Nightingale Health

Extensive report

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Antti Luiro
+358 50 571 4893
antti.luiro@inderes.fi

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Seeking a commercial recipe for success

Nightingale Health is a technology company built around blood analysis. The company tries with new technology, which initially seems competitive, to break into a conservative health care customer base, where achieving commercial success and its possible timing are, however, very uncertain. Despite the high long-term potential, we still have to wait for the signs of success and believe that positive share price drivers are still scarce. We, therefore, believe that the risk/return ratio will be weak over the next 12 months. We reiterate our Reduce recommendation and lower our target price to EUR 1.1 (previous EUR 1.3).

Nightingale aims to reduce lifestyle diseases through cost-effective blood analysis

Chronic diseases account for a significant proportion of health care costs although a large proportion of these could be avoided through lifestyle changes. Nightingale is a technology company that aims to promote the solution to this problem with a health information platform based on blood analysis. The company's technology measures 250 active tracers from a single blood sample and provides predictions of the sample provider's risk of falling ill with some 1,000 lifestyle-dependent diseases (ICD codes). Nightingale's predictions of disease risks are based on Biobank sample collections it has analyzed, from where measured blood tracers are linked to the sample providers' subsequent health events. So far it is hard to identify a notable competitor for the technology and the ever-increasing volume of tested blood samples creates a moat against potential future competitors. We also find the company's price point very attractive to health care providers and thus a good starting point for commercialization.

Seeking commercial breakthrough in a conservative target market takes time and involves considerable risks

Nightingale has succeeded in concluding several commercial contracts where health service companies build consumer services utilizing its health information platform. These contracts have not yet produced significant business. Over time, Nightingale also aims to integrate its services into the blood sample flows from existing health care providers (e.g. primary health care). This could enable its business to grow manifold from its current small level and to become profitable over time. The company does not yet have such contracts, so the risks are considerable. However, the market is slowly maturing and, according to management's estimates, primary health care could be its customer base already in ~2025-2026 but the visibility is still blurred. We believe that our estimates rely on a realistic but very high-risk scenario of Nightingale's business growth (revenue CAGR 43% in 2022-2032e). Achieving this, requires the company to sign several successful and significant commercial contracts every year, the biggest in terms of size we do not expect in the near future. Investors must believe in a commercial breakthrough of the company's technology over the next decade, have a very long investment horizon and be prepared to lose the invested capital.

Share is cheap compared to the potential, but low visibility and negative cash flow do not attract additions

Nightingale's fundamental-based valuation is very challenging, as possible scenarios vary between destruction and multiplication of invested capital. Our fair value estimate range for the share is wide, EUR 0.4-4.8 (previous EUR 0.4-4.7). Therefore, compared to its long-term potential, we feel the share is cheap. However, we consider the current risk/return ratio of the share to be weak, as growth investments constantly consume the company's cash and we do not expect the likelihood of a potential commercial breakthrough to increase sufficiently within 12 months. We wait for the company to take steps toward building large scale business and a lowering risk level.
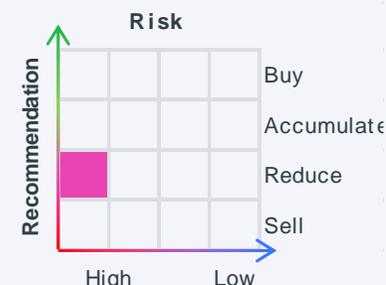
Recommendation

Reduce
(previous Reduce)

1.10 EUR
(previous EUR 1.30)

Share price:
0.99

Key figures

	2022	2023e	2024e	2025e
Revenue	2.3	4.3	5.2	8.6
growth-%	0%	84%	22%	65%
EBIT adj.	-13.6	-18.4	-17.8	-17.1
EBIT-% adj.	-589%	-431%	-342%	-199%
PTP	-16.2	-19.7	-18.2	-17.8
EPS (adj.)	-0.23	-0.30	-0.30	-0.29
P/E (adj.)	neg.	neg.	neg.	neg.
P/B	1.0	0.7	0.8	1.1
EV/EBIT (adj.)	neg.	0.7	neg.	neg.
EV/EBITDA	neg.	1.1	neg.	neg.
EV/S	8.3	neg.	1.1	2.9

Source: Inderes
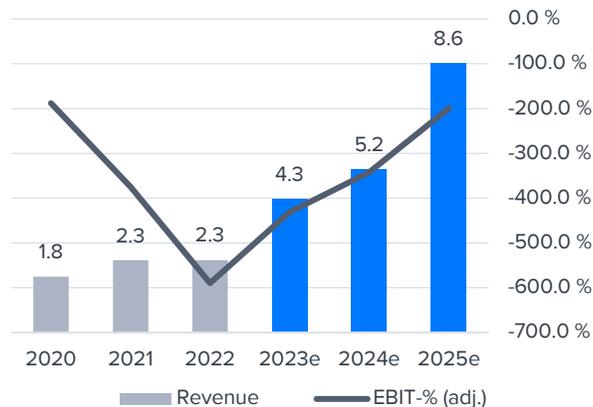
Guidance   (Unchanged)

Nightingale Health has not provided guidance for the fiscal period 2022-2023.
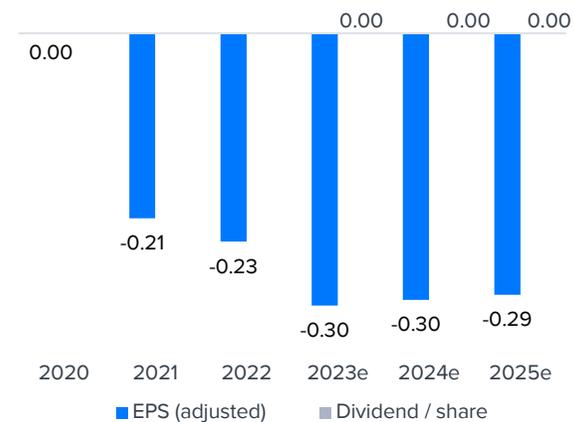
Share price

Source: Millistream Market Data AB

Revenue and EBIT-%

Source: Inderes

EPS and dividend

Source: Inderes

Value drivers

- Huge growing global market supported by mega trends
- Competitive and cost-efficient technology for predicting disease risks from blood samples
- Scalable business model
- Strong position as analyzer of Biobanks' blood samples
- Credible investors support internationalization as partners

Risk factors

- The business model proves ineffective and service demand is weak
- Slower than expected progress in the implementation of new technology in a conservative industry
- Falling behind ambitious objectives and drop in valuation that relies on successful commercialization
- Competing technologies
- Data breach including personal health data
- Need for new financing

Valuation	2023e	2024e	2025e
Share price	0.99	0.99	0.99
Number of shares, millions	60.9	60.9	60.9
Market cap	60	60	60
EV	-12.9	5.8	25
P/E (adj.)	neg.	neg.	neg.
P/E	neg.	neg.	neg.
P/FCF	neg.	neg.	neg.
P/B	0.7	0.8	1.1
P/S	14.1	11.5	7.0
EV/Sales	neg.	1.1	2.9
EV/EBITDA	1.1	neg.	neg.
EV/EBIT (adj.)	0.7	neg.	neg.
Payout ratio (%)	0.0 %	0.0 %	0.0 %
Dividend yield-%	0.0 %	0.0 %	0.0 %

Source: Inderes

Contents

Nightingale Health in brief

Summary and key figures

Nightingale is a biotechnology company that develops and sells a health information platform to identify and reduce the risks of lifestyle diseases.

2013
Current operative activities started

2021
IPO

>450
Scientific publications using company technology

>1.8 million
Blood samples analyzed with company technology

~1,000
Extensive risk analysis of diseases (ICD codes) based on biomarkers (active tracers) in blood

83
Number of employees (December 31, 2022)

142 MEUR
Capital raised (40 MEUR July 1, 2017 - December 31, 2020, and 102 MEUR net assets from the IPO 03/2021)

After a long research period, Nightingale has moved investments to commercializing its technology

Key events in recent history

2013-2019
- The company develops a blood analysis method and risk predictions for diseases
- The scientific community is included in assessing the effectiveness of the technology (e.g. the universities of Oxford and Bristol)
- The platform analyzes, e.g. samples of the UK Biobank and related disease data, first disease risk prediction models are created
- The company achieves regulatory approvals within the EU
- Business loss-making and comes mainly from research institutes that maintain their independence by paying
- Research is funded with capital investments and debt financing
- The technology matures in blood analysis and prediction of disease risks and its effectiveness is validated with the scientific community

2020-
- Focus shifts from research to commercialization and services that support disease prevention (2020)
- Analysis results are offered to consumers in Finland in the MyNightingale pilot app (2020)
- Contract with Estonian Biobank on bringing the blood samples of 0.2 million people to Nightingale's platform (2/2021)
- Considerable capital (102 MEUR net assets) raised in IPO for commercialization (3/2021)
- Commercial partnerships with Terveystalo and Mitsui/Welltus (Japan) (4/2021)
- At-home tests are launched in Finland (Q1/22)
- Expansion to genetic testing launched with the Negen acquisition (1/2022)
- Livit app, replacing MyNightingale and a consumer service based on at-home testing are released (4/2022)
- Commercial Physitrack partnership (6/2022)

Revenue and EBIT development, MEUR

Year	Revenue	EBIT
2018	1.7	-2.5
2019	2.0	-3.8
2020	1.8	-3.3
2021	2.3	-9.8
2022	2.3	-13.6

■ Revenue ■ EBIT

Source: Nightingale, Inderes

Source: Inderes
*Until 2020, figures are FAS accordant and starting from 2021 IFRS accordant. Years are fiscal periods ending on June 30.

Company description and business model 1/8

Nightingale Health is a technology company built around analyzing blood tracers

Nightingale Health started its current operations already in 2013 with the aim to develop a solution to change the current health care system towards a more preventive model. Nightingale took its current name from Florence Nightingale, who is considered the developer of modern health care. Nightingale's technology is based on extensive measuring of biomarkers (blood tracers) and collected data is combined with disease risks recognized from blood samples analyzed from Biobanks.

After a long research and development phase, Nightingale entered a technology commercialization phase in 2020 and was listed in 2021 to finance this. The company has progressed in commercializing its technology, but we still see it as an early-stage growth company that seeks a working long-term business model to exploit the commercial value of its technology.

Nightingale's founders are still involved in company management and operations. The founders have played a key role in developing the company's laboratory techniques, blood analysis and risk predictions.

The company's goal is to make preventive health care mainstream

Health care has for a long time focused more on treating sick people, while there have been limited effective tools for extensive disease prevention. A concrete example is the prevalence of lifestyle diseases (e.g., Type 2 diabetes and cardiovascular

diseases). According to the national public health institute in the United States (CDC) around 90% of the annual health care costs in the US are generated from treating people with chronic and mental health related diseases.
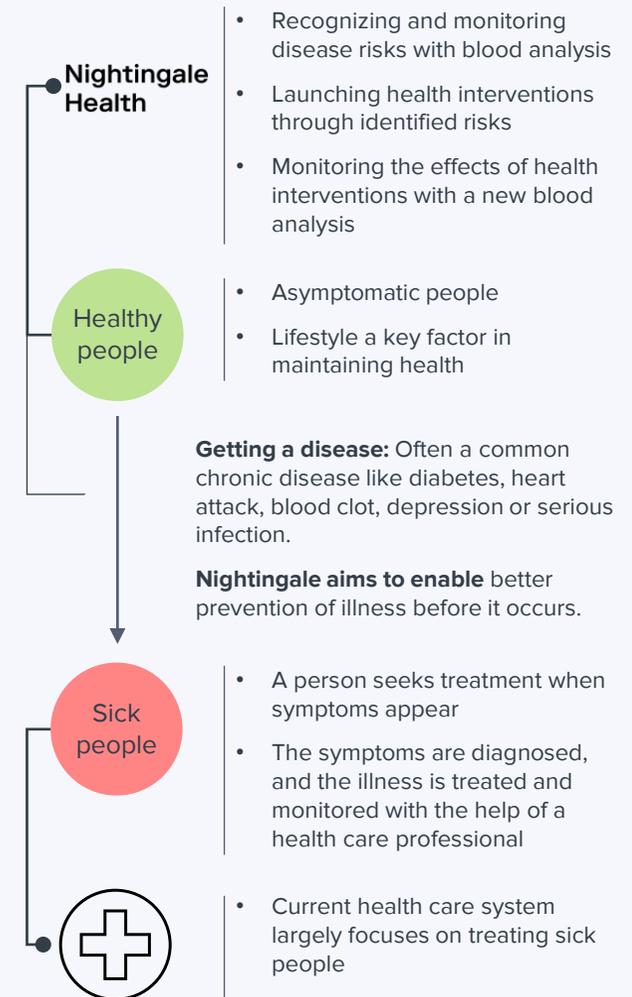
Nightingale's vision is to shift the focus of health care more strongly from disease treatment to prevention of people getting sick. The driving idea behind the vision is that a person is never completely sick or healthy but something in between. Nightingale's aim is to bring information to people on where they stand on the scale and, thus, make it easier for people to understand how health develops and improves.

As an instrument for preventive health care, Nightingale has developed a platform for monitoring lifestyle changes. In its platform Nightingale combines 1) a cost-effective method for measuring 250 blood tracers ("biomarker") from blood samples, 2) a prediction of the person's risk to fall ill with more than 1,000 different diseases (ICD codes) based on the test, and 3) comprehensible communication of health and disease risks.

With the platform, health service companies can offer people targeted health interventions related, e.g., to physical activity and diet, the effects of which can be monitored with new blood tests. In addition, the platform provides coherent health data to enable operators to carry out research and develop new health technologies.

Blood analysis makes many people think of Theranos that developed its own carefully guarded blood analysis method that proved a hoax.

Currently Nightingale is positioned as a reducer of diseases

Nightingale Health
- Recognizing and monitoring disease risks with blood analysis
- Launching health interventions through identified risks
- Monitoring the effects of health interventions with a new blood analysis

Healthy people
- Asymptomatic people
- Lifestyle a key factor in maintaining health

Getting a disease: Often a common chronic disease like diabetes, heart attack, blood clot, depression or serious infection.

Nightingale aims to enable better prevention of illness before it occurs.

Sick people
- A person seeks treatment when symptoms appear
- The symptoms are diagnosed, and the illness is treated and monitored with the help of a health care professional
- Current health care system largely focuses on treating sick people

Source: Nightingale Health

Nightingale's approach has been the opposite. The company's blood analysis platform is used by several universities (e.g. Oxford, Bristol) and the company distributes the results of their blood analysis to the scientific community that publishes its research in scientific peer-reviewed publications.

Nightingale's technology base is a blood analysis machine and software it has developed which measures the tracer counts in blood. The prediction of disease risks is based on Nightingale's analysis of more than 1.8 million samples especially from biobanks using its own testing method. The company has more than 450 published peer-reviewed studies using the company's technology as its scientific basis. The research addresses, e.g., the link between biomarkers measured from human blood samples and their subsequent risks of disease.

The company's measurement technology relies on applying well-known methods for blood analysis

Nightingale's blood analysis is based on the resonance (vibration) of molecules in the magnetic field, which is called NMR[1] spectroscopy. The technology and method are known in themselves and, for example, MRI technology (magnetic resonance imaging) used for imaging of people work with the same principle according to the company. In the measurement, electromagnetic radiation is directed at the blood sample at different frequencies.

