Aiforia Technologies

Extensive report

2/28/2024

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Inderes corporate customer

This report is a summary translation of the report “Lupaavasti alkanut kasvumatka on vasta alussa” published on 2/28/2024 at 8:40 pm EET.

Promisingly started growth journey is just beginning

Aiforia has gained a promising first foothold in the clinical segment of digital pathology. We continue to see the company in a good competitive position and on a clear trajectory to grow into one of the long-term winners in its market. On the other hand, poor growth predictability and elevated financing risks argue for some caution in pricing the company's potential. However, at the current share price, we believe that the company's value creation potential outweighs the risks. We reiterate our target price of EUR 4.2 and Accumulate recommendation.

Aiforia provides AI-based image recognition for medical applications

Aiforia is a software company at a commercially early stage whose products enable AI-based image analysis in medicine. The software's primary application is in pathology, where it helps pathologists analyze tissue samples taken from patients. Aiforia identifies the content of sample images at the cellular level and aims to analyze them faster, more efficiently and with better quality. The company will leverage its strong position in medical research to a much larger clinical customer base where it already has strong customer references (Mayo Clinic, NHS/UK, Veneto/Italy). Aiforia operates a recurring business model based on the use of Software-as-a-Service (SaaS), where the profitability after the investment phase is typically excellent if growth is successful.

Digital pathology is catching on, although it is difficult to predict how fast the market will develop

The digitization of pathology is at a very early stage, and by 2020, only 14% of pathology samples were digitized worldwide. The technological limitations that were a barrier have largely disappeared over time. With an aging population, the need for pathology analysis is expected to increase and there is already a shortage of pathologists. We believe there are clear demand drivers for solutions that increase efficiency and capacity. The competitive landscape in the young market is still being formed. However, given Aiforia's differentiating factors (customizability, cell-level detection, first commercialized predictive AI model) and significant clinical references, the company's competitiveness appears to be good. We believe the company is well positioned to be a long-term winner in its market.

The conditions for strong growth are good, even though not everything is in the company's hands

We expect Aiforia's commercial success to more clearly translate into revenue in 2023-27, as the company's clinical customers expand their use of the software. We expect annual revenue growth to be a very high 56-85% from a low base and EBIT margin to strengthen from a loss-making investment phase to 5% in 2027. We expect revenue in 2030 to be already 74 MEUR (target: >100 MEUR ~2030). We expect the company to be one of the few winners in the clinical market, which will require very strong execution of the strategy. Therefore, we believe that high forecast risks must be compensated by a higher required return.

Despite the clear risks, we believe the valuation justifies further purchases

Aiforia's valuation (23-24e EV/S 33-22x, 25-26e 14-8x) relies on expectations of very strong and scalable growth. With methods that price growth at various rates and confidence intervals we can justify the company's value at a wide range of EUR 0.7-8.0 per share (previous EUR 0.9-7.7). Our confidence in the company's long-term growth is strong in the light of the evidence received. Risks come from uncertainty about the rate of growth and the additional financing we project will be needed in 2024. Supported by the company's good track record, we estimate that the dilution in a potential share issue would still be reasonable. As growth continues to strengthen, we see an attractive risk/reward ratio at current share price.

Recommendation

Accumulate
(previous Accumulate)

EUR 4.20
(previous EUR 4.20)

Share price:
3.45

Key figures

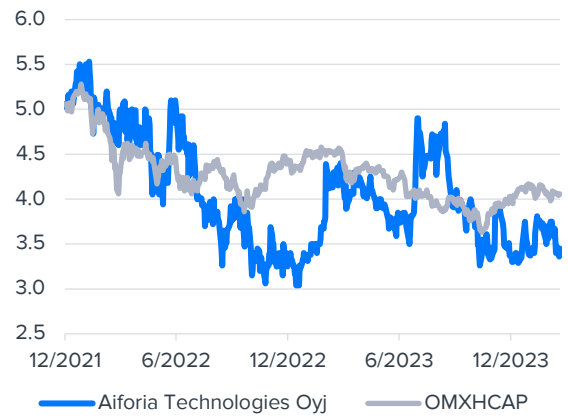
	2022	2023e	2024e	2025e
Revenue	1.6	2.5	4.5	8.1
growth-%	65%	56%	79%	81%
EBIT adj.	-11.8	-12.6	-11.2	-10.3
EBIT-% adj.	-731.9 %	-503.0%	-248.7%	-126.9%
Net Income	-12.2	-12.9	-11.4	-10.6
EPS (adj.)	-0.47	-0.50	-0.43	-0.39
P/E (adj.)	neg.	neg.	neg.	neg.
P/B	2.8	5.4	18.1	neg.
Dividend yield-%	0.0 %	0.0 %	0.0 %	0.0 %
EV/EBIT (adj.)	neg.	neg.	neg.	neg.
EV/EBITDA	neg.	neg.	neg.	neg.
EV/S	38.2	33.5	22.0	13.8

Source: Inderes

Guidance (Unchanged)

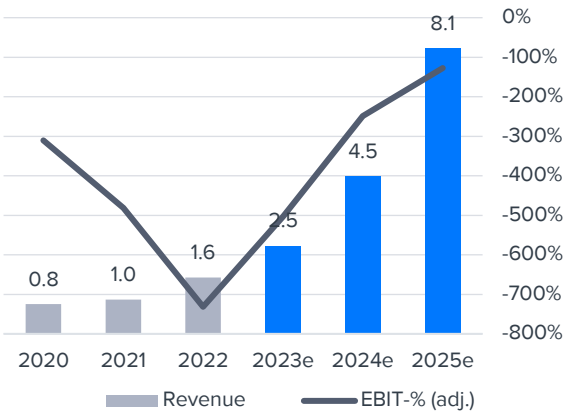
Aiforia has not provided guidance for 2023.

Share price



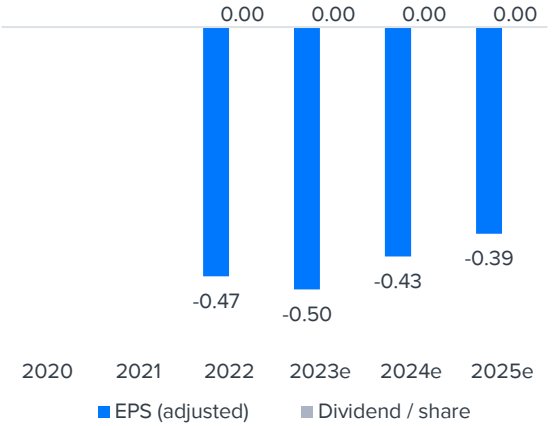
Source: Millistream Market Data AB

Revenue and EBIT-%



Source: Inderes

EPS and dividend



Source: Inderes

Value drivers

- Significant market potential in increasing automation in pathology
- Early evidence of the product's competitiveness
- Plenty of room for growth especially by increasing the number of sample types supported by clinical customers and technology
- SaaS business model provides continuity and scalability as growth is successful
- Aiforia's attractiveness as an acquisition target in a highly valued sector

Risk factors

- The business is only being built and the company's valuation virtually relies on future promises
- Falling behind ambitious objectives and drop in valuation that relies on successful strong growth
- Slower-than-expected progress in the implementation of new technology in a conservative industry, tightening regulations
- Competing technologies, changes in the company's position in the value chain of digital pathology, key personnel risks
- Data breach including personal health data
- Cash flow still strongly negative, which increases financing risk

Valuation	2023e	2024e	2025e
Share price	3.45	3.45	3.45
Number of shares, millions	26.0	26.4	27.2
Market cap	90	91	94
EV	84	99	112
P/E (adj.)	neg.	neg.	neg.
P/E	neg.	neg.	neg.
P/B	5.4	18.1	neg.
P/S	35.7	20.2	11.6
EV/Sales	33.5	22.0	13.8
EV/EBITDA	neg.	neg.	neg.
EV/EBIT (adj.)	neg.	neg.	neg.
Payout ratio (%)	0.0 %	0.0 %	0.0 %
Dividend yield-%	0.0 %	0.0 %	0.0 %

Source: Inderes

Contents

Aiforia in brief

Summary and key figures

Aiforia is a SaaS software company developing image analysis technology whose products use artificial intelligence to study tissue and cell samples, particularly in medical research, clinical diagnostics and drug development.

2013
Year of establishment

2021
IPO in December

1.6 MEUR (+65% vs. 2021*)
Revenue 2022

-11.8 MEUR (2021: -4.7 MEUR*)
EBIT 2022

5 + 1
CE-IVD marked AI model for clinical use + CE-IVD marked viewer, 1/2024

>5,000
Active software end-users, 9/2023

2.4 MEUR (+214% vs. H1'22)
Order book at the end of H1/2023

15.0 MEUR
Net cash excluding IFRS 16 liabilities at the end of H1/2023

Aiforia is well on its way to penetrating its rapidly growing target market

Key events in recent history

2013-2018

- Aiforia Technologies (Fimmic Oy) was founded as a spin-off from the University of Helsinki (2013)
- Research project to develop an image analysis platform based on deep neural networks launched (2015)
- Collaborative project with MIT to use artificial intelligence in lung cancer research launched (2016)
- Aiforia Custom image analysis services and AI teaching apps go commercial (2017)
- Gross fundraising of 6.6 MEUR from venture capitalists (2017)
- First academic study based on the Aiforia solution published (2018)

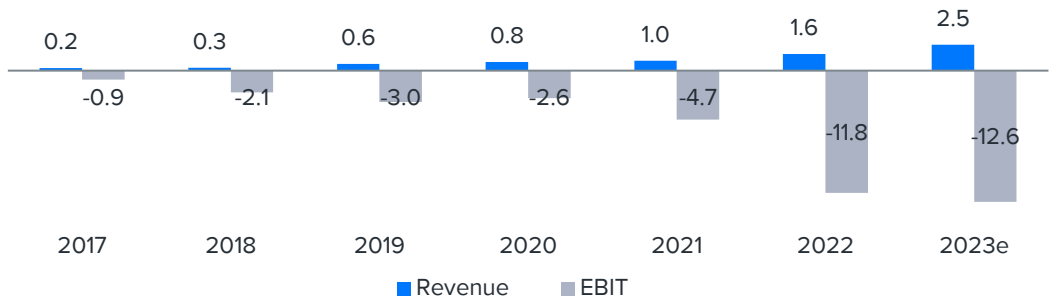
2019-2021

- First CE-IVD marking for a visual diagnostics software solution (2019)
- Collaboration agreement with drug development company Bristol Myers Squibb (2020)
- Distribution agreement for the sale of software solutions with Epredia (2021)
- First CE-IVDs for proprietary AI models for breast cancer (Ki67) and lung cancer (PD-L1) diagnostics (2021)
- Framework agreement with Mayo Clinic (one of the world's top hospitals) for preclinical and clinical software (2021)
- Raising gross funds of 47 MEUR (of which IPO ~29 MEUR) to finance growth (2021)

2022-

- 3 new CE-IVD-marked image recognition models, plus Aiforia Clinical Suite viewer released (2022)
- New major contracts (e.g. City of Hope National Medical Center, Brunel Medical School and University of Bern) (2022)
- 10th major pharmaceutical customer (Q2/2023)
- Wins in major tenders on the clinical side (NHS Q1/23 and Veneto Q2/23)
- Mayo Clinic introduced the first AI model for clinical use H1/2023)
- Significant clinical client with Catania Province (Q4/23)

Revenue and EBIT development, MEUR*



Source: Aiforia, Inderes
*2022 onwards IFRS figures, therefore 2021 figures are not fully comparable

Company description and business model 1/6

Aiforia develops AI-based image recognition for medical needs

Aiforia ("Artificial Intelligence for image analysis") develops software products for medical customers for image analysis using artificial intelligence. The company aims to accelerate, refine and harmonize image analysis for medical research and clinical work. Aiforia focuses specifically on pathology, i.e., the analysis of tissue or excreta samples taken from the body to support a physician's diagnosis.

Johan Lundin, Kari Pitkänen and Mikael Lundin founded Aiforia in 2013 as a spin-off from the University of Helsinki (FIMM, the Finnish Institute of Molecular Medicine). The founders are physicians and health technology entrepreneurs. The initial problem to be solved was the management of large-scale images used in digital pathology. Attention quickly turned to the interpretation of the images, i.e., the software's ability to support the pathologists who evaluate the samples. According to Aiforia, it was the first company in the world to launch a commercial solution using deep learning machine vision in pathology. The founders are still involved in the company's activities in an operational, advisory or board capacity and remain significant shareholders in the company (around 14% ownership by 12/2023). Management and the board have quite significant holdings in the company as a whole.

Aiforia products have long been in preclinical use (medical research). As the product, technology and market matured, the company began commercializing its product to a more regulated clinical customer base (patient care) in 2021. This market is still emerging, but it is on the verge of strong growth, judging by the pace of procurements.

Aiforia is an early-stage growth company whose investment story rests on a belief in the very strong future growth enabled by the commercial potential of its software, very high profitability in the mature phase and a business model focused on continuous revenue streams.

Building deep learning image analysis models is at the heart of Aiforia's software

Aiforia's image recognition software relies on *supervised deep learning*. In practice, the company's AI models are trained by showing them images of patient samples, in which pathologists mark the biomarkers they want the model to identify in the sample. Aiforia's models do not only make diagnoses from the images but identify and calculate biomarkers from them at the cellular level on behalf of pathologists.

A separate model will be developed for each biomarker. For example, covering the analysis of one cancer category may require around 5-10 separate models, according to Aiforia. Multiple models can also be built to deepen the study, allowing the automatic calculation of other data such as cancer tumor diameters in addition to the identification of biomarkers. Some of these calculated data also enable the prediction of cancer progression (e.g. the Mayo Clinic's prognostic model for colorectal cancer*) and thus the development of cancer treatment.

Typically, deep learning image analysis models have the advantage of high accuracy, which often requires a significant amount of labeled training data.

An illustrative example of Aiforia software in clinical use

A doctor takes **a tissue biopsy** from a patient with suspected breast cancer

The tissue sample is sent to the pathology laboratory where it is **scanned digitally using a microscope scanner**

Through the laboratory's image management system, the sample is brought into the Aiforia workflow

Aiforia's software

- **Identifies** biomarkers associated with breast cancer in a sample image using machine vision and marks them on the sample image
- **Calculates** the parameters required for the pathologist to assess the sample and **visualizes the findings** in the sample image
- **Prioritizes** cases requiring rapid diagnosis from scanned samples

The pathologist checks the analyses and **gives an opinion on the sample**

The treating physician reviews the pathologist's opinion and **continues to treat the patient**

The analysis of samples speeds up and pathology laboratory productivity increases

Lower sample analysis costs

More accurate, consistent and faster results for patients

Source: Aiforia, Inderes
*Cancer of the colon and rectum.

Company description and business model 2/6

However, a single pathological sample may contain more than a thousand identifiable biomarkers. In fact, Aiforia often only needs around 50-200 sample images to train its models.

Aiforia's products are used in particular in preclinical and clinical medicine

Aiforia's software products are built modularly on the same modern cloud platform, the **Aiforia Platform**. Aiforia uses the commercial cloud as its platform (esp. Azure) and is able to meet the needs of its customers in different countries in terms of software data location and varying storage and computing capacity. The company's products can also be used in the customer's own cloud environment (e.g. Azure/AWS/Google Cloud).

With Aiforia Create, users annotate sample images and use them to train and improve AI models. As the model is being built, the software starts annotating for the user and guides the user to annotate less clear parts of the sample images, saving the user time. No programming knowledge is required to use the product. Aiforia has patented its method for annotating sample images in the US. Although the company's strategy focuses on pathology applications, the product has also been and could be used in other applications in medicine (e.g. drug development) or in other applications entirely (e.g. materials engineering, satellite imaging).

Create has been used to develop thousands of AI models for the study of colorectal cancer, lung and breast cancer, Alzheimer's, Parkinson's and malaria. For preclinical customers, image recognition models can be used without regulatory approval. Clinical customers can also use **Aiforia Create** to build and edit their own models. However, the customer must validate the new or modified AI model before it is implemented in clinical patient work (LDT, "Laboratory Developed Test").

Aiforia builds ready-to-use, clinically approved image recognition models for its customers to use in the **Aiforia Clinical Solutions** product. Aiforia has published 5 CE-IVD approved models for the diagnosis of different types of cancer and the company's clinical trial is CE-IVD approved. The company does not yet have FDA-approved models (1/2024) but is aiming for a first registration in 2024. Aiforia's image recognition models are trained on images produced by scanners from several different manufacturers, so the software can be used in environments where customers have different technology choices.

