

MODULIGHT

06/30/2025 18:41 EEST

This is a translated version of the "Uutta kasvupohjaa rakentamassa" report, published on 07/01/2025



Antti Siltanen
+358 45 119 6869
antti.siltanen@inderes.fi

INDERES CORPORATE CUSTOMER

EXTENSIVE REPORT



Building a new growth base

Modulight is a technology company focused on the design and manufacture of lasers and optics with a strategic focus on medical and biomedical applications. The company aims to return to a path of profitable growth after difficult years following its listing. Recent reports have shown preliminary signs of improvement, although the turnaround involves significant uncertainty. Our valuation based on revenue-based multiples and cash flows suggests the stock is moderately undervalued. We reiterate our Accumulate recommendation and target price of EUR 1.5.

A technology company in the pharmaceutical and biomedical R&D and early commercialization phase

Since 2014, Modulight has strategically focused on medicine and biomedicine - in particular cancer and eye diseases. Its strengths include flexibility in design and production, a high level of manufacturing expertise and the integration of products with cloud services. Cloud services enable SaaS-style pay-per-treatment pricing and various support services. The company seeks close development partnerships with its clients, ranging from large global corporations to early-stage unlisted companies. Modulight's revenues depend on the progress of long and uncertain projects that, if successful, could lead to the commercialization of the company's lasers, for example as part of a new patient treatment. The company's revenue and earnings deteriorated strongly after the listing in 2021. Recent reports have shown initial signs of improvement.

We expect good growth and profitability in the long term

Visibility on the content and progress of Modulight's projects is limited, reflecting a high forecast risk. Our revenue forecast (2025e: 8.0 MEUR) is based, in the short term, on the announced order backlog growth, new device installations generating PPT

revenue, and an order related to quantum computing. For next year and beyond, visibility at this stage is still quite limited, and forecasts rely on highly uncertain assumptions. Achieving strong growth in the long term requires breakthroughs in new patient treatments and/or significant successes in the company's other focus areas.

The earnings turnaround is not yet quite around the corner

Despite the growth forecasts, the operating result continues to be in the red in our forecasts in the coming years (2025e: -5.8 MEUR). Earnings are depressed by the company's heavy cost structure compared to revenue and increasing depreciation due to the recent investment in a production plant. We expect a turn in EBITDA and cash flows in 2027 and a turn in earnings at the EBIT level one year later. Investments and losses have consumed the company's cash assets (net cash Q1'25: 10.6 MEUR) and we consider an additional financing round possible in the coming years. The company can, however, manage with its current financing, should the business turnaround progress favorably.

Opportunity for those willing to risk

The stock's valuation is very imprecise due to the uncertainty of earnings and cash flow turnaround. The valuation relies heavily on future projections, which carry a high degree of forecasting risk. Our fair value range, based on various methods, is EUR 0.6-3.7. EV/S multiples are 6.4x-5.1x for 2025-2026, which we find cautiously attractive due to the substantial growth potential. The DCF model suggests a moderate upside for the stock. We emphasize that a sufficient expected return on the stock requires a continuation of good performance, which is difficult to assess at this stage. The investment involves high risk, which can be realized if the budding growth slows down or is interrupted.

Recommendation

Accumulate

(was Accumulate)

Target price:

EUR 1.50

(was EUR 1.50)

Share price:

Share price: EUR 1.22

Business risk



Valuation risk



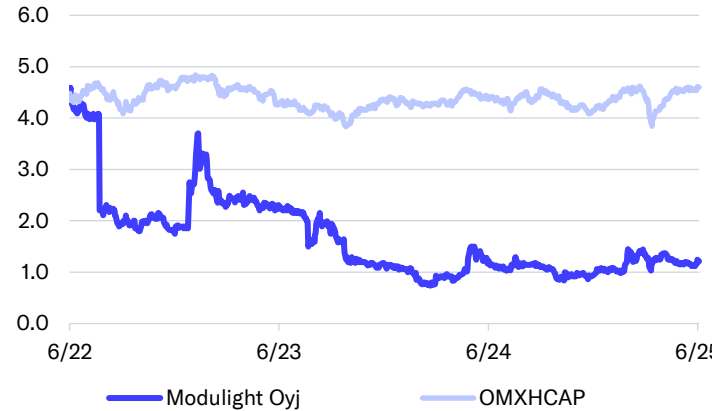
	2024	2025e	2026e	2027e
Revenue	4.1	8.0	10.8	15.3
growth-%	2%	95%	36%	41%
EBIT adj.	-8.3	-5.8	-4.6	-2.4
Net Income	-6.5	-5.4	-3.8	-2.0
EPS (adj.)	-0.15	-0.13	-0.09	-0.05
P/E (adj.)	neg.	neg.	neg.	neg.
P/B	1.0	1.2	1.3	1.4
Dividend yield-%	0.0 %	0.0 %	0.0 %	0.0 %
EV/EBIT (adj.)	neg.	neg.	neg.	neg.
EV/EBITDA	neg.	neg.	neg.	50.5
EV/S	8.3	5.8	4.6	3.4

Source: Inderes

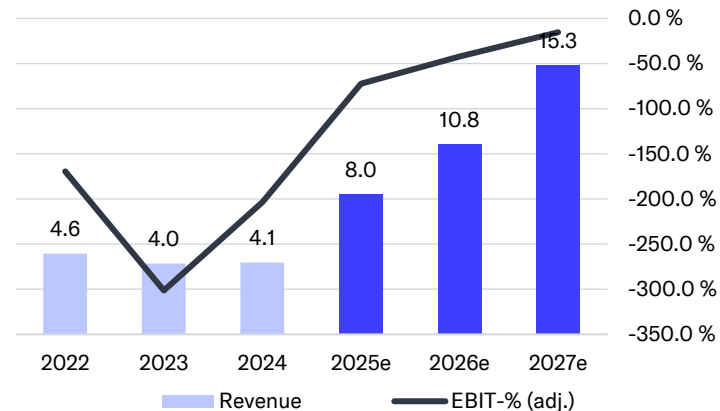
Guidance

Modulight does not provide any guidance.

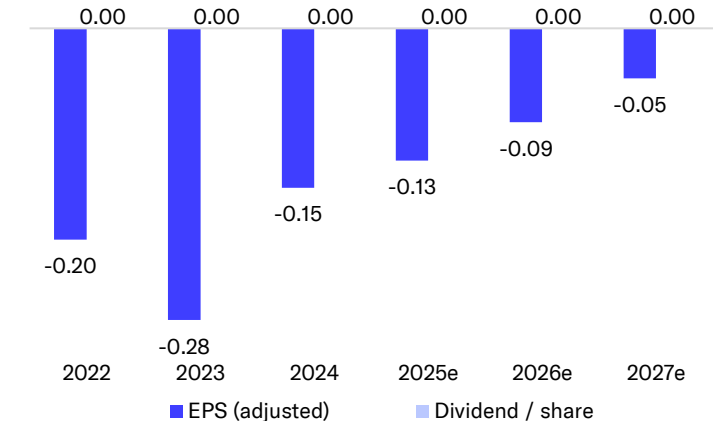
Share price



Revenue and EBIT-% (adj.)



EPS and dividend



Value drivers

- A defensive market with growth well into the future
- Technological expertise, ability to tailor products and build cloud services gives Modulight a competitive advantage
- A model based on license fees and pay-per-treatment pricing can be highly scalable if successful

Risk factors

- Medical development projects progress slowly, and their commercialization is uncertain.
- Growth is poorly predictable
- Low visibility of projects and their progress
- Immature and concentrated customer base brings more risk

Valuation	2025e	2026e	2027e
Share price	1.22	1.22	1.22
Number of shares, millions	42.6	42.6	42.6
Market cap	52	52	52
EV	46	50	52
P/E (adj.)	neg.	neg.	neg.
P/E	neg.	neg.	neg.
P/B	1.2	1.3	1.4
P/S	6.5	4.8	3.4
EV/Sales	5.8	4.6	3.4
EV/EBITDA	neg.	neg.	50.5
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

Company description and business model	6-14
Investment profile	15-16
Techology and products	17-20
Industry and competitive field	21-25
Strategy and financial objectives	26-27
Financial position	28-29
Estimates	30-34
Valuation and recommendation	35-41
Summary table	42
Disclaimer and recommendation history	43

Modulight in brief

Modulight is a Finnish technology company focused on the design and manufacture of lasers and optics. Modulight's strategic focus is on biomedical and medical solutions, but the company also supplies its products to other technology sectors.

2000

Year of establishment

2021

IPO

MEUR 4.1

Revenue 2024 (+2% vs 2023)

MEUR -8.3

Operating result 2024

66

Personnel at the end of 2024

8.3% 2023-2030

Market growth in photodynamic therapy (CAGR)

Strategic focus on biomedicin

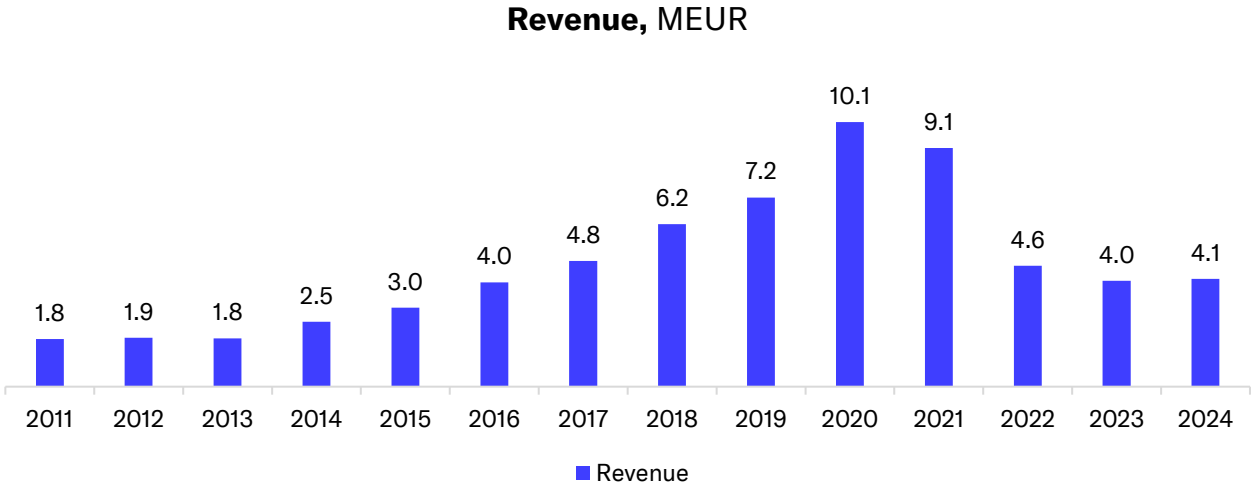
- 2000 The company is established
- The 2000s: Period of developing and piloting technologies and medical applications
- 2014 Strategic focus on medicine and biomedicine, US and large customers
- 2014CE marking for a laser platform for cancer medicine
- 2016 First cloud-based system deployment; FDA approval for cancer laser
- 2018 Ophthalmology agreement with Bausch & Lomb

Listing, implementing PPT model and investment phase

- 2019 CE marking for ophthalmic laser platform
- 2019 Launch of a 23 MEUR investment program in the production plant
- 2020 Profitable growth continued for a decade
- 2021 First North listing
- 2021 the company starts implementing a pay-per-treatment (PPT) model
- 2021-23 revenue and profitability decrease
- 2022 current strategy for 2023–25 is published

Pursuing a new growth phase

- 2023 FDA approval for Visudyne ophthalmic laser
- 2023 product development projects are progressing to Phase III clinical trial
- 2024 investment program for production plant is completed
- 2024–25 early signs of the business returning to the growth path
- 2025 0.8 MEUR contract for supplying prototype lasers for quantum computers
- 2025 the installed base of therapeutic lasers is growing



Business model 1/7

Laser technology company aims to get back on the growth track

Modulight is a Finnish technology company that designs, manufactures and sells laser products and optics. The company's products include semiconductors, laser modules and complete laser systems. The company has a particular strategic focus on medical and biomedicine applications, where it develops solutions for, e.g., the treatment of cancer and eye diseases. Modulight's core products are laser platforms that can be used to implement various treatments for, e.g., cancer and ophthalmology. The company also typically makes laser solutions that require customization as part of its customers' products. An example of such a solution is Hewlett Packard's laser printing machine.