For example, Queensland University has described the operating principle of NMR technology[3]. Each atomic nucleus has their own typical frequency with which it receives radiation energy, which results in the core resonating. In line with their composition, molecules have their own vibration profile, whose

strength can be measured and turned into the molecule's ("biomarker's") count. Nightingale's software can be used, e.g., to automatically turn the measuring result to the count of certain molecules. In order to work, the system requires a strong magnetic field generated with a superconductor, the maintenance of which requires a cold temperature maintained with liquid helium and nitrogen.

According to Nightingale, the NMR method is very exact as it relies on the physics of the nature of the substance. Nightingale's NMR equipment is largish and basically placed in a centralized laboratory, which is typical also for conventional laboratory equipment based on clinical chemistry.

According to Nightingale, the NMR method is very exact as it relies on the physics of matter properties. The NMR equipment used by the company is commercially available. The machine components are common but currently come from one supplier. Nightingale is also assessing the possibility of dual sourcing.

Nightingale has developed automation related to operating the equipment and software needed to analyze the results, which has made the overall blood testing method unique. The method is protected by business secrets in terms of recognizing, measuring, and preparing the sample, and the processing of data.

Nightingale's NMR method currently allows measurement of 250 biomarker counts. If the corresponding or larger amount of biomarkers were measured with regular laboratory tests, Nightingale says it would require more blood samples and the cost would be high.

Example of a commercial device used for NMR spectroscopy

Source: Bruker

Marketing image of the blood collection device used in Nightingale's at-home testing kit

Source: Nightingale

1 NMR = Nuclear Magnetic Resonance

2 IVD = In vitro diagnostics means research made on samples taken from patients and healthy people

3 https://cai.centre.uq.edu.au/facilities/high-resolution-nmr-spectroscopy

We have not found a market operator whose technology would be better suited for reliable and cost-effective measurement of a large sample size and a high sample-specific number of biomarkers either (see image in the sidebar).

Of the 250 biomarkers measured by Nightingale, 39 are individually CE approved (3/2023 situation), enabling their use not only to predict disease risks but also to replace standard laboratory tests. For example, Synlab's consumer price for measuring these 39 clinical biomarkers is around EUR 300-600 (incl. VAT), while Nightingale's list prices for corresponding measurements from a venous blood sample start at EUR 19 (excl. VAT).

The laboratory equipment used by Nightingale has as a whole been CE marked as an IVD[2] device in the EU and in Japan the company's laboratory is certified as a clinical laboratory. The universities of Oxford and Bristol have access to Nightingale's blood analysis technology and we believe it has been extensively validated by parties outside the company. As this report is written, Nightingale is still applying for FDA's 510k approval in the United States, but we see good conditions for the approval.

All samples are delivered for analysis to Nightingale's laboratories, the main ones of which are located in Finland, Japan and the United Kingdom (opens in 2023). The blood sample can be taken as a normal venous blood sample, allowing individual blood counts and health risks to be determined. Tests carried out as venous blood samples may replace certain normal blood tests for other purposes and may also be used to assess the person's disease risks.

In 2021-2022, Nightingale developed and commercialized an at-home test technology where the customer collects a few drops of blood from the fingertip into the collection device and mails it to Nightingale's laboratory. With the at-home test, the company currently offers its customers health risk predictions, but not individual blood counts. At-home testing relies on the blood collection device by Weavr Health (Velvet). Nightingale has manufacturing and development rights of the device and a royalty-free license. The company has applied for a patent for a blood analysis method from dried blood with NMR analysis.

According to Nightingale, the benefit of its technology is the cost level of the tests and the repeatability of the results. According to the company, a different analysis device, in a different location and at a different time generates comparable results. This means that the Biobanks analyzed around the world generate comparable data and a test made anywhere can be put through the risk prediction model and generate reliable results. We also believe that Nightingale's technology is competitive compared to the technology of main competitors developing preventive health care (see competitor comparison pp. 19-20). The core of Nightingale's technology is in the analysis of blood tracers that indicate the body's metabolism. In addition, the company expanded to genetics through the Negen acquisition in early 2022. The company received an existing genetic testing offering in the transaction, which it plans to integrate into its health information platform.

Nightingale's technology has clear advantages compared to conventional blood analysis technologies

	Nightingale Health NMR	Mass spectrometers	Devices based on clinical chemistry
Cost per test	Low[3]	High[3]	High[3]
Blood volume needed	Small <1 ml	Small <1 ml	Medium ~4 ml[4]
Number of biomarkers per test	High (~250)	High (~100–>1,000)	Low (~5–20[3,4])
Very high precision	Yes	No	Yes
High consistency of results	Yes	No	Yes
Very extensive overall selection of test values	No[5]	Yes	

Source: Nightingale, Duodecim, Terveystalo, Synlab, US National Center for Biotechnology Information NCBI, Inderes' estimate

2 IVD = In vitro diagnostics means research made on samples taken from patients and healthy people

3 Nightingale does not publish exact cost information about its method but according to the company, NMR is the only cost efficient and mass volume test for, e.g., analyzing lipoproteins in blood. Public test price lists (e.g. Synlab, Terveystalo, University of Boulder Colorado) and Nightingale's own test price list support this argument.

4 Nightingale / Duodecim Terveyskirjasto: amounts vary by test

5 Nightingale's test cannot replace all laboratory tests

This feature is already utilized in the company's Livit service. Through the expansion, the company introduces risk factors for hereditary diseases alongside blood tracers that indicate lifestyle choices.

Blood counts are combined with disease risks using Biobank data

Nightingale has invested heavily in promoting research on the connection between biomarker counts in blood samples and the subsequent risk of disease in persons providing the samples. The company has analyzed over 1.8 million blood samples with its technology, which has generated a vast database that enables research. The basis is the vast Biobank samples (especially UK Biobank) and the sample providers' later health data, where you can see who of the sample providers' later fell ill.

More than 450 peer reviewed studies have been published based on Nightingale's technology and data analyzed with it, where connections between biomarker counts and later diseases have been found Some of the research was carried out by the company's own research personnel and some by the scientific community, but in both cases the research is peer reviewed by the scientific community before publication.

After the sample analysis is completed, Nightingale can start the study with the biobanks' data even before the data is openly published. This allows the company to patent certain findings. Nightingale has applied for a maximum patent protection of some 20 years for the risk analysis of several diseases. In Finland, Nightingale has 6 patents related to the technology's ability to determine disease risks of kidney disease, atrial fibrillation, digestive system diso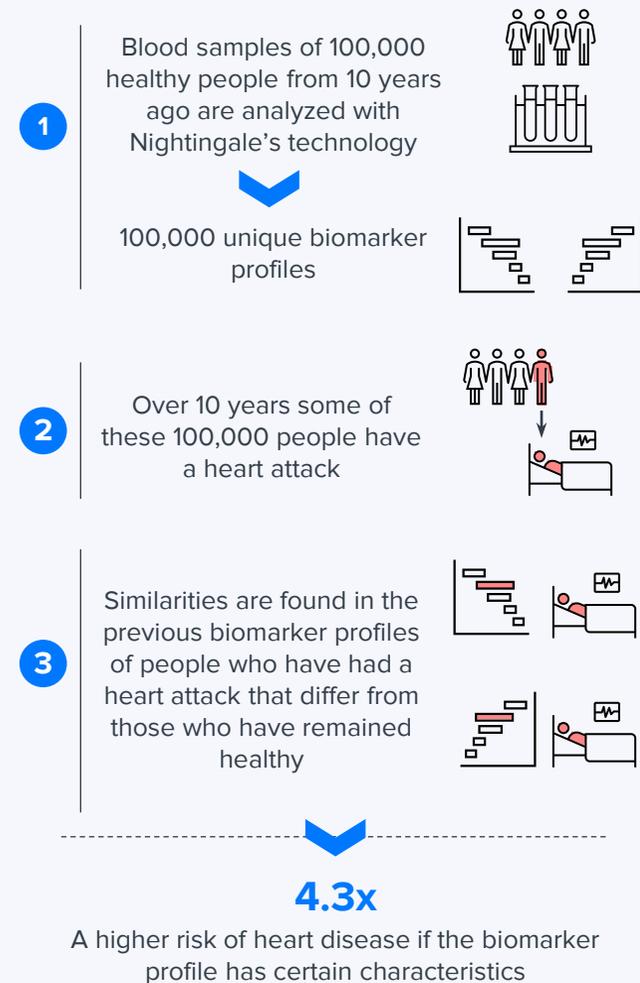rder and pre-eclampsia, and death risks in breast cancer and prostate cancer (5/2023 situation). The company is expanding the patents into international patents.

Research data will become open soon after the analysis is completed when the scientific community can carry out independent research with the data and expand understanding of predicting disease risks. According to Nightingale, such research has contributed to medical understanding of lifestyle diseases, but also constitute independent scientific validation for the company and to our understanding to some extent also outsourced product development.

According to Nightingale, it can carry out risk predictions for ~1,000 diseases (ICD codes) from a blood sample. In spring 2021, some 2/3 of these ~1,000 risk predictions were, according to the company, more accurate than the current clinical standard and ~70 (mainly the most common diseases) had been incorporated into the platform. Peer-reviewed research supporting the claim of more accurate risk assessments than the clinical standard has been published in small parts (e.g. sample of 24 diseases[1]), but we expect that it will take several years for peer-reviewed clinical evidence to be collected for a wider range of diseases. In addition, we believe that increasing the number of disease risks in the health information platform (~70) will also take several years.

According to Nightingale, it continuously expands the risk predictions that are delivered to its customers. The risk predictions to be added later will be based on the same biomarkers, which means new risk predictions can be made over time on previously analyzed samples.

Predicting risk for a heart attack – research example from UK Biobank:

1. Blood samples of 100,000 healthy people from 10 years ago are analyzed with Nightingale's technology

   100,000 unique biomarker profiles

2. Over 10 years some of these 100,000 people have a heart attack

3. Similarities are found in the previous biomarker profiles of people who have had a heart attack that differ from those who have remained healthy

4.3x

A higher risk of heart disease if the biomarker profile has certain characteristics

Source: Nightingale

1 Buergel, T., Steinfeldt, J., Ruyoga, G. et al. Metabolomic profiles predict individual multidisease outcomes. Nat Med (2022). https://doi.org/10.1038/s41591-022-01980-3

Customers utilize Nightingale's technology to implement health interventions

The final part of Nightingale's vision, i.e. the implementation of interventions that promote health and improve the user's health situation is more strongly based on the company's customers. The company's own consumer service (Livit) is a simpler digital tool for promoting health and covers only a fraction of potential health interventions. Nightingale partners with health care sector actors to extend the impact of its platform on human health (e.g. health care services, coaching, Current Care Guidelines).

We believe, Nightingale's customers can be divided into four categories: 1) research operators, 2) primary health care (public/private), 3) health service companies, and 4) consumers.

Research operators are a strategic customer for the company, as, e.g., Biobanks with blood samples and scientific research operators are a key enabler of Nightingale's product development. Data is produced on the blood samples for the customer (e.g. the Biobank) to enable scientific research. Nightingale has the largest customer base in this segment, which we believe it has served with limited margins and partly for free. Historically, this segment has been the only source of income for the company, but its role in the company's growth targets is very small. We believe Nightingale's long-term commercial potential focuses on other customer groups.

We believe that primary health care providers are the largest potential customer group for Nightingale. We estimate that these customers would use Nightingale's platform for broader reduction of health risks at population level, e.g., through health risk screening and prevention based on Current Care Guidelines. The segment's customer (public/private primary health care organization) could save in the analysis of certain standard blood samples, produce more extensive and accurate health risk predictions to prevent disease, and collect comprehensive and comparable health data at population level with Nightingale's help.

Primary health care is a conservative customer base, so despite the huge potential, breaking into the segment is likely to be challenging. Nightingale still has no clear customer in this segment. However, the cooperation with the Estonian Biobank involves population level screening. In addition, among the company's customers Terveystalo and Welltus (Mitsui) are also active in primary health care, where they do not however use Nightingale's technology yet.

Health service companies (e.g. Terveystalo, Welltus and Physitrack) are, in our view, Nightingale's main customer segment at the moment. Health service companies offer health information similar to Nightingale's Livit platform as part of their own service package for consumer or occupational health care customers. In this case, the health service company can handle the blood sample collection in their laboratory or utilize Nightingale's at-home test. Health service companies develop the offering of health interventions, which we expect to play a critical role in building the commercial value of Nightingale's technology.

Nightingale's target customers & revenue streams

Customer group	Expected drivers of revenue streams	Revenue stream's importance (2022 → long-term)
Research operators (e.g. Biobanks and universities)	• Samples analyzed	High → Low
Primary health care (public/B2G and private/B2B)	• Samples analyzed	No income → High
Health service companies (B2B2C)	• Samples analyzed • Identification of health risks • Customer guidance • Additional sales reached	Low → Medium
Consumers (D2C)	• At-home tests • More detailed health information • Service subscriptions	Low → Low

Source: Inderes' estimate, Nightingale

B2B / Business to Business: Nightingale offers its platform to a private primary health care provider

B2G / Business to Business: Nightingale offers its platform to a public primary health care provider

B2B2C / Business to Business to Consumer: Nightingale offers its platform to a health service company that integrates it into its own consumer service package

D2C / Direct to Consumer: A partner distributes the at-home test, Nightingale provides the service with its own Livit app

Nightingale aims to offer possibilities of additional service sales and cost-effective new customer acquisition for health service companies. The segment is also a possible gateway to primary health care, as health service companies can, in addition to consumer sales and occupational health care, implement national primary health care to some extent.

Nightingale also approaches **consumers** directly with chargeable at-home tests, that are available in the Livit app, Yliopiston Apteekki or Life stores. The cost of at-home tests is higher for the company than the cost of venous blood samples taken in laboratories due to the cost of the collection devices, packaging and logistics. The role of the direct consumer channel is complementary and the number of customers is estimated to be low.

Nightingale's sales relies on the company's own personnel, who mainly seeks to enter partnership agreements with health service providers. According to the company, these contract negotiations typically take about 3-9 months. In the longer term, the company can also focus more on direct consumer sales and marketing, or introduce sales efforts more strongly into the Livit app (e.g., user guidance to purchase partner services).

Business is based on the health information platform developed by the company

Commercially we believe Nightingale is still in practice a start-up company, where the service and commercial models are constantly being developed and tested. The exact business model (target customers, focus of value propositions, applications, packaging of offering, pricing) will probably still fluctuate considerably in the next few years, so the description and emphasis we present here can quickly become obsolete.

Nightingale has built a health information platform with its technology. The company receives blood samples, analyzes them at low cost and forwards the results (blood tracer counts, disease risk predictions, other health indicators) to its customers. The company builds its business around this core and we believe it is positioning itself as a technology and service provider in the health care value chain. The health information platform is also expanding to genetic tests from blood samples, which is why the company acquired the genetics company Negen in early 2022. Its role is to bring genetic factors alongside lifestyle choices to predicting health risks and we thus find this expansion natural.

Nightingale serves both professional operators and consumers with its health information platform. The service targeted at professional operators is called Nightingale Pro and the service targeted directly to consumers is called Nightingale Home.

Nightingale offers all its customers blood analysis results without interpretation from health care professionals. It is difficult for a layman to interpret the results of laboratory tests and the company offers consumers simpler indicators. At present, these include, e.g., the number of healthy life years and separate health indicators related to heart health, mental wellbeing, metabolism and immunity. Nightingale has built result delivery into the Livit app launched in spring 2022.