A clinical pathology laboratory is typically a "factory-like" environment, and one pathologist can create pathology reports for up to 50-100 samples in a working day. The **Clinical Solutions** software integrates with the software used by pathologists in the workflow through open interfaces (APIs). Aiforia won its first clinical contract in 2021, when Mayo Clinic, one of the world's top hospitals for several years and a pioneer in digital pathology, selected Aiforia's software in a tender.

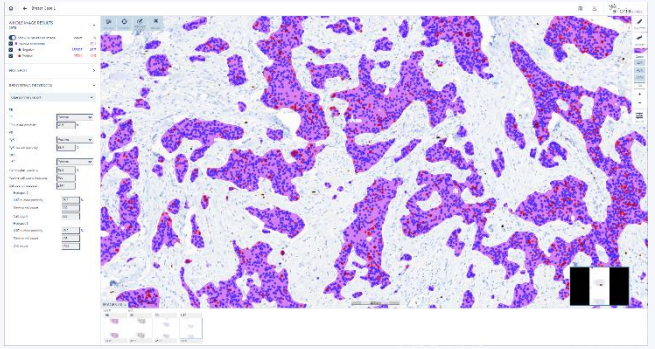
Aiforia also offers products and services to support the use of its software and training in pathology.

Aiforia's products and services

	Description
Aiforia Platform	• Aiforia's cloud platform, on which the products and services are built
Aiforia Create	• Software for building and further developing image recognition models
Aiforia Clinical Solutions	• Software for automated analysis of clinical patient samples as part of the pathology laboratory workflow • Includes sample viewer and ready-to-use image recognition templates
Others	• **Aiforia Custom AI Services**: Services for building models and getting started with Aiforia software • **Aiforia Community Platform**: A platform for knowledge sharing within the pathology community using the software • **Integration Services** • **Cloud Hosting Services**

Source: Aiforia, Inderes

Example of a pathologist's view in Aiforia software



Source: Aiforia

Company description and business model 3/6

The **Aiforia Community Platform** allows pathologists and researchers to learn and share knowledge directly with their peers and Aiforia's broad scientific team in different fields of medicine. The company offers its customers a service to build models and start using the software (**Custom AI Services**).

Regulatory approvals are a key part of the company's product development

Building and certifying an image recognition model for clinical use with Aiforia software normally takes about 4-10 months. In simple terms, the process can be divided into three stages:

1. **Creating a model (~1-2 months)**
2. **Model validation (~1-2 months)**
3. **Model certification (~2-6 months)**

To create the model, pathologists annotate the sample images with the biomarkers they want to identify. As the annotations accumulate, the software automatically trains the image recognition model and learns to more accurately identify the desired biomarkers in the images. Training will continue until the level of accuracy is deemed sufficient. The annotation can be done either by Aiforia's pathologists or those of its clients.

An image recognition model built with Aiforia software is typically trained on 50-200 samples. We estimate that the collection of sample images is the main bottleneck in building the models. Aiforia obtains tissue and cell samples from several sources. The company participates in research projects and collaborates with pathology laboratories and biobanks. In certain cases, Aiforia also gets access to its customers' sample data. In part, Aiforia's customers can be seen as partners in product development. For example, the Mayo Clinic built and licensed image analysis and prediction models for colorectal cancer to Aiforia.

Model validation involves validating the performance of the built model by using it to evaluate new samples. The results are then compared with estimates made by pathologists on samples independently and with the support of Aiforia software. Aiforia has a dedicated team of approximately 10 clinical consultant pathologists, typically 3-5 of whom contribute to the validation of each Aiforia model in addition to their other work. According to Aiforia, typically around 100-200 new samples are used for validation. The customer can also validate the model that it has built. Validation of the model will enable its clinical use (LDT).

Model certification involves obtaining a certificate from the regulatory authority for the model to be used in clinical practice. At this stage, Aiforia, an independent body or institution examines and documents the results of the validation phase. According to Aiforia, this usually results in either 1) a conformity assessment or 2) a local authority approval to sell the product.

Clinical use requires CE-IVDR (EU) and FDA (US) approval. According to Aiforia, the processes and requirements are largely similar, although the company did not have its own FDA-cleared models on the market at the time of this report's publication. However, we understand that obtaining FDA approval is more expensive and slower than the CE-IVDR model. Once CE-IVDR approved, Aiforia says the model can be modified if necessary. If the changes are minor, no new certification is required. Significant changes will lead to a new notified body assessment.

Steps in building an image recognition model

1. Creating a model (~1-2 months)
2. Model validation (~1-2 months)
3. Model certification[4] (~2-6 months)

Types of clinical approvals for models in Aiforia's key markets[1]

Approval	Area	Applicant for approval
CE-IVDR	EU countries[2]	Aiforia or a competing commercial provider of models
FDA	The US[2]	Aiforia or a competing commercial provider of models
LDT ("laboratory developed tests")	EU countries and the US[3]	A clinical operator validating a model for its own use without separate regulatory approval

1 EU countries and the United States
2 Approvals may also allow the use of models in certain other regions, provided that local authorities recognize the validity of the approvals
3 Legislation differs from region to region, but to understand the requirements and processes for validations are broadly similar
4 Under normal circumstances (certifiers backlogged 2022-2023)
Source: Aiforia, Inderes estimate

Company description and business model 4/6

EU legislation on medical devices became stricter on May 26, 2022 (CE-IVDR). When Aiforia's products for clinical use are exported to the market, they will be subject to a notified body audit and their use will be more actively monitored. In the future, it could be more efficient for Aiforia to apply for model approvals on a package basis, for example for five breast cancer diagnostic models at once, rather than for individual models. The notified body certification process was backlogged due to the regulatory change, and Aiforia could not get models approved for more than 18 months (0 units 6/2022-1/2024). According to the company, the situation is improving and certification times should be reduced. We see the situation itself improving over time, with a smoother progression of model certifications in the future, once the gates are expected to reopen in 2024.

The customer can also validate the AI model it has developed for clinical use (known in the US as a Lab Developed Test, or LDT). In these cases, Aiforia sells its software for research purposes and the customer handles the validation for clinical use. This will allow Aiforia to offer its software to clinical customers without FDA approval also in the US, as in the Mayo Clinic account won in late 2021. However, we believe that finished FDA-approved products would facilitate the company's commercialization in the US. The company's competitor Paige has one FDA-approved AI model (prostate cancer, binary cancer/non-cancer and risk area detection) and another FDA breakthrough designation (breast cancer, binary cancer/non-cancer and risk area detection).

Sales processes for large accounts are quite long, but customer retention is correspondingly strong

Aiforia's customer base is almost exclusively medical, divided between preclinical and clinical customers. Until 2021, the company focused in particular on smaller preclinical customers (later also large pharmaceutical customers) and built up a large global customer base. These typically smaller, agile research teams often make the decision to purchase an Aiforia product quickly and do not require a large implementation project to start using the software. As a result, the sales process for this customer group is generally quite straightforward. However, the strong growth that Aiforia is targeting is particularly dependent on larger clinical customers.

Aiforia's preclinical clients include academic research and education organizations, research service companies and pharmaceutical and biotechnology companies. Clinical customers are hospitals, healthcare companies and clinical laboratories that analyze patient samples as part of clinical diagnostics.

For large preclinical and clinical customers, sales cycles are often long, typically lasting 9-12 months, according to Aiforia. After winning the contract, deployment requires integration of the software into the laboratory's workflow and user training. Depending on the customer, we expect the roll-out to large customers to take between 3 and 9 months in the future. We estimate that the first deployments have been slower, but the ready-made integration implementations created in these should speed up the process in the future.

Examples of Aiforia's customers

Preclinical

Massachusetts Institute of Technology
charles river
SANOFI
Bristol-Myers Squibb
MAYO CLINIC
ORION
UNIVERSITY OF HELSINKI
TURUN YLIOPISTO
Brunel University London

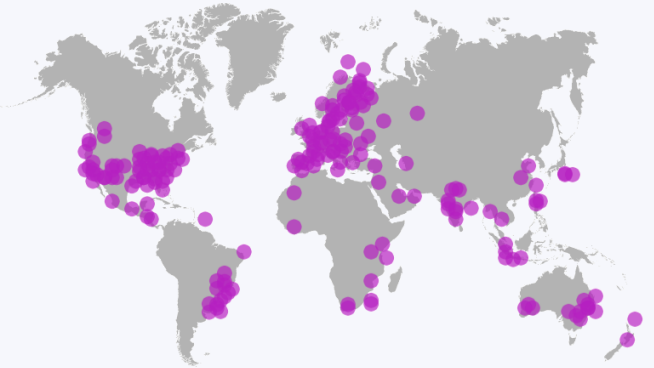
Clinical

MAYO CLINIC
NHS
Veneto Healthcare District
Catania Healthcare District

+ Other major drug development companies

Source: Aiforia

Locations of Aiforia's customers, 12/2023



~100
Customer locations 11/2021

+50
Different countries 12/2023

Source: Aiforia

Aiforia's key customers

Mayo Clinic

- First AI model in use since H1/23, second and third since Q1/2024.
    - The aim is to gradually introduce more AI models.
    - Potential revenue is conservatively recorded in the order book.
- Potential 2.6 million samples per year.
- 70 pathologists are using the Aiforia platform on the preclinical side since H2'22.
    - Mayo Clinic is also developing new AI models and applications on the Aiforia platform, which Aiforia has a collaboration agreement to commercialize.

Veneto Healthcare District

- Size 1.2 MEUR
- Term 3 years (3+3), first deliveries H2'23
    - Possibility of a 3-year extension
- 12 hospitals
- 5 AI models, 200,000 samples
- EUR 6 per sample (minimum), but a significant portion of revenue comes from services (e.g. deployment and integration)

PathLAKE+ consortium / NHS

- Framework agreement for 25 hospitals.
- Hospitals can contract with Aiforia without a tender process and the company's technology is already approved for clinical use.
- The term of individual contracts with hospitals is 3 + 3 years.
- Aiforia is the only supplier for lung cancer and one of the three suppliers for prostate cancer.
- Estimated volumes for prostate cancer 109,000 and lung cancer 29,000 samples per year. Volumes are expected to grow annually.
- First contract with Southampton Hospital (PD-L1 model), deployment estimated to start H2'23.

Two high potential customers

- Aiforia has also reported customer relationships in the US with City of Hope and Wake Forest (in H1/22 report).
- The clients have the potential to be of Mayo's magnitude. In both cases, the aim is to bring Aiforia into clinical use, but we expect use to start in the preclinical phase.
- No precise information on the progress is available.

10 major customers in the pharmaceutical industry

- One of the world's largest pharmaceutical customers using Aiforia in drug development.
- For example, Bristol Myers Squibb, Sanofi, Orion.
- The average customer size is still relatively small, but there is clear potential for growth in the sector and a willingness to adopt AI tools.

Several renowned universities

- Small in terms of revenue, but strategically important customers that will keep Aiforia in a strong position in academic research.
- The software is used for educational and research purposes.
- E.g. MIT, University of Bern, Brunel Medical School, University of Helsinki, University of Turku.

Source: Aiforia, Inderes, Mayo Clinic

Company description and business model 5/6

On the other hand, integration with core customer processes improves customer loyalty.

As Aiforia aims to significantly expand its customer's use of the software over time (e.g. customer's other laboratories, new research areas, new sample types, more models available per sample type), successful account management is critical for the company. The annual revenue potential of a single large customer can be several million euros for Aiforia. In late 2021, the company won its first high-potential customer when the Mayo Clinic selected Aiforia as its pathology image analysis partner in a tender process.

Aiforia has its own sales force in Finland, the Netherlands, France, the UK, Hungary and the US. The company focuses its sales efforts in particular on clinical diagnostic laboratories in Europe and North America, as well as the pharmaceutical industry and major medical research institutions.

Aiforia's channels are direct sales and partners. For large customers, Aiforia often approaches customers directly or through its partners (often a scanner manufacturer / system integrator / other software vendor) when tendering. In the preclinical segment, Aiforia is well known and customers in this segment often contact Aiforia themselves. However, to reach a large number of customers, the company also uses distribution partnerships.

Aiforia products (AI for diagnostics) are often purchased as part of a wider digital pathology package (including sample scanners). Partnerships with equipment manufacturers allow Aiforia to participate naturally in these larger tenders. The most important of these is currently Epredia, which we understand is still a significant owner of Aiforia (Shandon Diagnostics Limited, ownership behind the nominee register). Aiforia also seeks to partner with other software vendors (esp. LIS/IMS) and with system integrators for deployments.

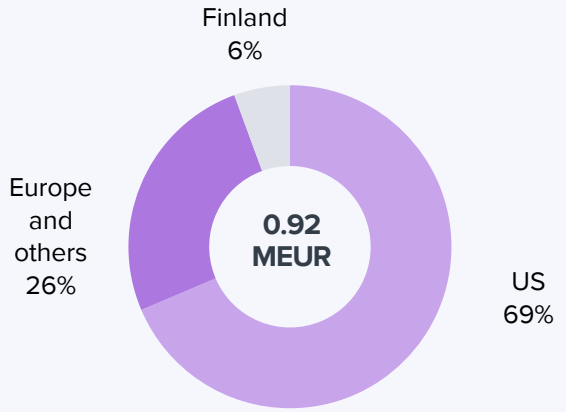
Revenue streams are recurring in nature thanks to SaaS business model

Aiforia's current revenue streams are still very small relative to the company's growth targets and we expect them to fluctuate significantly in the coming years. Until 2021, revenue streams consisted of preclinical customers.

Of Aiforia's H1/2023 revenue, 6% came from Finland, 26% from Europe and other countries and 69% from the United States. We expect North America and Western Europe to continue to dominate the revenue mix in the future as the company seeks to acquire large clinical customers, particularly in these regions. We expect the share of clinical revenue to become a clear majority of Aiforia's revenue already in 2024.

We expect Aiforia's longer-term revenue streams to consist mainly of high-cost recurring revenues linked to the use of its software products.

Geographical distribution of revenue*, H1'2023, % of revenue



Source: Aiforia (*FAS figures)

Estimated distribution of long-term Aiforia's income streams, % of revenue

Software products	Services
80-95%	5-20%

Clinical customers	Preclinical customers
~80 %	~20 %

Source: Inderes estimate, Aiforia

Company description and business model 6/6

These are likely to be a combination of ongoing Software-as-a-Service (SaaS) annual fees and usage-based fees (particularly the number of samples analyzed). Payments are typically invoiced 3-12 months in advance, which results in negative working capital for the company.

The value of Aiforia's software to its users comes from the analysis of samples, and we see the number of samples analyzed as the key driver of the company's revenue streams. Fundamentally, Aiforia's revenues will be stable in the long term, as the company's customers are mainly very stable companies (e.g. large hospital chains), the software usage is continuous and, to our understanding, customer retention is high. Aiforian is expected to receive non-recurring revenue streams from the sale of services (including software roll-outs and integration, AI model development, and customer support). However, we expect the share of services to decline from its current significant level to a clear minority over time.

Business scalability potential is excellent if growth is successful

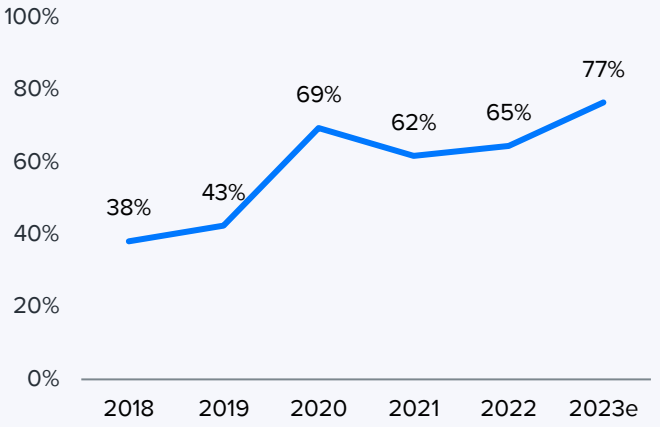
As a SaaS software company, Aiforia's business is inherently highly scalable. In the long term, we believe that the company's ongoing product revenue has the potential to generate gross margins of approximately 60-90%, depending on whether the customer purchases its computing capacity directly or through Aiforia. Aiforia's main cost items are fixed and staff-related, so we see scale-up and scaling of these costs as a key driver of profitability. The company's gross margin in H1'23 was 74%.