Modulight received FDA approval (marketing authorization from the Food and Drug Administration in the US) in January 2023 for its ophthalmic laser to activate the photosensitive Bausch & Lomb drug Visudyne. The approval allows the company to start the actual commercialization of its first medical laser. Other medical applications are still in the R&D phase, and Modulight products are not yet routinely used to treat patients outside clinical trials and experimental treatments. Modulight's technology can also be applied to several other areas, like diagnostics, genetics, weather measurement, quantum computing, and various scientific applications. The company has reported commercial progress in, e.g., laser systems for quantum computers, microscopy imaging, and flow cytometers.

Modulight's headquarters and production plant are located in Tampere and the company had 66 employees at the end of Q1'25. Geographically, the company focuses particularly

on the US, where the markets are uniform and achievable prices are high compared to other developed countries.

The company was founded in 2000 and listed on the Nasdaq First North Growth Market in 2021. The company was profitable between 2011 and 2021 and also grew strongly during this period (CAGR 17.6%). However, the growth was interrupted in 2021-23 when revenue fell sharply and earnings turned negative. At the time of writing, the latest Q4'24 and Q1'25 reports have shown initial signs of a return to the growth path.

Modulight is profiled as a technology growth company in the product development and early scale-up phase. The markets the company is targeting are large, so the long-term growth potential is significant if the strategy succeeds. The profitability potential is excellent thanks to the pay-per-treatment (PPT) pricing model, although the model's practical effectiveness is still partially unproven. The investment's risk profile is high due to loss-making and uncertainty regarding the realization of growth targets. Financial risks are also increasing due to losses.

A vertically integrated operating model

Modulight has a vertically integrated business model, where the company is largely responsible for product development, design and manufacturing. The company has also handled sales itself in its main market, the US. Sales in the rest of the world take place mainly through distributors. With this operating model, Modulight aims to respond flexibly and quickly to the technological needs of its customers, which we believe are numerous due to the large number of laser applications, specific technological requirements, and the different sectors of the customer base. The actual applications are typically developed by Modulight in close cooperation with its customers.

Vertically integrated laser manufacturer



Modulight designs the products itself, often according to the customer's wishes. Agility and speed act as a differentiation factor from mass producers.



The company has its own new production facility, which enables scalable and traceable production and increases productivity.



The company's lasers are connected to a cloud service, which increases the functionality of the products.



Modulight's clients range from research institutions to mature and early-stage companies.



Medical applications are developed with the drug owner in stages on a project model, from the pre-clinical phase to a regulatory-approved treatment.



Technology applications are also typically developed together with the customer from an early prototype to a commercial product.




















Modulight has made a transition towards a SaaS-type pay-per-treatment pricing model (PPT model). Previously, the company mainly used a project-based earning model, where revenue is earned in stages according to progress.



Modulight aims to support product lifecycle management with services such as after-sales support, spare parts availability and software maintenance.

Source: Modulight / Inderes

Modulight's business areas and key products

		 Core areas	 Other growth areas	Examples of finished products	
Cloud services	Medicine, biomedicine and diagnostics	 Cancer medicine	 Fluorescence imaging	 ML7710	A laser platform in oncology, which can be customized with several lasers of different wavelengths.
		 Ophthalmology	 Flow cytometry		
		 Genomics, diagnostics, drug development	 Microscopy and other life science applications		
	Other high value added solutions	 Quantum computers	 Communications (5G, data centers)	 ML6710i	Ophthalmic laser for, e.g., retinal treatments. The device is controlled via an iPad.
			 Detection & measurement		
			 Other technology applications		
			 Digital presses		
				 ML8500	A bump plate reader for diagnostics and drug development applications.
				 ML6600	A three-wavelength laser system that can be used, e.g., in imaging, quantum computers or flow cytometers. Typically used in OEM projects.

Business model 2/7

Product development starts with an early-stage pilot study or, in a medical application, a pre-clinical (animal or cell model) phase. The development of the application will progress in stages towards actual commercialization. In medical applications, the company aims to obtain regulatory approval for the laser device together with a drug as part of the same treatment. Success in this would give Modulight a strong position as a laser supplier for a treatment package and the opportunity to generate revenue as part of the treatment's value creation.

In-house design and manufacturing for flexibility and service capability

Modulight manufactures its products in-house at its production facility in Tampere, Finland, which is located next to the company headquarters. According to the company, its in-house manufacturing is a key competitive advantage based on (1) the long-term accumulation of expertise in compound semiconductor lasers (gallium arsenide and indium phosphide) and product cloud connectivity, (2) control of the entire design and manufacturing process, (3) the ability and know-how to customize products (for example in terms of laser wavelength or optical power) and (4) ensuring the availability of products to customers throughout the product life cycle which could mean decades. In addition to the benefits mentioned above, maintaining one's own production plant naturally involves high fixed costs and, in the future, maintenance investments.

Modulight started a production plant investment in 2019, which was completed in 2024. The investment of approximately 23 MEUR is very significant considering the

size of the company. The high cost of the investment is explained by the very high standard of cleanrooms required for production and the equipment needed for production automation. In our view, the investment was mainly completed as planned.

The investment has increased Modulight's production capacity, productivity and production quality while reducing manual labor. The new production plant also enables the company to move to higher volume production series and, thus, supports the implementation of the company's growth strategy. However, we don't believe that Modulight is willing or able to challenge the major laser manufacturers on price-competitive products, but rather the company is seeking to specialize as a high-tech supplier, particularly for medical and life science applications. We estimate that the company will not fully benefit from the investment in the very short term, as the volumes of individual products will only increase significantly when the products enter the actual commercialization phase. It is difficult to estimate the timeframe for the full utilization of the new capacity, but it could take several years depending on the success of the commercialization of the products.

According to Modulight, certain materials it uses in its laser chips are of a quality and purity only available from a handful of suppliers worldwide. In our view, the company has a moderate supplier risk in the event of a deterioration in the availability of materials due to, for example, production disruptions or an escalation of geopolitical risks. Modulight said it experienced component shortages during the global supply chain disruptions in 2022. Since then, we believe these problems have not occurred.

The business model covers a significant part of the value chain



Innovation

Modulight develops laser technology solutions and cloud services for medical, biomedical and technology applications



Prototyping

Prototype customization and iterative development with the customer



Testing and validation

Researching safety and efficacy in patient trials; Validating and improving a technological product



Productization

Product design; data collection; production and sale of disposable and spare parts



Production

Production in compliance with regulatory requirements; traceability of production



Life cycle support

Warranty and after-sales services; user support and training; preventive maintenance and equipment calibration; recycling

Source: Modulight / Inderes

Business model 3/7

Customer base includes hospitals, research institutes and companies at various development stages

Modulight's customers include public and private hospitals and research institutions, early-stage companies and large companies in the mature development phase, e.g., in the pharmaceutical industry. Based on Modulight's Q1'25 report, the company had 31 customer projects that it believes have significant commercial potential (i.e. by the company's own definition, potential for at least 10 MEUR in annual revenue). According to Modulight, three of the project clients are hospitals or research institutes, nine are private companies, and 17 are listed companies.

We estimate that the vast majority of these projects are medical, biomedical and diagnostic projects in the Life Science area. We note that individual projects are uncertain to reach the commercialization stage (see table on page 12), and predictability is weak. So far, there have been hardly any project terminations. In our estimate, a minority of the projects are in other technology areas where Modulight's technology can be applied in a straightforward manner. We estimate that research institutes and hospitals are reliable customers, but have limited commercial potential. In our view, a significant proportion of private and listed companies are early-stage companies. They may include customers that are heavily dependent on external funding and therefore have a high risk profile as customers. Modulight wrote down projects for 4.5 MEUR in 2022, after which there have been no write-downs. In recent years, pharmaceutical development companies have faced

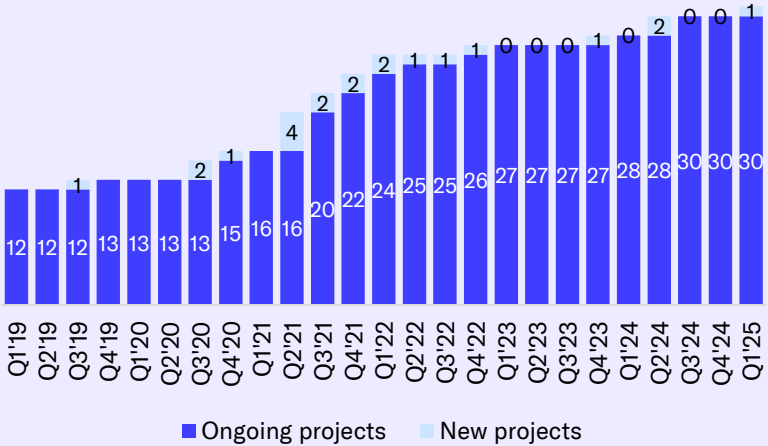
challenges in securing funding, which may affect the progress rate of Modulight's customers' projects.

The number of projects increased rapidly from thirteen to more than twenty between 2020 and 2021, with a relatively high number of new projects started. In recent years, growth has been steady, and the company has stated that it is more selective than before when it comes to projects. Reporting on the number of projects shows that almost all new projects have increased the total number of projects. This suggests that projects are of very long duration and have rarely been terminated.

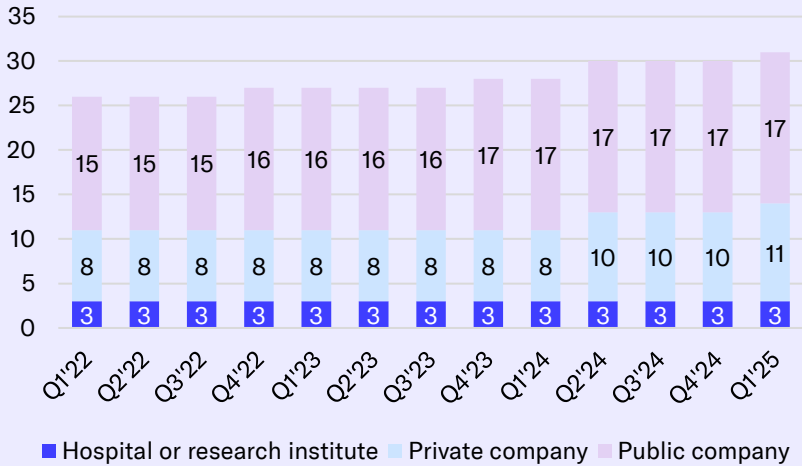
Building revenue by partnering with customers

Modulight seeks to enter into partnership agreements with its customers, starting from the product development and conceptualization phase and, if successful, continuing through to product commercialization. We believe that Modulight has chosen this type of approach because it allows it to differentiate itself from its competitors by customizing a product with advanced features that the customer needs. The close partnership also makes it possible to achieve a high level of customer knowledge. The model allows Modulight to obtain regulatory approval for its lasers, e.g., for use with a specific medicine, which would give the company a strong position as a technology supplier in the commercialization phase. We believe that a possible drawback of the approach is the substantial commitment of resources, which may not lead to significant revenue recognition if the project is terminated or its commercial potential ultimately remains low.

Development of number of projects



Ownership base of project customers



Business model 4/7

The project model takes time and is risky

Particularly in the medical field, Modulight's partner customers must demonstrate the safety and efficacy of products designed for patient use, such as medical devices. This requires phased and long-term clinical trials. If at any stage of development a medicinal product candidate, e.g., proves to have an inadequate safety profile, the relevant authority may suspend the development of the medicinal product candidate. Modulight is exposed, at least in the medical field, to the same high binary risk and long development cycles as its partners. In other technology sectors, development cycles are faster, but we estimate that Modulight's development projects in other areas are also at high risk of being interrupted before reaching the commercialization phase.