Nightingale's business model (health information platform)

- Nightingale receives and analyzes the blood sample
- The following results on the blood sample are produced for the customer: 250 blood tracer counts (of which 39 for clinical use), disease risk predictions, other health indicators

Source: Inderes' estimate, Nightingale
*Abbreviations explained on the previous page

Professional operators (research operators/primary health care/health service companies) are also offered measuring results of all 250 biomarkers and disease risk predictions. These operators can use the results to complement their own consumer services (e.g. Physitrack) or create new ones (e.g. Terveystalo), where Nightingale's Livit app acts as a reference implementation. Similarly, wider information can be used for research (e.g. UK Biobank) or as part of clinical activity to replace other laboratory tests or other methods of health risk assessment (e.g. replace the FINRISK calculator).

Revenue streams from various sources

Nightingale's income has historically consisted of payments from research institutes and universities that use its technology. We believe these revenues are mainly project-based, as the need to analyze research collections is generally non-recurring. The growth Nightingale seeks is based on analyzing large repeated sample volumes, so if growth is successful, the role of small and non-recurring revenue streams from research operators would probably reduce.

If the strong growth targeted by the company is successful, we expect revenue streams to come mainly from health and welfare operators, like health service companies and public health care providers. We believe these revenues would be more constant in nature, as, e.g., screening of population-level health risks would be natural reproducible activities for the company's customers. Revenue could also include continuous service orders. However, we expect that the company's revenue will include a combination of recurring and non-recurring income also in the long term.

We note that assessing the structure and nature of the company's long-term revenue streams is at best an educated guess at the moment. The planned structure and focus of the company's business may change significantly over time.

Cost structure is relatively scalable

We believe Nightingale's blood analysis based business is scalable by nature. We estimate that the company's revenue streams based on sample analysis have a gross margin level of around 60-90% (laboratory sample/ research collection) or 20-60% (at-home tests) depending on the sampling method. If the company grows successfully, we estimate that the volume will focus on higher margin samples, so in principle the company's business is highly scalable. However, due to high fixed costs, the company's revenue needs to multiply to turn the business profitable and visibility into this is still weak.

The costs of Nightingale's blood sample analysis consist mainly of work, liquid hydrogen and helium, wearing parts and electricity. According to the company, the price of its NMR machine is typically under EUR 1 million and the capacity is some 90,000 tested blood samples per year. Divided over eight years, the cost of the machine is some 30 to 45% of the variable costs of analyzing the sample according to the company's estimate. This estimate would correspond with a variable cost of some EUR 3-5 per test.

The Materials and services cost item accounted for 6% of Nightingale's costs in the fiscal period 2022. These mainly consisted of small raw material or

Revenue and EBIT, fiscal periods 2018-2022
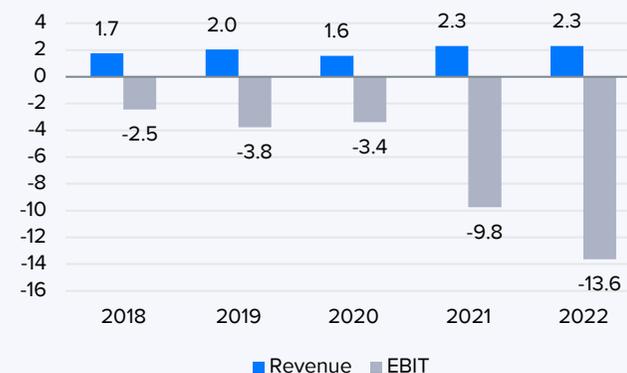
Source: Inderes, Nightingale

service purchases. Most of Nightingale's costs are fixed and highly personnel-dependent. During the fiscal period 2022, personnel costs accounted for some 40% of costs and consisted mainly of salaries and indirect salary costs. Other expenses that are partly personnel-related represented 27% of costs. These mainly include equipment purchases and costs, R&D costs, software and IT costs, administrative expenses, and office expenses.
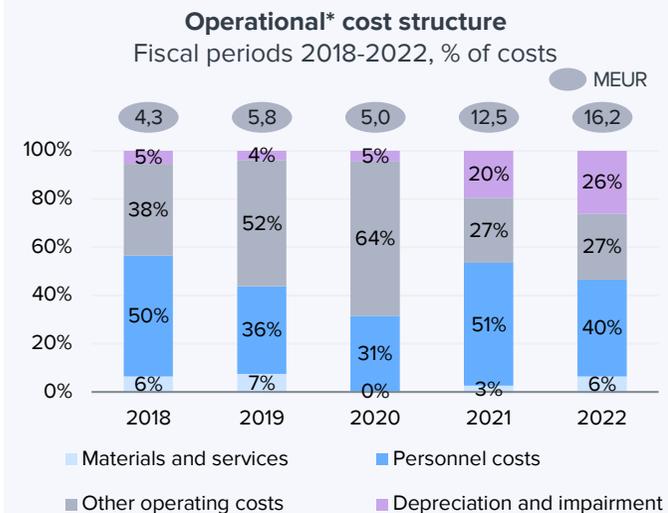
Depreciation (2022: 26% of costs) are also a significant cost item and consist mainly of depreciation of capitalized product development costs and rental costs (especially facilities and equipment, IFRS 16). The company currently capitalizes more deprecation than costs (2022 capitalization 4.7 MEUR, depreciation 2.3 MEUR). Thus, EBIT gives a more positive picture of Nightingale's cash flow in the current development phase than reality.

A clear majority of personnel (77 on average in H2/ 22) consisted of product development and operational (laboratories) activities (44 employees). Sales and business development (25 employees) and administration (8 employees) represent a minority of personnel, although the company has increased its investments in sales. As development of the Livit app is largely outsourced (Reaktor), some R&D efforts are not reflected in personnel distribution. R&D related to blood sample analysis and identification and prediction of health risks is in the company's own hands.

As the company's size class grows, we believe there will be scalability practically in the entire personnel. The exception in our opinion is laboratory operations that grow with sample volumes, although we believe that laboratory personnel is currently designed for a higher revenue level. We also believe the company continues to carry out low-margin or free-of-charge blood analysis for research operators to a substantial extent. The sales mix moving to clearly higher margin services would also support the company's profitability.

Cash is allocated to growth

Nightingale's capital allocation is currently mainly focused on commercialization of product development and technology. The company finances its negative cash flow with its strong net cash, mainly raised in the 2021 IPO, so we believe growth financing is secured for several years (discussed in more detail in the estimates section). However, if the company decided to invest more aggressively in growth, and e.g. analyze samples for free to increase the number of users, capital could be spent more quickly. We do not, however, believe the company is currently implementing or planning this type of user acquisition on a large scale.

Operational* cost structure
Fiscal periods 2018-2022, % of costs

	MEUR
2018	4,3
2019	5,8
2020	5,0
2021	12,5
2022	16,2

Legend:
- Materials and services
- Personnel costs
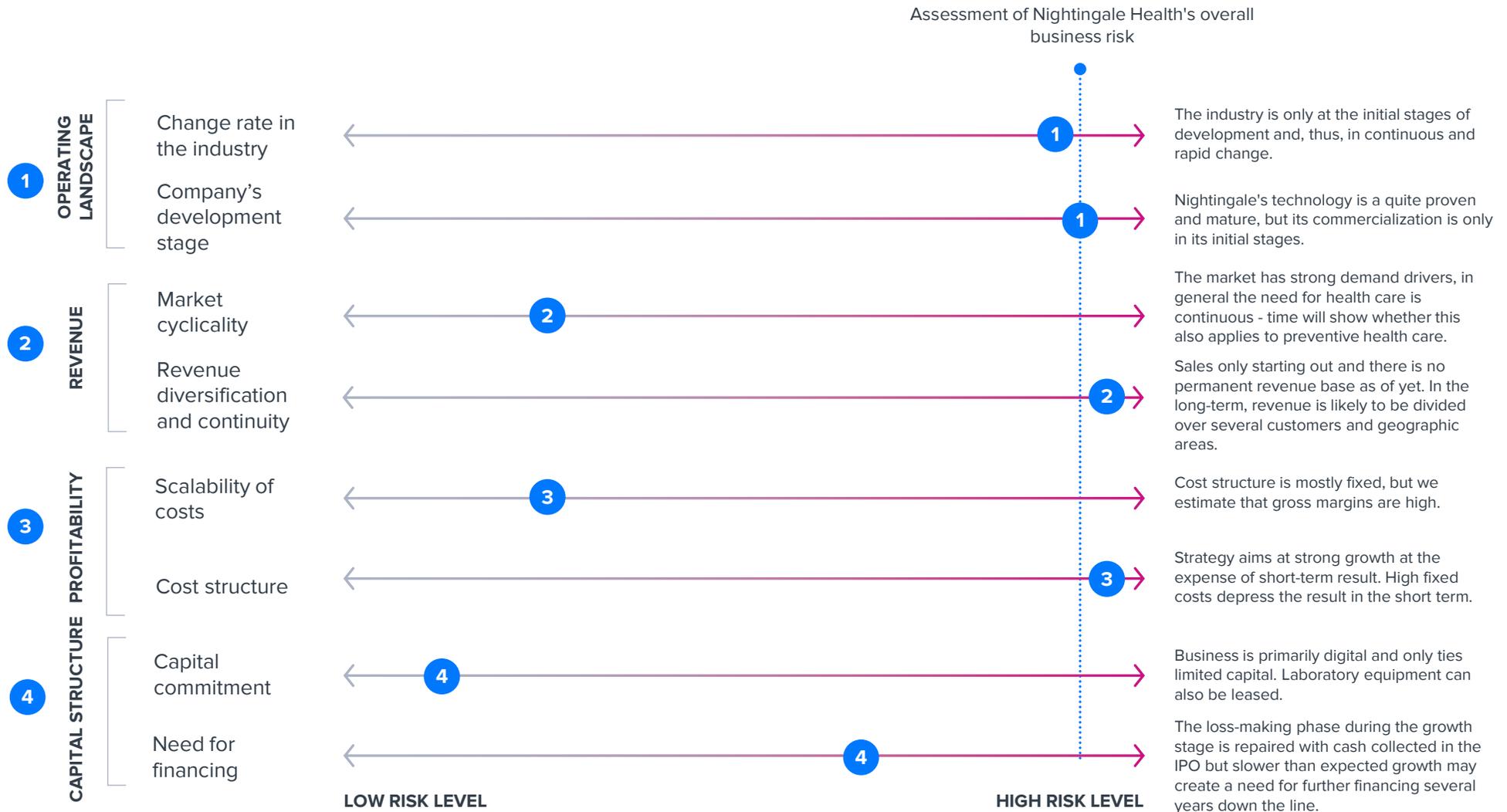- Other operating costs
- Depreciation and impairment

Source: Inderes, Nightingale

*Expenses recorded in the income statement before EBIT.

Figures are FAS accordant until 2020 and starting from 2021 IFRS accordant. Nightingale's fiscal periods end on June 30.

Risk profile of the business model

Assessment of Nightingale Health's overall business risk

OPERATING LANDSCAPE (1)

Change rate in the industry — **1** — The industry is only at the initial stages of development and, thus, in continuous and rapid change.

Company's development stage — **1** — Nightingale's technology is a quite proven and mature, but its commercialization is only in its initial stages.

REVENUE (2)

Market cyclicality — **2** — The market has strong demand drivers, in general the need for health care is continuous - time will show whether this also applies to preventive health care.

Revenue diversification and continuity — **2** — Sales only starting out and there is no permanent revenue base as of yet. In the long-term, revenue is likely to be divided over several customers and geographic areas.

PROFITABILITY (3)

Scalability of costs — **3** — Cost structure is mostly fixed, but we estimate that gross margins are high.

Cost structure — **3** — Strategy aims at strong growth at the expense of short-term result. High fixed costs depress the result in the short term.

CAPITAL STRUCTURE (4)

Capital commitment — **4** — Business is primarily digital and only ties limited capital. Laboratory equipment can also be leased.

Need for financing — **4** — The loss-making phase during the growth stage is repaired with cash collected in the IPO but slower than expected growth may create a need for further financing several years down the line.

LOW RISK LEVEL   **HIGH RISK LEVEL**

Source: Inderes

Investment profile 1/2

Nightingale's investment profile

We believe, Nightingale is a very early-stage growth company. The value of the company relies purely on the expectation of considerable business potential that lies several years down the road and whose materialization involves considerable uncertainty. The profile makes the company high-risk as there is extremely low visibility into future profits and the business model is still practically untested. On the other hand, if the commercialization is successful, the value creation potential is considerable.

Nightingale's risk profile does, however, differ from a biotechnology company in the research stage as its technology has already largely been proven to work. In addition, the technology already has regulatory approvals, so it has been offered to consumers. In our view, the risks focus more the commercialization of the technology than on product development risks.

We believe Nightingale's value development is currently driven mainly by the news flow on contracts that support the growth of analysis volumes in commercial blood samples. Contracts on analyzing samples with various partners play a key role in the beginning. As commercialization progresses, the specifics generated by operating indicators will in our opinion play the key role in the company's value formation.

We feel the investment horizon needs to be very long as Nightingale's possible commercial success will be decided years from now. Progress towards the strategic goals improves the possibilities to reach the ambitious objectives, and this will be monitored in coming years.

Key positive value drivers

Huge growing global market supported by mega trends offer a long road for growth. Mega trends like the aging population keep the market growing. The company technology solves a problem that is globally important for humanity.

Competitive and cost-efficient technology for predicting disease risks from blood samples enables Nightingale to grab the opportunity the market offers. Peer-reviewed research provides the technology with a scientific base for predicting disease risks. With the same analysis, the company also produces measurements of blood tracers suitable for certain clinical use, which are produced at a significantly lower price than the currently used measurement technology.

Scalable business model makes Nightingale's value creation potential huge if growth succeeds. We believe Nightingale's business has high margins.

Strong position as analyzer of Biobanks' blood samples offers, according to our estimate, Nightingale a sustainable competitive advantage. The company's large volume of tested blood samples from several Biobanks and sample collections has, in our opinion, made it the most attractive technology for analyzing tracer counts in blood samples.

Credible investor partners help Nightingale start its business. In Japan, the company has already started its business (Kirin, Mitsui) and in the US (PerkinElmer) it also has a credible investor, which we believe can support Nightingale in opening the market.

Key negative value drivers and risks

The business model can prove inoperable and demand for services weak, as the commercialization of the business is only in its initial stages. The business model can lead to poor profitability or assumptions concerning business development may prove wrong. Finding a new business model can take considerable amounts of time and capital in this type of situation.

The conservative health care industry can be slow in adopting technology. Even if commercialization is successful, it can take clearly more time for Nightingale to reach its objectives than it has anticipated. For example, the company does not yet have a clear reference in public health care customers.

Falling behind the ambitious objectives would have a considerable effect on the valuation that relies of growth. These risks materialized to a significant extent in 2021-2022 due to the weak development of short-term growth.

Competing technologies can take market shares even though Nightingale's position as the analyzer of Biobanks creates a moat.

A potential data breach containing health information could be a threat to the company's existence, even though Nightingale has invested heavily in security (the company has the ISO/IEC 27001:2013 information security certificate). In Finland, the data breach of, e.g., Psykoterapiakeskus Vastaamo lead, according to media information, to a situation where the company had to file for bankruptcy.