Aiforia's business is in the early stages of growth and the cost structure will evolve over time. For the time being, a significant portion of the operating costs consists of personnel expenses (2023e: 55% of costs), other operating expenses partly related to personnel (23%), and depreciation and amortization (18%), which is focused on the capitalization of product development costs. Materials and services are still a very small cost item (4%). We discuss the background to these costs in more detail in the Financial position section.

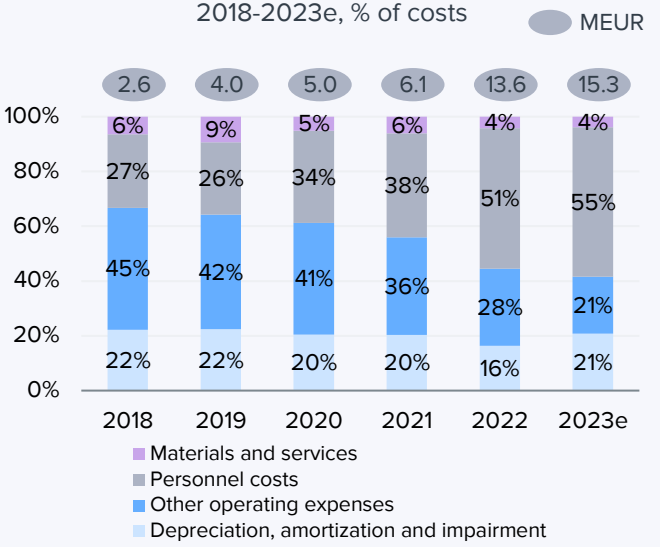
The majority of Aiforia's employees are focused on software development, product development and project management (including the development of image analysis models). Sales and marketing is still slightly smaller as a function, but it has grown rapidly, while administration is small in terms of overall size.

Aiforia's costs will clearly outweigh its revenues in the short term. This is due to the small size of the business so far and the company's strong front-loaded investments in growth. We see scalable growth as a key driver for strengthening the company's profitability. In order to strengthen profitability, we believe that the company must be able to increase its size many times over. However, the company's capital allocation in the coming years will focus on growth investments, mainly in the form of front-loaded personnel costs.

Gross margin
2018-2023e, % of revenue

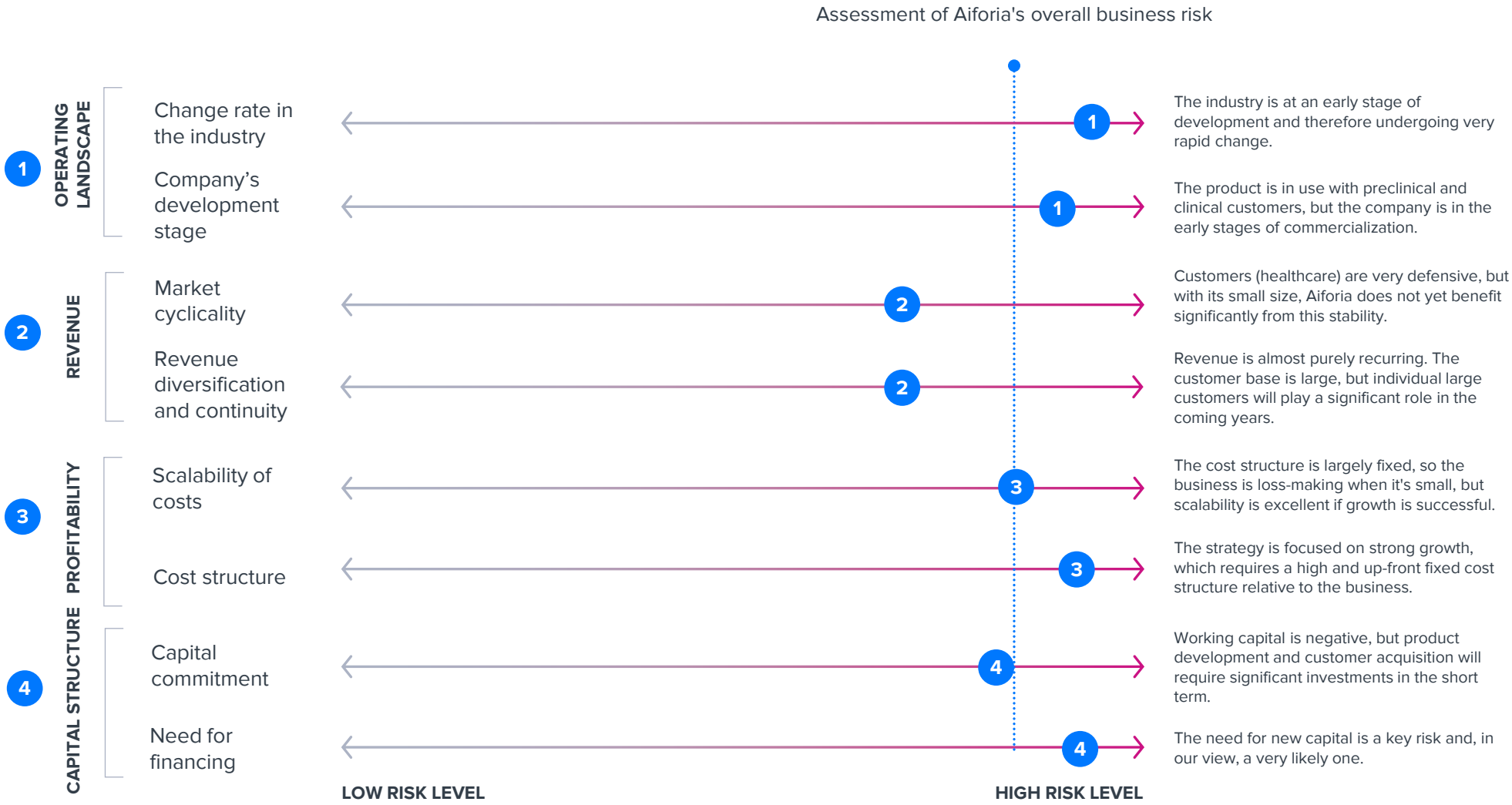


Operational* cost structure
2018-2023e, % of costs



*Expenses recorded in the income statement before EBIT
Source: Aiforia, Inderes

Risk profile of the business model



Source: Inderes

Markets and competitive landscape 1/5

Digital pathology has potential, but uncertain timeline for realization

Aiforia's target market is broadly image recognition software. At present, the company focuses almost exclusively on medicine and pathology (diagnosing diseases by examining tissue and excreta samples), so we will only look at this market in this section. We see the image recognition market in other industries and medical areas as a longer-term option for Aiforia to expand its target market.

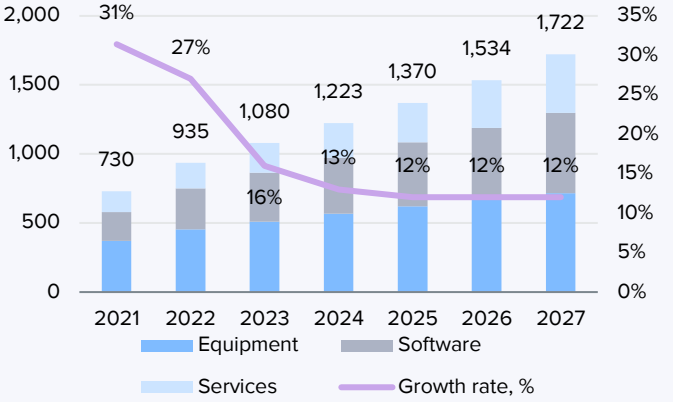
We believe that the pathology image recognition market can be broadly segmented into preclinical (research) and clinical (patient care) applications. We estimate that clinical use represents the clear majority of the market potential, as the number of samples processed in patient care, and thus the potential benefits, are significantly higher than in research. Therefore, we will focus on the clinical market.

Pathology can benefit from the digital processing of samples, a market of enabling tools known as digital pathology. The market can be divided into scanners that digitize samples, software (sample image management and analysis), and storage and communication systems. Signify Research estimates the market size to be around 935 MUSD in 2022 and to grow at a CAGR of around 13% by 2027. Signify estimates that growth has clearly outpaced this in recent years (2020-22: 37%, 31% and 27%, respectively). We also see the potential for faster growth in the future. Aiforia focuses only on software, so only part of this market is relevant for the company. Signify Research estimates the AI market for digital pathology image analysis to be approximately 52 MUSD by 2022. We expect the market to grow very rapidly in the coming years, as even individual contracts (e.g. Aiforia's Veneto with a total value 1.2 MEUR for about three years) are significant in relation to the size of the market.

The market potential for clinical diagnostics can also be assessed by the number of samples handled by pathologists, the degree of digitization of samples and the revenue potential per sample. Aiforia itself (see table on the right) has estimated its market potential at around 900-2,100 MEUR in 2020 and around 3,600-7,100 MEUR in 2027. Realizing this potential in a market requires the development and active deployment of image recognition models that cover multiple sample types in pathology laboratories. Aiforia's estimate of the market potential is therefore, in our opinion, significantly higher than the market size estimated by market researchers. However, we believe that the estimate focuses only on the automation of diagnostic work and does not include, for example, applications that predict disease progression (e.g., the Mayo Clinic colorectal cancer prediction model), where the value per sample could be significantly higher.

Image recognition software can only be used if the samples are analyzed in digital format. Scanners that digitize samples are therefore a necessity for using Aiforia's software. According to Market Intellix & Maia Research, the digitization rate of pathology laboratories worldwide will be about 14% in 2020, so the use of image recognition software

Composition and growth rate of the digital pathology market, 2021-2027, MEUR



Source: Signify Research

Pathology image recognition market potential in clinical diagnostics, MEUR per year

2020e	2027e	Description
1,229 - 1,472	1,980	**Number of samples,** millions
✖		
14%	35%	**Digitization rate of samples,** %
✖		
5-10e	5-10e	**Price per sample,** EUR
=		
~900 - 2,100	~3,600 - 7,100	**Addressable target market,** MEUR

Source: Aiforia prospectus (a combination of third-party information and the company's own assumptions)

Markets and competitive landscape 2/5

in pathology is inevitably still quite low, although the digitization rate in Western countries is clearly higher and growing rapidly.

According to Aiforia, the large size of pathology images (one image in gigabytes or even terabytes, roughly the size of a Netflix movie) has slowed the formation of the market. Image recognition has long been used in radiology, where the smaller image size (about 1/1000th of pathology sample images, according to Aiforia) has placed lighter demands on the technology used to digitize and process sample images.

Overall, we believe that the high market potential of image analysis, especially in clinical pathology, provides Aiforia with a long-term growth path. In our view, clinical medicine customers in particular are very conservative and highly regulated, which can make them very slow to adopt new technologies. The outlook for the speed of market formation is therefore cloudy, although the contracts won by Aiforia suggest that the market is opening up quite rapidly.

We note that Aiforia and its competitors play a key role in shaping the market. If software companies in the sector can 1) quickly develop clinically acceptable and attractive solutions, and 2) effectively deliver these solutions to clinical customers, the market potential can be realized quite quickly. We also see some pressure (see next section) from clinicians to increase the efficiency of pathology laboratories and thus the use of image analysis software. We also see the ability of companies in the industry to prove the efficiency and cost benefits of their software to customers as a key factor in shaping up the market.

Clear trends support market growth in the longer term

The aging population and increasing incidence of cancer are also driving an increase in the number of samples analyzed by pathologists. Aging is increasing the overall need for healthcare, and the UN estimates that the number of people over the age of 65 will more than double between 2020 and 2050. On the other hand, cancer treatment often requires a significant number of samples to be analyzed by pathologists, and the World Health Organization (WHO) estimates that the incidence of cancer will increase by 47.4% between 2020 and 2040. Aiforia believes that these factors will increase the need for digital pathological analysis.

At the same time, there is an estimated international shortage of pathologists, for example in the US[1], the UK[2] and Germany[3]. A Medscape survey also found that about one-third of pathologists are overworked, although to a lesser extent than several other groups of medical professionals. With the shortage of pathologists, the growing demand must be met by increasing the efficiency of pathologists' work, which we see as a growth driver for Aiforia's target market.

According to Aiforia, working methods in pathology often rely heavily on traditional methods based on visual interpretation. The company itself sees digital pathology as still at an early stage of development. Market Intellix & Maia Research expects the digitization rate in pathology labs to increase from 14% in 2020 to approximately 36% in 2027.

The benefits of AI-based image analysis in healthcare

The analysis of samples speeds up and pathology laboratory productivity increases

Lower sample analysis costs

More accurate, consistent and faster results for patients

Source: Aiforia

Key market growth trends

Aging population and increasing cancer incidence

Shortage of pathologists

The ongoing digitization of healthcare and pathology

Source: Aiforia, Allied Market Research, media sources, Inderes estimate

1 JAMA Netw. Open / DOI jamanetworkopen.2019.4337
2 The Royal College of Pathologists
3 Springer / DOI s00428-020-02894-6

Markets and competitive landscape 3/5

This brings new potential customers for image recognition software. In our view, the increase in digitization is driven not only by the shortage of pathologists, but also by the cost pressures on healthcare providers, which can be addressed through software automation. Aiforia believes that the industry is in transition and faces a growing need to use AI-based methods to improve efficiency. We believe the long-term growth trends in the market are clear.

The value chain and roles of players in digital pathology are still evolving

Aiforia's competitive landscape consists primarily of companies developing digital pathology technologies for the clinical market. Companies in the market provide pathology laboratories with scanners that digitize physical samples and software that makes the pathologist's job easier. In our view, the digital pathology value chain can be divided into five distinct groups of players:

1. Hospitals and other healthcare providers
2. Manufacturers of digitizing sample scanners
3. Image management software providers (PACS & IMS)
4. Image analysis software providers automating diagnostics with AI
5. Healthcare information system providers (LIS and EHR)

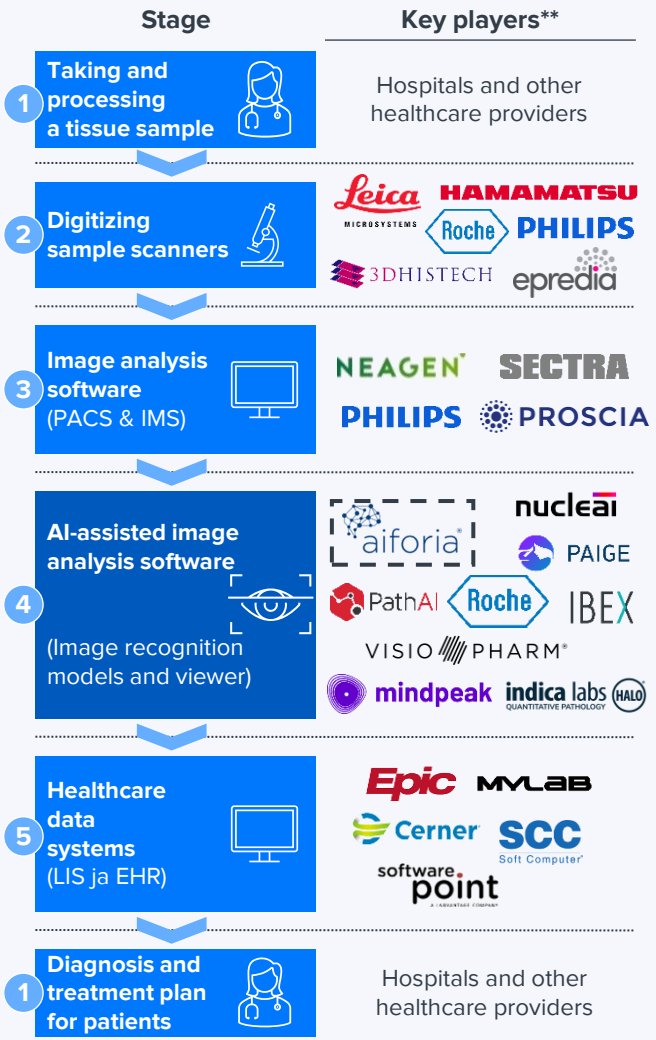
The clinical workflow behind digital pathology is illustrated on the right. The image analysis software market in which Aiforia operates is, in our opinion, at the earliest stage of development in the chain. Digital pathology as a whole is at an early stage of development, but other parts of the value chain have already seen the emergence of much more mature major players.

Manufacturers of sample scanners include Leica, Philips, Epredia, 3DHISTEC and Roche. Scanners are a prerequisite for the use of other digital pathology solutions, but we believe they will remain a bulk product in the long term, as we see a relatively narrow space for competitors to differentiate themselves.