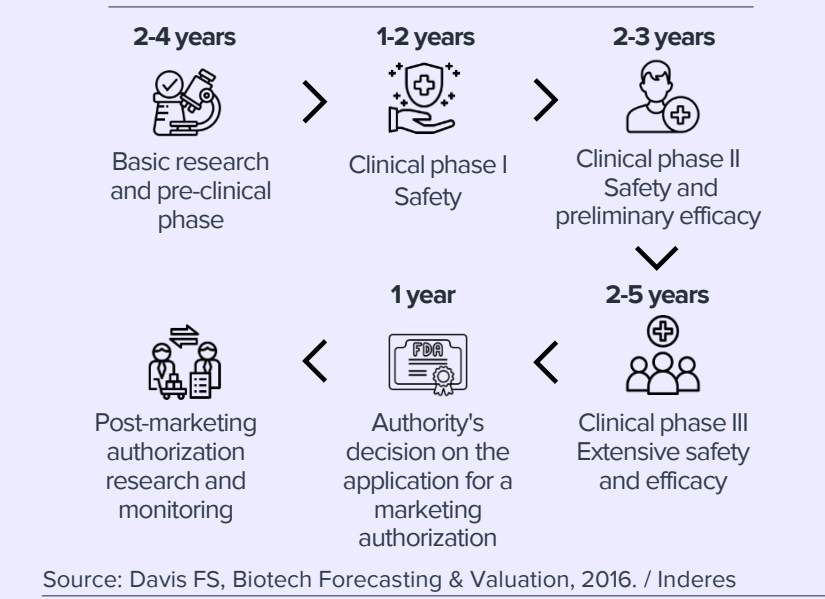
According to the company, the phases of projects can be broken down as follows: 1) pre-clinical/conceptualization phase, 2) clinical phase I/pilot production, 3) clinical phase II&III/product development and 4) commercialization. Modulight is currently in the commercialization phase of an ophthalmic laser to activate the Visudyne drug. In addition, the company has reported that several projects have moved to Phase III clinical trials. However, we understand that the majority of projects are early-stage projects, with a particular focus on pre-clinical projects (i.e. animal and cell testing) and the conceptualization and piloting phases of technological projects. Presumably, a large share of projects will be called off, e.g., due to a lack of safety or efficacy of a drug candidate or treatment, and Modulight's business for that project will probably also cease. The table

on the next page presents the historical probabilities of success in drug development from each development phase to commercialization. Visibility on the likelihood and timing of project progress is weak, as we believe that most medical projects are experimental treatments, for which we don't believe that historical probabilities of drug development necessarily apply.

From the number of projects reported by Modulight, it can be concluded that between Q1'19 and Q1'22 no projects were discontinued or completed, as all new projects directly added to the total number of projects. During Q2'22-Q3'22, one project was discontinued in each quarter. This underlines the longevity and slow turnaround of projects. Modulight has announced that it will apply stricter criteria for the admission of new projects to maintain a high quality of projects and avoid future write-downs (4.5 MEUR) realized in 2022.

According to Modulight, it typically takes 6-24 months from the first contact with a customer to the start of a project. Clinical trials typically take place 3-5 years after contacting the client. Typical cancer medicine projects take 5-10 years from project start to clinical approval. The duration of clinical development of a drug is typically closer to the upper end of the range. Our assessment is that projects in early-stage companies often run behind schedule. However, customers at a more mature stage of development have the resources and experience to deliver projects within more realistic timeframes.

Duration of the pharmaceutical development project



Project phases and duration

Sales cycle	The sales cycle from contacting the customer to starting the project typically lasts a few months.
Initial phase of the project	The pre-clinical or conceptualization phase typically takes 2-4 years
Clinical phases; product development	In medicine, 3-4 years at fastest, but typically ~10 years; slightly faster for technology solutions
Regulatory approval	The administrative process takes 1-2 years.
After commercialization	Sales of new medicines, medical devices and treatments typically develop slowly. Efficacy and safety are monitored throughout the lifetime on the market.

Business model 5/7

The company is transitioning towards a pricing model based on device usage and value creation

Modulight aims to price its products and services on the basis of value. This means that the company's pricing is based not so much on the cost of manufacturing individual laser devices, but on the added value the company brings to the project/treatment. For several years, Modulight has been transitioning towards a usage-based pricing model. The company talks about a pay-per-treatment (PPT) model. In this model, the user pays for the device as a service separately for each treatment session. In addition to the device itself, we believe the service includes, e.g., training, cloud services and device maintenance. The model's real strengths lie in the commercial phase, if the company succeeds in its value-based pricing. According to Modulight, value-based pricing would account for 1-10% of the total value of the care pathway. As a concrete indicative pricing range, the company has mentioned EUR 1,000-10,000 per treatment. In certain indications, even a higher price point could be reachable. According to the Q1'25 report, the PPT model is currently used by approximately 50 hospitals, with use focusing, in our view, mainly on clinical trials.

According to Modulight, the prices of the treatments provided vary considerably. For more routine treatments, such as laser treatment of the fundus, the total cost of the treatment is typically a few thousand euros. Biological cancer drugs, in turn, are priced in the US at up to hundreds of thousands of dollars, which means that laser-activated cancer drug treatments could also be priced quite high. In pharmaceutical treatments, we estimate that the drug owner has a stronger position in the value chain than the laser equipment manufacturer. The company has not

yet disclosed the pricing of its only commercialization (Visudyne laser), so there is no concrete information available on commercial PPT pricing at this time. Modulight has increasingly applied the PPT model also in product development projects, where Modulight's revenue is recognized according to the PPT model at least in some clinical patient trials. In development phase projects, payments are probably lower than those mentioned above. According to the company, the transition to the PPT model has impacted the decline in revenue after the listing. In the model, revenue is gradually recognized over a longer period.

Revenue from development phase projects is generated as projects progress

Modulight's target pricing ranges for project phases are illustrated in the graph on the next page. Pre-clinical and clinical phase I typically involves a single laser device and associated services. Clinical Phase II/III is typically performed as multi-center studies, typically requiring several devices. Pricing depends on whether the client is an academic or private sector client, especially in the early stages. We believe that most of the projects are still in an early stage, although a few projects have progressed to the final Clinical Phase III.

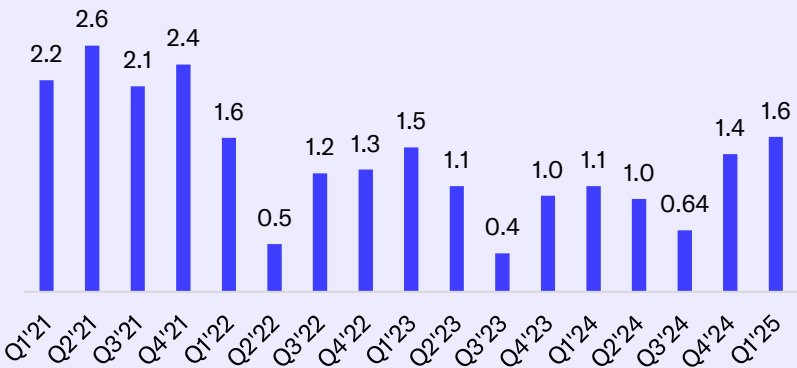
In connection with the Q2'24 report, Modulight reported that the PPT model's revenue was six figures at the time. Based on the news flow from early 2025, the share of PPT revenue is growing, even though the company has not specified PPT revenue in its reporting. However, we also estimate that project-based fees still account for the majority of revenue at the time of writing in 6/2025.

Probability of marketing authorization in drug development

	Phase I → marketing authori- zation	Phase II → marketing authorization	Phase III → marketing authorization	Regulatory process → marketing authorization
Probability of marketing authorization	7.9%	15.1%	52.4%	90.6%

Source: Thomas et al, 2021: Clinical Development Success Rates and Contributing Factors 2011–2020

Revenue by quarter, MEUR



Source: Modulight

Examples of indications and their treatment costs

Indication	Incidence in the US	Median cost of the treatment path	Modulight's target pricing
Retinoblastoma	2,000	100,000	1-10% of treatment costs
Head and neck cancer	66,000	200,000	1-10% of treatment costs
Pancreatic cancer	64,000	275,000	1-10% of treatment costs

Source: Modulight

Business model 6/7

Sales and distribution with an emphasis on in-house operations in the US and partnerships elsewhere

Modulight's presence at industry conferences and trade fairs plays a key role in meeting and finding customers. Digital marketing and social media also play an important role. We estimate that Modulight has already built up a fairly broad reputation in the industry over its 20+ years of operation. The company reports that it receives many contacts from potential customers who are already familiar with Modulight.

In addition to its presence at trade fairs, the company's products are used in many scientific studies, the results of which are reported at industry meetings. This spreads awareness of the company's products and services among researchers and industry representatives. According to the company, it also has a network of key opinion leaders who contribute to the visibility and credibility of Modulight's solutions in the industry.

Previously, Modulight has been responsible for the distribution of its products. However, in its current strategy, the company is focusing on direct sales, especially in the US, and selected partnerships in Europe and Asia. We believe that Modulight will continue to use more and more external distributors outside the US in the future. As an example, in January 2023 Modulight announced a partnership with Laser 2000 in Europe. The agreement covers the distribution of products in Germany, Austria, Switzerland and France. We estimate the distributors' margin to be around 40%, which is typical for the industry.







The business model has potential for scalability

In the last decade, Modulight has achieved a gross margin of over 80% and in 2020, the margin was as high as 91%. In 2021-2023, the gross margin decreased significantly, which we believe is related to the introduction of the PPT model. In the model, revenue is not generated immediately when the device is delivered. The costs of materials and services also appear to vary quite considerably from period to period. The variation is likely explained by the still low revenue, whereby the share of materials and services in revenue varies depending on the nature of the projects and the timing of purchases. Since 2024, the gross margin has improved and is at a good level of 69% at the time of writing (Q1'25).

The use of the PPT model is enabled by connecting the devices to Modulight's own cloud service. We understand that this type of pricing isn't yet that typical in the healthcare sector, but Modulight says that its customers have shown a clear interest in using this model. We believe that success in implementing the model on a large scale would open the door to a highly scalable and profitable business for Modulight. At this stage, however, we remain cautious about the model until more proof of its widespread adoption emerges. Maintaining the model also increases fixed costs, as it requires user training, maintenance of devices in use, cloud service maintenance costs, etc.

Challenges to implementing a scalable model include a long period of product development with the customer, which can take a long time to commercialize, and a high probability that projects will be discontinued before reaching the commercialization phase.

Modulight's project pricing model¹

 Project phase	 Pricing
 Pre-clinical phase or researcher-driven study / suitability assessment	Private sector clients one-off fee 0.1-1 MEUR; Academic clients EUR 10,000-150,000
 Clinical phase I / Piloting	One-off fee 0.5-5 MEUR; Service fee 25% of the customer's investment
 Clinical phase II-III / Product development	One-off fee 2-30 MEUR; Service fee 25% of the customer's investment
 Large-scale commercialization	1-10% of revenue / added value to treatment; Service fee 25-35% of client's investment

¹ In our view, the model is indicative and may vary depending on clients and projects.
Source: Modulight



Business model 7/7

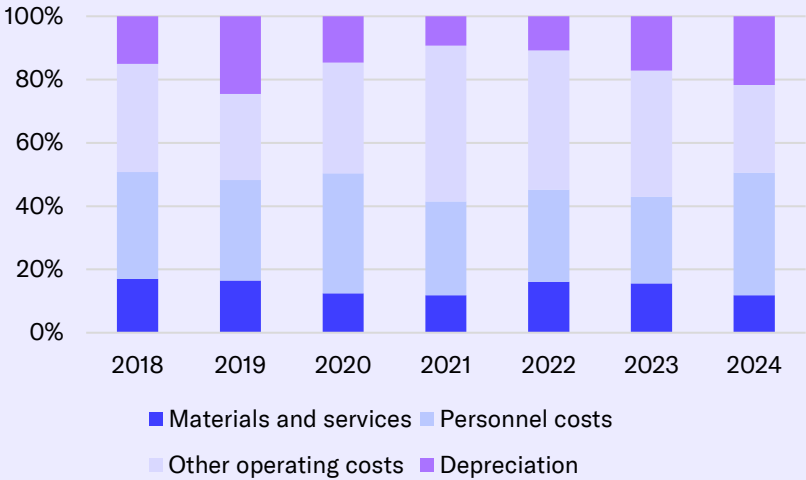
Another scalability challenge we see is the need for a local presence, which we believe is needed to serve customers alongside cloud services.