Investment profile 2/2

1. Mature technology for large-scale blood tracer measurement and health risk identification

2. Target market of preventive health care that grows supported by mega trends

3. Offering that seems competitive and a scalable business model

4. Challenges of breaking into a conservative market raise the risk level to very high

5. Implementation of the growth strategy eats away on cash assets and may require additional funding if growth is weak

Potential

- Huge growing global market supported by mega trends
- Competitive and cost-efficient technology for predicting disease risks from blood samples
- Scalable business model
- Strong position as analyzer of Biobanks' blood samples
- Credible investors support internationalization as partners

Risks

- The business model proves ineffective and service demand is weak
- Slower than expected progress in the implementation of new technology in a conservative industry
- Falling behind ambitious objectives and drop in valuation that relies on successful commercialization
- Competing technologies
- Data breach including personal health data

Markets and competitive landscape 1/5

Preventive health care is not a new concept, but the market is far from ready

Disease prevention is already being done in several ways, but there is still considerable potential for wider utilization. A concrete example is the prevalence of lifestyle diseases (e.g., Type 2 diabetes and cardiovascular diseases). Disease prevention could have the potential to decrease the costs of health care considerably, which creates a market for cost-effective ways to reduce disease risks (see page 19).

The global technology and services market for preventive health care is estimated to grow by 15% annually (CAGR) in 2021-2026 to USD 382 billion. The market has many clear growth trends. The aging of the population and prevalence of lifestyle diseases will increase the strain on health care systems, which increases the need for disease prevention. The digital transformation of health care enables new and efficient methods for implementing prevention. In addition, consumers are investing more in their own health and measuring it, which creates demand for products and services that allow measuring one's health.

The tools available for disease prevention vary from one country to another but there are plenty of tools that can be classified as such. For example, vaccinations, health questionnaires, cancer screening, ante-natal clinics, monitoring of hereditary diseases (e.g., glaucoma) or regular health checks are preventive health care. Preventive tools, like the examples above, are, however, often point-like and only cover a limited number of disease risks.

According to Nightingale, there has not previously been an individual and cost-efficient way to cover hundreds or even thousands of diseases at one time. We have not found it in the market either.

We believe Nightingale is creating a new approach in the market for preventive health care. However, the company's disease risk predictions are only part of the overall picture. Disease prevention requires successful health interventions. Changes in lifestyles can be difficult to achieve. In addition to the health risk predictions, the company must build a functional range of health interventions, where we believe the current actors in the industry with their services will play a key role.

Health care can be seen as a conservative sector in general, as regulation in the sector is understandably very expansive due to patient protection. Therefore we do not expect it to be easy to open a new segment in the market. However, industry players are constantly trying new things in the field of preventive health care. In Finland, e.g., Synlab and Puhti (Mehiläinen) offer a variety of targeted laboratory test packages. Elsewhere, e.g., the UK's national health care service (NHS) has piloted Nightingale's competitors' Grail's solution for early detection of cancer. Nightingale has also established a number of partnerships where the company's solution is offered to consumers in cooperation with sector operators.

Global preventive health care technology and services market, USD USD

CAGR (annual growth)

+15%

2021	2026e
193	382
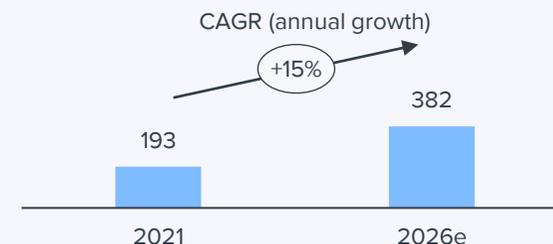
Source: Business Research Company

Trends behind target market growth

Trend	Effect on the market
Digitalization of health care	↗
Aging population and strain on health care	↗
Investing in your health and measuring it	↗

Source: Inderes, Nightingale

Markets and competitive landscape 2/5

Differences in health care systems by country that are also reflected on Nightingale

Diseases cause considerable costs for society but naturally also humane and often financial costs for the sick individual. Globally health care also uses, e.g., public and private service providers, public and private funding, and direct and insurance-based grounds for payment. We believe prevention of diseases would be sensible in all systems both for society and the individual. The route to monetizing the benefit is not, in our opinion, as clear in all models.

Preventive health care does not reduce the number of sick people or the amount of care they need immediately but the effects are generated as the number of diseases decreases over time. In the short term, the overall costs may even rise as prevention of disease risks can generate extra costs. The costs may also be divided among different players depending on the model.

In insurance-based primary health care systems, the insurance company usually covers a considerable amount of disease treatment, so we believe there is a clear commercial interest to reduce these costs in the long term. Correspondingly the insurance payer, i.e., a private person or the employer in case of occupational health care, can benefit as lower insurance premiums.

On the other hand, we estimate that publicly funded primary health care systems usually have a more limited budget to arrange their activities. For example, in Finland the resources are quite scarce based, .e.g., on treatment queues and during the COVID pandemic the treatment debt of primary health care grew. Even though in the longer-term preventive health care could reduce the treatment costs of sick people considerably, budget limitations can slow down implementation in the short term. Costs rising in the short term could, however, in our opinion, be justified in a dynamic public health care system.

Health conscious and financially sound consumers can see preventive health care as a sensible use of money. The consumer will, however, only experience part of this benefit as improved health and quality of life and benefits are also generated for society. Consumers are also often covered by some health insurance or public service and are not necessarily ready to spend considerable amounts of their own money on preventive care. We believe, however, that consumers, particularly the most health conscious ones and those in higher income brackets, may be willing to pay for preventing disease risks.

According to Nightingale, health service companies will generate a lot of new customer stream of persons in sound health from preventive health care that would not normally seek these services when healthy.

We believe the key for Nightingale is to find players in the health care value chain that either gain benefits from preventive health care quickly or are ready to accept increasing costs in the short term.

Preventive health care could offer a relief to the cost pressure of health care

Chronic diseases are the most common cause of death and cause of health hazards globally

| Heart diseases | Stroke | Cancer | Diabetes | Chronic respiratory diseases |
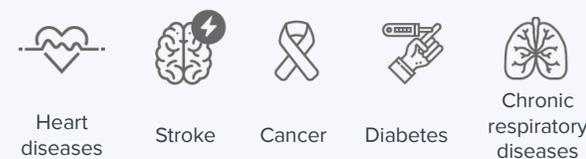
Source: WHO, Nightingale

90%

of the USD 3.8 trillion annual health care costs are generated from **treating people with chronic and mental health related illnesses**

5x

More expensive to treat sick people. Five times higher health care costs per person in the US compared to the rest of the population **if the person has chronic illnesses**

Source: The Centers for Disease Control and Prevention, CDC

80%

of common chronic illnesses[1] **can be prevented with preventive actions that improve health**

Source: American Action Forum
1 Strokes, heart diseases and diabetes

A sensible route to market could be replacing an existing disease risk prediction (e.g. FINRISK) with risk prediction based on Nightingale's blood analysis, which is more extensive and estimated to be cheaper.

Private primary health care companies and insurance-based systems would in our view initially be the most promising options. We also see potential in modern public sector systems (e.g., UK's NHS), although their conservatism may make materialization rather slow.

The competitive landscape combines biotechnology, software and medical research

Nightingale's product combines different disciplines. The company's competitiveness and moat are formed both directly of these competences and of combining them into a whole. The competitive field can therefore be assessed as a whole consisting of blood analysis (biotechnology/diagnostics), interpretation of results and popularization (digital) and disease risk predictions (health). We believe it is easier for the buyer to buy the entire chain at once and this gives a competitive advantage to a supplier who can offer this.

Own or applied analysis technology seems for the moment to be the precondition for managing the entire prevention chain. According to our estimate, this is caused by the high-cost level of the technology and limited coverage (see technology comparison page 8). In blood testing laboratories, the price for a wide base covering up to hundreds of biomarkers is expensive if traditional methods relying on clinical chemistry are used for analysis. For

example, Synlab's consumer price for measuring Nightingale's 39 CE marked clinical biomarkers is around EUR 300-600 (incl. VAT), while Nightingale's list prices for corresponding measurements from a venous blood sample start at only EUR 19 (excl. VAT).
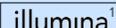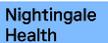
We also believe that without extensive cost-effective measurement of blood tracers, it is difficult to get to test Biobanks' samples. Even if the samples were tested with large investments and connections to disease risks were found, the high-cost level would also make the consumer test to be sold later expensive. A person's health can, however, be assessed by tests using existing laboratory technology as the connection between several blood counts and disease risks is known (e.g., cholesterol levels and cardiovascular disease).

However, according to Nightingale, its risk prediction is more accurate than the current general clinical standard in about two-thirds of ~1,000 diseases (ICD codes). In addition, one Nightingale test can assess all risks at once while with conventional laboratory tests several tests are required and the price for carrying out the tests would be multi fold compared to Nightingale's test.

Companies carrying out genetic testing can assess hereditary disease risks (e.g., 23AndMe, Prenetics), but these tests are static and do not take into account how people's lifestyles affect these risks. Thus, they only compete with Nightingale to a limited extent in terms of genetic information.

Only a few players in the competitive landscape comprehensively covers the chain of disease risk determination

NOT A COMPREHENSIVE LIST

1 Illumina acquired Grail in September 2020
Source: Nightingale

As far as we know these companies do not have their own measurement technology which would give them a clear advantage in terms of measurement ability or cost level.

There are several competitors in the market that perform individual stages of the value chain (biotechnology/diagnostics, digital interpretation of results and prediction of health risks). However, there are only a few comprehensive players utilizing blood biomarkers on the market. According to Nightingale, next to itself Grail and SomaLogic cover the entire chain. These players are combined by own biotechnology in sample testing and are, in our view, the main possible direct competitors to Nightingale. However, the industry is developing rapidly, and we would not be surprised if new competitors would emerge. However, we believe that the market entry threshold (long road of collecting research data) is high.

Nightingale and SomaLogic both measure blood biomarkers. Nightingale's testing applies NMR spectroscopy while SomaLogic applies mass spectrometry. The mass spectrometer can measure a larger amount of protein in particular than NMR spectroscopy. SomaLogic's technology measures some 7,000 proteins. NMR measures a smaller number of biomarkers, but is not limited only to proteins. On the other hand, according to Nightingale's estimates, SomaLogic's testing is clearly more expensive than its own. A broad comparison of blood analysis technologies can be found on page 8 of our report.

SomaLogic was listed in fall 2021, its revenue was USD 98 million and cash assets about USD 540 million in 2022 so the company is considerably stronger in terms of its business and balance sheet than Nightingale. However, according to information published by SomaLogic, it focuses more strongly on research-related applications (e.g. drug development, disease biology, biomarker exploration). SomaLogic's technology has also analyzed UK Biobank's samples for these purposes. We believe that SomaLogic is currently not trying to build comprehensive disease risk predictions like Nightingale. SomaLogic has also analyzed clearly fewer samples than Nightingale. However, we see the company as the most clear potential competitor for Nightingale, so we believe that its strategy development should be monitored closely.

Grail, the other most natural direct competitor, carries out extensive genetic (DNA) analysis where it applies its own technology to recognize early signs of cancerous tumors. We believe cancer-oriented Grail largely solves different problems than Nightingale (disease risks caused by lifestyle choices) and SomaLogic (biomarker measuring), and thus we do not see it as an especially relevant competitor for Nightingale at the moment.

The number of samples analyzed by Nightingale creates a moat and increases network effects

A larger volume of data available for research improves the predictive power of data and the preconditions of the research in general. The more data is available the more reliable the results are. On the other hand, high data volumes can also predict less frequently occurring diseases. According to Nightingale, it has analyzed more samples than its competitors, covering, e.g., the UK Biobank, Finland's national Biobank, the Estonian Biobank and sample collections from South-East Asia.

Nightingale is different compared to its main competitors and from many viewpoints a more competitive option

	Nightingale Health	GRAIL	somalogic
What is analyzed	Blood biomarkers	Genetic ancestry in blood	Blood biomarkers
Risk recognition	~1,000[4] common diseases (ICD codes)	>50 cancers	N/A
Test cost[2]	Low	High	High
Samples analyzed	>1 million	0.13[3] million	0.45 million
Capital raised	142 MEUR[5]	2,000 MUSD	950 MUSD
Scientific publications	>450	>30	>570

2 No exact data available. Nightingale estimates that competitors' costs are some tens or hundreds of times higher than its costs. The competitors have collected some 5 to 15x more funding than Nightingale relative to the number of samples they analyze which could indicate that this statement is true but no reliable conclusions can be drawn from this.

3 Analyzed volume in ongoing clinical tests

4 Nightingale has not yet filed patent applications for the entire amount and this sum has not yet been peer reviewed as a whole. A single disease typically covers many ICD codes.

5 40 MEUR from July 1, 2017 to December 31, 2020 and 102 MEUR net assets from the IPO 03/2021

Source: Inderes' estimate, company websites and publications, media sources, Nightingale

Markets and competitive landscape 5/5

Nightingale's technology has been used for over 450 studies in Europe, Asia and the US.

According to Nightingale, Biobanks have an incentive to analyze their samples as a part of more extensive comparable research data as it increases the available data volume gained from studying samples. On the other hand, as part of a large sample base the extent of the research grows when more Biobank samples are included. According to Nightingale, Biobanks' samples are usually not analyzed with similar methods several times, as most benefits are achieved with the first analysis. The volume of samples decreases with every testing and Biobanks want to utilize their samples for as many tests as possible (e.g., genetics).

We believe that the analyzed sample volume brings significant network effects for Nightingale and deepens the company's technology moat. We believe that Nightingale has gained a good foothold as an analyzer of biomarkers in blood from Biobanks thanks to its competitive advantages and the research base based on the data it has produced is already extensive. We also find Nightingale's technology to be a natural solution for blood analysis for persons looking for disease risk predictions, since both human measurement and risk analysis are based on the same comparable measurement method.

As a whole, we believe that the Nightingale has clear competitive conditions to be successful on the market for disease risk prediction and their prevention based on blood tracer measuring. However, we still feel proof is needed on whether the company's approach will ultimately fit into the value chain of large-scale disease prevention with a viable commercial model. If this is the case, we believe that the company's competitive position allows it to pursue a quasi-monopoly position in a large global market and to increase its scale considerably.

Nightingale's key competitive factors

- Scalable, cost-effective and comprehensive technology for analyzing biomarkers in blood samples

- Access to Biobanks' sample bases and an extensive database of analyzed samples

- Regulatory approvals enable the use of Nightingale's blood test also in primary health care

- Ability to predict extensive disease risks

Nightingale's competitive disadvantages

- Functionality of the business model and benefits to parties not proven

- Credibility, especially in the primary health care market not yet earned

- Competitors are clearly better financed, Nightingale has smaller resources for company development

- Conservative target market, where the company's track record is still short (especially primary health care)

Source: Inderes' estimates

Strategy 1/2

Nightingale tries to grow with sample flow from current laboratory players

The starting point for Nightingale's strategy is to build the business around its health information platform. However, commercially the company is still in an early stage and the priorities and focus of its business model are changing. We therefore believe that the company's strategy is to continuously test different service models with existing and potential new customers. In this section, we describe our own interpretation of the company's strategy as we see it today.

In order to achieve a significant size, Nightingale must in practice analyze at least a few million blood samples per year. We feel direct consumer sales would be a slow route for this. In order to accelerate growth, Nightingale aims to tap in to existing large blood sample flows.