Image management software (PACS/IMS) is supplied by companies such as Sectra, Proscia and Philips. These are partners and to some extent gatekeepers for image analysis software such as Aiforia. For example, in its image management product, Sectra operates a third-party extension store through which Aiforia and its competitors offer their image recognition models. Many players in the industry have developed similar marketplaces, but the different usage logics of the models make it difficult to standardize marketplaces, and we expect more image analysis software to be purchased directly from the vendor. In addition, given the simplicity of image management software, we estimate that its bargaining power in the digital pathology chain remains relatively limited.

Image analysis software is supplied by companies such as Aiforia, Indica Labs, Paige, Visiopharm, IBEX, Nucleai, PathAI and Roche. We believe that image analysis is a critical part of diagnosis and represents a large part of the overall value potential of digital pathology. In our opinion, image analysis software could therefore become a decision criterion for the procurement of digital pathology,

The clinical workflow* behind digital pathology



*The illustration is simplified and may differ from the exact work chain
** Not a comprehensive list
PACS: Picture Archiving and Communication System. **IMS** = information Management System. **LIS**: Laboratory Information System. **EHR**: Electronic Health Record.

Source: Inderes estimates, media sources, company websites

Markets and competitive landscape 4/5

which we believe makes Aiforia's position in the market attractive. We emphasize that our assessment is preliminary and still uncertain, as the negotiating positions of operators may change significantly as the market evolves.

Aiforia's attractive position in the value chain also makes the company and its peers potential acquisition targets in our view. This option is supported by the ability of other players in the digital pathology chain (e.g., sample scanner manufacturers, other software vendors) to support demand for their other products by controlling what is presumably the key image recognition component of the purchase. On the other hand, the downside of overly aggressive bundling weakens this option, as the customer may not want to be limited to specific scanners and other software. The loss of compatibility of other components would also reduce the ability to sell image recognition software to certain buyers and could limit its value in the hands of the rest of the chain.

Of the potential buyers, Philips and Roche develop both hardware and software, while Sectra offers image management software. In addition, scanner manufacturer Epredia is already a major shareholder in Aiforia. Aiforia could also be interested in expanding into image management software itself. In the coming years, we expect to see mergers and acquisitions in the digital pathology value chain that will reshape the competitive landscape. In addition to improving the value chain position that drives consolidation, we expect to make it easier for customers to buy. Consolidation has been limited so far, but the wheels have started to turn. Clarapath acquired Crosscope (2023) and Tribun Health acquired Keen Eye (2022). Crosscope and Keen Eye are AI players, but at an earlier stage of development than Aiforia, and in our view not yet significant competitors to Aiforia.

Aiforia seems to be well positioned against its main competitors, but the situation is in a state of flux

Overall, Aiforia's competitive landscape is still shaping up and its evolution is difficult to predict. Nevertheless, we believe that the company is in a promising position at the moment. The software developers that compete directly with Aiforia are mostly relatively new players. The clear competitors in AI-based image recognition in pathology as we see it are IBEX, Paige, Visiopharm, Mindpeak, Roche, PathAI, Indica Labs. However, some operators have raised significantly more funding than Aiforia, which supports their position as they are able to invest more in sales and product development.

IBEX is an important competitor in the clinical segment, estimated to be at a similar stage of development to Aiforia. IBEX software products are already in use in hospitals. The models are, as we understand it, top-level binary classifications with limited customizability by the user. Raised 102 MUSD, of which the latest round of 55 MUSD was in September 2023, with a valuation of 200-300 MUSD, according to public sources.

Paige works on the preclinical and clinical side and has a marketplace where other applications can be imported. The company has raised 220 MUSD in funding. Paige has one FDA-approved AI model (prostate cancer, binary cancer/no cancer and risk area detection) and one FDA breakthrough designation for approval (breast cancer, similar functionality).

Aiforia competitive factors

+	Cell-level, AI-based and scalable SaaS software
+	Customer ability to efficiently create new models and develop existing ones without software expertise (Aiforia Create and patented pattern annotation)
+	The versatility and customizability of software solutions
+	Well-known in academic circles and a broad preclinical client base, which adds credibility
+	Strong clinical customer references (Mayo Clinic, Veneto, Catania and NHS) and existing CE-IVD approved models to support sales
±	Clinical products still have limited evidence of high-volume customer use (however, Mayo Clinic in production from Q1/2023)
–	Still lacking FDA approvals (target for submission in 2024) will limit marketing and, we estimate, make US sales more difficult
–	Fewer sales and product development resources than heavily capitalized competitors

Source: Inderes' estimates

Markets and competitive landscape 5/5

In addition, Paige has an FDA-approved viewer. Paige's models are limited to specific Philips scanners and the solutions are not as vendor-agnostic as Aiforia's. To our understanding, the models also produce more limited data than Aiforia.

Visiopharm is a 20-year-old company with a solid foothold in the market. Operates on the clinical and preclinical side, 8 CE-IVD certified AI models. Some work at the binary level (cancer/no cancer in the sample) and some at the cellular level. We understand that the models are simpler algorithms that are more challenging to build and bring to the level of accuracy of deep learning image recognition models like Aiforia. Visiopharm also has scanners, but we understand that their software is not as vendor-agnostic as Aiforia's.

PathAI is particularly active in drug development but has also invested heavily in clinical diagnostics. PathAI has raised 300 MUSD in funding. According to Deloitte and Forbes, the company has grown by 529% between 2019 and 2022 (presumably from a low base) and has around 250 employees. We understand that the company's models work at the cellular level and with multiple scanners, but the models are not approved by regulators.

Mindpeak is a company founded in 2018 whose AI models also work at the cellular level. No proprietary platform. 9 AI models, 6 of which are CE-IVD certified. Has signed significant agreements and collaborates with other players in the value chain (e.g. Paige).

Indica Labs is a company founded in 2011 that offers some teachable models. We understand that similar to Aiforia the company's models operate at the cellular level and are scanner-independent. The company has its own image management software with AI integration, as well as outsourced pathology services. Three CE-IVD approved AI models. Operates in both the preclinical and clinical segments.

Roche is a health technology giant. Provides scanners and software. Proprietary AI-enabled software and partnering with other providers and bringing them to the company's platform (IBEX and PathAI partnerships starting in 2021).

Other potential competitors we see include Panakeia, Deep Bio, Nucleai, Qritive and Owkin. Radiology companies could also look to expand into pathology in the future. There are also algorithmic image recognition products on the market, which we see as less competitive than AI-assisted products (non-learning, harder to build and achieve high accuracy). In the long term, we expect the market to focus on a handful of players who manage to establish themselves in the market through approvals and clinical references.

In our view, heavily funded AI-driven players are fundamentally relevant competitors. For example, we believe that Paige and IBEX are significant competitors in terms of customer references. In our view, the competition is still led by scanner-independent and cell-level recognition players such as PathAI, Indica Labs and Aiforia. Among these, we see Aiforia's strengths as strong customer references (especially the Mayo Clinic), the ability for customers to build models themselves, and what we believe is the first predictive model for cancer care in the market. We think that Aiforia's position is promising, but the early stage of the market and limited information about competitors make it difficult to draw reliable conclusions about the competitive situation.

Funding raised by digital pathology operators

Company	MUSD	Key competitor
Owkin	304	x
PathAI	300	x
Paige.AI	220	x
Strateos (3Scan)[3]	118	
IBEX Medical Analytics	102	x
Proscia	69	
Aiforia (incl. IPO[1])	58	
Nucle.ai	47	x
Hangzhou Diyinga Technology	46	
Volastra	44	
Indica Labs	*~0-10*[2]	x
Others	507	

Source: Signify Research, Inderes
1) Inderes' estimate
2) According to Pathology News, the company has been funded with only a small amount of seed funding.
3) We understand that the company has no substantial activity in AI-based image recognition.

Strategy 1/3

Short-term focus on key customer wins and product development

Aiforia focuses on the development and commercialization of its software solutions in clinical and preclinical pathology. Aiforia's strategy has been to first develop a software solution to efficiently build and teach AI models for image recognition in large image files. Aiforia has built a strong track record of software reliability and usability through a broad preclinical customer base, various user applications, and scientific publications.

Now, in the second phase of the strategy, the company is leveraging its proprietary Aiforia Create software to create a comprehensive set of validated AI models for clinical use in a variety of diagnostic applications. Aiforia's clinical diagnostic solutions require, at least for the time being, a sufficient number of customers to make their deployment profitable. In the coming years, Aiforia will focus its resources on the sales and implementation processes of its largest and most important key accounts (e.g. Mayo Clinic). The company intends to serve smaller customers through distributors, which we also see as a way for the company to streamline the process of bringing its clinical product to market. Aiforia has also made progress in this area over the last 18 months, improving compatibility with various interfaces and other software in the clinical chain.

The focus areas of product development are future-proofing, transparency, ease of use, and security. In addition, the company will continue to develop features to further enhance the customer experience and make necessary investments to adapt to the regulatory framework in different markets.

Aiforia sees that the clinical diagnostics market is now opening up and it is important to be among the first in the market with a comprehensive AI solution offering. On the clinical side, the company aims to launch 10 new CE-IVDR marked models in the near future. Measured by CE-marked models, we understand that the company remains at the forefront of the industry in terms of coverage. We believe that succeeding in this objective is critical to remain competitive in Europe in the future. Following the change in the regulatory process, Aiforia has now received its company-specific validation and we believe the company is well positioned to achieve this. Aiforia has established partnerships with clinical laboratories and also has good links with biobanks, giving it access to the sample material needed to train AI models. It also works closely on product development with some strategic customers (esp. Mayo Clinic).

In commercialization, Aiforia's strategy is to strengthen its own sales power, especially in Europe, the US and other key markets. Aiforia's goal is to scale its business by acquiring new customers, increasing sales within customers and establishing key strategic partnerships.

Short-term objectives,
2024-2025

	Extend the preclinical offering with new AI models and an interface designed for the GLP* workflow
0 / 10	Expand clinical offering with 10 new regulatory-approved AI models
0 / 3	Form at least three new strategic partnerships
3 / 15	Achieve 15 key accounts (potential for over EUR 500,000 in annual recurring revenue)
	Achieve a positive cash flow from operating activities

Source: Aiforia, Inderes estimate
*Good Laboratory Practice
** Inderes estimate

Strategy 2/3

In our view, partnerships are key in scaling sales, as the company's resources are limited on a global scale and the market is opening up quickly. In addition to Epredia, the company is targeting three new strategic partnerships in the short term, in addition to scanner manufacturers, workflow management software providers and system integrators. The company has already worked with several partners and the Veneto and Catania contracts are good examples of this.

The company aims to reach 15 key accounts with the potential to generate annual recurring revenue of more than EUR 500,000. We believe that the target is relatively well in line with our revenue forecasts. Among Aiforia's current customers, Mayo, Veneto and the NHS can be counted as key customers. Wake Forest and City of Hope are very large potential customers, but at the current contract stage they are not yet counted as key customers.

The third focus area of the company's strategy is personnel. In a company the size of Aiforia that scales its business globally, successful recruitment and keeping the right people in the company is extremely critical.

Medium-term goals require rapid market opening and leadership

In the long term, Aiforia aims to achieve 80% coverage of the pathologist's diagnostic workflow (~20 most common cancer types) with its product offering. Based on our estimates and the company's comments, this would require an estimated 50-100 models. We note that the models also require FDA clearance to be offered to U.S. operators outside of LDT validation.

Aiforia seeks to open up a new vertical (or verticals) beyond pathology. We believe Aiforia's software can be useful for any need with large image sizes and lots of pixels to be analyzed. A possible example could be satellite image interpretation. We feel the goal is interesting and naturally has huge potential, but the company's strengths are clearly in pathology in the short term. A key benefit of Aiforia's software is the ease of building new image recognition models, which we believe could still be useful in other application areas as well.

As a new target, the company now aims to make the business profitable by the end of 2027 at net income level. We believe this is a very ambitious target, requiring very strong growth, but it is achievable and we expect the business to turn profitable in 2027.

We believe that the 100 MEUR revenue target by the end of 2030 is still very ambitious. This requires both a rapid opening of the market and for Aiforia to achieve a leading market position. Overall, the medium-term targets are very ambitious, but we think the company has the potential to end up at least in this ballpark.

Medium-term financial objectives,
by ~2030

1. Product offering covering 80% of the pathologist's diagnostic workflow
2. Achieve profitable business by the end of 2027
3. > 100 MEUR revenue
4. Leverage technology beyond diagnostic support for pathologists
5. Achieve 50 key accounts (potential for over EUR 500,000 in annual recurring revenue)

Source: Aiforia, Inderes estimate

Strategy summary 3/3

Target market and Aiforia's position

Global market for digital pathology, 2022e

935 MUSD

Projected market growth rate, 2022e-2027e

13% CAGR

Key market trends for Aiforia

- Aging population and increasing cancer incidence
- Shortage of pathologists
- The ongoing digitization of healthcare and pathology

Software company developing image recognition to improve clinical pathology

aiforia®

Strategic focus areas

1. Developing AI models and bringing a comprehensive range of AI solutions to the market
2. Building a comprehensive sales network (direct sales and partners) and commercialization of clinical diagnostic solutions
3. Investment in both preclinical and clinical diagnostics client segments
4. Focusing on the analysis of pathology tissue samples, but also exploring the potential to expand to the analysis of other images (medical and other industries).

Financing the initial phase of the strategy in 2021 with funds raised, after 2025 with cash flow

>100 MEUR

Revenue ~ 2030

Positive

Operating cash flow by the end of 2025

Positive

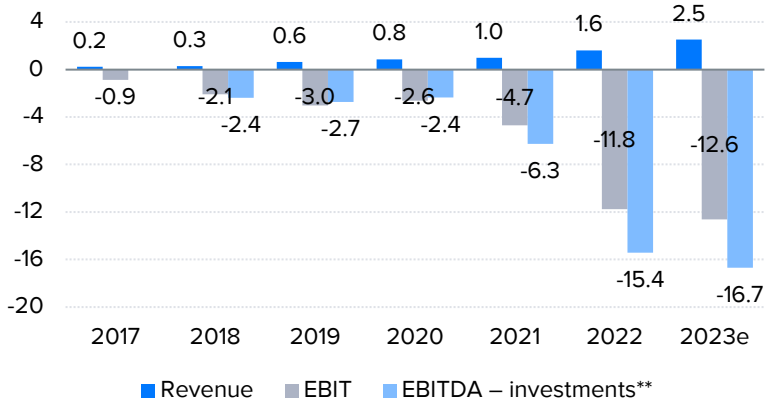
Net result by the end of 2027

Source: Inderes, Signify Research, Aiforia

Financial position 1/2

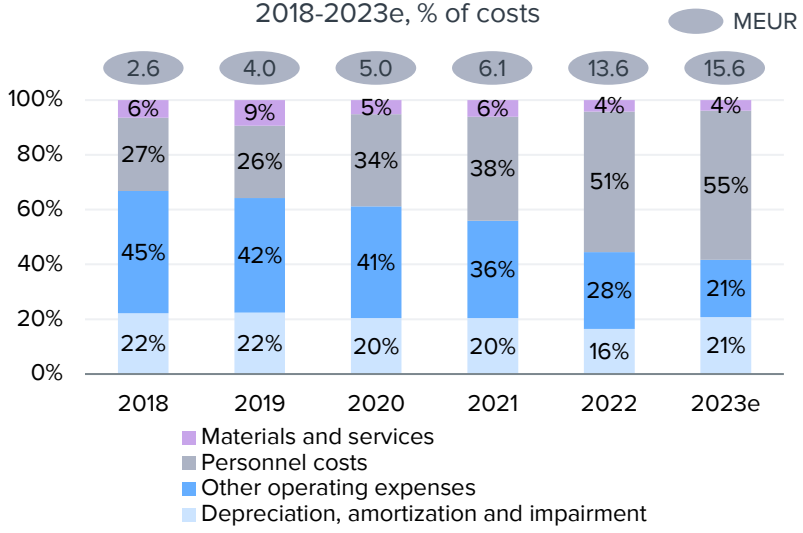
The business has been heavily loss-making due to early development and investments

Revenue (MEUR), EBIT-%, EBITDA – investments,
2017-2023e



- Aiforia's CAGR has been around 56% and profitability has still been heavily loss-making between 2018 and 2023e. The IFRS transition (in figures from 2022 onwards) changed the revenue recognition to be slightly more backward-looking (projects are recognized when completed, not by stage of completion).
- The company began commercializing its clinical diagnostics products in 2021, so revenues have been generated primarily from smaller preclinical customers. The early growth of the clinical segment is therefore reflected in 2022-2023e revenue.
- Historically, Aiforia has been in the product development phase, which has resulted in clearly loss-making results. The company operates a scalable software product business in an emerging market where sufficient scale is a prerequisite for success.
- The company's depreciation is significantly lower than its capitalized expenses, so the development of cash flow is a much better indicator of the company's profitability than EBIT.