The cost structure is dominated by personnel costs

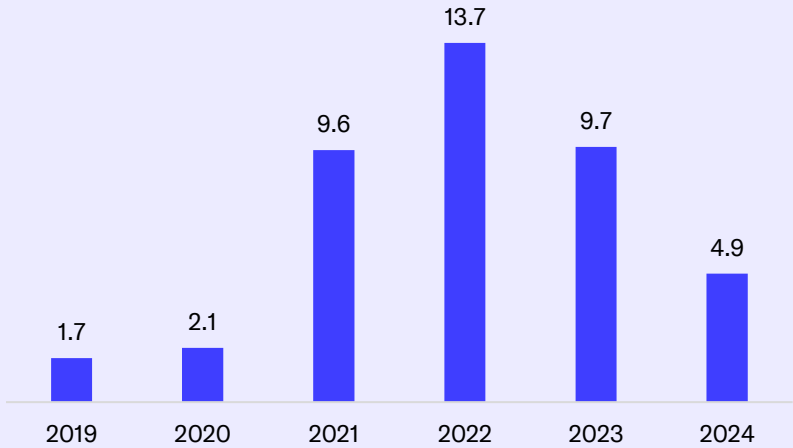
Modulight's fixed cost structure is currently heavy, as revenue has decreased from the beginning of the decade, while operating costs have increased. However, costs were cut during 2024, and the completion of the production plant has reduced investments, which has stabilized the situation.

Materials and services have been a relatively small part of the cost structure due to the high gross margin, which appears to be recovering after a sharp decline. Personnel costs have historically been the largest expense item, and they are also expected to remain at a relatively high level. However, the number of personnel has slightly decreased from 70 at the end of 2023 to 66 in 2024. Based on the company's comments, the number of personnel is roughly at the desired level. Other operating expenses have also been a major expense item, affected, e.g., by the company's high level of activity at conferences in the US and elsewhere in the world. Depreciation on investments made in the production plant has increased and is expected to remain at a high level in the coming years.

Operating cost structure, % of revenue



Investments, MEUR



Investment profile - SWOT



Strengths

- A vertically integrated operating model, which enables the company to serve customers flexibly, quickly and with reliable delivery.
- A combination of expertise in laser technology, manufacturing and life sciences helps with profiling in a competitive industry.
- Cloud solutions and related expertise.
- The pay-per-treatment pricing brings earnings potential and flexibility to customers.



Opportunities

- Success in commercializing the laser solutions as part of treatment could bring significant revenue to Modulight with high profitability.
- Cloud services enable added value for care and commerce, such as pay-per-treatment billing.
- Expanding the use of technology to new applications and new technology areas, such as quantum computing.



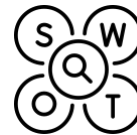
Weaknesses

- In the project model, progress to the commercialization phase is uncertain and can take a very long time, even if successful.
- Projects and the PPT model have so far generated modest revenue, and we believe that the models' functionality still requires further evidence.
- Visibility on the development of revenue and earnings is low.
- The balance sheet has weakened due to loss-making and the company may need additional funding.



Threats

- Projects failing and taking longer to complete; Delays in regulatory approvals.
- Payment and financing difficulties of customers in the product development phase.
- Larger, cost-efficient competitors in new growth openings.
- Weakness of bargaining power in higher volume products.



Technology and products 1/4

Laser technology in medicine, biomedicine and diagnostics

Laser light has only one wavelength and its light waves oscillate in the same direction and at the same frequency. In medical and biomedical applications, this enables, e.g., applications where an inactive drug can be activated by a laser light in the desired tissue. This can reduce side effects elsewhere in the body. Such an application of medicine is called photodynamic therapy (PDT). In turn, biomedicine and diagnostic applications are typically based on the illumination of fluorescent tracers by laser, enabling imaging solutions, various biological measurements and assays or DNA sequencing (i.e. reading DNA base sequences).

Medical applications and photodynamic therapy PDT

Modulight develops its lasers for medical applications in partnerships with, for example, pharmaceutical companies. For drug development projects, the company will supply a laser light source of a specific wavelength, for which it has ML7710 (cancer medicine) and ML6710i (ophthalmology) instruments approved for patient studies. Several lasers of different wavelengths can be incorporated for different applications.

As an example of an application of cancer medicine, a patient can be administered an intravenous drug from Modulight's partner pharmaceutical company. The drug candidate is transported throughout the body via the bloodstream and is typically enriched in cancer cells. The drug is harmless to cells until it's activated in a cancer tumor by illuminating the tumor with a laser of a certain wavelength. Upon activation, the drug molecule produces

highly reactive oxygen free radicals that destroy cancer cells. The inflammation and immune reaction caused by the treatment may further enhance the long-term efficacy of the treatment by activating the immune defense against cancer. In an optimal situation, the drug is not activated outside the cancer tissue to any significant extent. In practice, however, sunlight or other light can cause activation and adverse effects.

A treatment like this example is called photodynamic therapy (PDT). In addition to cancer medicine, PDT can be used to treat conditions such as eye or skin diseases. In addition to the example above, there are many different types of PDT cancer applications, differing for example in terms of the drugs used, their different mechanisms of action and the indications (i.e. different types of cancer). What these approaches have in common is that a precise laser light of a certain wavelength is used to illuminate a molecule in the patient, which reacts to the light. The reaction may involve activation of a drug molecule or, e.g., the molecule becoming fluorescently colored, allowing the operating surgeon to see the tumor in the healthy tissue and cut away the tumor as precisely as possible.

The drug can also be linked to an antibody that adheres to the molecular structures on the surface of the cancer cell, which is called photoimmunotherapy. This allows the treatment to be targeted even more precisely at the cancer cells. In the latest experimental applications, the drug can be packaged, e.g., inside microscopic fat droplets. The droplets can be scattered at the desired place with a laser light, releasing the drug into the target tissue.

General principle of laser operation in medical and biomedical applications



The laser produces light of the desired wavelength at the desired power, and illuminates the target to be treated or the sample to be examined.



The target molecule absorbs the energy from the laser light based on the wavelength of the laser and the chemical properties of the target molecule.



The laser energy can activate the drug target molecule, for example to produce highly reactive compounds or to release the drug as the carrier structure breaks down around it.



The energy contained in a laser can also be stored for a very short time in the target molecule and released as longer wavelength light (fluorescence). This phenomenon can be used for imaging and diagnostics.

Source: Inderes

Technology and products 2/4

Photodynamic therapy can treat superficial tissues, such as the eye or skin, that are easily accessible without surgery. On the other hand, in open or endoscopic surgery, a laser light can also reach other tissues, starting from the brain.

PDT first received FDA approval for cancer treatment in the 1990s. However, PDT has not yet become a mainstream cancer treatment, but has remained an experimental treatment. The widespread commercial success of Modulight in these applications requires regulatory approvals for new treatments/indications and a breakthrough into routine treatment practices, which may take a long time.

In ophthalmology, for example, Visudyne (verteporfin) is used in the photodynamic treatment of macular degeneration. This treatment was popular at the turn of the millennium, after which anti-VEGF treatments administered as injections have taken over a majority of the market. Modulight has signed an agreement with the pharmaceutical company Bausch & Lomb for the exclusive supply of Visudyne lasers. Modulight received FDA approval for the indication in early 2023 and began commercialization around the middle of that year. The company has not disclosed figures regarding the progress of commercialization.

In addition to ophthalmology, we believe photodynamic therapy is also routinely used to treat skin diseases. As far as we know, Modulight does not currently have any projects close to commercialization in this area.

Biomedical and diagnostic applications typically based on fluorescence

Applications in biomedicine and diagnostics are usually based on fluorescence. In this case, the fluorescent tracer is illuminated at the appropriate wavelength, so that the laser energy is stored in the tracer and immediately released at a longer wavelength. In practice, for example, when a tracer is illuminated with a blue laser (wavelength around 490 nm), it fluoresces back at a longer green wavelength (around 550 nm). In biomedicine, lasers are used in a wide range of applications. For example, the Modulight ML8500 plate reader can be used to perform various measurements and assays on living cells or to determine the concentration of a specific protein in a sample. Similar solutions can also be found from several other manufacturers. The ML6600 laser light source can also be used for a wide range of applications. In fluorescence microscopy, e.g., a laser is used to illuminate markers introduced into cells or tissue sections, allowing the desired structures in the cell or tissue sample to be seen. Such measurements and applications have been commonplace in laboratories for decades, and we believe that Modulight's market potential is mainly based on small-batch customized solutions or contract manufacturing, instead of mass markets.

Potential future applications for Modulight in biomedicine and diagnostics include flow cytometry and genetics. Flow cytometers are widely used in experimental laboratories and clinically, e.g., in the diagnosis of blood samples and cancers.

Modulight's key products

ML7710



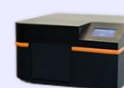
A laser platform for medical applications, which can be customized with several lasers of different wavelengths.

ML6710i



Ophthalmic laser, used e.g. in Visudyne drug treatment. The device is controlled via an iPad.

ML8500



A bump plate reader for diagnostic applications.

ML6600



A three-wavelength laser system that can be used, for example, in microscopy for fluorescence imaging of tissues.

Source: Modulight / Inderes

Technology and products 3/4

We believe that a breakthrough in this market would be a significant opportunity for Modulight. However, flow cytometers are an established technology and we believe the company will face significant competition from larger players in this market. In genetic applications, fluorescence can be used to determine the base sequence of DNA samples. These applications exist but are emerging technologies where we believe there is significant competition.

Cloud services add value for the customer and help in differentiating from the competitors

Modulight has outlined that in the future, all its products will be connected to the company's cloud platform. Already today, for example, the ML7710 and ML6710i medical laser platforms are connected to the cloud. The cloud platform enables treatment planning and the sharing of treatment protocols, as well as the processing of treatment-related data, giving caregivers near-instant feedback on treatment dose and other variables. The company says that feedback and data accumulation from multiple treatments can help improve treatment outcomes. The platform also enables, e.g., remote support and training for users, real-time data sharing in multi-center studies between different treatment facilities, and a billing model based on number of treatments. In the future, the platform may also enable personalized medicine solutions by tailoring treatment to the patient's needs. We believe that the cloud platform can serve as a differentiator from competitors. Information security is supported by the ISO 27001 standard achieved in early 2024.

ML7710 and ML6710i laser platforms are ready-to-use products for medical applications

We believe that the company's key products are the ML7710 and ML6710i laser platforms that are suitable for patient treatment. Modulight is able to customize the platform with the wavelengths the customer wants and, if necessary, add them in the future as needed. Both products have CE marking (EU marketing authorization) and FDA approval for the US market. New product generations of the devices are launched from time to time, for which new regulatory approvals are obtained. We have discussed other ready-for-sale products that we believe are less important to the company in the chart on the previous page.