In the model, Nightingale would either replace existing blood tests or receive a small proportion of regular blood samples taken in laboratories for testing. Nightingale needs a very small amount of blood (< 1 ml) for its analysis, which it says it can easily get from any regular blood sample (<25% of a 4ml sample). In principle, Nightingale could offer its analysis to any customer getting a blood test, whether for a fee or free of charge, if the customer could be monetized later. We believe that the company currently focuses on customers who would pay for analyzing each sample.

To date, we believe that Nightingale has only one cooperation integrated into existing sample flows

(Estonian Biobank/200,000 samples for Nightingale's platform). The company's main commercial contracts (Terveystalo, Mitsui/Welltus, Physitrack) still rely mainly on individual service purchases.

Nightingale included several contracts to integrate to existing sample flows in its 2022-2023 fiscal period targets. We are cautious about the preconditions of the company's commercial contracts to date to generate strong growth. Thus we believe achieving the new targeted contracts is a critical next step for the credibility of the company's growth story.

Nightingale collects evidence in Finland first and then expands internationally in coming years

Nightingale has started commercialization in its home market and based on the gained references it has also started investing in other markets (see graph on right). In each geographical area, Nightingale must find facilities and equip a laboratory with its equipment, pass local laboratory regulations and localize the health information provided to customers. In addition, the company must naturally sign contracts to receive sample flow and scale its analyzing capacity to correspond with the sample flow. However, we expect the bottleneck in Nightingale's growth will be on the commercial side.

We feel Nightingale's IPO in the spring of 2021 brought necessary credibility and capital to be a reliable partner for major players in the health care sector.

Steps towards geographical expansion

✓ Implemented

1. First commercial contracts and platform launch on domestic markets in Finland or a neighboring country ✓

2. Launching business in Japan together with investor-cooperation partners (Kirin, Mitsui) ✓

3. Expanding commercial references in Europe ✓

4. Launching business in the US with investor-cooperation partners (PerkinElmer)

5. *Other geographical expansion*

Source: Inderes' estimates

Strategy 2/2

Nightingale also carried out an IFRS transition in fall 2022, which was designed to make it easier for international customers who require delivery reliability from partners to assess its operational preconditions. In light of the contracts signed since the IPO, the company has been successful in partner negotiations and the conditions for gaining new contracts are, in our opinion, also OK, in principle.

We expect the company to seek new partners at least in the US and the UK. In the UK, Nightingale has cooperated with the national biobank for a longer time and the company will open a laboratory in the market in 2023. The solution of Nightingale's competitor Grail focusing on early detection of cancers is also piloted in the UK. We believe Nightingale could also pursue a partnership in primary health care on the market.

In the US, Nightingale is, in turn, supported by the company's investor PerkinElmer, with whom it has a cooperation laboratory in Pittsburgh. We expect that the conditions of a possible contract in the US would be substantially strengthened with an FDA (Food and Drug Administration in the United States) approval, which has been delayed from the initial target (by June 30, 2022).

Nightingale's strategy involves a lot of uncertainty, which the investor carries as a risk

The long-term estimates of Nightingale's strategy (see right side) are highly ambitious in our view and require a continuous stream of major commercial successes over the next few years. We explain our views on the realism of the objectives in the Estimates section.

We believe the core of Nightingale's platform (predicting disease risks from blood samples) has been proven to work, although expanding the platform (more diseases with more accurate predictions, genetics) will probably continue for years. The company has also managed to win several partner contracts with health care companies and organizations. In this respect, we believe that Nightingale has provided proof of strategy implementation and credibility.

Despite this, there are still considerable risks associated with the implementation of the company's strategy. Nightingale has not yet concluded contracts where we see potential for a steeper slope growth (integration to existing blood flows, e.g. primary health care). Furthermore, the company's commercial contracts have not generated substantial revenue, so we believe the attractiveness for end-users of the offering built around the company's platform is still unclear. It is also possible that finding a successful commercial recipe will take several iterations from the company.

As a whole, we believe that despite the initial track record, Nightingale's strategy is still at a very risky stage from the viewpoint of investors.

Key objectives

✓ Achieved   ☐ Objectives of the IPO (2/2021)

⧗ Delayed   ☐ New objectives (fiscal period 2022-2023)

Short-term*

ISO27001 information security certificate	✓
Contract to analyze at least 75,000 samples	✓
Partner contract with an established health care service provider	✓
Launch of new app version	✓
FDA approval**	⧗
A major commercial contract with a public health operator	
Contracts with private sector companies to analyze >50,000 blood samples	
Contracts with scientific institutes to analyze >175,000 blood samples	

Medium term

| Cash flow turning positive |
| Contract on 2 million samples with health care service companies |
| Contract on 10 million samples with health care service companies |

Long-term

| Revenue over EUR 500 million |
| Over 100 million users |

Source: Nightingale, Inderes
*Objectives added after the IPO given for the fiscal period 2022-2023
**FDA approval was delayed from original target (June 30, 2022)

Summary of the strategy

Target market and Nightingale's position

Size of target market[1] 2021

USD 193 bn

Market growth, 2021-2026

~15% CAGR

Market trends

Digitalization of health care

Aging population and strain on health care

Investing in your health and measuring it

Mature technology for predicting lifestyle diseases, in early stages of commercialization

Nightingale Health

Key strategic points

1. Focus on reducing lifestyle diseases through blood analysis and disease risk predictions

2. Continuous testing and development of service models with existing and potential new customers

3. Integration with existing sample flows through private health care

Financing negative cash flow with cash assets, moving toward income financing in the medium term

Key objectives

Profitability turnaround

In the medium term, measured by cash flow

+100 million

Users in the long term

+500 MEUR

Revenue in the long term

1 Global technology and service market for preventive health care
Source: Inderes, Business Research Company, Nightingale

Economic situation and historical development 1/2

The commercialization strategy requires strong, front-loaded costs, but the revenue it generates is still low

Revenue and EBIT*, fiscal periods 2018-2022

Revenue values: 2018: 1.7, 2019: 2.0, 2020: 1.6, 2021: 2.3, 2022: 2.3
EBIT values: 2018: -2.5, 2019: -3.8, 2020: -3.4, 2021: -9.8, 2022: -13.6

Legend: ■ Revenue ■ EBIT

Operational* cost structure
Fiscal periods 2018-2022, % of revenue

MEUR: 2018: 4.3, 2019: 5.8, 2020: 5.0, 2021: 12.5, 2022: 16.2

	2018	2019	2020	2021	2022
Depreciation and impairment	5%	4%	5%	20%	26%
Other operating costs	38%	52%	64%	27%	27%
Personnel costs	50%	36%	31%	51%	40%
Materials and services	6%	7%	0%	3%	6%

Legend:
■ Materials and services
■ Personnel costs
■ Other operating costs
■ Depreciation and impairment

- Annual growth of Nightingale's revenue* (CAGR) has been about 7% in fiscal periods 2018-2022
  - Until the fiscal period 2021, Nightingale's revenue has in practice been generated by analysis services offered to universities (e.g. Bristol and Oxford) and research projects based purely on academic cooperation agreements. According to Nightingale, these payments are based on players' wish to remain independent as using the current technology for research free of charge could be interpreted as affecting the independence of the research.
  - Starting from fiscal period 2022, there have also been limited sales directly to consumers or through partners. However, these revenues are still small and the company seeks to multiply them in the future.
- Measured by EBIT, profitability has been on a negative trend in fiscal periods 2018-2022.
  - Until 2020, Nightingale invested mainly in technology development and research. The company started investing more strongly in the commercialization of its technology during the fiscal period 2021, when the company also listed to finance the implementation of its strategy. We estimate that the company's profitability is close to the targeted lowest absolute level and the trend should turn upwards.
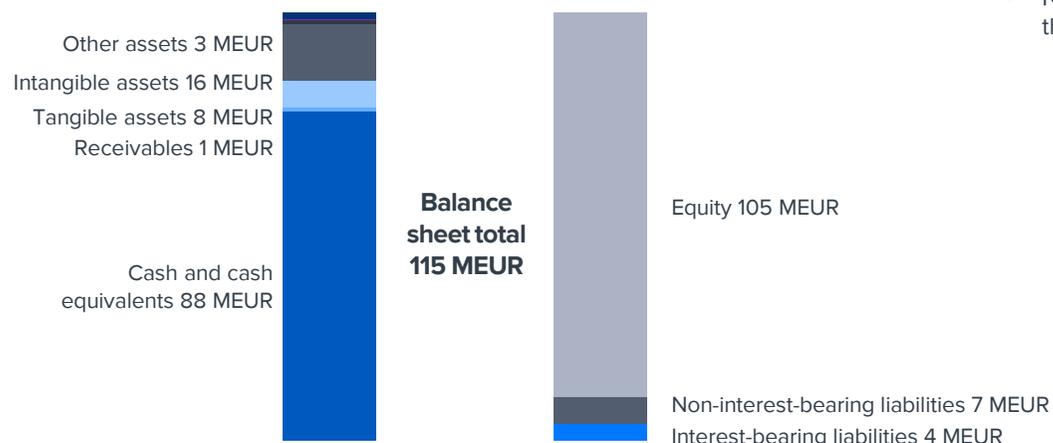- Nightingale's expense structure is virtually fully fixed and therefore scalable
  - The company's operational expenses have increased strongly in euros (2018/FAS: 4.3 MEUR, 2022: 16.2 MEUR). Costs focus strongly on fixed items and personnel costs account for a high share of costs (40% in fiscal period 2022).
  - Until fiscal period 2020, costs focused especially on research personnel salaries, laboratory equipment and rents. These costs have included a significant amount of the company's technological development and analysis of Biobank samples to collect research data.
  - Since fiscal period 2021, Nightingale has shifted substantially more investment to the commercialization of its technology, although research and especially software development (Livit platform in particular) has still been invested in. In addition, starting from fiscal period 2021 the company has reported IFRS figures (previously FAS), so we feel the latest figures are the most relevant to examine the company's cost structure.
  - The company's growth requires constant investments in fixed costs, so turning profitability to neutral would require the company's size class to multiply. In addition, Nightingale's capitalization is higher than depreciation so far (2022 capitalization 4.7 MEUR; depreciation 2.3 MEUR), so some of the fixed costs are not fully visible in the company's income statement.

Source: Inderes, Nightingale

*Until 2020, figures are FAS accordant and starting from 2021 IFRS accordant. Nightingale's fiscal periods end on June 30.

Economic situation and historical development 2/2

Balance sheet structure, December 31, 2022

Other assets 3 MEUR
Intangible assets 16 MEUR
Tangible assets 8 MEUR
Receivables 1 MEUR

Balance sheet total 115 MEUR

Cash and cash equivalents 88 MEUR

Equity 105 MEUR

Non-interest-bearing liabilities 7 MEUR
Interest-bearing liabilities 4 MEUR

- Nightingale's balance sheet (12/31/22) is very strong and provides security for financing the cash-flow negative investment phase.
  - Cash and cash equivalents (88 MEUR) represent a clear majority of the company's balance sheet. The company's strong net cash position (84 MEUR) creates good conditions for investing in commercialization and there are no new financing needs on the horizon at least for the next few years.
  - The company's other key assets are intangible assets (16 MEUR) focusing on capitalized R&D expenditure and tangible assets focusing on laboratory equipment (8 MEUR).
  - Nightingale's balance sheet (115 MEUR) is nearly exclusively financed by equity (105 MEUR), which the company collected mainly in the IPO in early 2021.
  - As a result of IFRS reporting, the company's non-interest-bearing liabilities (7 MEUR) also include lease liabilities (3 MEUR). The company's interest-bearing liabilities (4 MEUR) are not significant relative to its balance sheet.

Operational cash flow after investments (MEUR), net result (MEUR) and net gearing (%), fiscal periods 2021-2022

-3.8

-13.0

-17.9

-9.7

2021   2022

■ Cash flow after investments   ■ Net result   — Net gearing-%
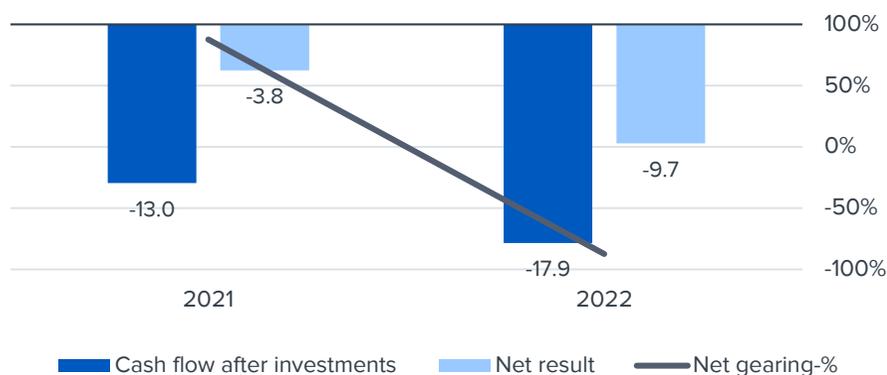
- Nightingale's cash flow is still highly negative.
  - The company's business is in the investment phase, which pushes the result into red (2022 net profit -9.7 MEUR).
  - Nightingale's cash flow is clearly negative (2022 Operational cash flow after investment -17.9 MEUR).
    - The company's capitalization is currently higher than deprecation (2022 capitalization 4.7 MEUR; depreciation 2.3 MEUR)
    - The company has also made significant investments in the form of acquisitions (e.g. Negen acquisition 1/2022, Weavr investment 6/2021), so non-recurring items also push cash flow more into red than the result.
  - Nightingale's business that is still small does not as such tie up considerable amounts of capital and the company's net working capital is negative (2022: -2.7 MEUR, adjusted for short-term lease liabilities under IFRS). In the longer term, however, we expect net working capital to be committed, although this is entirely dependent on the structure of the company's long-term business model.

Source: Inderes, Nightingale

Our estimate is based on the progress of the company's commercial strategy

Nightingale operates in the preventive health care market, where the growth outlook is generally strong. We estimate that the company's technology is the only available cost-efficient way to predict health risks on a large scale. Using the same measurement, the company also produces blood counts suitable for clinical use at a manifold lower cost than its competitors (see p. 8). In principle, we can see a market niche for the company and good preconditions for growth.

However, Nightingale is trying to break into conservative health care customers with new technology, and it is not self-evident that the company can benefit from market growth. It is also very challenging to assess the timing of a possible commercial breakthrough. We believe that finding a viable business model has already required and can continue to require a number of iterations from the company. Our estimates contain several uncertain assumptions, the accuracy of which will only be determined over time. The assumptions concern both revenue, as well as required growth investments and the cost structure of the business.

Our estimates are based on a realistic but high risk scenario of the company's growth in the current situation. Investors should be aware of the exceptionally high risks of our estimates, because it is fully possible that the company will not succeed in making a substantial commercial breakthrough. We discuss different growth scenarios in more detail in the valuation section. Nightingale's fiscal periods end on June 30 (e.g. the 2022 fiscal period ended on June 30, 2022), so our estimates concern fiscal periods and not calendar years.

We estimate revenue based on analyzed sample volumes and unit prices

Our revenue estimates are based on the analyzed sample volumes and the unit price of sample analysis. Nightingale does not report the figures precisely at the moment, so the figures we use include estimates. We estimate the company's revenue as one item and thus do not consider any revenue items that are independent of analyzed sample volumes in our estimates. We assume that a sufficient proportion of the company's revenue relies on the analyzed sample volumes starting from the fiscal period 2022.

