow by more than 16% between 2022 and 2025 (CAGR-%), driven by the growth in the installed base, the impact of the increase in HOME's installed base, increased usage and the uptake of probes.

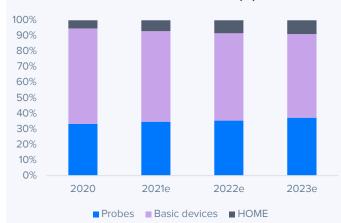
### Home care devices

Forecasting HOME is very challenging because the product is still relatively new, the speed of take-up is difficult to estimate, and a major breakthrough may require a change in treatment practices. So far, the net sales from the product has been low (2022 estimate: "5 MEUR), but the need for home measurements is clear and the new HOME2 product has been well received.

### Tonometer net sales (MEUR)



## Net sales distribution of tonometers (%)



NB! Revenio has not reported the breakdown of revenue, so the historical data are also Inderes' estimates.

## Estimates 2/5

We expect HOME to sell 4,000-5,000 units this year and to grow by around 25-30% p.a. in the coming years as HOME2 starts to gain a foothold in the US. We estimate the average price of the device to be around EUR 1300 for the distributor. In recent years, our estimates for HOME have been on the high side, and we have now also lowered our estimates for the existing installed device base. HOME's share of revenue has therefore fallen sharply, even though it has been the fastest growing single product. Our current assessment is that the breakthrough of HOME into a high-volume product may require changes in treatment practices (especially in the US), which will take time. We therefore see HOME as an important growth driver in the medium term, but expectations for the coming years should be kept moderate. Estimates and assumptions are particularly uncertain for HOME.

## **Key figures for tonometers**

Based on a combination of device sales, HOME and probe sales, we forecast tonometer revenue to grow at a CAGR of just under 13% between 2022 and 2025. The business is projected to reach a revenue of around EUR 85 million in 2025, of which basic devices will account for 47% (estimated 2022: 56%), probes 40% (2022: 35%), and HOME 13% (2022: 8%). So far, the business is driven by sales of basic devices and probes, but after this period HOME should take on a bigger role. Without this or a substantial renewal of the product portfolio, we estimate that growth would slowly start to weaken in line with sales of basic devices. The company already has a strong market position, through which growth in the long term will inevitably approach market growth.

In terms of profitability, gross operating margins are excellent and we see no material pressure on them. However, the gross margin for probes is weaker than for basic equipment, through which we expect a slight normalization as their share increases.

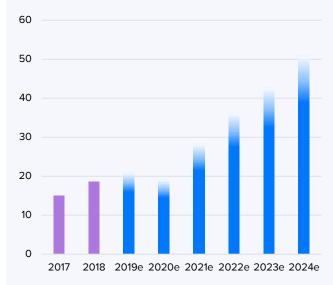
## **Imaging devices**

#### **Growth estimates**

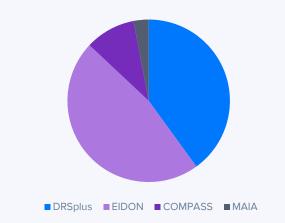
Revenio has not opened the net sales distribution of CenterVue's or Revenio's imaging devices in more detail, but we have tried to perceive the net sales distribution to different product families, products' sales volumes, and device portfolios. Based on these rough estimates, we have created a prediction model for imaging devices, the accuracy of which is still questionable. We have had to make a lot of assumptions, so the figures should be considered indicative.

We estimate that the single most important product for imaging devices in terms of sales volume has historically been DRS and now the spearhead is the new generation DRSplus. We estimate that new equipment will be priced in the range of EUR 8,000-10,000 for distributors, and we estimate that DRS products account for around 40% of imaging devices net sales. We estimate that the gross margin of DRSplus is very high (estimate >70%), especially when customers include the software package offered (up to 20% of the purchase price). DRSplus will continue to provide a very strong growth driver for imaging devices in the coming years, as it remains highly competitive and has already gained market share.

### Net sales of imaging devices (estimate, EUR million)



## Net sales distribution of imaging devices (estimate)



Source: Inderes Revenio has not reported the breakdown of net sales between the different businesses or product families.

## Estimates 3/5

By far the most important product family is EIDON, which we estimate to account for around 45-50% of imaging device net sales. The competitiveness of the EIDON product family improved significantly with the introduction of the Ultra Widefield module. In 2022, sales were excellent and the outlook remains strong. We estimate that the average price of products to distributors is over EUR 20,000, which makes volumes good. EIDON has emerged as the second spearhead product for imaging devices, alongside DRSplus, and we expect it to continue to grow strongly ahead of the overall market.

We estimate that the remaining 10-15% of imaging device net sales is split between COMPASS and MAIA products. COMPASS has not yet succeeded in penetrating its own product segment, which is dominated by Zeiss, but there is significant potential in the product family. Considering its features, COMPASS is attractively priced, and we estimate the average price for distributors is also around EUR 22,000. MAIA represents the highest price range (40-60 TEUR), but volumes are limited. For example, drug development companies could, however, make significant one-off orders in MAIA products and their size class could be significant for Revenio.