Products in other application areas are still mainly in the development phase

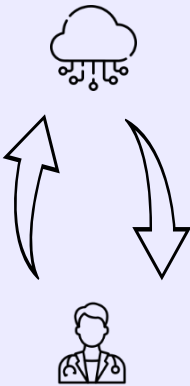
In addition to the ready-for-sale products mentioned above, Modulight is developing new products in its projects, which we estimate are in most cases still at the conceptualization or development stage. We understand that such products require a significant development investment, both in terms of money and time. Modulight has said that it has identified potential applications for its laser technology, such as quantum computers. As a practical step forward, Modulight announced in early 2025 that it had received an order worth 0.8 MEUR for quantum computing-related prototypes. However, visibility of the commercial potential of quantum computers is still low. Other potential applications highlighted by Modulight include digital printing presses and environmental measurement. In our opinion, the company's lasers are already used commercially in both application areas.

Cloud service supporting treatment

A doctor plans the treatment and stores the treatment protocol in Modulight's own cloud service.

The treatment protocol is downloaded from the cloud and the treatment is carried out according to the protocol.

The data collected during the treatment is uploaded to the cloud, where it's processed and the caregiver receives feedback on the treatment almost immediately.



Cloud service features and benefits

Remote device management and user support	Sharing training materials and protocols. Usage tracking and activation of features. Real-time consulting. Monitoring device performance and maintenance requirements.
Data collection, analysis and utilization	Pricing based on number and type of uses Licensing of new use cases. Monitoring the use of the device for compliance with regulations and contracts.
Processing and storing treatment data	Treatment feedback (see above). Data storage for later analysis. Data sharing between participating centers.

Source: Modulight, Inderes

Technology and products 4/4 – Examples of applications

Example of laser use in cancer medicine



In photodynamic therapy, a cancer patient is given an intravenous light-sensitive drug that travels throughout the body in the bloodstream. The drug is in an inactive form, so it has no therapeutic or side effects.



The cancer tissue is illuminated with a laser at the right wavelength, which triggers the activation of the drug and the formation of oxygen free radicals that destroy cells. The drug is not activated elsewhere in the body, so side effects are minimal.

Example of the use of Visudyne in ophthalmology



The drug is administered as in the above cancer medicine example. It becomes particularly enriched in the vascular cells of patients with macular degeneration. In the disease, patients have an overgrowth of blood vessels, which causes the symptoms of the disease.

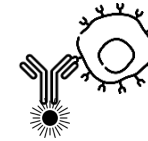


The drug in the fundus is illuminated by a red (689 nm) laser, which triggers the production of free radicals and cell death. The overgrowth of blood vessels is reduced and symptoms are relieved.



Patients need to spend time in the dark or otherwise protect themselves from light after treatment, as light can cause activation of the drug and side effects, for example on the skin.

Example of diagnostics - flow cytometry



A blood sample is taken from the patient, from which blood cells are isolated. Cells are treated with an antibody that binds only to a protein on the surface of certain types of blood cells. A fluorescent tracer is attached to the antibody.



The cell sample is run through a flow cytometer, where the cells are passed in a thin tube one after the other and illuminated by a laser.



Cells with a fluorescent marker attached to their surface by an antibody send back light. The light emitted can be measured and the sample can provide the number of blood cells of interest and other information.

Industry and competitive field 1/5

Modulight builds competitiveness by differentiating itself within the overall laser technology market

Modulight operates and aims to operate in several segments of the overall laser technology market. We estimate that the most important of these is the photodynamic therapy market, which covers Modulight's core business areas of cancer, ophthalmology. For the other business areas, we rely on the independent analysis commissioned by Modulight and carried out by the consultancy firm KPMG. We consider this to be the best available source for estimating the value of the laser market in the potential market segments selected by Modulight. In addition to these, the company has its sights set on a number of other technology areas where it says it is taking an opportunistic approach. These opportunistic initiatives are on a very broad technological scale, so we will not deal with them all separately in this report.

Market for photodynamic therapy (PDT)

Modulight's medical business is in the photodynamic therapy market. This market is estimated to be 2.4 BNUSD in 2023 and grow to 4.2 BNUSD by 2030 (CAGR 8.3%)¹. The overall market is further segmented into photosensitive drugs and devices that activate the drug. Photosensitive pharmaceuticals account for a larger share of the market value than devices. In 2023, the device market was about 560 MUSD (Grandview research). In addition to lasers, the light source for the device can also be implemented using, e.g., LED technology, so we believe the entire market does not consist of laser solutions.

Cancer treatments are expected to be the largest application area for PDT by 2030 as cancer cases increase and new treatments are developed. Naturally, there is

significant uncertainty associated with the development of new treatments and their breakthrough. Currently, we believe that the biggest application area for PDT is in various skin disease indications such as solar keratosis and psoriasis.

Among ophthalmological applications, PDT is used, e.g., to treat macular degeneration, for which Modulight exclusively supplies Bausch & Lomb with lasers to activate its Visudyne drug. The size of ophthalmic solutions in relation to the total PDT market is not known. However, the 21% share of ophthalmic lasers in the total market for medical lasers gives an indication².

Cancer and ophthalmology market

Modulight's market potential can also be examined through the diseases being researched, their costs to society, and the potential value creation of Modulight's services. The table on the next page presents examples of diseases, their patient numbers, and the total costs of treatment pathways in the main market, the US, where Modulight sees opportunities. Defined in this way, the market for individual projects varies considerably and is typically a few billion USD in size. Modulight's goal is to achieve a revenue share of 1-10% of the total cost of the care pathway through its services. When interpreting the figures, it should be noted that commercialization first requires obtaining extensive, high-quality clinical evidence of the treatment (see probabilities of success on page 10). Each disease is typically divided into numerous indications, each of which must demonstrate efficacy and safety separately. There is also no practical evidence yet of Modulight's targeted pricing range being achieved. Defined in this way, the target market size reaches over 100 BNUSD.

Modulight's target markets



Modulight's primary focus areas are the cancer and ophthalmology photodynamic therapy (PDT) markets.

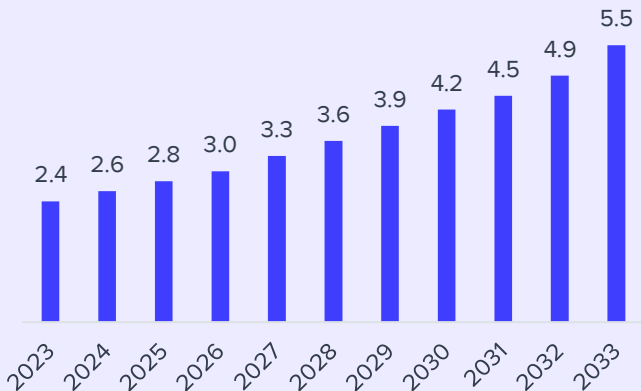


In addition to these, the company has identified four high potential growth markets: skin diseases (PDT), flow cytometry, semiconductor metrology and quantum computing.



Other opportunistic growth areas include: digital printing presses, genomics, automotive environmental monitoring, other life science applications and other high value-added applications.

Photodynamic therapy market, BNUSD



1) Market.us Global Photodynamic Therapy Market
2) Global Market Insights 2023
3) Mordor Intelligence

Industry and competitive field 2/5

Modulight's growth objectives as a contract manufacturer

In addition to cancer and ophthalmology, Modulight has identified four areas of particular growth potential: flow cytometry, dermatology, semiconductor metrology, and quantum computing. The company sees these areas as potential high-volume, high value-added opportunities where the core technologies can be applied with low thresholds and high synergies.

Based on an estimate by KPMG for Modulight, the combined total market value for laser devices in these growth areas at 1.1 BNEUR in 2021 and is expected to grow to 1.8 BNEUR by 2026. According to KPMG, dermatology applications are an attractive short- to medium-term opportunity for Modulight due to the large market. Modulight has the potential to act as a subcontractor for OEMs in the industry. The laser market for dermatology was around 450 MEUR in 2021 and is expected to grow to 640 MEUR by 2026 (CAGR 7%), according to KPMG.

Laser systems for flow cytometry are worth around 230 MEUR and the market is expected to grow to 370 MEUR by 2026 (CAGR 10%). We understand that price competition in this area is fierce, so we believe that success in this sector will require Modulight to successfully differentiate itself from its competitors in terms of technology. We estimate that the flow cytometry market is quite concentrated, and thus we believe that success will require becoming a subcontractor to a large player.

According to KPMG, laser solutions will account for 78 MEUR of the quantum computing market in 2021. The market is expected to grow very strongly as a result of the breakthrough in quantum computing, reaching 290 MEUR

in 2026 (CAGR 30%). We believe that Modulight's ability to develop and customize laser solutions could well position the company in this developing market. The prospects for the commercialization and growth of this new technology are still very low at this stage.

The overall ODM market that Modulight is targeting is, in our view, competitive and challenging. In our view, the company needs to find the right partners and market niches where it can play to its strengths.

Modulight also selectively targets other markets

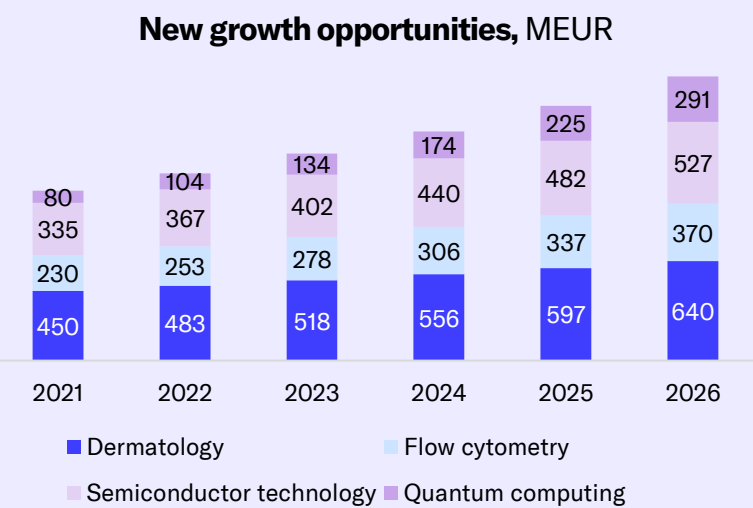
Modulight's laser technology can also be applied to other technology areas, which the company says it is opportunistic about. These identified markets include digital printing presses, genomics (DNA/RNA sequencing), automotive environmental measurement technology, and other life science applications. The company's practical progress in these markets is still unclear and we believe they are lower priority businesses for the company, so we won't discuss these markets in detail in this report.

Market trends

We believe that the key market trends for Modulight are very much in line with those in the health technology, pharmaceutical and life science sectors in general. As the population grows and ages, the number of cancers and eye diseases, e.g., will increase steadily and predictably. In addition, combination treatments and personalized medicine are expected to become more common in cancer therapy, which could support Modulight's business. In general, the need for new treatments in medicine is obvious.

	Incidence (thousand)	Median cost of the care pathway	Market size, MUSD
Glioblastoma	13	200	2,600
Bladder cancer	80	120	9,600
NSCLC	200	420	84,000
H&NC	75	100	7,500
Esophageal cancer	18	130	2,340
Prostate cancer	201	30	6,030
Ocular melanoma	2	100	200
PCV (eye)	20	125	2,500
Macular degeneration	200	105	21,000
CSR (eye)	12	20	240
			136,010

Source: Modulight
NSCLC = non-small cell lung cancer;
H&NC = head and neck cancer
PCV= polypoidal choroidal vasculopathy
CSR= central serous retinopathy



Source: Modulight, KPMG

Industry and competitive field 3/5

Competitive factors in the market

Laser technology has traditionally been based on silicon-based semiconductors, where we believe Intel and AMD, the original developers of the technology, are still strong. Modulight focuses in particular on the newer and more demanding compound semiconductor technology. We believe that there are relatively few companies in the world that have mastered this technology because of the demanding manufacturing processes.

We believe that price is a key competitive factor in high-volume lasers, which means that the high-volume market is dominated by large laser manufacturers such as Mitsubishi Laser and Coherent. In the field of medical lasers, on the other hand, we estimate the quality of the product to be more important than the price. Long-term availability of spare parts and product support are also important. For example, we understand that there have been availability problems with Visudyne drug-activating lasers, which contributed to Bausch & Lomb entering into an exclusive manufacturing agreement with Modulight in 2018.