Operational* cost structure
2018-2023e, % of costs

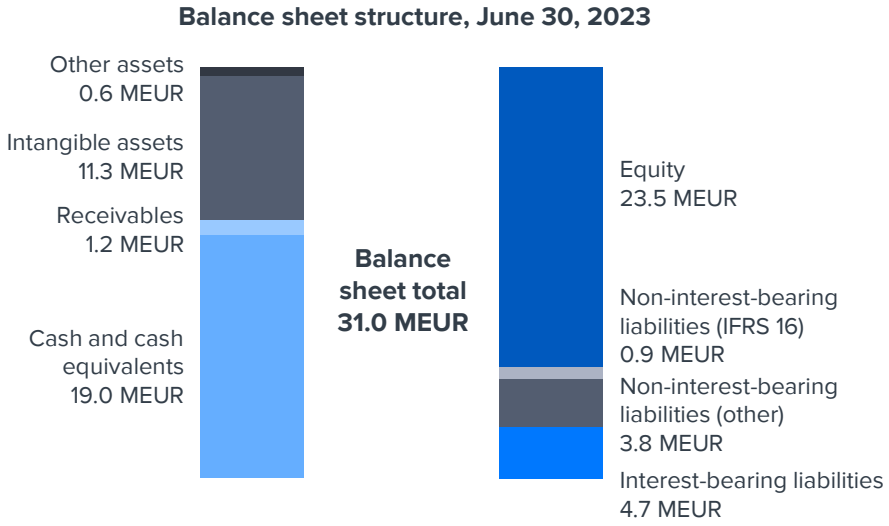


- We believe the cost structure has significant scalability potential across the board as the business grows.
- Materials and services mainly include cloud computing costs related to the sale of software and external services. This is the only cost item in the company where we see limited room for scalability (the need grows with revenue).
- The majority of personnel expenses are related to product development and, increasingly, sales and marketing. Product development personnel costs are mainly capitalized in the balance sheet (excluding costs covered by grants), so that a portion of Aiforia's personnel costs is reflected in the income statement under depreciation with a time lag. The company will continue to capitalize product development costs and we expect the level of amortization to continue to increase. The company recognizes personnel costs and capitalizes stock options at the date of vesting (non-cash).
- Other operating expenses primarily include software development services purchased from third parties, as well as expenses related to administration, occupancy, IT, marketing and advertising. Other operating expenses related to product development have been capitalized in the balance sheet, except for the part for which direct grants have been received. The company's depreciation and amortization consists primarily of capitalized product development. Total intangible assets capitalized in H1/2023 amounted to 10.4 MEUR.

*Costs recognized in the income statement before EBIT **Investments in intangible and tangible assets
Source: Aiforia, Inderes. The figures are in FAS until 2021 and in IFRS from 2022 onwards.

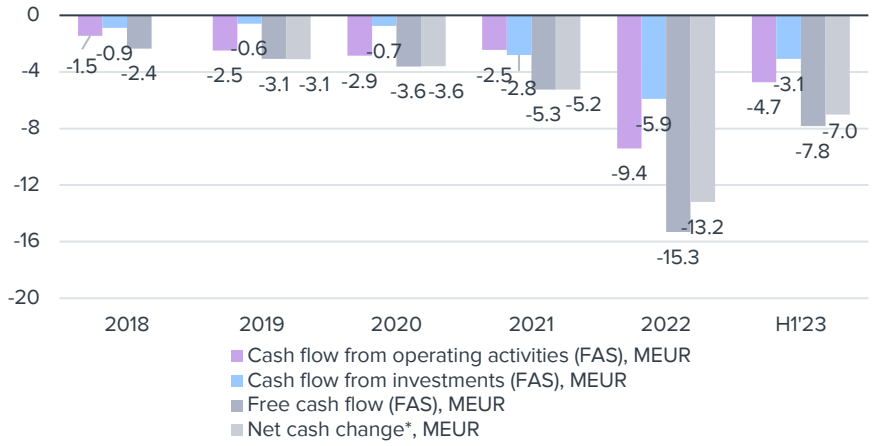
Financial position 2/2

Net debt free balance sheet is weighted towards cash and cash equivalents



- At the end of H1/23, cash and cash equivalents (19.0 MEUR), net cash excluding lease liabilities (15.0 MEUR) and net gearing (-64%) are still at a reasonable level. However, we estimate that the company will still need new funding during 2024.
  - Interest-bearing liabilities consist mainly of low-interest loans from Business Finland.
  - Aiforia has an estimated 5 MEUR of the product development loan granted by Business Finland 4/23 still available (maximum loan 7.3 MEUR).
- At the current stage of development, product development in particular ties up a significant amount of capital in intangible assets relative to revenue. We expect that intangible assets will continue to be a significant part of the asset side of the balance sheet, along with cash and cash equivalents.
- Working capital requirements are very low due to the upfront payments typical of the SaaS business model (customers are often billed 3-12 months in advance). Aiforia is already able to operate with negative net working capital (H1'23 -1.9 MEUR) due to the non-interest-bearing liabilities generated by the advance payments.

Cash flow development
2018-H1'2023, MEUR



- The company's cash flow is so far strongly negative due to the early stage of the company's development.
  - Aiforia is still investing heavily, especially in product development and sales and marketing on a near global scale, given its small revenues.
  - We expect the free cash flow trend to turn upward in 2024 through rapid revenue growth and cost control.
- In 2022, the product development investments capitalized amounted to EUR 5.8 million (FAS) and accounted for the lion's share of the company's investments. In 2022, capitalized product development investments amounted to 5.8 MEUR (FAS), representing the lion's share of the company's investments. So far, depreciation is lower than capitalization, and the company's cash flow is lower than its EBIT.

Source: Inderes, Aiforia. *Excluding the impact of the 2020-2021 share issues. Aiforia switched to IFRS accounting at the beginning of 2022.

Estimates 1/4

Revenue forecasts already on solid footing, but forecast risks remain high

Aiforia operates in a young growth market. We expect the digitization of pathology and the use of AI applications to grow significantly over the next decade. Aiforia has demonstrated its initial competitiveness and has won several significant customer wins in its markets, both on the clinical and preclinical side. We already see hard ground beneath the company's revenue growth. We see clear opportunities for Aiforia to become one of the long-term winners in its market.

At the same time, there is considerable uncertainty about the timing of the company's growth. The timing of new customer wins, the pace of customer software adoption expansion, and the timing of regulatory approvals to support growth are difficult to predict. It can take a long time to deploy AI-based applications on a large scale.

Aiforia's revenue growth relies primarily by clinical diagnostics customers, while the company's revenue through 2021 was chiefly driven by smaller preclinical customers. Another important change is the shift from smaller customers to larger customers (clinical laboratories, large pharmaceutical research companies), which require different capabilities from the organization. For these reasons, the company's history provides limited support for the forecasts. Our forecasts are based on a number of assumptions, the validity of which only time will tell. The assumptions apply to both revenue and investments required for growth. It is therefore important for the investor to be aware of the exceptionally high uncertainties in our estimates.

To meet our forecasts, the company needs to be among the few winners in the market

Our forecasts are based on a scenario in which the implementation of Aiforia's strategy is an excellent success. To do this, the company must build and significantly scale new sales channels (large customers and distribution partners) while developing and maintaining the competitiveness of its product. This is expected to position the company as one of the winners in the clinical image recognition software market.

We believe that Aiforia is on this path in the short term, but the progress of the journey needs to be monitored closely. In our view, the exceptionally high level of risk in our forecasts must therefore be offset by a much higher-than-usual required return.

Key estimate drivers

We are forecasting Aiforia's revenue as a single item as the company does not yet publish revenue breakdowns. We make assumptions about the number of large, medium and small customers and the evolution of annual billings per customer. 1-3 years ahead, we rely on announced customers in our forecasts. Prepayments and the order book also give an indication of the evolution of revenue, but only partially (not all growth in order books). Customers below the reporting threshold are accounted for based on their assumed number and average bill. We are only focused on digital pathology customers and use cases in other areas remain a positive option outside of our forecasts.

Drivers for income statement estimates

Estimate	Key parameters
Revenue	• Number of customers won by size class • Development of customer-specific invoicing
Costs	• Number of personnel • Personnel costs per person • Other operating costs per person • Development of product development capitalization (5v straight-line depreciation)

Defining customer groups for estimates

Customer size to trigger a stock exchange release (Inderes estimate)

Customer group and potential	Description	Number* in the main market
Large customers (ARR >500 TEUR)	• **Large clinical clients** (hospital group or larger individual hospital)	~50-200
Medium-sized customers (ARR 50-500 TEUR)	• **Small and medium-sized clinical clients** (single small or medium-sized hospital) • **Large preclinical clients** (e.g. large pharmaceutical companies)	~5,000 - 10,000
Small customers (ARR < 50 TEUR)	• **Smaller preclinical clients** (e.g. study groups)	~500-1,000

*Figures are indicative. Main markets: North America and Western Europe.
Source: Inderes estimate, Statista, media sources, Aiforia

Estimates 2/4

Our revenue forecasts over 3 years are based on assumptions about the number of large and midsize customers won and the development of annual billings. Our forecast of annual billings is based on assumptions regarding the coverage of the Aiforia software (% of samples for which an image recognition model is available for analysis) and the time required to expand the use of the software. The customer groups* and the annual recurring revenue (ARR) they generate are shown on the right.

In our model, Aiforia's profitability is determined in particular by the development of personnel-related fixed costs in relation to revenue. We forecast headcount by comparing the number of employees to the company's revenue growth. We forecast personnel costs and other operating expenses using the development of unit costs. The depreciation trend is based on our forecast level of product development capitalization.

Our measure of profitability is operating profit, which includes the cost of product development capitalized through amortization. In our view, rental costs (IFRS 16), which are only included in financial expenses, are immaterial in the overall picture.

Key assumptions underlying the estimates

By early 2024, Aiforia has announced a handful of large clinical accounts (Mayo Clinic, NHS, Veneto/Italy). We use data from the Mayo Clinic to gauge the value of a large clinical case.

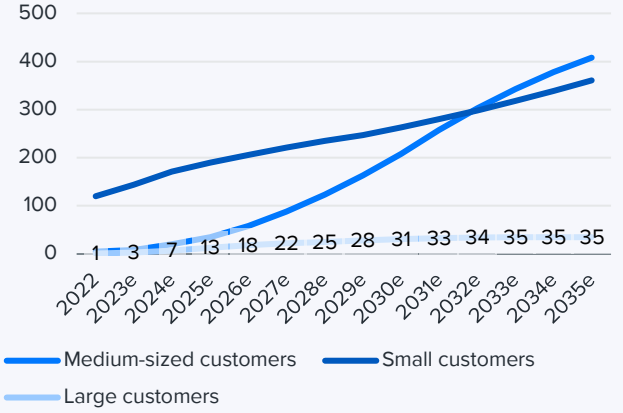
According to Aiforia, the Mayo Clinic processes approximately 2.6 million pathology samples each year. The account is very large, as the company estimates the total number of units in Finland to be around 1.6 million. According to the World Foundation for Cancer Research, samples from the five most common cancers[1] account for roughly 50% of the total number of samples processed in clinical pathology.

According to Aiforia, covering one type of cancer requires about 1-10 separate models (we assume an average of 5). Aiforia has released 5 CE-IVD approved image recognition models for clinical use (mainly in EU countries), with major customers such as the Mayo Clinic also building and validating their own models (Mayo Clinic: 3 models in use 2/2024). We expect the company and its key customers to have around 15 image recognition models in clinical use in the next few years (2024-25). In this case, we estimate that the potential sample coverage in the coming years would be 30% of all samples.

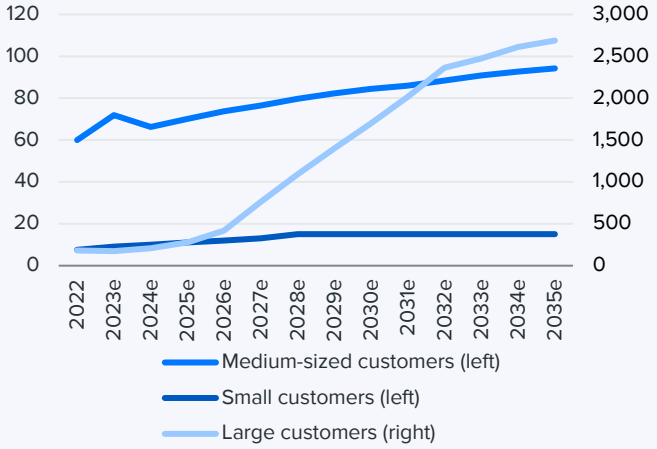
Aiforia has estimated its revenue potential at EUR 5-10 per sample analyzed. Using the bottom line of the estimate, we get an annual billing potential for a large customer the size of Mayo Clinic of about 3-4 MEUR per year in the coming years.

Aiforia aims for 80% coverage of the pathology sample stream in the medium term (~2030). In fact, the company's annualized revenue per major customer could grow well above our estimate (>10 MEUR) in the coming years. We are more cautious in our forecast assumptions as we expect Aiforia's future large accounts to be much smaller on average than Mayo Clinic. For medium-sized customers, we assume a typical customer potential of around 50-200 TEUR per year.

Estimate assumptions for number of customers,
2022-2035e, cumulative #



Average billing forecast assumptions,
2022-2035e, TEUR / customer / year



Source: Inderes
NB! Aiforia itself does not report the customer breakdown, the figures in the tables are based entirely on our assumptions.
1 Breast, lung, prostate, skin and gastrointestinal cancers.

Estimates 3/4

Expanding the use of Aiforia's software will take time, and we expect each major account to reach its potential (based on current model coverage) within ~3-4 years of winning the account. We expect medium sized customers to progress faster (~18 months to potential).

For small customers, we get support for our assumptions from Aiforia's past business. In 2021, the company's business (1.0 MEUR revenue, ~100 customers, ~10 TEUR per customer) would still consist to a significant extent of smaller customers, so the figures calculated here form the basis of our assumptions for the small customer segment.

Focus on turning business into stronger growth in 2023-2024

In the short term, Aiforia is developing its products, trying to sell itself to new large customers, and increasing its customer base. Won contracts with Mayo Clinic, NHS and Veneto (see page 10) will provide some visibility and a basis for growth in these years as well. However, we still expect the company's revenue growth to be moderate in absolute terms in the near term, given the time it takes to acquire these customers and the somewhat limited number of off-the-shelf image recognition models available. We forecast Aiforia's revenue to grow by 56% and 79% annually from the low base in 2023 and 2024, respectively, to reach 4.5 MEUR in 2023. We expect revenue growth to be concentrated on large customers in North America and Western Europe.

Due to strong growth efforts, mainly related to personnel, we forecast Aiforia's operating result to be significantly below break-even in 2023 and 2024, at -12.6 MEUR and -11.2 MEUR, respectively. The company has implemented cost-cutting measures, especially toward the end of 2023, so we expect the loss to narrow in 2024. For H2/2023, we forecast a revenue of 1.55 MEUR (+50% y/y) and EBIT of -6.2 MEUR, based on the progress of the Mayo and Veneto ramp-ups.

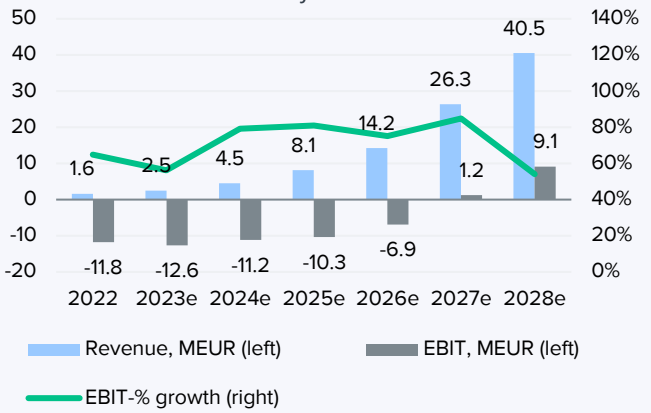
Measuring commercial success and becoming profitable between 2025 and 2028

We forecast Aiforia's annual revenue growth to be around 74% in 2025-28 and revenue to grow to 40.5 MEUR. The visibility to growth over this period will begin to clear if the company demonstrates its ability to grow revenue per customer and continue to win new large customers, in line with our expectations, especially between 2024 and 2025.