## We expect strong profitable growth and market share growth in imaging devices

The years following the acute phase of COVID have been excellent for imaging devices, but now the pent-up demand has largely dissipated. However, the market should remain on a healthy growth path (around 5%) and in this sector iCare

has only just started to capture market share. DRSplus and the EIDON product family are both highly competitive and will continue to take market share in the future.

In 2014-2018, CenterVue's net sales grew by an average of 26% p.a. In 2018, net sales was EUR 18.6 million and EBIT was EUR 3.9 million, which means a good profitability of 21%. This was the last year as an independent company before Revenio's acquisition. We estimate Revenio's revenue from imaging devices to be around EUR 36 million in 2022, which would represent a strong average annual growth rate of just over 18% from 2018 to 2022. During the period, the market was disrupted by the COVID pandemic, but performance was still excellent.

Despite strong growth and a competitive product portfolio, Revenio's market share in imaging devices is still only around 5%. We forecast that imaging equipment will continue to grow at around 18% per annum in the medium term, taking the market share to the next 10% in 2028. More than five years from now, the competitive landscape may change dramatically as products are renewed.

We estimate that business profitability has improved steadily under Revenio's guidance. We estimate that gross margins for imaging devices are already roughly in the same size range (65-75%) as for tonometers (around 75%). There is considerable uncertainty in the estimates, especially in the longer term, as the market is more dynamic than that of tonometers and there is currently no continuous element of revenue ("probes"). However, imaging equipment is essentially linked to the ILLUME

solution in particular, which could become a really strong growth driver over the next five years.

## Software / Oculo

### **Several moving parts**

Oculo has been in our estimates as a segment, but now the more relevant whole might be "Software". Oculo's development is even more difficult to predict now that knowledge and resources have been transferred from the previous business model to the promotion of Revenio's other projects. We are trying to outline more of a somewhat realistic scenario for Oculo, but in the longer term the focus may well shift to the ILLUME platform and the potentially significant revenue streams from the use of AI by partners. Their role in our estimates is currently small, and we don't expect their potential to be realized to any significant extent in the coming years.

We estimate that Oculo's revenue in 2022 will be just over EUR 2 million, which in our projections would represent an increase of more than 100% year-on-year. We expect Oculo to grow by around 50% annually in the coming years and to reach a revenue of EUR 5 million in 2024. At the same time, we expect the business to become broadly internally funded in the coming years. We recommend taking the estimates of the Software / Oculo segment with a very high degree of caution, as they are so far largely educated guesses. The software revenue stream may be very relevant in the future, after which we will seek significantly more accurate estimates.

## Estimates 4/5

## **Revenio Group**

#### **Growth estimates**

Combining the net sales estimates for tonometers and imaging devices and Software (Oculo), we get Revenio's group-level estimates. In 2023, we expect net sales to grow by around 15% to EUR 112 million, with a slight headwind from exchange rates (USD/EUR). Thereafter, we forecast growth to normalize to around 16-17%, in line with the company's target level (acceleration of growth from just above 13%).

In the big picture, the core business will continue to dominate profit and growth figures in the medium term, but at the same time Revenio is "maturing" its future growth drivers. The most significant of these, in our view, are HOME2 in tonometers, ILLUME and Al solutions in imaging devices and software, and Oculo software. Their size is still small overall, so in the coming years they would need to be able to grow to scale in order to sustain Revenio's growth and thus earnings growth well into the future. In addition, opportunities may come from in-house R&D, which accounts for around 10% of net sales. The long-term outlook is very strong.

## **Profitability and earnings estimates**

The profitability of Revenio's businesses is scaling nicely thanks to high gross margins, but in the coming years there will still be upward pressure on the company's fixed costs. We estimate that Revenio's "normal" gross margin will remain at around 70%, and the 2022 level was exceptionally

good in this respect. In addition, in 2022, Revenio's profitability was supported by a significant tailwind from the strengthening of the US dollar, which may turn into a headwind this year. We expect R&D investments to be at the normal 10% level this year, which will also put some pressure on profitability (2022: 8.9%).

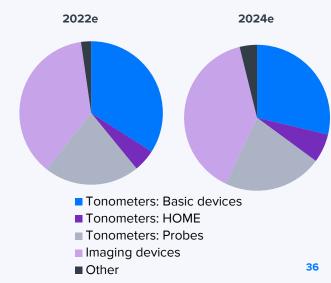
For 2023, Revenio has guided for strong year-on-year revenue growth at constant exchange rates and good profitability excluding non-recurring items. The company started last year with the same guidance and ended up raising it. We estimate that strong net sales growth means a level below 15% and a good level of profitability below 30% EBIT margin, but we believe these levels are realistic also this year excluding currency effects. The company's management didn't expect major changes in the development of key figures (vs. 2022) and said that the guidance may change to a different format (range) as the year progresses.

For these reasons, we expect Revenio's EBIT margin for 2023 to be 29.4%, down slightly from last year (30.6%). This brings our EBIT estimate for 2023 to around EUR 33 million (2022: 30 MEUR) which means 10% growth year-on-year. We believe that our 2023 estimates are in line with Revenio's guidance and relatively conservative, as has traditionally been the case with the company's guidance.