In the medical devices sector, there are barriers to entry where we believe Modulight has strengths. However, in new growth areas such as flow cytometry, there are fewer or no barriers and we estimate that price competition is more intense. Our views on the general barriers to entry and the role of Modulight are summarized in the adjacent graph.

Key competitors in different categories

Medical device manufacturers such as Medtronic, Stryker, Siemens Healthineers and General Electric produce lasers

used in patient treatments. These companies have the advantage of long-term experience, extensive existing distribution channels and large sales and marketing resources. To our understanding, these companies typically subcontract lasers, and their ability and desire to design and customize products to customer needs is lower than Modulight's, at least for small-scale projects. This category also includes smaller manufacturers, such as the French company Lumibird, which manufactures lasers used in ophthalmology and medical imaging, among other technology solutions.

Semiconductor technology companies include several large companies such as Coherent and Mitsubishi Laser. These companies are cost-effective and able to supply lasers at competitive prices. For example, Coherent manufactures lasers used in flow cytometers and other life science solutions that compete with Modulight. In our opinion, Modulight can succeed in solutions that require customization of smaller series. In the simplest mass-produced products, on the other hand, we believe price competition is fierce. As far as we know, these companies don't manufacture medical lasers used to treat patients.

In our view, the third relevant category of competitors consists especially of **companies active in the market for photodynamic laser treatments**. This category partly overlaps with the first one. The competing companies have typically focused on certain medical fields and are smaller in size. Examples include Galderma and Suslaser (skin), Lumibird (eye), and Theralase (cancer). The competitive field is summarized in the picture on page 25.

Market trends



Aging population leads to increased incidence of cancer, eye and skin diseases



Rise of combination treatments and personalized medicine in cancer treatment.



Introduction of new treatments and technologies

Source: Modulight / Inderes

Barriers to entry and Modulight's position

Long product development	Modulight does not yet have any widely commercialized products, so this hurdle remains uncrossed.
Official permits	The sale of medical devices requires an official authorization, which can take years to obtain. Modulight has FDA authorization and CE marking for its ophthalmic and cancer lasers.
Technological and production skills	Technological and production know-how in compound semi-conductor lasers is in the hands of a small number of players. Modulight is capable of a vertically integrated operating model with its own production facility and know-how.
Presence in local markets	We estimate that Modulight's local presence is limited at this stage, but the company will particularly focus on the US .
Competitive landscape	Some markets have large, effective competitors (e.g. Sony and BD Biosciences in flow cytometers).

Source: Inderes

Industry and competitive field 4/5

Modulight's competitive factors

We believe that Modulight's key strength is its ability to customize products to customers' needs and to develop products in close cooperation with the customer. In our view, this flexibility is based on the company's vertically integrated operating model, where the company designs and manufactures the products itself and often carries out product development together with the customer. Other laser manufacturers also emphasize customizability, but in our opinion, Modulight is an agile player thanks to its vertically integrated model. Modulight has a high level of manufacturing expertise that enables it to produce lasers for demanding applications. There is also a high level of product traceability, which is important for medical solutions. The connectivity of the company's laser products to cloud services differentiates the company from its competitors and enables it to offer additional services and features. In our view, Modulight has increased its productivity and level of expertise with the new production plant investment. In the tighter geopolitical situation of recent years, keeping production strongly in own hands may prove to be a great strength.

Modulight focuses on laser solutions in the life science area. Competitors also have extensive business and expertise in the field. Modulight has recently established a biolaboratory on its premises, where the company can develop its solutions in an agile manner and test products, e.g., with living cells. This brings agility and presumably speeds up product development and tailoring to customers' needs.

Modulight employs a number of industry specialists, which enables profiling and a deep knowledge of the customer base and industry. We consider this a prerequisite for success in medical solutions.














As regards competitive disadvantages, we think that Modulight's production capacity and price competitiveness are currently insufficient to compete with large manufacturers for products that can be produced with relatively simple technological solutions and at relatively low cost. We think this is the reason Modulight has positioned itself in life science solutions that require high quality and smaller production batches. The company's project-based commercialization model has not yet produced significant financial results. In our view, this is mainly due to the very long duration and uncertain success of the projects. We have some reservations about the viability of the model until further evidence of its functionality is available. The company has also emphasized the PPT pricing model since its listing, but so far, the revenue streams it has generated have remained small. In our view, the commercial viability of the PPT model still requires further evidence. Modulight has made several business initiatives in different technology sectors, but in the absence of large-scale commercial successes, we consider this a risk.

Intellectual property rights

Modulight develops products and technologies in the interface of three areas of deep expertise: drugs and treatments for cancer and eye diseases, cloud-

connected medical devices, and semiconductor and laser technologies. The solutions developed with pharmaceutical companies and other customers are based on Modulight's own product platforms and technologies, which are also actively protected by patents. The IPR portfolio is mainly built around cloud-connected treatment and diagnostic devices and related technologies, including business models and analytics. Modulight aims to protect its technology primarily in the US and extend protection to Europe and Asia as needed. Modulight has four valid US patents for a cloud-based, remotely managed medical laser device. In addition, the company has several patent families under evaluation. These patent families relate to, e.g., fluorescence imaging, optical treatment monitoring, theranostics, flow cytometry, gene sequencing, treatment usability, light-activated drug delivery, and some specific semiconductor processes. In our view, patents and other means of protection provide the company with good IPR protection, although it's challenging to assess them from the outside.

Industry and competitive landscape 5/5 - examples of competitors

	Competitor	Description of the competitor	Modulight's competitive advantages ¹	Modulight's competitive disadvantages ¹
Manufacturers of medical devices	 CARL ZEISS MEDITEC    	<ul style="list-style-type: none"> Medical device manufacturers are mainly large global companies that design and manufacture lasers. The companies typically use commercially available components and don't have in-house expertise in semiconductor technology. Thus, the companies have limited scope to customize their products. 	<ul style="list-style-type: none"> The agility of a vertically integrated approach and the ability to customize products to customer needs Technological and manufacturing expertise in semiconductor lasers Flexibility in production thanks to in-house manufacturing capacity Added value of cloud computing 	<ul style="list-style-type: none"> Resources of the sales and distribution organization compared to larger competitors Price competitiveness Recognition in the market
Semiconductor technology companies	 	<ul style="list-style-type: none"> Large global companies that manufacture semiconductor components Focus on standardized products with high production volumes 	<ul style="list-style-type: none"> Flexibility and customization Medical and life science expertise 	<ul style="list-style-type: none"> Price competitiveness
System solutions developers	  	<ul style="list-style-type: none"> The companies focus on application-level solutions. No knowledge of semiconductor laser manufacturing 	<ul style="list-style-type: none"> Flexibility and customization Manufacturing expertise in semiconductor lasers Added value of cloud computing 	<ul style="list-style-type: none"> We estimate that some competitors have a more developed sales and distribution organization and wider brand awareness.
PDT ² focused companies	  	<ul style="list-style-type: none"> Companies have focused on PDT applications Focus typically in a specific medical area, such as ophthalmic lasers 	<ul style="list-style-type: none"> Flexibility and customization Semiconductor laser expertise Added value of cloud computing 	<ul style="list-style-type: none"> A more limited focus on a specific medical area than Modulight can be an advantage for competitors Some competitors have greater resources (e.g. Lumibird).

Source: Inderes, Modulight, company websites

1) Inderes' estimate

2) PDT = photodynamic therapy

Strategy and financial objectives 2023-2025 1/2

A strategy for strong growth and restoring profitability

In late 2022, Modulight published a new strategy and financial targets for 2023-2025. At the time of writing (6/2025), the season is therefore coming to an end. The company has five key strategic areas and five key projects to implement the strategy. In addition, the company has five business objectives and three financial targets. We have summarized this in the table on the following page.

The company's strategy is clearly growth-oriented and also focuses on operational and technological quality and expertise. Modulight is looking to expand geographically, with the company saying it's aiming to start its own operations in the US and focus on selected partnerships in Europe and Asia. Another strategic growth driver is expansion into new applications and uses. In practice, this means, e.g., using the laser platform of cancer medicine for new types of cancer. The third growth initiative in the strategy is the introduction of new business models, such as SaaS-type pay-per-treatment billing. Other strategic objectives relate to the development of business, commercial and technological skills.

In our view, the implementation of the growth strategy relies on the increased capacity resulting from the investment, which the company will seek to exploit by increasing production through large-scale deployments. We see Modulight's agility to customize and manufacture products according to

customer needs and its (bio)medical expertise alongside its technological know-how as strategic strengths.

Achieving financial targets seems challenging

In terms of financial targets, Modulight is aiming for strong revenue growth and a return to strong profitability measured in terms of EBITDA. At the time of writing, the growth and profitability targets have not been met. However, the latest reports have shown preliminary signs of a return to growth.

Modulight's business objectives include taking three development projects to the commercialization stage. This would mean, according to Modulight's definition, a revenue of 30 MEUR from these projects in addition to other business. The target is the same as in the IPO strategy for 2021–2023. So far, the only commercialization of Modulight's own product has been an ophthalmic laser to activate the Visudyne drug. According to our estimates at the time of writing, Modulight's revenue will grow in the last year of the strategy period, 2025, while earnings will still be in the red. Major successes may still be seen at the end of the strategy period if the commercialization of the development projects is successful. However, there is no visibility for such projects.

















In our view, the strong profitability targeted by the company during the strategy period, as measured by EBITDA, would necessitate a significant increase in revenue from the current level. In principle, the PPT

model should be a very profitable business, which would create the basic conditions for good earnings scalability. We believe that the company utilizes EBITDA in its strategy as a measure of profitability because of high depreciation due to production investment, which will weigh on reported EBIT in the coming years.

In terms of revenue growth, we believe the most concrete short-term potential relates to the Visudyne application. With FDA approval, the company began commercializing the laser in the summer of 2023. The company has not reported revenue separately, so its success is difficult to assess. We believe that the commercial significance for the company is small for the time being, based on the limited number of patients (anti-VEGF injections are the primary treatment) and the long-standing availability problems of verteporfin (Visudyne). Additional future potential comes from projects that have advanced to Clinical Phase III, which should bring PPT revenue in the implementation phase. With potentially good results, the studies may lead to wider commercialization in the longer term.

With the strategy period coming to an end, we present our assessment of the successes and failures of the strategy period using the traffic light model (green/yellow/red) in the graph on the next page.

Strategy and financial objectives 2023-2025 2/2

Key elements of the strategy	 Geographical expansion	 Expansion of the offering to new indications and applications	 New business models	 Commercial and operational excellence	 State-of-the-art laser technology expertise
	●	●	●	●	●
Projects to implement the strategy	 Sales, marketing and operations development	 Productizing platform devices for various indications and applications	 Cloud technology and cloud-based services development	 Technology development based on the completed investment program	 Development of ESG, governance and reporting
	●	●	●	●	●
Business targets	 At least three commercial roll outs of projects in the current R&D pipeline	 Operations starting in the US; partnerships in Europe and Asia	 Development of SaaS-based business models	 Utilizing cloud-based services	 Carbon-neutral operations
	●	●	●	●	●
Financial targets and dividend policy	 Strong revenue growth	 Return to strong profitability in terms of EBITDA-%	 The company distributes little or no dividends		
	●	●	●		

Inderes' view on the success of achieving the targets



Targets have been achieved successfully



The target has been partially achieved or it cannot be assessed



It is unlikely that the target will be achieved during the strategy period

Financial position 1/2

Performance has been declining in recent years

Modulight was founded in 2000 and reached a revenue of 1 MEUR in 2006. The company was profitable between 2011 and 2022, when Modulight grew profitably (CAGR 17.6%). In its 2021 listing, the company raised 71.9 MEUR (gross), which is ample relative to the planned production plant investment of approximately 23 MEUR and profitability.