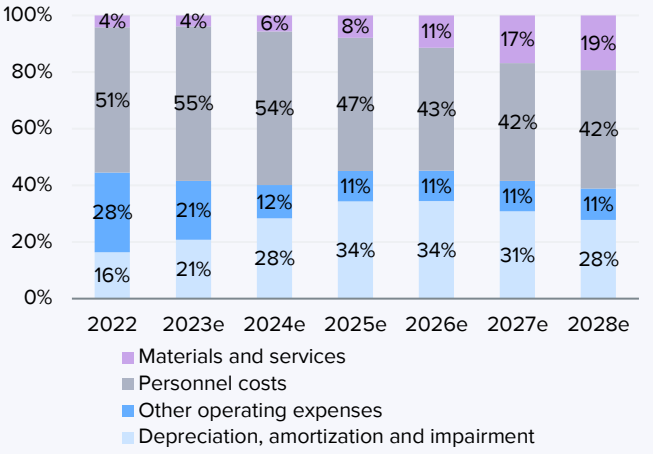
In our forecasts, growth over the period will continue to be driven primarily by large clinical customers and, particularly from 2026, by a significant increase in revenue per customer. We estimate that Aiforia has received regulatory approvals for a significant number of image recognition models and that the first large customers are beginning to realize their potential.

At the same time, we expect Aiforia's cost structure to scale as the company's headcount grows at a much slower rate than its high-cost revenue. We expect operating profit to turn positive in 2027 as operations reach sufficient scale in line with the company's goals (profitable business by the end of 2027). In 2028, we expect the operating profit to reach 9.1 MEUR or 23% of revenue.

Revenue and EBIT estimates,
2022-2028e, MEUR and % of the previous year



Development of cost structure
% of operative costs 2022-2028e



*Costs recognized in the income statement before operating profit
Source: Inderes

Estimates 4/4

We believe that Aiforia has already made a significant organizational expansion by the end of 2023, but high growth targets will require hiring across all functions in the coming years. In particular, sales and customer work (services and customer relationship management) will require additional pairs of hands, given the still relatively product-oriented distribution of staff. If growth is successful, we expect product development to increase significantly from the level at the end of 2023.

In the longer term, the conditions for continued growth remain in place

Between 2028 and 2031, we expect Aiforia's growth to slow as the company increases in size and market share, to around 27% per year. We expect growth to be driven fairly evenly by large and medium-sized customers. In 2032-36, we expect revenue growth to mature significantly to around 9% per year, reflecting our assumption of a gradual maturation of the market (digital pathology image recognition) after the strongest growth years.

We forecast Aiforia's revenues to be around 74 MEUR in 2030, below the company's target (>100 MEUR ~2030), and around 143 MEUR in 2036. As growth investments slow, we expect the EBIT margin to rise to 23-35% between 2028 and 2032, leveling off at 28% in 2036.

New capital will still be raised in the coming years, but in moderation and from a rather good position

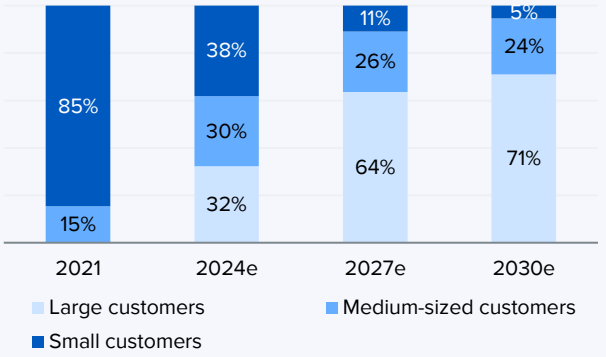
Aiforia's financial position (around 10-15 MEUR at the end of 2023) is still reasonable (H1'23 net cash: 15 MEUR vs. H2' 23e: 5-6 MEUR, plus 7.3 MEUR Business Finland loans). The company aims to achieve positive operating cash flow by the end of 2025. In practice, if the targets are met, the company would generate positive cash flow from operating activities in 2026, which is in line with our forecast. We expect the company to make investments (product development capitalizations) of around 7-8 MEUR per year, so that FCF would only turn positive in 2027.

However, based on our current forecasts, the company would need new funding during 2024. By 2027, we estimate that around 15-20 MEUR of new funding will be required (assumed exercise of options will provide around 5-7 MEUR of additional funding). The amount is reasonable in relation to the market value of the company (~90 MEUR) and with good execution of the strategy, we believe the company is well positioned to raise funds. Of course, the situation can change if the company encounters adversity or growth is better than expected, in which case the amount of dilution will vary.

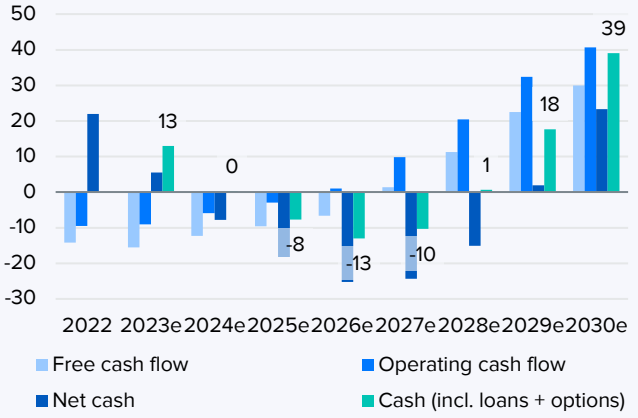
Dilution expected from option schemes, but also some additional funding

Aiforia's management option plans include a maximum number of options corresponding to roughly 3.6 million new shares. The resulting dilution would be approximately 14% for the share volume at the end of 2023, or approximately 6% at the time of publication of this report, taking into account the subscription prices. We include options in our projections of the number of shares of the company for their estimated net effect. The cash impact of the options of up to 8 MEUR is considered separately when commenting on the company's financial position (e.g. chart on the right).

Development of customer structure,
2021-2030e, % of revenue



Development of cash flow and financial position*,
2022-2030e, MEUR



Source: Inderes' estimates
*The impact of options on the financial position is linked to the realization of subscriptions, which may be slower than we forecast.

Income statement and estimate revisions

Income statement	H1'21	H2'21	2021	H1'22	H2'22	2022	H1'23	H2'23e	2023e	2024e	2025e	2026e
Revenue	**0.4**	**0.5**	**1.0**	**0.6**	**1.0**	**1.6**	**1.0**	**1.5**	**2.5**	**4.5**	**8.1**	**14.2**
EBITDA	**-1.3**	**-2.2**	**-3.5**	**-4.0**	**-5.5**	**-9.5**	**-5.0**	**-4.5**	**-9.4**	**-6.7**	**-4.0**	**0.4**
Depreciation	-0.6	-0.7	-1.2	-0.9	-1.3	-2.2	-1.4	-1.8	-3.2	-4.5	-6.4	-7.3
EBIT (excl. NRI)	**-1.9**	**-2.8**	**-4.7**	**-4.9**	**-6.9**	**-11.8**	**-6.4**	**-6.2**	**-12.6**	**-11.2**	**-10.3**	**-6.9**
EBIT	**-1.9**	**-2.8**	**-4.7**	**-4.9**	**-6.9**	**-11.8**	**-6.4**	**-6.2**	**-12.6**	**-11.2**	**-10.3**	**-6.9**
Net financial items	-0.5	-2.4	-2.9	0.0	-0.4	-0.4	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3
PTP	**-2.3**	**-5.2**	**-7.6**	**-4.9**	**-7.3**	**-12.2**	**-6.5**	**-6.3**	**-12.8**	**-11.4**	**-10.6**	**-7.2**
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net earnings	**-2.3**	**-5.2**	**-7.6**	**-4.9**	**-7.3**	**-12.2**	**-6.5**	**-6.3**	**-12.9**	**-11.4**	**-10.6**	**-7.2**
EPS (adj.)				**-0.19**	**-0.28**	**-0.47**	**-0.25**	**-0.24**	**-0.50**	**-0.43**	**-0.39**	**-0.26**
EPS (rep.)				**-0.19**	**-0.28**	**-0.47**	**-0.25**	**-0.24**	**-0.50**	**-0.43**	**-0.39**	**-0.26**

Key figures	H1'21	H2'21	2021	H1'22	H2'22	2022	H1'23	H2'23e	2023e	2024e	2025e	2026e
Revenue growth-%	-4.3 %		14.7 %	34.7 %	88.3 %	64.9 %	67.4 %	50.0 %	56.2 %	79.2 %	81.0 %	75.1 %
Adjusted EBIT growth-%	53.7 %		78.1 %	163.9 %	142.0 %	150.7 %	31.1 %	-9.5 %	7.4 %	-11.4 %	-7.7 %	-33.0 %
EBITDA-%	-299.8 %	-396.5 %	-354.2 %	-695.8 %	-536.2 %	-593.3 %	-517.3 %	-288.4 %	-376.1 %	-148.6 %	-48.6 %	2.5 %
Adjusted EBIT-%	-434.3 %	-518.1 %	-481.4 %	-850.7 %	-665.8 %	-731.9 %	-666.4 %	-401.5 %	-503.0 %	-248.7 %	-126.9 %	-48.6 %
Net earnings-%	-550.0 %	-954.7 %	-777.7 %	-846.5 %	-707.1 %	-756.9 %	-679.8 %	-408.6 %	-512.5 %	-254.1 %	-130.6 %	-50.7 %

Source: Inderes

Estimate revisions	2023e	2023e	Change	2024e	2024e	Change	2025e	2025e	Change
MEUR / EUR	**Old**	**New**	**%**	**Old**	**New**	**%**	**Old**	**New**	**%**
Revenue	2.7	2.5	-8%	5.1	4.5	-12%	9.0	8.1	-9%
EBITDA	-9.0	-9.4	-5%	-7.6	-6.7	12%	-4.3	-4.0	8%
EBIT (exc. NRIs)	-12.1	-12.6	-5%	-12.0	-11.2	7%	-10.6	-10.3	3%
EBIT	-12.1	-12.6	-5%	-12.0	-11.2	7%	-10.6	-10.3	3%
PTP	-12.2	-12.8	-5%	-12.2	-11.4	7%	-10.9	-10.6	3%
EPS (excl. NRIs)	-0.47	-0.50	-5%	-0.46	-0.43	7%	-0.40	-0.39	3%
DPS	0.00	0.00		0.00	0.00		0.00	0.00	

Source: Inderes

- We changed our forecast to IFRS, under which Aiforia will report from H2/2023 onwards.
- We have lowered our revenue estimates for the next several years after reassessing the realistic pace of the company's customer wins.
- However, our cost forecasts decreased more than revenue forecasts, as the company has made cost savings and moderated its investments compared to our previous expectations.
- Our long-term forecasts changed less.

Balance sheet

Assets	2021	2022	2023e	2024e	2025e
Non-current assets	**4.8**	**10.2**	**14.3**	**16.9**	**17.7**
Goodwill	0.0	0.0	0.0	0.0	0.0
Intangible assets	4.8	8.7	11.5	12.7	12.7
Tangible assets	0.0	1.5	2.8	4.3	5.0
Associated companies	0.0	0.0	0.0	0.0	0.0
Other investments	0.0	0.0	0.0	0.0	0.0
Other non-current assets	0.0	0.1	0.0	0.0	0.0
Deferred tax assets	0.0	0.0	0.0	0.0	0.0
Current assets	**39.1**	**26.3**	**15.0**	**8.1**	**10.6**
Inventories	0.0	0.0	0.0	0.0	0.0
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	1.0	1.6	1.8	2.1	2.6
Cash and equivalents	38.1	24.7	13.2	6.0	8.0
Balance sheet total	**43.9**	**36.5**	**29.3**	**25.1**	**28.3**

Source: Inderes

Liabilities & equity	2021	2022	2023e	2024e	2025e
Equity	**37.9**	**29.3**	**16.4**	**5.0**	**-5.6**
Share capital	0.1	0.1	0.1	0.1	0.1
Retained earnings	-15.8	-26.5	-39.4	-50.8	-61.4
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	53.7	55.7	55.7	55.7	55.7
Minorities	0.0	0.0	0.0	0.0	0.0
Non-current liabilities	**2.7**	**3.0**	**8.5**	**13.9**	**23.8**
Deferred tax liabilities	0.0	0.0	0.0	0.0	0.0
Provisions	0.0	0.0	0.0	0.0	0.0
Interest bearing debt	2.7	2.2	7.7	13.0	23.0
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	0.0	0.8	0.8	0.8	0.8
Current liabilities	**3.3**	**4.2**	**4.3**	**6.2**	**10.1**
Interest bearing debt	0.2	0.5	0.0	0.8	3.2
Payables	3.1	3.5	4.1	5.2	6.6
Other current liabilities	0.0	0.2	0.2	0.2	0.2
Balance sheet total	**43.9**	**36.5**	**29.3**	**25.1**	**28.3**

Investment profile

1. **Significant market potential for increasing automation in the defensive healthcare market**
2. **Early evidence of product competitiveness in preclinical and winning clinical tenders**
3. **A clear path to growth, particularly by increasing the number of clinical wins and sample types supported**
4. **SaaS business model provides continuity and scalability as growth is successful**
5. **High risk: business is still being built, predictability is low, and valuation is based on future promises**

Potential

- Significant market potential in increasing automation in pathology
- Early evidence of the product's competitiveness
- Plenty of room for growth especially increasing the number of sample types supported by clinical customers and technology
- SaaS business model provides continuity and scalability as growth is successful
- Attractiveness as an acquisition target in a highly valued sector

Risks

- The business is only being built and the company's valuation virtually relies on future promises
- Falling behind ambitious objectives and drop in valuation that relies on successful strong growth
- Slower than expected progress in the implementation of new technology in a conservative industry, tightening regulations
- Competing technologies, changes in the company's position in the value chain of digital pathology, key personnel risks
- Data breach including personal health data
- Cash flow still strongly negative, which increases financing risk

Source: Inderes

Valuation and recommendation 1/5

Valuation relies on uncertain future potential

We believe that Aiforia's valuation is based on the expectation of scalable growth. The company has already succeeded in winning clinical customers (Mayo Clinic, NHS, Veneto...) and bringing its technology to them, so the first signs of the company's competitiveness in the market are very promising. On this basis, we believe that the company's future potential can be well priced into the stock. On the other hand, commercialization is still in its early stages and the rate of customer growth is still uncertain. Expectations about the cash flows generated by Aiforia's business, and therefore the value of the company, are based on highly uncertain cash flows that are more than a decade away.

In the current valuation of Aiforia, we believe it is essential to assess the value creation potential of the company's business, the likelihood of achieving that potential, and the market's willingness to price it. In our opinion, valuing Aiforia is very imprecise due to the large uncertainties in the forecast. In the short term, raising capital (and at what valuation) also affects expected returns by diluting existing shareholders.

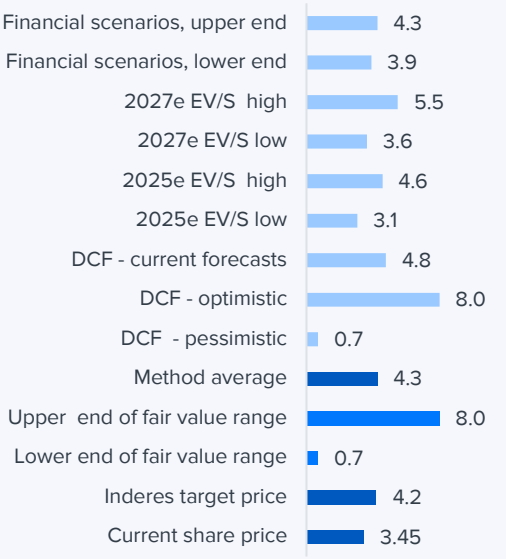
Aiforia is investing heavily in growth, which will weaken profitability even in the medium term. In our opinion, sales-based multiples (EV/sales) relative to growth and profitability are the best measure of a company's valuation. The role of earnings-based multiples, on the other hand, becomes more important only at a mature stage of development, as SaaS companies primarily invest in growth in their income statements.

Due to the early stage of development, even the sales-based multiples will not be supported for a few years, and we will have to rely on the 2025 and 2027 multiples. In our view, the valuation ranges estimated with future projections (especially the 2025 scenario) currently best help evaluate the fairness of the stock's current pricing, although they need to be considered with high forecast risks. In addition, the DCF model offers a maximum for the accepted valuation based on the company's long-term potential. We determine the DCF model with different scenarios, which gives an indication of the business development assumptions of the current valuation level.