### Revenue and EBIT-% development



## Projected development of Revenio's revenue breakdown



# **Estimates 5/5**

In 2024-2025, we expect Revenio's EBIT margin to return to a gentle upward curve and be around 30%. The scaling of profitability could be significantly stronger, but we expect the company to make substantial investments in its current growth areas in the coming years. The competitive situation may also gradually tighten slightly (patent expiry) and cost inflation is forecast to continue at a higher rate than historically. In the long term, we have assumed a "neutral" level for Revenio of around 30% (terminal 28%).

We expect Revenio's EPS to rise to EUR 0.94 this year (2022: EUR 0.86) and to rise further to EUR 1.11 in 2024. Over the period 2022-2025e, we forecast adjusted EPS to grow at an average CAGR of around 17% p.a., which is roughly in line with revenue growth based on conservative margin assumptions. If profitability scales better than our expectations in the coming years, much faster earnings growth is possible. We believe that the conditions are there, but so are the risks.

#### Balance sheet and cash flow

Revenio's balance sheet is very strong. At the end of 2022, the company's equity ratio was 67% and net gearing had turned negative at -13%. With the CenterVue and Oculo acquisitions, the company has about EUR 60 million of goodwill and about EUR 17 million of intangible rights on its balance sheet (partly PPA write-offs), but we are not concerned about these. Overall, Revenio's balance sheet remains clean and straightforward. The company hasn't significantly capitalized its development costs and the items on the balance sheet are also critically reviewed.

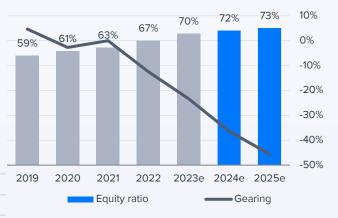
Revenio's cash flow has traditionally been comparable with the company's reported operating profit because the business only ties up a little capital and the investment needs (excl. acquisitions) are moderate. In recent years, more working capital has been committed than normal, but it should also be released as the component situation normalizes. R&D investments are made constantly but these are capitalized to a limited degree. Thus, the business generates a lot of cash flow, which the management has been allocating excellently in the past.

#### Estimate revisions 2023e 2023e Change 2024e 2024e Change 2025e 2025e Change MEUR / EUR % % % Old New Old New Old New 130 0% 152 152 0% Revenue 111.4 111.4 0% 130 **EBITDA** 36.6 42.5 50.8 50.4 36.6 0% 42.3 0% -1% EBIT (exc. NRIs) 47.7 47.2 33.9 34.0 0% 39.7 39.5 0% -1% **EBIT** 32.7 32.8 0% 38.5 38.4 0% 46.5 46.0 -1% PTP 32.3 32.4 0% 38.3 38.2 0% 46.5 46.0 -1% EPS (excl. NRIs) 0.98 0.98 0% 1.15 1.15 0% 1.39 1.38 -1% DPS 0.42 0.56 0.55 0.74 0.73 0.42 0% 0% -1%