We estimate the development of Nightingale's analyzed sample volumes through the contracts the company has reported. In fiscal periods 2018-2022, we estimate the company has analyzed about 150,000-400,000 samples annually. During the fiscal period 2021-2022, we estimate that the company has analyzed around 500,000 samples (by 6/30/21, the company had analyzed > 1.0 million samples in total, by 12/31/22 >1.8 million samples).

The list price per sample for Nightingale's blood analysis is EUR 19 in early 2023 (at the beginning of 2021, the list price was about EUR 25). We use the EUR 19 price as the premise for the average price of the company's commercial samples from the fiscal period 2023 onwards. The company still analyzes a significant volume of samples free of charge, which has allowed it to collect a significant amount of data to support technological development. As a result, we assess the volume of commercial samples separately, which is the main driver of our revenue estimates for the company.

Key estimate drivers

Estimate	Key parameters
Revenue	• Volume of analyzed samples • Share of commercial samples and unit price
Costs	• Fixed costs • Variable costs A. Cost per analyzed sample B. Volume of analyzed samples

Source: Inderes

27

Estimates and valuation 2/9

We estimate costs based on assumptions of fixed and variable costs

In the short term, the costs of Nightingale's business are highly fixed as the company continues to invest in research, product development and sales and marketing. We also include the company's management and administration in fixed costs. We estimate that the company's fixed costs have been approximately EUR 10-15 million per year during the fiscal periods 2021-2022, including temporary outsourced product development costs. In our estimates we allocate fixed costs to personnel costs, other operating expenses and capitalization in the balance sheet.

The sample volumes analyzed by Nightingale are still quite moderate, so variable costs play a smaller role for the time being. However, the company has provided good indications of variable costs related to sample analysis. According to Nightingale, the price of its NMR machine is typically under EUR 1 million and the capacity is some 90,000 tested blood samples per year. Divided over eight years, the cost of the machine is some 30 to 45% of the variable costs of analyzing the sample according to the company's estimate. This estimate would correspond to a cost of approximately EUR 3-5 per analyzed sample.

In 2018, Nightingale reported that analyzing the UK Biobank's sample of 0.5 million tests corresponds with an investment of over EUR 10 million, which would mean a cost of over EUR 20 per sample. We estimate that the company's processes have developed since then and will evolve further with the clear increase in testing volume, which will decrease

the variable cost of analysis over time. Overall, we assume the average sample cost of Nightingale's test will fall to EUR 5 in the longer term. For at-home tests, costs and sales prices are clearly higher, but we expect their share of sales will be low in the long term.

Using assumptions we allocate variable costs based on estimated development of sample volumes and individual sample costs to materials and services, personnel costs and other operating expenses, and the leasing costs of NMR equipment mainly to depreciation.

Fiscal period 2023 still in very early stages of commercialization

We expect that Nightingale will grow in the fiscal period 2023 (7/1/22-6/30/23) by a strong 84% to EUR 4.3 million. In practice, the company's current partnerships have not yet been reflected as increased revenue and the revenue growth (2.2 MEUR and +76% y-o-y) between July 1 and December 31, 2022 came from research customers. Nightingale aims for new contracts of at least 225,000 samples (private sector >50,000, research institutes >175,000, public sector "a major commercial contract") in the fiscal period 2023

So far, the company has managed to enter into targeted commercial contracts so we include them in our estimates. At an individual sample price of EUR 19, the contracts would correspond to a minimum order book of EUR 4.3 million. The contracts have not yet been announced, so if realized the related revenue will probably at the earliest focus on the second half of the fiscal period and we expect delivery to take some 1-1.5 years.
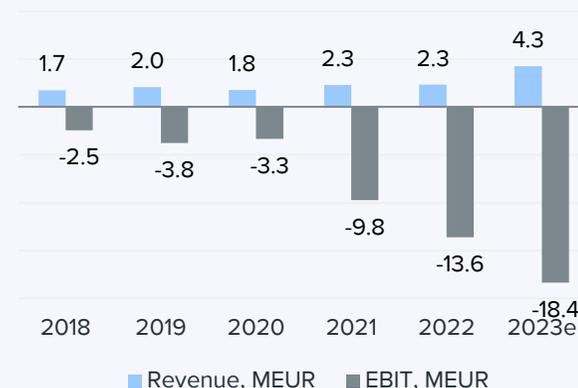
Volume of analyzed samples,
fiscal periods 2018-2023e, million samples per year

Source: Inderes
NB! Nightingale has not published detailed data on the volume of analyzed samples so the figures in the graph are based on our own estimates.

Revenue and EBIT,
Fiscal periods 2018-2023e

Source: Nightingale, Inderes
NB! Fiscal periods 2018-2020 FAS accounting accordant, starting from 2021 IFRS accounting accordant.

Estimates and valuation 3/9

Thus, our 2023 estimates are still based on the income flows generated by previous research customers.

We predict that fixed costs will continue to grow in fiscal period 2023 and the operating loss will increase (EBIT 2023e: -18.4 MEUR, 2022: -13.6 MEUR). However, the growth in high-margin sales will mitigate the expected drop in profitability.

Fiscal periods 2024-2032 development requires continuous commercial success

Our estimates for fiscal periods 2024-2032 expect Nightingale to win several medium-sized continuous commercial contracts that cover tens of thousands to hundred thousand samples annually. The contracts can also be extensions of existing customer relationships. At annual level the estimate corresponds with an annual increase of about 50,000-500,000 commercial samples in fiscal periods 2024-2027 and some 300,000-600,000 samples per year in fiscal periods 2028-2032. We expect a slight increase in the sales price of commercial samples with inflation, from EUR 19 to EUR 22 between fiscal periods 2024 and 2032. We assume that the number of free samples analyzed will remain quite stable at the same time.

Our estimate corresponds to 41% annual revenue growth (CAGR) in fiscal periods 2024-2032. Despite the low starting point, this means that the company's business will multiply (2032e revenue 82.4 MEUR), so materialization of the estimate requires strong performance by the company in implementing its commercial strategy.

In practice, materializing of the growth we expect requires the company to find a target customer group where it succeeds in making a commercial breakthrough. We believe the strongest candidate for this is currently private and public primary health care providers. The company's management has commented that these are possible customers around ~2025-2026. If the breakthrough is successful, these would use Nightingale's cost-effective blood analysis to replace conventionally used clinical disease risk prediction methods (e.g. FINRISK calculator) and possibly certain other blood tests as well where Nightingale's technology also has a clear cost benefit (see p. 8). We believe Nightingale's current commercial partnerships do not enable the growth we estimate at least in their current form, so materialization of our estimate is naturally highly uncertain.

Nightingale's targets include a contract of 2 million users and a contract of 10 million users in the medium term. We interpret that the number of users is roughly proportional to the number of samples analyzed. In practice, our estimates therefore include achieving the first objective in the longer term, but through a number of smaller contracts. We estimate that the annual volume of Nightingale's commercial samples will rise to approximately 4 million in 2032. However we believe that the aim of 10 million samples in particular is very ambitious and would require evidence of winning clearly larger contracts than currently.

Nightingale's profitability scales in our estimates as higher margin revenue grows, turns positive in fiscal period 2028 and rises to around EUR 23 million measured by EBIT (EBIT-% 28%) in fiscal period 2032.

Estimate of analyzed sample volumes,
fiscal periods 2022-2032e, million samples per year

Source: Inderes' estimate.
NB! Nightingale has not published detailed data on the volume of analyzed samples so the figures in the graph are based on our own estimates.

Revenue and EBIT estimates,
2022-2032e
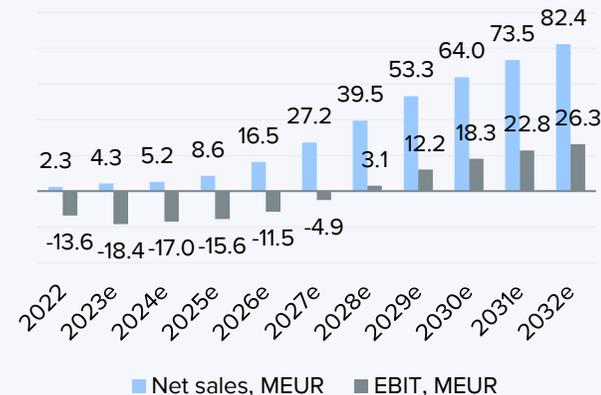
Source: Inderes

Profitability turning positive is fully conditional on a significant increase in the company's commercial sample volumes. If the growth we estimate materializes, the company's net cash would hit its lowest level of being slightly in the red in fiscal periods 2027-2029 and would roughly be sufficient to finance growth. We note that, if growth fails or is delayed, the risks of cash adequacy also increase significantly.

Our key estimates for cost development are described in the graph on the right. The underlying assumption is that the increase in the proportion of commercial samples will turn the gross margin positive in fiscal period 2024 and that free samples will become the minority from fiscal period 2025. At the same time, we expect a gradual decrease in the cost per sample from about EUR 7 in fiscal period 2022 to some EUR 5 in fiscal period 2032, based on the assumption that volume growth enables improved efficiency. In this case, the gross margin of all samples (incl. negative margin free samples) would rise as a whole to about 75% in the fiscal period 2032.

Fiscal periods 2033-2036 development requires continuous commercial advances

As Nightingale is in an early development phase, we expect the company to be growing still in 2032 so we have stretched our estimated cash flow model further than usual until fiscal period 2036. We expect the company's growth to be on a downward trend of 2-12% per year in fiscal periods 2033-2036. Our revenue estimate for fiscal period 2036 is about EUR 98 million. Nightingale's own target announced in connection with the IPO is over EUR 500 million revenue in the long term. Thus we expect the
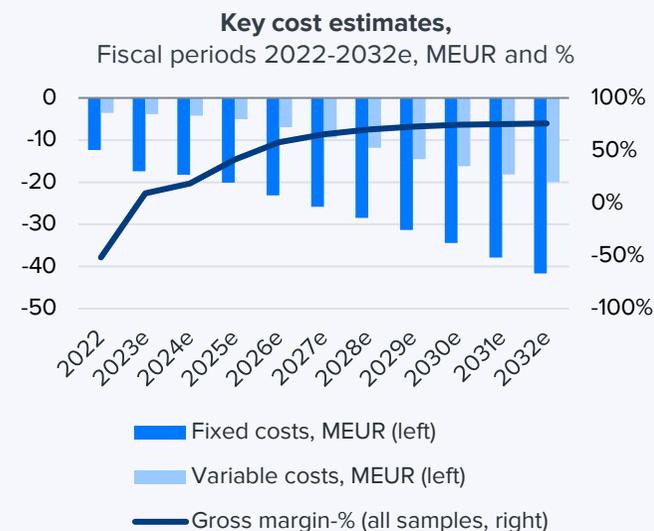
company to achieve a clearly smaller market position than its own target in the long term. We note that despite this, our estimate contains an assumption of considerable commercial success.

We expect profitability (EBIT-%) to decrease from the 2033 peak (32%) to about 30% in 2036. In the mature development phase, with long-term gross margins of around 75%, we believe this profitability is realistic for the company. Profitability is fully conditional on the success of growth, as the high gross margins will only be reflected in profitability when revenue increases to a significant size.
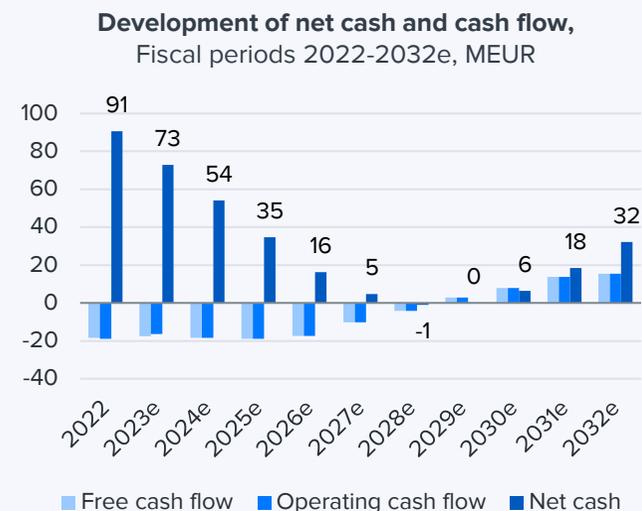
A significant number of options enter into force as the company grows excellently

On June 30, 2022, Nightingale's management and Board of Directors held options entitling to subscribe for approximately 9.9 million shares and other personnel to some 4.4 million shares. On December 31, 2022, Nightingale had around 60.9 million shares, so if all options were subscribed, the company's share capital would increase by about 23%. Thus, the exercise of options would result in a significant dilution of investors' holding per share.

However, the options are significantly tied to a considerable increase in the company's market cap. Vesting steps for most options are reaching a market cap of EUR 500-1,500 million when the company's current market cap is EUR 60 million. In addition, in early 2023 the subscription price of the options was EUR 2.5 per share which is clearly above the current share price (EUR 0.99)

Key cost estimates,
Fiscal periods 2022-2032e, MEUR and %

- Fixed costs, MEUR (left)
- Variable costs, MEUR (left)
- Gross margin-% (all samples, right)

Source: Inderes

Development of net cash and cash flow,
Fiscal periods 2022-2032e, MEUR

- Free cash flow
- Operating cash flow
- Net cash

Source: Inderes

Income statement

Income statement	2020	2021	2022	H1'23	H2'23e	2023e	2024e	2025e	2026e
Revenue	1.8	2.3	2.3	2.2	2.0	4.3	5.2	8.6	16.5
EBITDA	-3.1	-7.3	-9.4	-5.5	-6.5	-12.0	-11.9	-10.9	-7.4
Depreciation	-0.2	-2.5	-4.2	-3.2	-3.2	-6.4	-5.9	-6.2	-6.5
EBIT (excl. NRI)	-3.3	-8.6	-13.6	-8.7	-9.7	-18.4	-17.8	-17.1	-13.9
EBIT	-3.3	-9.8	-13.6	-8.7	-9.7	-18.4	-17.8	-17.1	-13.9
Net financial items	-0.4	0.0	-2.6	0.1	-1.5	-1.4	-0.3	-0.7	-1.1
PTP	-3.7	-9.7	-16.2	-8.5	-11.2	-19.7	-18.2	-17.8	-14.9
Taxes	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net earnings	-3.7	-9.7	-16.1	-8.6	-11.2	-19.8	-18.2	-17.8	-14.2
EPS (adj.)		-0.21	-0.23	-0.14	-0.16	-0.30	-0.30	-0.29	-0.23
EPS (rep.)		-0.23	-0.27	-0.14	-0.18	-0.32	-0.30	-0.29	-0.23

Key figures	2020	2021	2022	H1'23	H2'23e	2023e	2024e	2025e	2026e
Revenue growth-%		29.4 %	0.3 %	76.3 %	93.9 %	84.2 %	22.2 %	65.0 %	92.0 %
Adjusted EBIT growth-%		158.6 %	57.7 %	46.8 %	25.5 %	34.7 %	-2.9 %	-4.0 %	-19.0 %
EBITDA-%	-174.9 %	-316.7 %	-405.9 %	-243.6 %	-321.9 %	-280.7 %	-229.2 %	-127.2 %	-44.7 %
Adjusted EBIT-%	-187.6 %	-375.0 %	-589.5 %	-386.6 %	-480.4 %	-431.1 %	-342.5 %	-199.3 %	-84.1 %
Net earnings-%	-209.2 %	-421.9 %	-695.7 %	-381.3 %	-554.7 %	-463.5 %	-348.5 %	-207.2 %	-86.0 %

Source: Inderes

Estimate revisions MEUR / EUR	2023e Old	2023e New	Change %	2024e Old	2024e New	Change %	2025e Old	2025e New	Change %
Revenue	4.3	4.3	0%	5.2	5.2	0%	8.6	8.6	0%
EBITDA	-11.9	-12.0	0%	-11.9	-11.9	0%	-10.5	-10.9	-4%
EBIT (exc. NRIs)	-18.3	-18.4	0%	-17.0	-17.8	-5%	-15.6	-17.1	-10%
EBIT	-18.3	-18.4	0%	-17.0	-17.8	-5%	-15.6	-17.1	-10%
PTP	-19.7	-19.7	0%	-17.3	-18.2	-5%	-16.3	-17.8	-9%
EPS (excl. NRIs)	-0.30	-0.30	0%	-0.28	-0.30	-5%	-0.27	-0.29	-9%
DPS	0.00	0.00		0.00	0.00		0.00	0.00	

Source: Inderes

Estimate revisions

- We revised our estimates for the growth rate of the company's cost level slightly upwards to better meet our expectations of the investments required by the commercialization of the company.
- We also revised the development of working capital to more cautious. As our growth estimates rely more on primary health care customers, we do not expect significant advance payments to be generated by the company's business in the future, which weakens the cash flow profile of the business somewhat.