The attractiveness of Aiforia as an acquisition target adds another dimension to the valuation. Thus, the valuation levels of the company's competitors provide a perspective on Aiforia's justified valuation level.

We have also assembled a peer group for Aiforia, who operate in the same sector as the company. We do not rely on peer valuations for our valuation, but the group we have assembled provides a cross-section of valuations of listed companies in the sector and companies at different stages of development. The group consists of two parts. First up are the listed peers in the digital pathology market: Sectra, ContextVision, Roche Holding and INIFY Laboratories. The second is software companies developing health technology, whose offering is largely built around artificial intelligence: Feedback, PainChek, Renalytix, LBT Innovations, Diagnos, CellaVision andySearch Laboratories.

Summary of valuation methods,
EUR/share

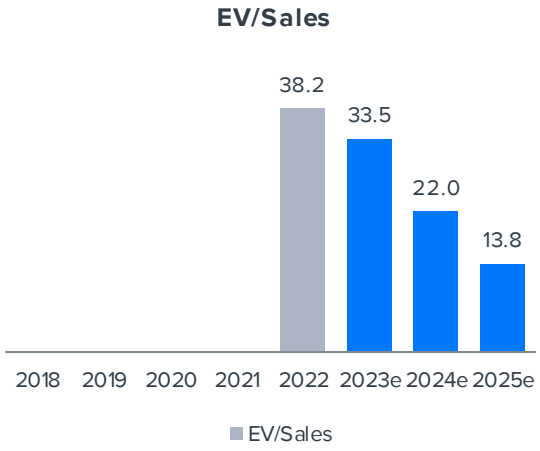


Source: Inderes

Valuation table

Valuation	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e
Share price				5.22	3.23	**3.45**	**3.45**	**3.45**	**3.45**
Number of shares, millions				25.8	25.8	**26.0**	**26.4**	**27.2**	**27.5**
Market cap				135	83	**90**	**91**	**94**	**95**
EV				99	61	**84**	**99**	**112**	**120**
P/E (adj.)				neg.	neg.	**neg.**	**neg.**	**neg.**	**neg.**
P/E				neg.	neg.	**neg.**	**neg.**	**neg.**	**neg.**
P/B				3.5	2.8	**5.4**	**18.1**	**neg.**	**neg.**
P/S				>100	51.9	**35.7**	**20.2**	**11.6**	**6.7**
EV/Sales					38.2	**33.5**	**22.0**	**13.8**	**8.4**
EV/EBITDA				neg.	neg.	**neg.**	**neg.**	**neg.**	**>100**
EV/EBIT (adj.)				neg.	neg.	**neg.**	**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



Valuation and recommendation 2/5

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

Short-term multiples do not yet support Aiforia's valuation as the company's revenues are still small in absolute terms. As such, a broad peer group of SaaS companies would be available, but we believe this is not a suitable valuation metric until the company has matured into a period of more stable and predictable growth.

We approach Aiforia's multiples-based valuation through our 2025 and 2027 EV/S multiples and our forecasts. 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.

At a mature stage of development, we estimate that around 15-20x EV/EBIT multiples could be justified for Aiforia (e.g. RaySearch 16-22x, CellaVision 22-27x), which would be equivalent to an earnings yield of around 4-5%, supported by longer-term sustainable revenue growth of >5% enabled by the long tail of digitization in pathology. With an EBIT margin of 25-30%, this would imply a mature EV/Sales multiple of 3.8-6.0x.

We believe the higher sales-based multiples in the scenarios (see table at right) are justified given the company's highly scalable and recurring business model. However, especially in the high scenario, the company's outlook at the time of the review should remain at least in line with our current forecasts (2025e-2027e revenue CAGR 80%, 2027e-2030e 41% and 2030e EBIT% 34%). In the low scenario, Aiforia's growth and market environment would be correspondingly weaker at the time of the scenario.

The 2025 scenario is already quite close in time, although forecasting Aiforia is challenging even in the short term. By 2025, there will still be initial visibility through the potential of the won Mayo Clinic case. Based on our forecasts (2025e revenue of 8.1 MEUR), we estimate Aiforia's value per share at EUR 3.9-5.8 at the end of 2025 and EUR 3.1-4.6 discounted to the present. In our view, the current share price (EUR 3.45) reflects a high but justified expectation of strong growth in the coming years.

In contrast, the 2027 scenario is quite distant in time. Given the challenge in forecasting Aiforia's future figures, we see the scenario's support for the valuation as slightly weaker. The scenario still illustrates well the company's potential in the medium term. Based on our current forecasts (2027e revenue of 26.3 MEUR), we estimate a value per share of EUR 6.1-9.2 at the end of 2027 and EUR 3.6-5.5 discounted to the present.

In the scenarios, we assess the value they justify in the present. The key drivers for pricing the stock at this level are signs of growth in the company's business: how many significant customer accounts the company is able to win, and how those accounts progress toward increased software usage and revenue. To date (2022-2023), customer wins have been in line with our expectations, but customer ramp-up has been slower than expected.

Estimated future valuation ranges,
2025e and 2027e

2025e, MEUR	Low	High
Revenue	8.1	8.1
EV/S, LTM	**16**	**24**
EV/S, NTM	9.1	13.7
EV	130	195
Net cash	1.8	1.8
Market cap	132	197
Per share	**3.9**	**5.8**
Per share currently	**3.1**	**4.6**

2027e, MEUR	Low	High
Revenue	26.3	26.3
EV/S, LTM	**8**	**12**
EV/S, NTM	5.2	7.8
EV	211	316
Net cash	-4	-4
Market cap	206	312
Per share	**6.1**	**9.2**
Per share currently	**3.6**	**5.5**

Source: Inderes
NTM = next 12 months
LTM = last 12 months

The scenarios include 10 MEUR directed share issues for 2024 and 2025 (total 20 MEUR), assuming a valuation level of EUR 3.11/share (share price -10%).

Valuation and recommendation 3/5

In the scenarios, we have included two share issues of 10 MEUR for the years 2024 and 2025 (total 20 MEUR). We use the current share price (EUR 3.45) at a 10% discount (EUR 3.11) as our default valuation, which we believe would be a typical discount if the company were to raise funds immediately through a directed issue. We believe a directed issue is the most likely option. This assumption does not include the cost of the issuance, the impact of which is relatively small.

We have also gauged the value of the stock using different funding round valuations (see table at right). A valuation at the share price level (or higher) would be very realistic if there are still good signs of the company's strategy being implemented. Similarly, a 35% discount to the current price would be a normal rights issue discount. At this point in time, the valuation of the financing round does not have a significant impact on the value per share due to the modest financing needs.

M&A in the sector provide an alternative and speculative measure of valuation

We think Aiforia would be an interesting addition to the offerings of the big players in digital pathology, such as Sectra or Philips. The company is a potential acquisition target and an estimate of the value of the potential acquisition is one aspect of the justifiable valuation. However, we would like to point out that this is a speculative perspective on which we do not believe too much reliance should be placed.

In our view, funding rounds in the sector reflect the view of early-stage investors on valuations. In principle, early-stage investors have a different perspective than the typical stock market investor, who often looks at valuation based on earnings or revenue over a few years. Investors in early-stage companies are typically quite confident in the long-term potential of companies. In our view, the M&A in the sector do not reflect the pricing that typical stock market investors would accept for these companies.

So far, there have been few acquisitions in digital pathology where valuation would be public. According to CB Insights, PathAI raised funding in the 2019 round at a valuation of 375 MUSD. In 5/2021, the company raised a larger financing round of 165 MUSD than in the previous round. The valuation was not disclosed, but a similar dilution would have raised the valuation to the order of a billion dollars. After the strong capital market years of 2020-2021, several loss-making growth companies have raised financing at lower valuation levels. Most recently IBEX raised 55 MUSD on 9/2023 (valuation level not public, rough estimate probably 100-400 MUSD). Venturradar compiles a list of recent, mainly smaller funding rounds.

DCF value really sensitive to the applied required return

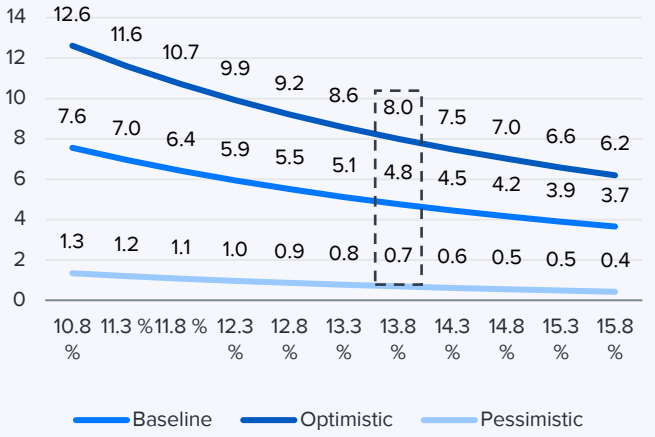
In Aiforia's valuation, the DCF illustrates long-term potential, and our model exceptionally continues for 15 years. We approach the DCF model through three scenarios. At the current stage of development, the model assumptions contain such significant uncertainties, and the cash flows are weighted over a decade (2033-> cash flows at a substantial 86% of the DCF) that we do not believe it provides a clear basis for a near-term valuation. The DCF model assumes that Aiforia closes its funding gap without dilution through debt, which we believe is unlikely.

Sensitivity of scenarios to valuation levels of 20 MEUR funding rounds in total, €/share at present

		Low		High		
		2025e	2027e	2025e	2027e	Average
Valuation level	Share price	3.1	3.7	4.7	5.6	**4.3**
	Share price -10%	3.1	3.6	4.6	5.5	**4.2**
	Share price -35%	2.9	3.4	4.3	5.1	**3.9**

Source: Inderes. Share price at the time of this report is EUR 3.45.

Sensitivity of the DCF value to the required return, EUR per share, WACC-%



Source: Inderes

Valuation and recommendation 4/5

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 Aiforia under our DCF model in the neutral scenario is 124 MEUR or EUR 4.8 per share.

In the optimistic scenario, we have increased our forecasts by around 20% for revenue and around 40% for EBIT over the entire forecast period compared to the baseline scenario. In this scenario, revenue reaches 185 MEUR in 2037 and EBIT margin reaches 35%. The value per share is then EUR 8.0. This scenario would require the market to form very quickly and Aiforia to succeed in becoming the clear market leader. Aiforia could also enter the scenario by rapidly expanding into markets outside the digital pathology.

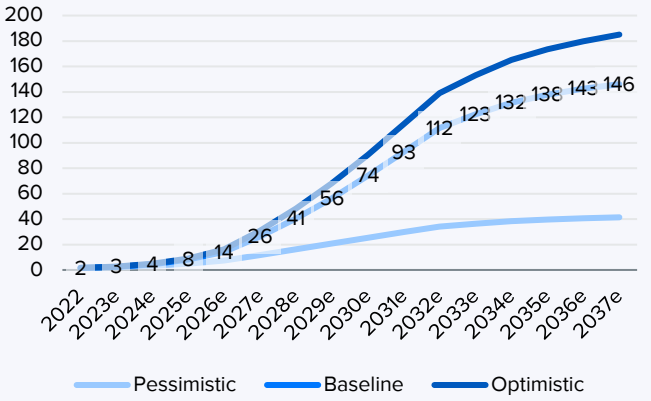
In the pessimistic scenario, we have lowered our forecasts compared to the baseline scenario by around 70% for revenue and around 85% for EBIT throughout the forecast period. In the scenario, revenue reaches 41 MEUR in 2037 and EBIT margin 25%. The value per share is then EUR 0.7. In the pessimistic scenario, market formation would be slower than in our baseline scenario and Aiforia's market share would also be weaker. We note that this scenario also includes significant expectations of successful growth.

The wide spread of scenarios reflects, in our view, the very significant risk and potential associated with a promising but early-stage investment story like Aiforia. Aiforia's future cash flows involve a high degree of uncertainty so we believe the expected return must be substantial. However, the company is already showing signs of being able to attract customers in the clinical customer segment, which is critical for growth. We use a WACC of 13.8% in our DCF model, based on a cost of equity of 14.3%, a leverage ratio of 5% and a cost of debt of 6%.

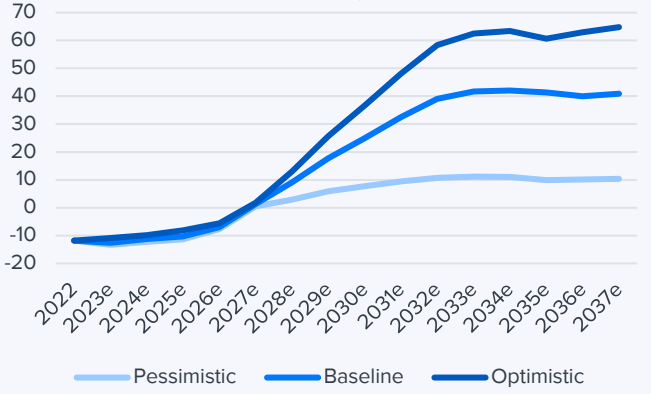
We see a clear downside to the WACC as Aiforia progresses with the commercialization of its products and provides further evidence of its ability to attract and grow, in particular, large customers (e.g. Mayo Clinic) to a significant size. Depending on the market environment and the stage of the company's development, the WACC could fall to 8-10% in the long term. The lower required return would also have a similar strong positive leverage on the company's DCF value, as can be seen in the graph on the previous page.

We expect Aiforia's growth to continue beyond our terminal period in a conservative market, with a DCF model terminal growth rate of 2.5% in 2037. For terminal profitability, we use an EBIT margin of 28%, which we see as a strong but very justifiable level for a scalable software company.

Revenue development in DCF scenarios,
2022-2037e, MEUR



Profitability development under different scenarios (EBIT),
2022-2037e, MEUR



Source: Inderes

Valuation and recommendation 5/5

Despite the clear risks, we believe the valuation justifies further purchases

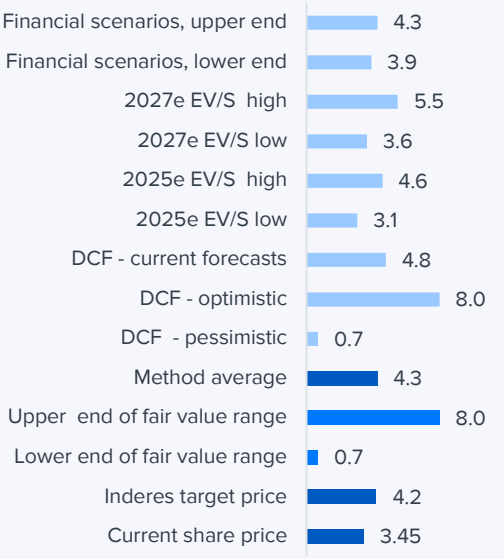
We believe Aiforia's long-term story is compelling, combining significant market potential in a defensive healthcare customer base with a product that looks competitive and scalable based on significant customer wins. In light of the valuation methods described in this section, which are mainly based on long-term potential, a wide range of EUR 0.7-8.0 per share could be justified for the company at present, based on a pessimistic DCF scenario at the low end and an optimistic one at the high end.

Aiforia's valuation is based on the expectation of future growth and consequently higher profitability. In our view, the pricing of this potential is tied to the development of the company's growth track record, which improves visibility and reduces the risks associated with successful growth. In 2022-23, the company has already provided good evidence of its ability to win significant clinical accounts. We expect the new customer wins and the strengthening trend in revenue to continue to provide good positive drivers for the coming 12 months.

Due to the early stage of commercial development, we believe that Aiforia's investors must have a very long investment horizon. In the medium term (~2027), the company's story will require significant growth in Aiforia usage by existing large customers and significant new customer wins. In this context, investors must be prepared to bear significant risks and uncertainties along the way, such as those we have listed in the Investment profile and Market and competitive landscape sections.

We reiterate our Accumulate recommendation and EUR 4.2 target price for Aiforia. The target price is close to the average of the valuation methods used. We consider the company's risk/reward profile to be attractive and expect further positive signs from the company's business. The financing round we expect from the company is still subject to risks. However, a moderate amount of funds raised relative to the market value of the company reduces the dilution risk to existing shareholders.