#### **EPS and ROE-%**



# Development of balance sheet key figures



# **Income statement**

Income statement	2020	2021	Q1'22	Q2'22	Q3'22	Q4'22	2022	Q1'23e	Q2'23e	Q3'23e	Q4'23e	<b>2023</b> e	<b>2024</b> e	<b>2025</b> e	<b>2026</b> e
Revenue	61.1	78.8	20.2	24.4	24.1	28.3	97.0	23.8	27.1	28.4	32.1	111	130	152	178
Tonometers (estimate)	41.8	49.2	13.2	16.9	13.0	15.5	58.6	15.0	17.9	15.0	17.2	65.2	73.7	84.0	96.6
Imaging devices (estimate)	19.1	28.3	6.6	6.9	10.7	12.1	36.2	8.1	8.4	12.5	13.9	42.8	51.0	60.1	71.0
Oculo / Software (estimate)	0.0	0.9	0.4	0.6	0.5	0.7	2.2	0.7	0.8	0.9	1.0	3.4	5.0	7.5	10.0
Other products (estimate)	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	21.7	25.7	6.4	8.0	8.5	10.2	33.1	7.4	8.6	9.0	11.7	36.6	42.3	50.4	60.7
Depreciation	-4.6	-3.6	-0.8	-0.9	-0.9	-0.9	-3.4	-0.9	-1.0	-1.0	-1.0	-3.9	-3.9	-4.4	-4.7
EBIT (excl. NRI)	19.2	24.5	5.9	7.4	8.0	9.6	30.9	6.8	7.9	8.3	11.0	34.0	39.5	47.2	57.1
EBIT	17.1	22.1	5.6	7.1	7.7	9.3	29.7	6.5	7.6	8.0	10.7	32.8	38.4	46.0	56.0
Net financial items	-0.4	0.0	0.3	-0.1	-0.1	-0.7	-0.6	-0.1	-0.1	-0.1	-0.1	-0.4	-0.2	0.0	0.2
РТР	16.7	22.1	5.8	7.1	7.6	8.6	29.1	6.4	7.5	7.9	10.6	32.4	38.2	46.0	56.2
Taxes	-3.4	-4.8	-1.2	-1.7	-1.5	-2.9	-7.3	-1.5	-1.7	-1.8	-2.4	-7.4	-8.8	-10.6	-12.9
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net earnings	13.3	17.3	4.6	5.4	6.1	5.7	21.8	4.9	5.8	6.1	8.2	24.9	29.4	35.4	43.3
EPS (adj.)	0.58	0.74	0.18	0.22	0.24	0.23	0.86	0.20	0.23	0.24	0.32	0.98	1.15	1.38	1.67
EPS (rep.)	0.50	0.65	0.17	0.20	0.23	0.22	0.82	0.19	0.22	0.23	0.31	0.94	1.11	1.33	1.63
Key figures	2020	2021	Q1'22	Q2'22	Q3'22	Q4'22	2022	Q1'23e	Q2'23e	Q3'23e	Q4'23e	<b>2023</b> e	<b>2024</b> e	2025e	2026e
Revenue growth-%	23.4 %	29.1%	20.6 %	29.5 %	24.1 %	18.9 %	23.1 %	17.8 %	11.2 %	17.8 %	13.5 %	14.9 %	16.3 %	17.0 %	17.1 %
Adjusted EBIT growth-%		27.8 %	6.6 %	57.6 %	27.5 %	19.3 %	25.9 %	16.1 %	6.3 %	3.9 %	14.2 %	10.0 %	16.4 %	19.4 %	21.0 %
EBITDA-%	35.5 %	32.6 %	31.7 %	32.7 %	35.4 %	36.1 %	34.1%	31.0 %	31.7 %	31.6 %	36.5 %	32.9 %	32.7 %	33.2 %	34.2 %
Adjusted EBIT-%	31.4 %	31.1 %	29.0 %	30.4 %	33.0 %	34.1 %	31.8 %	28.6 %	29.1 %	29.1%	34.3 %	30.5 %	30.5 %	31.1 %	32.2 %
Net earnings-%	21.9 %	22.0 %	22.6 %	22.2 %	25.2 %	20.2 %	22.5 %	20.7 %	21.3 %	21.3 %	25.4 %	22.4 %	22.7 %	23.4 %	24.4 %

Source: Inderes

# **Balance sheet**

Assets	2021	2022	<b>2023</b> e	2024e	2025e
Non-current assets	69.8	70.8	71.9	73.0	74.0
Goodwill	59.8	59.8	59.8	59.8	59.8
Intangible assets	4.2	4.3	4.8	5.4	5.8
Tangible assets	2.6	2.8	3.3	3.9	4.5
Associated companies	0.0	0.0	0.0	0.0	0.0
Other investments	0.0	0.4	0.4	0.4	0.4
Other non-current assets	1.9	1.9	1.9	1.9	1.9
Deferred tax assets	1.3	1.6	1.6	1.6	1.6
Current assets	40.8	52.5	67.3	89.2	114
Inventories	6.4	6.7	8.9	9.1	10.6
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	9.2	13.7	15.6	16.9	19.7
Cash and equivalents	25.2	32.1	42.8	63.3	84.2
Balance sheet total	125	136	151	173	198

Source: Inderes

Liabilities & equity	2021	2022	2023e	2024e	2025e
Equity	78.4	90.9	106	124	145
Share capital	5.3	5.3	5.3	5.3	5.3
Retained earnings	22.1	34.3	49.7	67.8	88.6
Hybrid bonds	0.0	0.0	0.0	0.0	0.0
Revaluation reserve	0.0	0.0	0.0	0.0	0.0
Other equity	51.0	51.3	51.3	51.3	51.3
Minorities	0.0	0.0	0.0	0.0	0.0
Non-current liabilities	5.8	20.1	19.3	19.3	19.3
Deferred tax liabilities	3.6	3.7	3.7	3.7	3.7
Provisions	0.5	0.5	0.5	0.5	0.5
Long term debt	1.7	15.8	15.0	15.0	15.0
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	0.0	0.0	0.0	0.0	0.0
Current liabilities	40.4	25.2	25.3	28.9	33.3
Short term debt	23.5	5.0	3.0	3.0	3.0
Payables	16.9	20.2	22.3	25.9	30.3
Other current liabilities	0.0	0.0	0.0	0.0	0.0
Balance sheet total	125	136	151	173	198

# Valuation 1/3

#### Basics of the investment story

Revenio is one of the biggest success stories on the Helsinki stock exchange of the past decade. With this tremendous success, Revenio's market capitalization has risen from EUR 30 million in 2012 to just under EUR 1 billion today. Historical earnings do naturally not ensure anything about the future but evidence of creating shareholder value is reflected in the acceptable valuation.

More importantly, Revenio is well positioned to continue its excellent development in the future. iCare tonometers continue to grow at a good pace and we expect imaging devices to grow very strongly in the medium term.

Over the next five years, existing growth opportunities need to be scaled up, which would also secure longer-term growth prospects. The most significant of these, in our view, are HOME2 in tonometers, ILLUME and AI solutions in imaging devices and software, and Oculo software. Indeed, Revenio's medium-term outlook is bright already with the current core business, but also for the longer term, very good conditions for profitable growth have been created. The outlook would be further improved by a possible extension of the product offering to the OCT market. Revenio would then have all the pieces and could become a major global player in the industry.