Balance sheet

Assets	2021	2022	2023e	2024e	2025e
Non-current assets	**23.8**	**26.8**	**25.3**	**26.0**	**26.7**
Goodwill	0.0	1.0	1.0	1.0	1.0
Intangible assets	11.8	16.2	16.3	17.1	17.8
Tangible assets	8.1	7.8	7.5	7.3	7.3
Associated companies	0.1	0.1	0.1	0.1	0.1
Other investments	3.3	1.2	0.0	0.0	0.0
Other non-current assets	0.6	0.4	0.4	0.4	0.4
Deferred tax assets	0.0	0.0	0.0	0.0	0.0
Current assets	**115**	**97.3**	**78.5**	**63.7**	**54.1**
Inventories	0.7	0.6	0.9	0.9	1.4
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	0.7	1.4	1.3	1.6	2.6
Cash and equivalents	114	95.3	76.4	61.2	50.2
Balance sheet total	**139**	**124**	**104**	**89.7**	**80.9**

Source: Inderes

Liabilities & equity	2021	2022	2023e	2024e	2025e
Equity	**123**	**111**	**91.6**	**73.5**	**55.7**
Share capital	0.1	0.1	0.1	0.1	0.1
Retained earnings	-18.5	-31.1	-50.8	-69.0	-86.8
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	141	142	142	142	142
Minorities	0.0	0.0	0.0	0.0	0.0
Non-current liabilities	**7.2**	**4.7**	**3.1**	**6.1**	**14.1**
Deferred tax liabilities	0.0	0.0	0.0	0.0	0.0
Provisions	0.0	0.0	0.0	0.0	0.0
Long term debt	4.1	2.6	1.0	4.0	12.0
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	3.1	2.1	2.1	2.1	2.1
Current liabilities	**8.7**	**7.9**	**9.1**	**10.1**	**11.1**
Short term debt	2.2	2.1	2.5	3.0	3.5
Payables	4.9	4.7	5.5	6.0	6.5
Other current liabilities	1.7	1.1	1.1	1.1	1.1
Balance sheet total	**139**	**124**	**104**	**89.7**	**80.9**

Thus, the increase in the number of shares resulting from options is, in principle, generated in a very favorable situation for investors and does not, in our opinion, dilute the company's long-term potential. On the other hand, the company management has strong incentives to increase the company's value which is also in the interest of shareholders. In the optimistic scenario, option subscriptions would, however, weaken investors' expected return.

Nightingale's value relies on the value of technology and future business potential

Nightingale is only in its initial stages of the commercialization of its technology. According to our view, the company's value is based on the future commercialization potential of the technology and the strategic value. This value can, in our estimate, become realized either through commercialization or by ending up as an acquisition target. We consider Nightingale's own commercialization more likely of the options considering the management's view and strong will to maintain the decision power within the company. Founders and key personnel have significant voting power in the company. Commitment of the founders is fundamentally positive for the investor, but voting power may limit the influence of other shareholders.

Nightingale's valuation involves exceptional uncertainty due to the early stage of commercialization of the business, so we approach the valuation from several viewpoints. In our opinion, there is practically no reliable method for company valuation. Thus, the margins of error are exceptionally high in the valuation and the range of our fair value estimate is very wide. The investor must, in principle, believe in the company's commercial potential materializing in the longer term. Our valuation methods also rely on balancing between the potential materializing and the significant risks associated with it.

In multiple-based valuation supporting points are sought several years down the line

Nightingale's business is currently priced at a negative value, so the company's technological potential is presently a giveaway to the strong net cash (2023e P/B 0.7x). In principle, this would be an attractive situation, but we feel that the strong negative cash flow and lack of visibility for successful growth justify caution. We believe business-related multiples are a more natural starting point for examining the share's multiple-based valuation.

Nightingale's profitability is clearly negative due to front-loaded growth investments, which means the only usable valuation multiple for the company is revenue multiples (EV/S). As net cash is spent and EV is negative, multiples will fluctuate significantly over the next few years, so an effective reference point must be sought further down the line.

We approach Nightingale's multiple-based valuation looking further into our 2027 estimates and assumed EV/S ratios. Our estimates involve a significant estimate risk due to the early stage of the business. We approach multiple-based valuation through a pessimistic and optimistic scenario, with which we aim to describe the valuation in various growth and market environments.

Valuation methods

- Valuation multiples

- Sensitivity calculation

- DCF scenarios

- Peer group

Source: Inderes

In the longer term, if growth is successful, the company should, based on a scalable cost structure and high margin level, be able to generate an EBIT of about 25-35%. Assuming that the company's business is then based on a defensive customer base in primary health care, we believe EV/EBIT ratios of around 12-15x could be justified for the company. With a 20% tax rate, neutral financial expense items and net debt free, the multiples correspond to a P/E of some 15-19x or 5-7% annual earnings yield. Considering the long-term growth drivers and the defensiveness of the health care sector, we believe the figures are justified in absolute terms when the expected 2-3% annual business growth is added to the return. The multiples are also quite in line with the multiples of the more mature giants in the sector (e.g. Roche, Quest Diagnostics). The EV/S ratios for Nightingale's mature development phase could therefore be justified in a range of 3.0-6.5x.

With our current estimates, we estimate Nightingale's per share value as EUR 2.8-5.4 at the end of 2027 and as EUR 1.4-2.8 discounted to the present. At the current share price (EUR 0.99), more cautious growth expectations are priced in the share than our estimates. In our estimates we use an actualized EV/S ratio of 6-12x and a forward-looking EV/S of some 4-8x at the end of the fiscal period 2027. We believe that these multiples are justified, as the company would then be at the brink of a profitability turnaround and provided clear proof of a commercial breakthrough.

The 2027 fiscal period is far away in time. With our current estimates, the company would then be in a situation where growth visibility would be reasonable. Considering the high estimate risks, we feel the scenario does not yet provide support for the valuation. This scenario still illustrates the company's hidden potential if strong growth materializes in line with our estimates.

In light of the sensitivity analysis, significant growth is not expected from the company

The sensitivity analysis shown in the table on the right shows the uncertainty of valuation based on estimates. The key variable components of the sensitivity analysis assessing the current value of Nightingale's share are the volume of analyzed samples and revenue per analyzed sample. We assume the company's net cash to be EUR 5 million in line with our current estimates. To simplify, we use the mid range of the valuation range for the fiscal period 2027 actualized EV/S ratio 9x throughout our sensitivity analysis. In reality, the applied valuation multiple and net cash depend on the company's growth rate. At a high level, however, we consider the sensitivity analysis a useful tool in assessing the impact of growth rates on the justified valuation of the share.

In the table on the right we have roughly highlighted the areas discussed in our DCF scenarios in the next section. At the current share price (EUR 0.99) a rather gentle growth slope is priced for the company considering its potential.
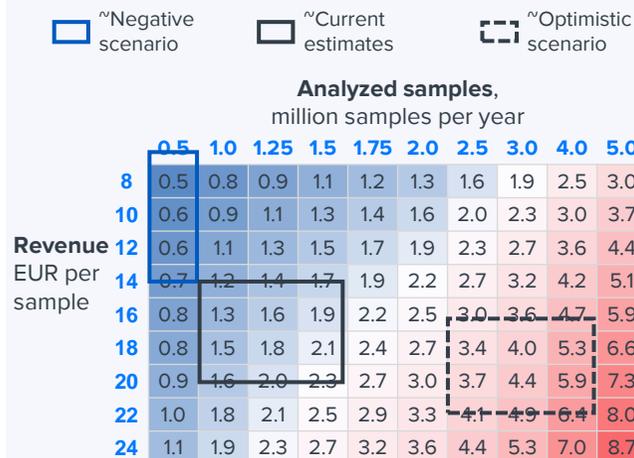
The DCF value is very sensitive to assumptions

In Nightingale's valuation, the DCF illustrates long-term potential and our model exceptionally continues for 15 years. We approach the DCF model through three scenarios. At the company's current development stage, the assumptions of the model contain significant uncertainty and cash flows focus on a period over a decade away (cash flows after 2033 are 54 % of the DCF value), so we do not feel that they offer a clear support for short-term valuation either.

Estimated future valuation ranges,
Fiscal period 2027e

2027e fiscal period	Low multiple	High multiple
Revenue, MEUR	27.2	27.2
EV/S, LTM, ratio	6	12
EV/S, NTM, ratio	4.1	8.3
EV, MEUR	163	327
Net cash, MEUR	5	5
Market cap, MEUR	168	331
EUR per share	2.8	5.4
Discounted to the present	1.4	2.8

Source: Inderes
NTM = 12 months forward-looking
LTM = 12 months backward-looking

Sensitivity analysis of valuation,
fiscal period 2027e, EUR per share at present

~Negative scenario   ~Current estimates   ~Optimistic scenario

Analyzed samples,
million samples per year

Revenue EUR per sample	0.5	1.0	1.25	1.5	1.75	2.0	2.5	3.0	4.0	5.0
8	0.5	0.8	0.9	1.1	1.2	1.3	1.6	1.9	2.5	3.0
10	0.6	0.9	1.1	1.3	1.4	1.6	2.0	2.3	3.0	3.7
12	0.6	1.1	1.3	1.5	1.7	1.9	2.3	2.7	3.6	4.4
14	0.7	1.2	1.4	1.7	1.9	2.2	2.7	3.2	4.2	5.1
16	0.8	1.3	1.6	1.9	2.2	2.5	3.0	3.6	4.7	5.9
18	0.8	1.5	1.8	2.1	2.4	2.7	3.4	4.0	5.3	6.6
20	0.9	1.6	2.0	2.3	2.7	3.0	3.7	4.4	5.9	7.3
22	1.0	1.8	2.1	2.5	2.9	3.3	4.1	4.9	6.4	8.0
24	1.1	1.9	2.3	2.7	3.2	3.6	4.4	5.3	7.0	8.7

Source: Inderes
NB! The sensitivity analysis is simplified and contains assumptions, so it should be interpreted as indicative.

Estimates and valuation 7/9

The neutral scenario is in line with our current estimates, which we describe in more detail in the Estimates section of this report. The equity value of Nightingale under our DCF model in the neutral scenario is EUR 74 million or EUR 1.2 per share.

In an optimistic scenario, Nightingale's long-term revenue is about 460% higher and EBIT some 560% higher in 2036 than in the neutral scenario. In the scenario, revenue reaches EUR 562 million and EBIT-% 35% in fiscal period 2036. The value per share is then EUR 4.8 at present. In all scenarios, we use 2% terminal growth

The optimistic scenario would require Nightingale to achieve an estimated analysis volume of over 10 million commercial samples annually in the long term and its EUR 500 million long-term revenue target. We believe that this is possible if the company manages to integrate to existing sample flows of several large primary health care providers in a number of international markets. A clear overshoot of the scenario would also be possible if the company's technology would achieve the position of best practice internationally as a preventive health care tool. The company has not entered into such contracts with smaller primary health care providers either, so the scenario still seems unlikely when this report is being written.

In a pessimistic scenario, Nightingale's revenue in 2036 is around 80% lower and EBIT some 90% lower than in the neutral scenario. In the scenario, revenue reaches EUR 20 million in 2036 and EBIT/% 15%. The value per share is then EUR 0.4. In a pessimistic scenario, Nightingale would burn its net cash with

growth investments and would probably have to raise new funding, which would weaken the expected return of the scenario even further.

In a pessimistic scenario, Nightingale would remain a niche service for consumers interested in wellbeing and would not achieve a role in the chain of preventive health care in primary health care. This scenario is fully possible and, without any indication of the progress of commercialization, we believe that it must be given a considerable probability. This would naturally be a clear failure for the company in commercializing its initially promising and competitive technology. The value of the company could in this scenario also be supported by an M&A option. Nightingale's own technology and the health database collected, e.g., from biobanks, could find a buyer even without the significant business built around it. However, the M&A option is speculative and we do not therefore rely on it in our valuation.

Nightingale's future cash flows involve a high degree of uncertainty so we believe the expected return must be substantial. On the other hand, the company has launched commercial operations on a small scale, which slightly reduces the risk level. In our DCF model, we use a 16.7% required return (WACC) and 18.0% COE, in line with the required returns of other early development stage companies (e.g. Aiforia WACC-% 13.8%, Betolar 17.2%, Bioretec 13.0%) we monitor.