Summary of valuation methods,
EUR/share



Recommendation and target price

Recommendation

Accumulate
(previous Accumulate)

4.20 EUR
(previous EUR 4.20)

Share price:
3.45

Source: Inderes

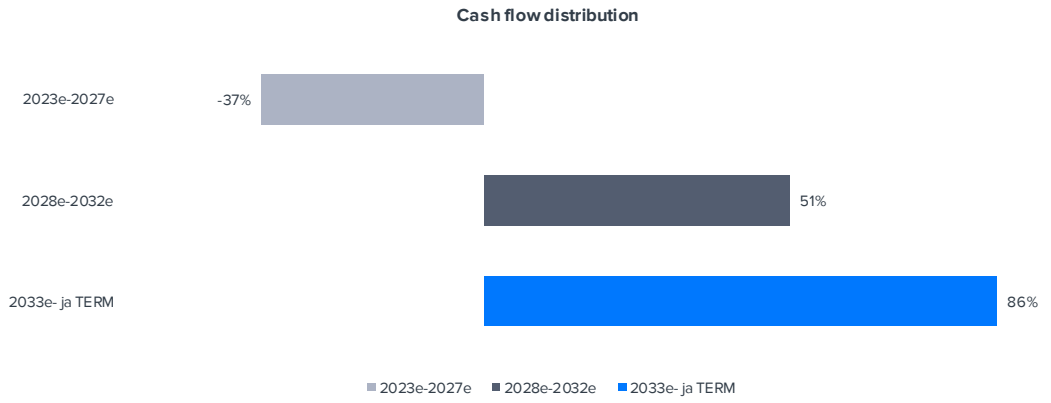
DCF calculation

DCF model	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	2036e	2037e	TERM
Revenue growth-%	64.9 %	56.2 %	79.2 %	81.0 %	75.1 %	84.8 %	54.0 %	38.9 %	31.6 %	25.3 %	20.3 %	9.7 %	7.4 %	4.8 %	3.4 %	2.5 %	2.5 %
EBIT-%	-731.9 %	-503.0 %	-248.7 %	-126.9 %	-48.6 %	4.7 %	22.5 %	31.5 %	33.7 %	35.0 %	35.0 %	34.0 %	32.0 %	30.0 %	28.0 %	28.0 %	28.0 %
EBIT (operating profit)	**-11.8**	**-12.6**	**-11.2**	**-10.3**	**-6.9**	**1.2**	**9.1**	**17.7**	**25.0**	**32.5**	**39.1**	**41.7**	**42.1**	**41.4**	**39.9**	**40.9**	
+ Depreciation	2.2	3.2	4.5	6.4	7.3	7.7	8.7	9.7	10.6	10.8	10.8	10.8	10.9	10.9	11.0	11.0	
- Paid taxes	0.0	0.0	0.0	0.0	0.0	0.2	1.8	2.6	2.5	-0.9	-7.8	-8.3	-8.4	-8.2	-7.9	-8.2	
- Tax, financial expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	
+ 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	0.0	0.4	0.7	1.0	0.7	0.6	0.7	2.4	2.7	2.8	2.8	1.6	1.4	0.9	0.7	0.5	
Operating cash flow	**-9.5**	**-9.0**	**-5.9**	**-3.0**	**1.1**	**9.8**	**20.4**	**32.4**	**40.7**	**45.2**	**44.9**	**45.8**	**45.9**	**45.0**	**43.6**	**44.2**	
+ Change in other long-term liabilities	0.8	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	-7.6	-7.3	-7.1	-7.2	-7.7	-8.4	-9.1	-9.9	-10.7	-10.8	-10.8	-10.8	-10.9	-10.9	-11.0	-11.0	
Free operating cash flow	**-16.3**	**-16.3**	**-13.1**	**-10.1**	**-6.7**	**1.4**	**11.3**	**22.5**	**29.9**	**34.4**	**34.1**	**35.0**	**35.0**	**34.0**	**32.7**	**33.2**	
+/- Other	2.1	0.8	0.8	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FCFF	-14.2	-15.5	-12.3	-9.6	-6.6	1.4	11.3	22.5	29.9	34.4	34.1	35.0	35.0	34.0	32.7	33.2	301
Discounted FCFF		**-15.8**	**-11.1**	**-7.6**	**-4.6**	**0.9**	**6.0**	**10.6**	**12.4**	**12.5**	**10.9**	**9.8**	**8.6**	**7.4**	**6.2**	**5.5**	**50.3**
Sum of FCFF present value		102	118	129	136	141	140	134	124	111	98.7	87.8	78.0	69.4	62.0	55.8	50.3

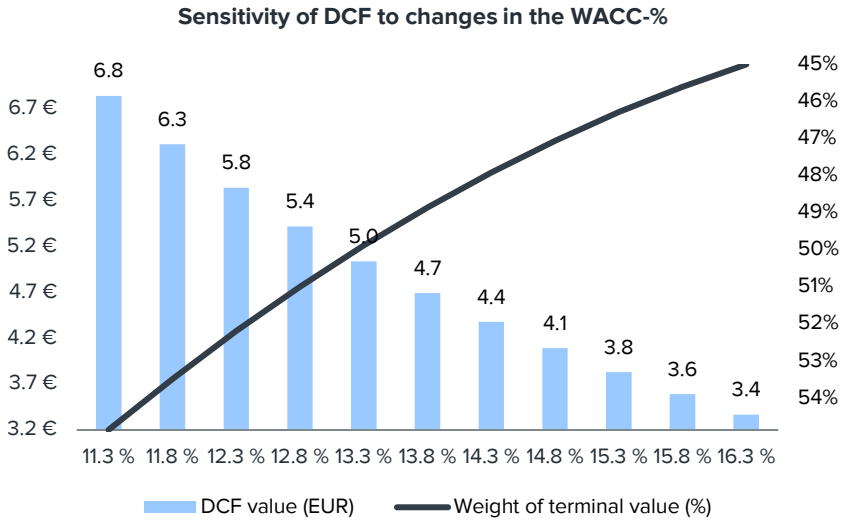
Enterprise value DCF	**102**
- Interest bearing debt	-2.7
+ Cash and cash equivalents	24.7
-Minorities	0.0
-Dividend/capital return	0.0
Equity value DCF	**124**
Equity value DCF per share	**4.8**

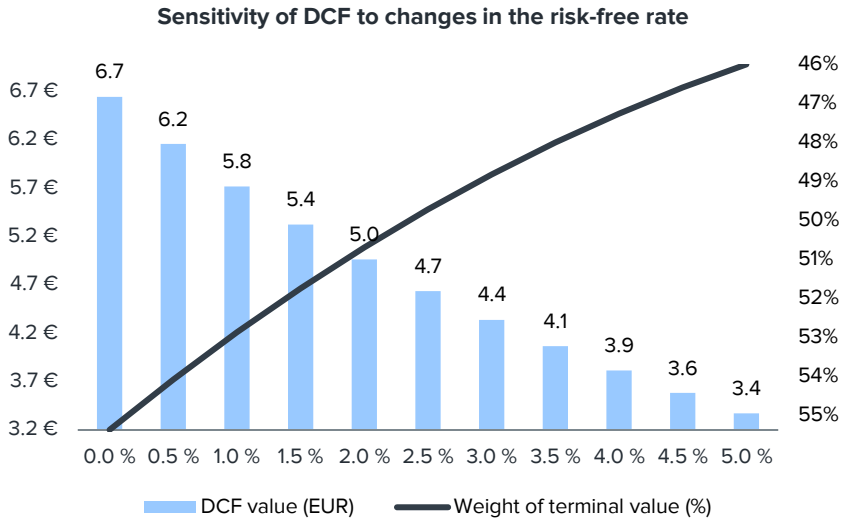
WACC	
Tax-% (WACC)	20.0 %
Target debt ratio (D/(D+E)	5.0 %
Cost of debt	6.0 %
Equity Beta	1.85
Market risk premium	4.75%
Liquidity premium	3.00%
Risk free interest rate	2.5 %
Cost of equity	**14.3 %**
Weighted average cost of capital (WACC)	**13.8 %**

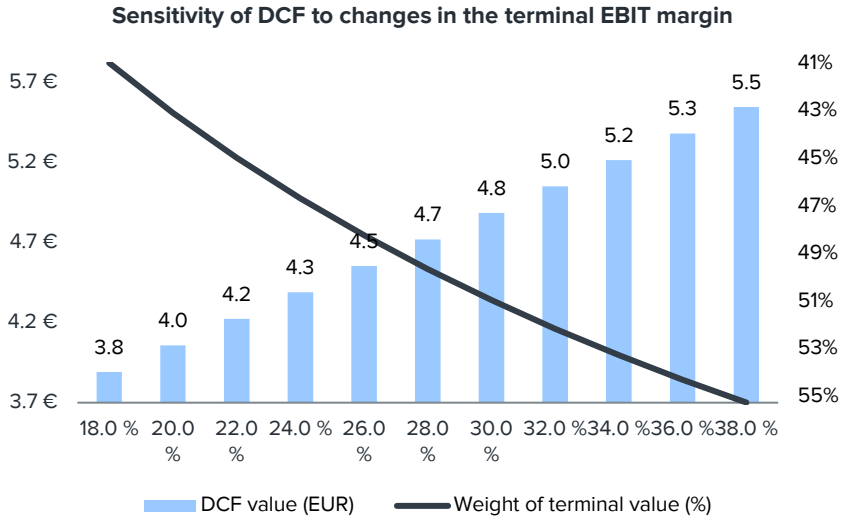
Source: Inderes

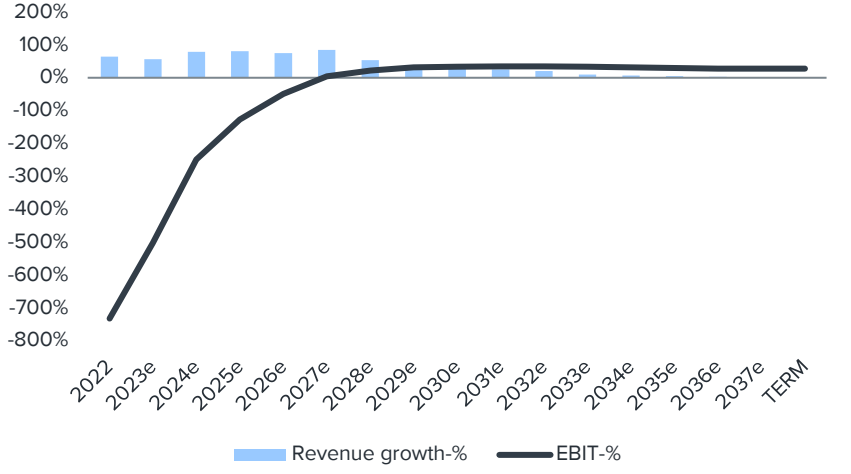


DCF sensitivity calculations and key assumptions in graphs









Source: Inderes. Note that the weight of the terminal value (%) is shown on an inverse scale for clarity.

Peer group valuation

Peer group valuation	Market cap	EV	EV/EBIT		EV/EBITDA		EV/S		Revenue growth-%		EBIT-%		Rule of 40
Company	**MEUR**	**MEUR**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2024e**
Sectra AB	3634	3592	72.6	57.9	65.6	57.0	14.6	12.8	18%	14%	20%	22%	36%
ContextVision AB	45	40	15.5	14.9	9.2	8.5	3.4	3.2	-1%	4%	22%	22%	26%
Roche Holding AG	198308	223654	10.7	9.9	9.3	8.7	3.5	3.3	1%	5%	33%	34%	39%
INIFY Laboratories AB									0%	0%	0%	0%	0%
Feedback PLC	11	2					1.4	0.9	48%	51%	-227%	-144%	-93%
PainChek Ltd	26	24		19.3			4.7	2.7	50%	72%	-22%	14%	86%
Renalytix PLC	33	20					3.6	1.5	72%	137%	-531%	-220%	-83%
Diagnos Inc	14	16				2.5	95.7	6.0		1541%			
CellaVision AB	552	547	27.4	22.3	23.2	19.3	7.8	6.9	20%	14%	29%	31%	45%
RaySearch Laboratories AB	314	332	21.9	16.5	7.8	6.8	3.3	3.0	12%	10%	15%	18%	28%
Aiforia Technologies Oyj (Inderes)	**90**	**84**	**-6.7**	**-8.8**	**-8.9**	**-14.8**	**33.5**	**22.0**	**56%**	**79%**	**-503%**	**-249%**	**-170%**
Average			**29.6**	**23.5**	**23.0**	**17.1**	**15.3**	**4.5**	**24%**	**185%**	**-73%**	**-25%**	
Median	**33.3**	**24.5**	**21.9**	**17.9**	**9.3**	**8.6**	**3.6**	**3.2**	**18%**	**14%**	**15%**	**18%**	**33%**
Diff-% to median	***169%***	***243%***	***-130%***	***-149%***	***-195%***	***-272%***	***836%***	***585%***	***212%***	***465%***			***-614%***

Source: Refinitiv / Inderes

Summary

Income statement	2020	2021	2022	2023e	2024e
Revenue	0.8	1.0	1.6	**2.5**	**4.5**
EBITDA	-1.6	-3.5	-9.5	**-9.4**	**-6.7**
EBIT	-2.6	-4.7	-11.8	**-12.6**	**-11.2**
PTP	-2.8	-7.6	-12.2	**-12.8**	**-11.4**
Net Income	-2.8	-7.6	-12.2	**-12.9**	**-11.4**
Extraordinary items	0.0	0.0	0.0	**0.0**	**0.0**

Balance sheet	2020	2021	2022	2023e	2024e
Balance sheet total	5.3	43.9	36.5	**29.3**	**25.1**
Equity capital	0.9	37.9	29.3	**16.4**	**5.0**
Goodwill	0.0	0.0	0.0	**0.0**	**0.0**
Net debt	1.3	-35.2	-22.0	**-5.5**	**7.8**

Cash flow	2020	2021	2022	2023e	2024e
EBITDA	-1.6	-3.5	-9.5	**-9.4**	**-6.7**
Change in working capital	-1.2	2.0	0.0	**0.4**	**0.7**
Operating cash flow	-2.8	-1.4	-9.5	**-9.0**	**-5.9**
CAPEX	-0.8	-3.8	-7.6	**-7.3**	**-7.1**
Free cash flow	-3.6	-5.3	-14.2	**-15.5**	**-12.3**

Valuation multiples	2020	2021	2022	2023e	2024e
EV/S		>100	38.2	**33.5**	**22.0**
EV/EBITDA (adj.)		neg.	neg.	**neg.**	**neg.**
EV/EBIT (adj.)		neg.	neg.	**neg.**	**neg.**
P/E (adj.)		neg.	neg.	**neg.**	**neg.**
P/B		3.5	2.8	**5.4**	**18.1**
Dividend-%		0.0 %	0.0 %	**0.0 %**	**0.0 %**

Source: Inderes

Per share data	2020	2021	2022	2023e	2024e
EPS (reported)		-0.29	-0.47	**-0.50**	**-0.43**
EPS (adj.)		-0.29	-0.47	**-0.50**	**-0.43**
OCF / share		-0.05	-0.37	**-0.35**	**-0.23**
FCF / share		-0.20	-0.55	**-0.60**	**-0.47**
Book value / share		1.47	1.13	**0.63**	**0.19**
Dividend / share		0.00	0.00	**0.00**	**0.00**

Growth and profitability	2020	2021	2022	2023e	2024e
Revenue growth-%	33%	15%	65%	**56%**	**79%**
EBITDA growth-%	-25%	114%	176%	**-1%**	**-29%**
EBIT (adj.) growth-%	-13%	78%	151%	**7%**	**-11%**
EPS (adj.) growth-%				**5%**	**-13%**
EBITDA-%	-189.8 %	-354.2 %	-593.3 %	**-376.1 %**	**-148.6 %**
EBIT (adj.)-%	-310.1 %	-481.4 %	-731.9 %	**-503.0 %**	**-248.7 %**
EBIT-%	-310.1 %	-481.4 %	-731.9 %	**-503.0 %**	**-248.7 %**
ROE-%	-386.3 %	-39.0 %	-36.2 %	**-56.2 %**	**-106.4 %**
ROI-%	-77.0 %	-20.9 %	-32.3 %	**-45.0 %**	**-52.0 %**
Equity ratio	16.8 %	86.4 %	80.3 %	**56.1 %**	**20.0 %**
Gearing	146.0 %	-92.8 %	-75.1 %	**-33.5 %**	**155.6 %**

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

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Recommendation history (>12 mo)

Date	Recommendation	Target	Share price
6/24/2022	Sell	4.00 €	4.58 €
8/26/2022	Reduce	4.00 €	3.52 €
12/3/2022	Reduce	4.00 €	3.50 €
3/3/2023	Accumulate	4.80 €	4.15 €
8/28/2023	Reduce	4.50 €	4.54 €
12/7/2023	Accumulate	4.20 €	3.45 €
2/29/2024	Accumulate	4.20 €	3.45 €

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