In addition to a strong earnings growth outlook, the acceptable valuation is driven by an excellent track-record of creating shareholder value, good business predictability and a generally low risk profile. The

company will create a lot of shareholder value also in future.

We believe the risk profile of Revenio's business is exceptionally low as the industry is defensive and the company's competitive advantages are unusually strong. The main risks relate to the weakening of patent protection for RBT technology after 2023, as well as to potentially intensifying competition, the development of the company's own growth ambitions and generally high expectations. The risks associated with high valuation levels have declined significantly with the multiples, but remain important for investors, especially in a difficult-to-predict interest rate environment.

# Valuation has fallen after the re-pricing of growth companies

Revenio's valuation has been under severe pressure since the pricing environment for growth companies changed in the summer of 2021. The main reason for this was the sharp rise in interest rates, which has been reflected in investors' return expectations, especially for highly valued growth companies. However, Revenio's earnings growth estimates have also fallen, which has created a destructive leverage effect for investors. The share's all-time high was EUR 72 in summer 2021, from which the share price has halved in less than two years. Yet at the same time, Revenio's business has rolled on strongly and the company has clearly created shareholder value.

Valuation	<b>2023</b> e	<b>2024</b> e	<b>2025</b> e
Share price	34.7	34.7	34.7
Number of shares, millions	26.6	26.6	26.6
Market cap	921	921	921
EV	896	876	855
P/E (adj.)	35.3	30.1	25.1
P/E	37.0	31.3	26.0
P/FCF	39.5	28.9	25.9
P/B	8.7	7.4	6.3
P/S	8.3	7.1	6.1
EV/Sales	8.0	6.8	5.6
EV/EBITDA	24.5	20.7	17.0
EV/EBIT (adj.)	26.4	22.1	18.1
Payout ratio (%)	45.0 %	50.0 %	55.0 %
Dividend yield-%	1.2 %	1.6 %	2.1 %

Source: Inderes

#### **Development of Revenio's valuation multiples**

Source: Bloomberg, current year's consensus estimate (BEST)



# Valuation 2/3

In retrospect, at its peak, Revenio's valuation was in a clear bubble. However, then the world was at zero interest rates, the market was euphoric, and the company's earnings were growing at a historic rate, which also distorted expectations for the future. Currently, both market sentiment and earnings growth expectations are significantly more subdued, which is a very good thing for investors.

# Valuation multiples seem reasonable

In our opinion, the most relevant valuation ratios for Revenio are P/E and especially EV/EBIT, which also takes into account the company's strong balance sheet. Over the last 10 years, Revenio's average P/E and EV/EBIT ratios have been around 39x and 28x respectively (median for current year results 2013-2023). Now the multiples have even returned to slightly lower historical levels, but the normal ranges would be 30-40x for P/E and 20-30x for EV/EBIT.

The stock's long bear market has therefore normalized valuation multiples and brought expected returns back to a reasonably good level. Valuation multiples are still relatively high in the 2023 projections (adj. P/E 35x, and adj. EV/EBIT 26x), but looking forward 12 months, the 2024 multiples (adj. P/E 30x, and adj. EV/EBIT 22x) are in our view reasonable for Revenio. In the 2024 multiples, we no longer see a "front-end" to strong future earnings growth, but at this level we expect earnings growth to come mostly in the form of returns to investors. Of course, this requires that the earnings growth outlook remains strong, but for Revenio we are quite confident about this also in the longer term. In our

view, the current valuation level is reasonable for a defensive growth company with a strong earnings growth outlook and no particular dependence on global economic developments.

#### The peer group gives a fragmented picture

Many of Revenio's competitors are listed but primarily they are part of a large group. Reichert owned by Ametek group and Keeler's Halam group are both listed companies that are large investment companies/conglomerates. Also, in the Topcon group the business relative to Revenio is a relatively small share of the group.

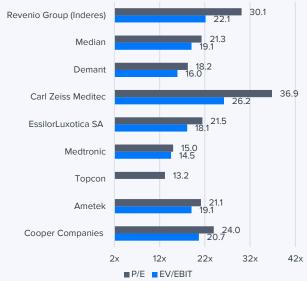
We think that the closest peer is by far Carl Zeiss Meditec, which is focused on the same sector. Zeiss' business is, however, clearly more extensive than Revenio's and the size class is clearly bigger. Zeiss also stands out from the peer group due to its high valuation level: 2023e P/E 41x and EV/EBIT 41x (estimates: Refinitiv consensus), which are significantly higher than Revenio's multiples. Otherwise, Revenio is priced at a significant premium to its peer group, but we believe this is justified.

An interesting name in the peer group is the Danish Demant whose main owner is the same as Revenio's. William Demant Invest A/S owns around 57% of Demant and over 16% of Revenio and has increased its shareholdings substantially in recent years. For example, at the beginning of 2021, the company's ownership in Revenios was 10.9%. Demant is an expert in the industry and a long-term owner, so we think it's a good idea to follow its activities.