Revenue development and terminal EBIT % of DCF scenarios
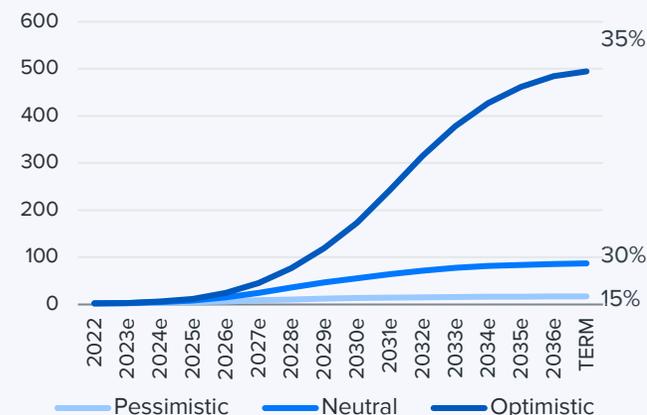
Sensitivity of the DCF value to the required return,
EUR per share, WACC-%
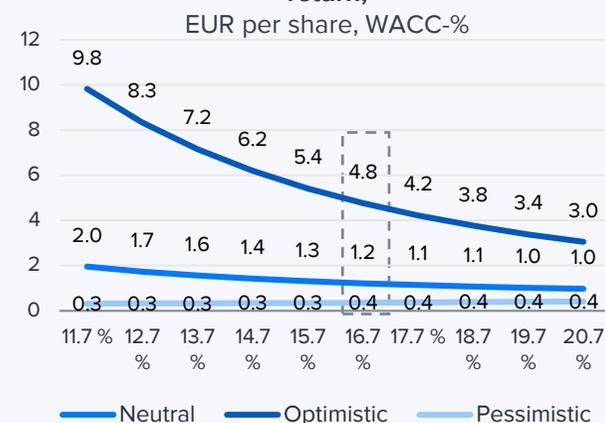
Source: Inderes

DCF calculation

DCF model	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	2036e	2037e	TERM
Revenue growth-%	0.3 %	84.2 %	22.2 %	65.0 %	92.0 %	65.0 %	45.0 %	35.0 %	20.0 %	15.0 %	12.0 %	8.0 %	5.0 %	3.0 %	2.0 %	2.0 %	
EBIT-%	-589.5 %	-431.1 %	-342.5 %	-199.3 %	-84.1 %	-27.1 %	2.9 %	18.4 %	24.2 %	26.8 %	27.7 %	32.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
EBIT (operating profit)	-13.6	-18.4	-17.8	-17.1	-13.9	-7.4	1.1	9.8	15.5	19.7	22.8	28.5	28.0	28.9	29.4	30.0	
+ Depreciation	4.2	6.4	5.9	6.2	6.5	6.9	7.0	8.1	9.4	10.6	12.0	13.7	14.9	15.8	16.6	16.7	
- Paid taxes	0.1	0.0	0.0	0.0	0.7	0.4	0.0	-0.4	-0.7	-0.9	-1.6	-2.7	-3.3	-4.1	-5.5	-5.6	
- Tax, financial expenses	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	
+ Tax, financial income	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	0.0	
- Change in working capital	-1.3	0.6	0.1	-1.0	-3.0	-0.8	-1.4	-2.1	-2.3	-0.3	-0.9	-0.7	-0.4	-0.3	-0.2	-0.2	
Operating cash flow	-10.6	-11.3	-11.8	-11.9	-9.7	-1.0	6.7	15.3	21.8	29.0	32.3	38.7	38.9	40.1	39.9	40.5	
+ Change in other long-term liabilities	-1.1	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	
- Gross CAPEX	-7.2	-5.0	-6.6	-6.9	-7.7	-9.3	-10.8	-12.5	-13.8	-15.3	-16.9	-16.9	-16.9	-16.9	-16.9	-16.9	
Free operating cash flow	-18.9	-16.3	-18.4	-18.8	-17.4	-10.2	-4.1	2.8	8.0	13.7	15.4	21.8	22.1	23.2	23.1	23.6	
+/- Other	0.5	-1.2	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	
FCFF	-18.4	-17.5	-18.4	-18.8	-17.4	-10.2	-4.1	2.8	8.0	13.7	15.4	21.8	22.1	23.2	23.1	23.6	163
Discounted FCFF		-17.3	-15.6	-13.7	-10.8	-5.5	-1.9	1.1	2.7	3.9	3.8	4.6	4.0	3.6	3.1	2.7	18.6
Sum of FCFF present value		-16.7	0.6	16.2	29.8	40.6	46.1	48.0	46.9	44.2	40.3	36.5	31.9	27.9	24.3	21.3	18.6
Enterprise value DCF		-16.7															
- Interest bearing debt		-4.7															
+ Cash and cash equivalents		95.3															
-Minorities		0.0															
-Dividend/capital return		0.0															
Equity value DCF		73.9															
Equity value DCF per share		1.21															

WACC

WACC	
Tax-% (WACC)	20.0 %
Target debt ratio (D/(D+E)	10.0 %
Cost of debt	6.0 %
Equity Beta	3.1
Market risk premium	4.75%
Liquidity premium	1.00%
Risk free interest rate	2.5 %
Cost of equity	18.0 %
Weighted average cost of capital (WACC)	16.7 %

Source: Inderes

Key figures

2023e-2027e	-182%
2028e-2032e	28%
2033e- ja TERM	54%

■ 2023e-2027e ■ 2028e-2032e ■ 2033e- ja TERM

Estimates and valuation 8/9

We see a clear downside in the required return if visibility into the company's growth being successful and its slope improves. We believe this would require large commercial agreements from the company, which would also be seen as accelerated revenue growth. Depending on the market environment and the company's development stage, we estimate that the required return could drop to 7-10% in the long term. The lower required return would also have a similar positive leverage on the company's DCF value, as can be seen in the graph on the previous page.

The peer group indicates that investors are cautious about the sector

To some extent, Nightingale aims to build a new market segment and the company's business model is not yet stabilized. Thus it is challenging to build a useful peer group for the company. However, listed peer can be found in the value chains of health care diagnostics and preventive health care which we have included in the peer group.

The valuation level that focuses on net assets and includes limited business value is not exceptional in the peer group at the moment. Such comapnies inlcude, e.g., 23AndMe, Prenetics and Somalogic. These companies are, like Nightingale, clearly loss-making and their short-term (2023e) growth expectations are also low. Like Nightingale, the value of Prenetics' business is also priced as negative.

In 2020-2021, transactions were still carried out in the sector at valuation levels of several billion euros (see table on right). Of the examples, Somalogic and 23AndMe already had substantial business activities when the transaction was announced. The valuation

levels of loss-making and high-risk growth companies were exceptionally high in 2020-2021 and, we do not believe the transactions in this period provide a useful indication of the valuation levels accepted by the market for companies in the sector at the moment.

We believe the valuations of Nightingale and the companies in the sector reflects a more general cautiousness among investors toward loss-making growth companies. Therefore, we believe the company should build a credible basis for growth to find positive valuation drivers for the share in the current market environment.

The potential is attractive, but weak share price drivers and very high risks hold back the view

We find Nightingale's long-term story attractive, as it combines a significant market potential in the defensive health care customer base, a product that seems competitive and a scalable business model. In the light of valuation methods that mainly price long-term potential, a valuation level of some EUR 0.4-4.8 per share could be justified for the company at present. Thus with the current share price (EUR 0.99), the valuation seems attractive for those who believe strongly in the company's story.

In the short term, however, we see little basis to rely on the company's long-term potential in the valuation. Although we expect Nightingale to continue winning new customers in the next 12 months, the company has not provided any evidence of increasing the size of its customer relationships to a significant size class.

Examples of valuation levels for sector transactions

Target (buyer)	Timing[1]	Pre-money valuation[2]
Somalogic (SPAC)	03/2021	~1.0 bn EUR
23AndMe (SPAC)	02/2021	~2.9 bn EUR
Grail (Illumina)	09/2020	~6.7 bn EUR

1 Date the transaction was announced
2 At exchange rates at the time of publication
Source: Inderes

Peer group valuation

Peer group valuation Company	Market cap MEUR	EV MEUR	EV/S 2023e	EV/S 2024e	Revenue growth-% 2023e	Revenue growth-% 2024e	EBIT-% 2023e	EBIT-% 2024e	EV/EBIT 2023e	EV/EBIT 2024e	P/E 2023e	P/E 2024e	P/B 2023e
23AndMe	560	198	0.7	0.8	8%	-10%	-103%	-109%					1.1
Aiforia Technologies	96	88	21.0	12.1	126%	103%	-264%	-134%					14.3
CellaVision	416	416	7.5	6.6	-5%	14%	25%	28%	30.4	23.3	39.9	29.6	6.7
Illumina	30558	31228	6.8	5.9	8%	16%	7%	12%	92.9	47.8	153.0	65.2	4.3
Immunovia	7	4	0.7	0.1	6800%	801%	-278%	29%		0.3		0.3	0.6
Nanopore	2619	2103	9.8	7.7	-7%	28%	-57%	-41%					3.4
Pfizer	201904	216987	3.4	3.4	-32%	1%	31%	32%	11.3	10.7	11.5	11.0	1.8
Prenetics	121	-4			-23%	24%	-11%	6%	0.2			23.2	
Quest Diagnostics	14157	17808	2.1	2.1	-8%	2%	16%	16%	13.2	12.7	15.5	14.9	2.4
Roche Holding	245714	266858	4.2	4.0	-4%	5%	33%	34%	12.8	11.7	15.1	13.8	6.6
Somalogic	584	116	1.5	1.2	-14%	25%	-154%	-116%					
Nightingale Health (Inderes)	**60**	**-13**	**-3.0**	**1.1**	**84%**	**22%**	**-431%**	**-342%**	**0.7**	**-0.3**	**0.0**	**0.0**	**0.7**
Average			5.8	4.4	623%	92%	-69%	-22%	26.8	17.7	47.0	22.5	4.6
Median	**584**	**416**	**3.8**	**3.7**	**-5%**	**16%**	**-11%**	**12%**	**13.0**	**12.2**	**15.5**	**14.9**	**3.4**
Diff-% to median	*-90%*	*-103%*									*-100%*	*-100%*	*-81%*

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

Estimates and valuation 9/9

We have reservations about the ability of the customers already won by the company to generate large business for the company. The most likely customers that would enable large scale business (public and private primary health care) could, based on the company's assessment, be realistic around 2025-2026. Therefore, we do not expect Nightingale to provide any evidence in the next 12 months that would act as share price drivers for stronger pricing of the company's growth potential than currently.

In addition, front loaded growth investments continuously eat away on the company's cash as growth is lingering and the overall risk level of the share is very high so far. Especially in the current market environment, investors are less prepared to bear long-term risks and to rely on long-term support in valuation. Therefore, we believe that positive valuation drivers are hard to find in the short term.

For the above reasons, we estimate that the justified valuation of the share is so far found in the more cautious end of our valuation range and we currently

consider the share's risk/return ratio weak as a whole. We revise our target price to EUR 1.1 (was EUR 1.3) and reiterate our Reduce recommendation.

We wait for clear steps from the company toward building large scale business which would lower the share's risk level through better growth visibility and cash adequacy. In concrete terms, this would mean, e.g., winning primary health care contracts and turning revenue into clear growth. Nightingale's growth outlook can change already through one major contract, so we remain alert when following the company's commercial development steps.

Summary of valuation methods,
EUR per share

Target price
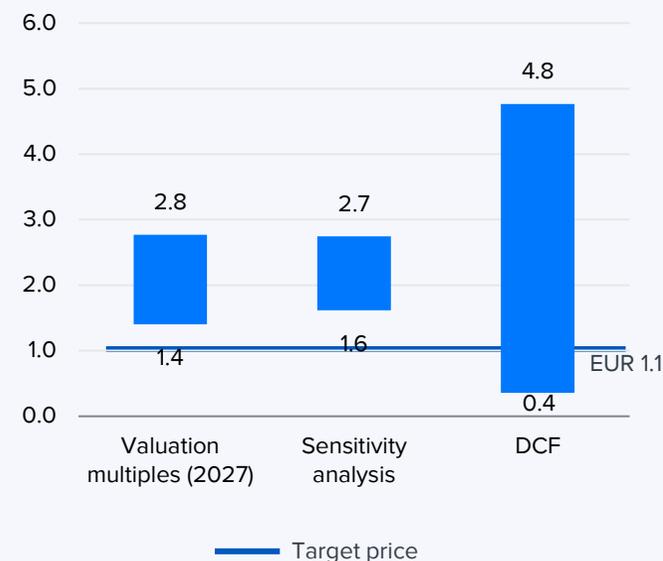
Source: Inderes

Valuation table

Valuation	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e
Share price				5.77	1.81	0.99	0.99	0.99	0.99
Number of shares, millions				41.7	60.2	60.9	60.9	60.9	60.9
Market cap				349	110	60	60	60	60
EV				241	19	-12.9	5.8	25	44
P/E (adj.)				neg.	neg.	neg.	neg.	neg.	neg.
P/E				neg.	neg.	neg.	neg.	neg.	neg.
P/FCF				3.3	neg.	neg.	neg.	neg.	neg.
P/B				2.8	1.0	0.7	0.8	1.1	1.4
P/S				>100	47.6	14.1	11.5	7.0	3.6
EV/Sales				>100	8.3	neg.	1.1	2.9	2.6
EV/EBITDA				neg.	neg.	1.1	neg.	neg.	neg.
EV/EBIT (adj.)				neg.	neg.	0.7	neg.	neg.	neg.
Payout ratio (%)				0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Dividend yield-%				0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %

Source: Inderes

Summary

Income statement	2020	2021	2022	2023e	2024e
Revenue	1.8	2.3	2.3	4.3	5.2
EBITDA	-3.1	-7.3	-9.4	-12.0	-11.9
EBIT	-3.3	-9.8	-13.6	-18.4	-17.8
PTP	-3.7	-9.7	-16.2	-19.7	-18.2
Net Income	-3.7	-9.7	-16.1	-19.8	-18.2
Extraordinary items	0.0	-1.1	0.0	0.0	0.0

Balance sheet	2020	2021	2022	2023e	2024e
Balance sheet total	27.2	139.0	124.0	103.8	89.7
Equity capital	6.3	123.0	111.4	91.6	73.5
Goodwill	0.0	0.0	1.0	1.0	1.0
Net debt	5.5	-107.5	-90.6	-72.9	-54.2

Cash flow	2020	2021	2022	2023e	2024e
EBITDA	-3.1	-7.3	-9.4	-12.0	-11.9
Change in working capital	3.4	2.4	-1.3	0.6	0.1
Operating cash flow	0.2	-4.9	-10.6	-11.3	-11.8
CAPEX	-12.4	-8.1	-7.2	-5.0	-6.6
Free cash flow	-8.6	105.4	-18.4	-17.5	-18.4

Per share data	2020	2021	2022	2023e	2024e
EPS (reported)		-0.23	-0.27	-0.32	-0.30
EPS (adj.)		-0.21	-0.23	-0.30	-0.30
OCF / share		-0.12	-0.18	-0.19	-0.19
FCF / share		2.53	-0.31	-0.29	-0.30
Book value / share		2.95	1.85	1.50	1.21
Dividend / share		0.00	0.00	0.00	0.00

Growth and profitability	2020	2021	2022	2023e	2024e
Revenue growth-%	-13%	29%	0%	84%	22%
EBITDA growth-%	-12%	134%	29%	27%	0%
EBIT (adj.) growth-%	-12%	159%	58%	35%	-3%
EPS (adj.) growth-%			13%	31%	-2%
EBITDA-%	-174.9 %	-316.7 %	-405.9 %	-280.7 %	-229.2 %
EBIT (adj.)-%	-187.6 %	-375.0 %	-589.5 %	-431.1 %	-342.5 %
EBIT-%	-187.6 %	-423.2 %	-589.5 %	-431.1 %	-342.5 %
ROE-%	-62.3 %	-15.0 %	-13.7 %	-19.5 %	-22.0 %
ROI-%	-26.1 %	-13.7 %	-11.1 %	-17.4 %	-20.3 %
Equity ratio	23.2 %	88.5 %	89.8 %	88.3 %	82.0 %
Gearing	87.6 %	-87.4 %	-81.3 %	-79.5 %	-73.7 %

Valuation multiples	2020	2021	2022	2023e	2024e
EV/S		>100	8.3	neg.	1.1
EV/EBITDA (adj.)		neg.	neg.	1.1	neg.
EV/EBIT (adj.)		neg.	neg.	0.7	neg.
P/E (adj.)		neg.	neg.	neg.	neg.
P/B		2.8	1.0	0.7	0.8
Dividend-%		0.0 %	0.0 %	0.0 %	0.0 %

Source: Inderes

Disclaimer and recommendation history

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Inderes Oyj

Itämerentori 2

FI-00180 Helsinki, Finland

+358 10 219 4690

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