However, the reported figures began to show signs of weakening in late 2021, when a write-down of 4 MEUR was also made on receivables. At the time of the IPO, the outlook for growth and profitability was still very strong, except for a sharp increase in trade receivables in 2019-2021. Revenue continued to decline until 2023. In 2024, revenue turned to slight growth (+2% vs. 2023). We assume that the decline in revenue from 2021 to 2023 is mainly related to the transition to the PPT model. The company has also referred to delays in the deliveries of various prototypes in several reports. However, the reasons for the decrease in revenue are difficult to assess from the outside.

The deterioration in Modulight's revenue and earnings has been significant compared to the outlook at the time of the IPO. The number of projects has grown moderately, and the company has repeatedly communicated good progress in projects. In our view, hardly any projects have been terminated either. However, turning project progress into revenue has been facing a headwind.

A large proportion of Modulight's customers are early-stage companies, so a deterioration in customers' financial situation may be one reason for the decline in revenue. Financing has been difficult for drug development and biotechnology companies since the rise of inflation and interest rates in 2022. According to Clinicaltrials.gov, at

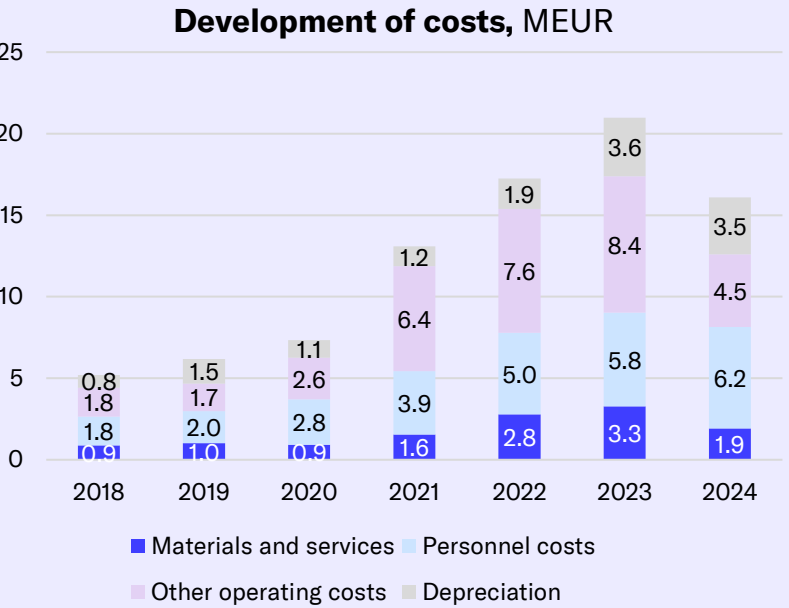
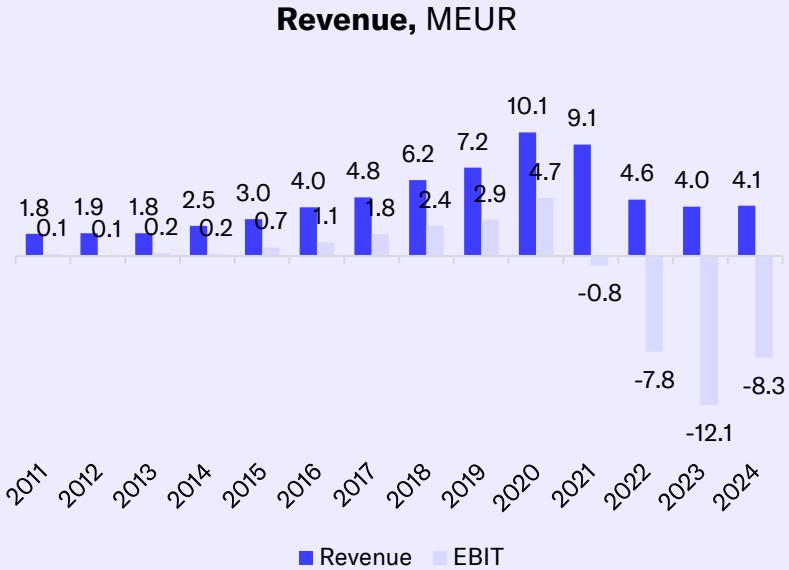
least one clinical trial using Modulight's lasers has been terminated due to the COVID pandemic. However, it is difficult to find extensive information on the progress of projects.

The introduction of the PPT model should be reflected in lower revenue fluctuations in the future. According to the Q2'24 report, the recurring revenue from the PPT model is over EUR 100,000, so most of the revenue still comes from outside the model. In winter 2024-25, the company also reported an increase in the order backlog for the PPT model. In the summer of 2025, the company expects new device installations, which we estimate will generate increasing PPT revenue starting in H2'25.

Cost development

Modulight's costs have increased with the strategy implementation since the listing. In our view, the transition to the PPT model has increased material costs relative to revenue and weakened the gross margin. In recent reports (Q4'24 and Q1'25), the gross margin has shown signs of strengthening, which may indicate an increase in the share of revenue generated from the PPT model

Personnel costs have also increased significantly since the listing. However, the number of employees has slightly decreased since its peak in 2023. Other operating expenses have increased sharply in 2021-2023 with the implementation of the investment program, as, e.g., the installation of new devices involved costs. However, these costs have stabilized since 2024 with the completion of the program. The investment program and capitalization of R&D costs to the balance sheet will be reflected in increasing depreciation, of which there have already been clear signs since 2022.



Financial position 2/2

Cash flow has reversed with higher costs and lower revenue

Modulight's operating cash flow has been positive in 2018-2020, but turned clearly negative in 2021. Cash flow deteriorated further in 2022-2023, mainly due to investments related to the production plant. The decrease in investments and the reduction of operating costs during 2024 have improved cash flow, which is still clearly in the red.

After the 2021 share issue, the company's cash assets were very strong (60 MEUR). However, the investment program and operating losses have reduced the company's financial flexibility. At the time of writing, based on the latest Q1'25 report, the company's cash reserves were 14.6 MEUR and its net cash position was 10.6 MEUR.

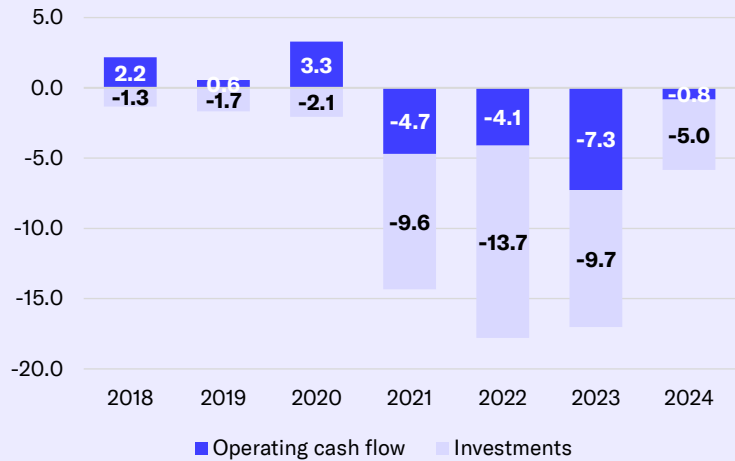
The balance sheet is still strong, but an earnings turnaround is needed

On the assets side of the balance sheet (according to the Q1'25 report), intangible assets of 11.4 MEUR consisted of capitalized R&D costs. Intangible assets (23.8 MEUR), in turn, consisted mainly of machinery and equipment, explained by the recent production plant investment. Inventories amounted to 2.3 MEUR and receivables to 1.9 MEUR, the most important of which were trade receivables of 1.5 MEUR. Cash, bank receivables and financial securities were (14.6 MEUR).

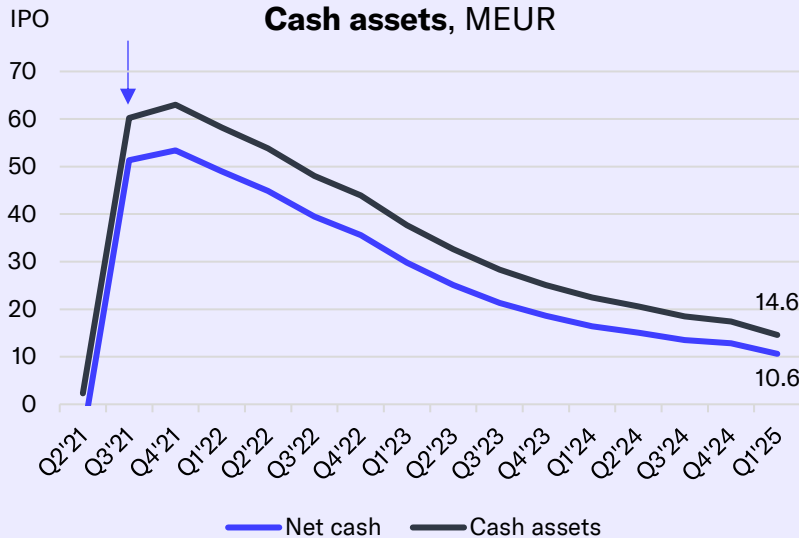
On the liabilities side, equity amounted to 47.7 MEUR. Interest-bearing liabilities amounted to 4.0 MEUR, of which long-term debt represented 2.2 MEUR. The company had 2.2 MEUR in non-interest-bearing liabilities.

At least for now, the company's balance sheet is still strong. However, the operating result is still clearly in the red, and in our view, the sufficiency of cash assets cannot be taken for granted. However, the company still has time to deliver an earnings turnaround.

Cash flow development, MEUR



Cash assets, MEUR



Estimates 1/3

The forecasting model consists of several components with low visibility

Modulight’s business consists of several sources. We believe the company has long-standing contracts for the supply of laser systems for applications such as weather measurement and HP laser printers. However, we believe the commercial significance and growth potential of these are limited. In the longer term, the growth potential culminates in the company's 31 projects, which, according to Modulight's definition, have significant commercial potential (at least 10 MEUR in annual revenue potential). There is no visibility of the projects as a whole, so closer analysis of them is not possible. At the time of writing in June 2025, ophthalmology laser Visudyne drug activation has advanced to the commercial stage. The revenue from this commercialization has so far been low, according to our estimate. Modulight's forecasts are thus heavily based on future deals, the value and timing of which cannot be accurately estimated.

As an example of a project pipeline, Modulight has mentioned the collaboration with [Aura Biosciences](#), a company that develops photodynamic therapy solutions for eye and bladder cancer. Aura's most advanced project is a Phase III eye cancer study. The study has started, and patient recruitment should be completed by the end of 2025. The study should be completed in early 2027 (clinicaltrials.org). If the study results are good, obtaining marketing authorization could be possible earliest in 2028.

For the current core business, we model revenue on the assumption that most of Modulight's 31 projects are early-stage development projects, with moderate revenue recognition based on the PPT model. We expect the number of projects to grow at a moderate pace in the coming years and anticipate a slow shift in project focus

from the early stages towards more mature and economically valuable stages.

We expect the progress of the projects to follow the [average probabilities for drug development](#). In other words, drug development has a certain probability of success at each stage of drug development based on history. We assume that the continuation of Modulight's projects into the next phase will follow these historical probabilities. In terms of drug development projects, we estimate that the time to market and from Modulight's perspective large-scale commercialization of treatments is still several years away. We estimate the probability of one large-scale commercialization project by 2028 to be around 50%.