### **Development of valuation multiples**



#### Peer group valuation multiples (2024e)



# Valuation 3/3

Otherwise, the peer group consists of companies that are linked to the industry but are not actual peers. Cooper specializes in contact lenses and eye surgeries, and EssilorLuxottica is a giant in lenses, as well as eye and sunglasses. In addition, Medtronic is one of the largest companies in health care technology that also has solutions related to eye diseases (mainly other, however). Unfortunately, the overall usefulness of the peer group in valuation is limited. The full peer group can be found in the annexes to the report.

#### **DCF** calculation

Our DCF model indicates a value of around EUR 39 for Revenio's share under realistic assumptions. DCF is driven by high assumptions about long-term growth and profitability, but we believe our long-term estimates are very reasonable. After the next five years, we expect revenue growth to decline significantly and terminal growth to be only 3%. We don't expect profitability to scale with growth practically at all, and at the terminal level we expect an operating margin of 28% (2022: 30.6%). We think this is a moderate assumption.

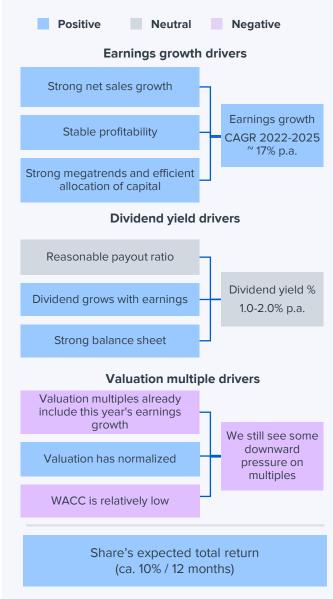
The terminal weight (70%) is high and highlights high expectations for the long term but given the slow-moving nature of the industry and Revenio's strong competitive advantages, we don't consider this excessive. Yet it is clear that, despite the exceptionally good long-term visibility, it's extremely difficult to predict the ten-year horizon.

In the cash flow calculation, we have used a cost of equity of 7.5%, which is also the weighted average

cost of capital (WACC) as we don't assume that the company uses debt leverage. Revenio's business would stand up well to the use of debt leverage, but even now the balance sheet is net debt-free. In any case, the WACC is quite low considering the currently still high interest rates (and inflation). Although the DCF calculation would support a higher target price, even at the current target price (EUR 38), investors must accept a rather low expected return.

Revenio's DCF model is sensitive to changes in important assumptions, which is why we have presented a sensitivity calculation for different risk-free rates in the graph below. Our entire DCF model is presented in the appendices.

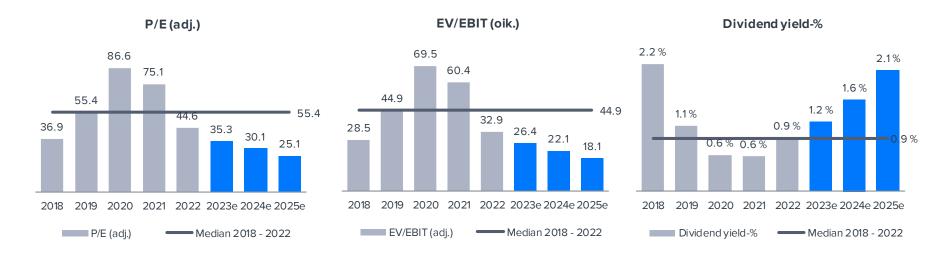
#### **TSR** drivers



# Valuation table

Valuation	2018	2019	2020	2021	2022	<b>2023</b> e	2024e	<b>2025</b> e	2026e
Share price	12.6	26.3	50.3	55.6	38.6	34.7	34.7	34.7	34.7
Number of shares, millions	23.9	26.0	26.6	26.7	26.6	26.6	26.6	26.6	26.6
Market cap	301	697	1337	1482	1026	921	921	921	921
EV	290	700	1335	1482	1015	896	876	855	832
P/E (adj.)	36.9	55.4	86.6	75.1	44.6	35.3	30.1	25.1	20.7
P/E	36.9	73.0	>100	85.7	47.1	37.0	31.3	26.0	21.3
P/FCF	36.0	neg.	>100	>100	48.7	39.5	28.9	25.9	21.9
P/B	16.6	10.8	19.2	18.9	11.3	8.7	7.4	6.3	5.5
P/S	9.8	14.1	21.9	18.8	10.6	8.3	7.1	6.1	5.2
EV/Sales	9.5	14.1	21.9	18.8	10.5	8.0	6.8	5.6	4.7
EV/EBITDA	27.1	47.9	61.5	57.7	30.6	24.5	20.7	17.0	13.7
EV/EBIT (adj.)	28.5	44.9	69.5	60.4	32.9	26.4	22.1	18.1	14.6
Payout ratio (%)	82.3 %	85.1 %	63.7 %	52.4 %	43.9 %	45.0 %	50.0 %	55.0 %	60.0 %
Dividend yield-%	2.2 %	1.1 %	0.6 %	0.6 %	0.9 %	1.2 %	1.6 %	2.1 %	2.8 %

Source: Inderes



# Peer group valuation

Peer group valuation	Market cap	EV	EV/	EBIT	EV/E	BITDA	EV	<b>7/S</b>	P.	/E	Dividend	d yield-%
Company	MEUR	MEUR	2023e	2024e	2023e	2024e	<b>2023</b> e	2024e	<b>2023</b> e	2024e	2023e	2024e
Revenio Group	924	912	27.4	23.3	24.6	21.5	8.3	7.3	35.6	30.7	1.2	1.4
Cooper Companies	16079	18506	23.0	20.7	19.0	17.1	5.6	5.2	27.1	24.0	0.0	0.0
Ametek	29454	31374	20.6	19.1	17.1	15.9	5.1	4.8	22.7	21.1	0.6	0.7
Topcon	1318	1580			7.4	7.2	1.1	1.0	14.2	13.2	2.5	2.7
Medtronic	99300	115461	14.9	14.5	13.2	13.0	4.0	3.8	15.0	15.0	3.4	3.6
EssilorLuxotica SA	72071	82978	19.8	18.1	12.8	11.9	3.3	3.1	23.7	21.5	2.1	2.4
Carl Zeiss Meditec	12253	12460	29.7	26.2	25.4	22.6	6.0	5.5	40.9	36.9	0.8	0.9
Demant	6898	8757	17.6	16.0	13.3	12.2	3.1	2.9	20.9	18.2		0.0
Optomed (Inderes)	59	61				65.5	3.7	2.8				
Revenio Group (Inderes)	921	896	26.4	22.1	24.5	20.7	8.0	6.8	35.3	30.1	1.2	1.6
Average			21.9	19.7	16.6	20.8	4.4	4.0	25.0	22.6	1.5	1.5
Median			20.6	19.1	15.2	15.9	4.0	3.8	23.2	21.3	1.2	1.1
Diff-% to median			<b>28</b> %	16%	61%	<i>30</i> %	103%	<b>78</b> %	<b>52</b> %	<b>42</b> %	5%	41%

Source: Refinitiv / Inderes. NB: The market cap Inderes uses does not consider own shares held by the company.

# **DCF** calculation

DCF model	2022	<b>2023</b> e	2024e	<b>2025</b> e	<b>2026</b> e	<b>2027</b> e	<b>2028</b> e	<b>2029</b> e	<b>2030</b> e	2031e	<b>2032</b> e	TERM
Revenue growth-%	23.1 %	14.9 %	16.3 %	17.0 %	17.1 %	16.0 %	12.0 %	9.0 %	8.0 %	5.0 %	3.0 %	3.0 %
EBIT-%	30.6 %	29.4 %	29.6 %	30.3 %	31.5 %	31.0 %	30.0 %	29.0 %	29.0 %	28.0 %	28.0 %	28.0 %
EBIT (operating profit)	29.7	32.8	38.4	46.0	56.0	63.8	69.2	72.9	78.8	79.8	82.2	
+ Depreciation	3.4	3.9	3.9	4.4	4.7	5.3	5.9	6.3	6.7	7.1	7.4	
- Paid taxes	-7.5	-7.4	-8.8	-10.6	-12.9	-14.8	-16.1	-17.0	-18.3	-18.6	-19.2	
- Tax, financial expenses	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	
+ Tax, financial income	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	
- Change in working capital	-1.5	-2.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Operating cash flow	24.0	27.1	35.7	39.8	47.8	54.5	59.1	62.5	67.4	68.6	70.7	
+ Change in other long-term liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Gross CAPEX	-2.9	-3.7	-3.9	-4.2	-5.7	-6.3	-6.7	-7.0	-7.4	-7.5	-7.4	
Free operating cash flow	21.1	23.3	31.8	35.6	42.1	48.2	52.5	55.5	59.9	61.1	63.2	
+/- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FCFF	21.1	23.3	31.8	35.6	42.1	48.2	52.5	55.5	59.9	61.1	63.2	1452
Discounted FCFF		22.0	28.0	29.1	32.1	34.1	34.6	34.0	34.2	32.4	31.2	716
Sum of FCFF present value		1028	1006	978	949	917	882	848	814	780	747	716
Enterprise value DCF		1028										

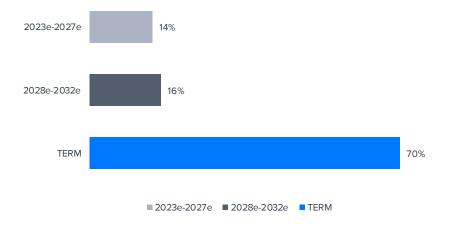
Equity value DCF per share	39.1
Equity value DCF	1039
-Dividend/capital return	0.0
-Minorities	0.0
+ Cash and cash equivalents	32.1
- Interesting bearing debt	-20.8
Enterprise value DCF	1028
Julii of F Cr Fresent value	1020

#### Wacc

Weighted average cost of capital (WACC)	7.5 %
Cost of equity	7.5 %
Risk free interest rate	2.5 %
Liquidity premium	0.00%
Market risk premium	4.75%
Equity Beta	1.05
Cost of debt	3.5 %
Target debt ratio (D/(D+E)	0.0 %
Tax-% (WACC)	20.0 %

Source: Inderes

#### Cash flow distribution



# **Summary**

Income statement	2020	2021	2022	<b>2023</b> e	2024e	Per share data	2020	2021	2022	<b>2023</b> e	2024e
Revenue	61.1	78.8	97.0	111.4	129.6	EPS (reported)	0.50	0.65	0.82	0.94	1.11
EBITDA	21.7	25.7	33.1	36.6	42.3	EPS (adj.)	0.58	0.74	0.86	0.98	1.15
EBIT	17.1	22.1	29.7	32.8	38.4	OCF / share	0.59	0.85	0.90	1.02	1.34
PTP	16.7	22.1	29.1	32.4	38.2	FCF / share	0.50	0.25	0.79	0.88	1.20
Net Income	13.3	17.3	21.8	24.9	29.4	Book value / share	2.62	2.94	3.42	4.00	4.68
Extraordinary items	-2.1	-2.4	-1.2	-1.2	-1.2	Dividend / share	0.32	0.34	0.36	0.42	0.55
Balance sheet	2020	2021	2022	2023e	2024e	Growth and profitability	2020	2021	2022	2023e	<b>2024</b> e
Balance sheet total	114.4	124.6	136.1	150.8	172.6	Revenue growth-%	23%	29%	23%	15%	16%
Equity capital	69.7	78.4	90.9	106.3	124.4	EBITDA growth-%	49%	18%	29%	11%	16%
Goodwill	50.4	59.8	59.8	59.8	59.8	EBIT (adj.) growth-%	23%	28%	26%	10%	16%
Net debt	-1.9	0.0	-11.3	-24.8	-45.3	EPS (adj.) growth-%	23%	27%	17%	14%	<b>17</b> %
						EBITDA-%	35.5 %	32.6 %	34.1 %	32.9 %	<b>32.7</b> %
Cash flow	2020	2021	2022	<b>2023</b> e	2024e	EBIT (adj.)-%	31.4 %	31.1 %	31.8 %	30.5 %	30.5 %
EBITDA	21.7	25.7	33.1	36.6	42.3	EBIT-%	28.0 %	28.0 %	30.6 %	29.4 %	29.6 %
Change in working capital	-2.1	2.4	-1.5	-2.0	2.2	ROE-%	19.9 %	23.4 %	25.7 %	25.3 %	25.5 %
Operating cash flow	15.8	22.7	24.0	27.1	35.7	ROI-%	17.9 %	22.1%	27.6 %	28.1 %	29.2 %
CAPEX	-2.5	-15.8	-2.9	-3.7	-3.9	Equity ratio	60.9 %	63.0 %	66.8 %	70.5 %	<b>72.1</b> %
Free cash flow	13.2	6.7	21.1	23.3	31.8	Gearing	-2.7 %	0.0 %	-12.5 %	-23.3 %	-36.4 %
Valuation multiples	2020	2021	2022	<b>2023</b> e	2024e						
EV/S	21.9	18.8	10.5	8.0	6.8						
EV/EBITDA (adj.)	61.5	57.7	30.6	24.5	20.7						

Source: Inderes

EV/EBIT (adj.)

P/E (adj.)

Dividend-%

P/E

69.5

86.6

19.2

0.6 %

60.4

75.1

18.9

0.6 %

32.9

44.6

11.3

0.9 %

26.4

35.3

8.7

1.2 %

22.1

30.1

7.4

1.6 %

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Accumulate	The 12-month risk-adjusted expected shareholder return of the share is attractive
Reduce	The 12-month risk-adjusted expected shareholder return of the share is weak
Sell	The 12-month risk-adjusted expected shareholder return of the share is very weak

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#### Recommendation history (>12 mo)

Date	Recommendation	Target price	Share price
2/21/2020	Accumulate	31.00 €	28.85 €
3/19/2020	Buy	24.00 €	18.48 €
4/23/2020	Accumulate	25.00 €	22.75 €
8/7/2020	Reduce	34.00 €	33.50 €
10/23/2020	Reduce	36.00 €	38.05€
12/21/2020	Reduce	44.00 €	48.65 €
2/12/2021	Accumulate	60.00€	53.00 €
4/26/2021 Analyytikko	Accumulate	65.00 €	59.20 €
vaihtuu		0.00 €	0.00€
6/9/2021	Accumulate	65.00 €	59.50 €
8/6/2021	Reduce	65.00 €	64.80 €
10/22/2021	Accumulate	58.00 €	55.40 €
2/11/2022	Accumulate	48.00 €	44.30 €
4/7/2022	Reduce	48.00 €	47.96 €
4/29/2022	Reduce	48.00 €	47.58 €
8/5/2022	Reduce	52.00 €	54.30 €
	Analyst chang	jed	
1/27/2023	Reduce	40.00 €	37.62 €
2/10/2023	Reduce	38.00 €	37.26 €
1/27/2023	Reduce	40.00 €	37.62 €
2/10/2023	Reduce	38.00 €	37.26 €
3/20/2023	Accumulate	38.00 €	34.66 €

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