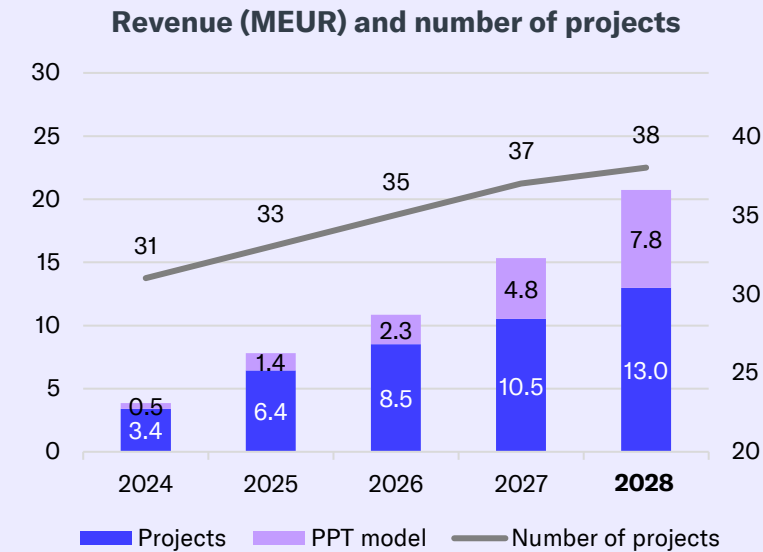
Visibility into the revenue recognition of projects is weak, as the development phase, schedule, and commercial potential are unknown variables in most projects. On the other hand, projects can also generate significant revenue, such as the 3.9 MUSD contract announced in early 2022 that was recognized in Q3'22-Q2'23. Similar projects could boost revenue very rapidly, but it’s very difficult to predict when they will come to fruition. Similarly, the entry of a single project into the large-scale commercialization phase (defined by Modulight as more than 10 MEUR revenue per year) could lead to a significantly rapid relative increase in revenue.

In terms of new growth areas like quantum computing or flow cytometry, we do not believe the company has significant revenue yet. However, a prototype project has been announced in quantum computing, which, in a positive scenario, could expand in the future. We model these areas rather conservatively based on a low project volume and a conservative level of revenue.

Key variables for revenue modeling

PPT model	Revenue of 8 MEUR in 2028, mainly from Phase III clinical trials and AMD treatments.
Projects	Revenue 13.3 MEUR in 2028
Projects in the commercialization phase	One project in the commercialization phase with a probability of 50% by 2028.

Source: Inderes



Source: Inderes

Estimates 2/3

In our view, there is a very high forecast risk, as the visibility on the company's business development is considerably limited. Recent history shows that revenue and profitability can fall significantly in a very short period of time. On the other hand, a single project entering the commercialization phase could raise Modulight's revenue from the low absolute level very heavily.

Our earnings estimate assumes recovery from difficulties and a growth trajectory

Modulight does not provide guidance, so our estimates are based purely on our revenue modeling. We expect revenue to grow rapidly after the next few difficult years. Growth is driven by the maturing project portfolio, increased use of the PPT model, and organic growth outside of projects. Our full-year revenue estimate for 2025 is 8.0 MEUR. Our forecast is based on the assumption of increased use of the PPT model, the quantum computing project, and other commercial progress in various projects. Our expectations of a recovery in the project business are supported by a gradual easing of the financial situation in the life science sector after a difficult period. Regarding the Bausch & Lomb agreement (Visudyne laser), our expectations are moderate based on the relatively small role of the treatment in macular degeneration and the continued availability challenges of the Visudyne drug.

In the longer term, our growth estimate is based on a moderate increase in the number of projects and a slow shift in their focus towards more mature stages, with an expected increase in revenue per project. For 2027 and 2028, growth will be driven in particular by expectations of projects moving into more mature phases and increasing

revenue from new growth projects. The strong growth we forecast will start to level off around the turn of the decade. Our projected CAGR for 2024-2030 is 41%. The figure is remarkably high, but the base figure is also very low, which makes achieving strong relative growth a bit easier. We estimate terminal growth of 3.0% from 2035 onwards based on the industry's good long-term growth outlook and favorable market trends. A key growth enabler is the recent factory investment, which Modulight has said will enable growth up to the 100 MEUR revenue level.

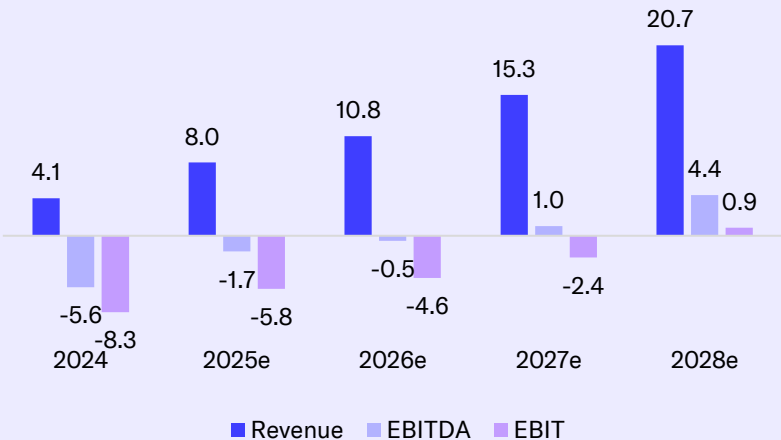
Costs and profitability

We expect the gross margin to develop towards its historical level of over 80% in the coming years, thanks to the introduction of the PPT model. The number of personnel is expected to grow fairly moderately based on the company's tighter cost control that began in 2024. However, we believe that growth will require a growing number of personnel.

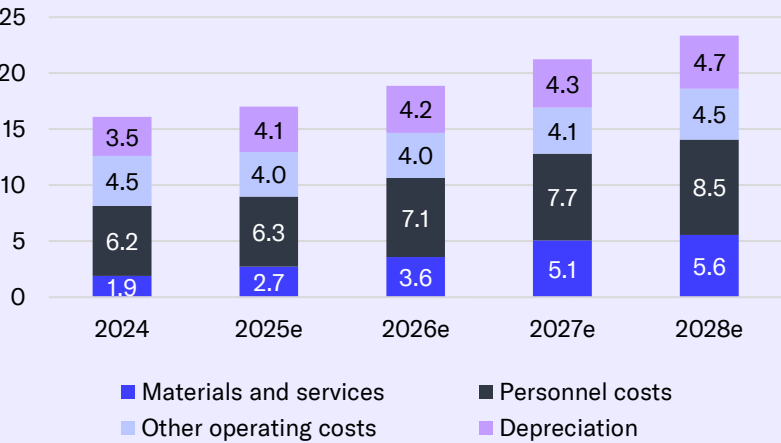
We expect the average personnel costs to be slightly below 100 TEUR per employee per year and the growth rate of the cost item to be 4%, based on expectations of wage inflation. We assume the growth rate of other operating expenses to be some 5% per year in the next few years. EBITDA is forecast to reach zero in 2027 and quickly turn positive as revenue grows clearly faster than costs.

We estimate a depreciation level of around 4 MEUR in the coming years, based on our expectation of increasing depreciation of plant and equipment investments. Due to high depreciation, EBIT will only become marginally positive in 2028, after which it will grow strongly, driven by high sales and costs that grow more slowly than revenue.

Revenue and profitability, MEUR



Costs, MEUR



Source: Inderes

Estimates 3/3

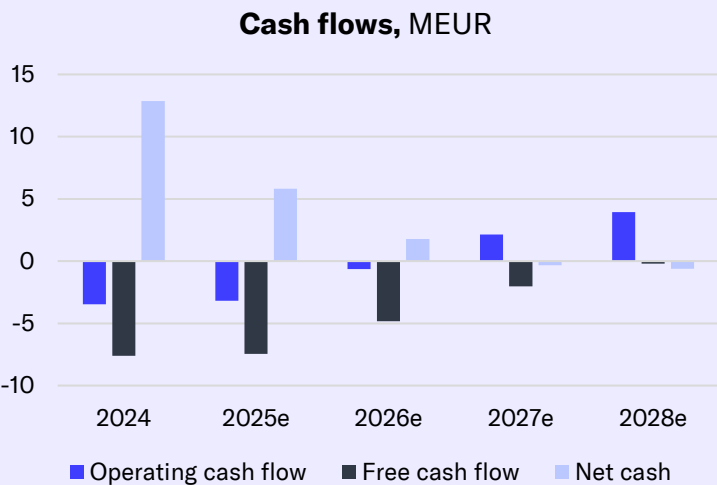
We assume a financial income of 0.2 MEUR due to the high cash position and a tax rate of 18% starting from 2027. We estimate the terminal level of EBIT to be a high 25%. Our assessment is based on the strong scalability potential of the business as the share of ongoing revenue increases through per-treatment pricing.

Cash flows are improving, but cash adequacy is tight

Modulight's operating cash flow has been clearly negative due to declining revenue, increased costs, and investments in production facilities. We predict that cash flow will improve clearly in the future with growth and scaling of earnings. We expect operating cash flow to turn positive in 2027 and improve thereafter as revenue growth and profitability improve. Going forward, the reported earnings and cash flow should largely match, as we expect investments and depreciation to be roughly at the same level in the future.

The completion of the production facility investment has reduced investments and improved free cash flow since 2024. However, in our forecast, investments (especially R&D capitalization) push free cash flow clearly below operating cash flow. In our estimates, free cash flow will reach zero in 2028.

As a result of the negative cash flow, the company's net cash turns negative in 2027. However, Modulight's current cash reserves are higher than its net cash, so we believe the company can survive without a new financing round even in our forecast scenario. We note that due to forecast uncertainty, the development of cash flows and the cash position may deviate significantly from our forecast in either direction.



Source: Inderes

Income statement

Income statement	2023	Q1'24	Q2'24	Q3'24	Q4'24	2024	Q1'25	Q2'25e	Q3'25e	Q4'25e	2025e	2026e	2027e	2028e
Revenue	4.0	1.1	1.0	0.6	1.4	4.1	1.6	1.7	2.1	2.5	8.0	10.8	15.3	20.7
Konserni	4.0	1.1	1.0	0.6	1.4	4.1	1.6	1.7	2.1	2.5	8.0	10.8	15.3	20.7
EBITDA	-8.5	-2.1	-1.2	-1.3	-1.0	-5.6	-0.6	-0.7	-0.2	-0.3	-1.7	-0.5	1.0	4.4
Depreciation	-3.6	0.1	-0.8	-0.8	-1.2	-2.7	-1.0	-1.0	-1.0	-1.0	-4.1	-4.1	-3.4	-3.5
EBIT	-12.1	-2.0	-2.0	-2.1	-2.2	-8.3	-1.6	-1.7	-1.2	-1.3	-5.8	-4.6	-2.4	0.9
Net financial items	0.3	0.1	0.1	0.1	1.5	1.9	0.0	0.2	0.2	0.2	0.4	0.8	-0.1	-0.1
PTP	-11.8	-1.9	-1.9	-2.0	-0.7	-6.5	-1.6	-1.6	-1.0	-1.1	-5.4	-3.8	-2.5	0.8
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	0.4	-0.1
Net earnings	-11.8	-1.9	-1.9	-2.0	-0.7	-6.5	-1.6	-1.6	-1.0	-1.1	-5.4	-3.8	-2.0	0.6
EPS (adj.)	-0.28	-0.04	-0.05	-0.05	-0.02	-0.15	-0.04	-0.04	-0.02	-0.03	-0.13	-0.09	-0.05	0.02
EPS (rep.)	-0.28	-0.04	-0.05	-0.05	-0.02	-0.15	-0.04	-0.04	-0.02	-0.03	-0.13	-0.09	-0.05	0.02

Key figures	2023	Q1'24	Q2'24	Q3'24	Q4'24	2024	Q1'25	Q2'25e	Q3'25e	Q4'25e	2025e	2026e	2027e	2028e
Revenue growth-%	-12.5 %	-29.0 %	-12.8 %	57.6 %	40.3 %	1.7 %	51.5 %	79.7 %	227.5 %	77.0 %	94.6 %	36.1 %	41.4 %	35.1 %
Adjusted EBIT growth-%	55.7 %	3.9 %	-2.3 %	-31.4 %	-56.5 %	-31.3 %	-20.1 %	-16.1 %	-44.1 %	-41.1 %	-30.8 %	-20.3 %	-48.5 %	-137.2 %
EBITDA-%	-212.0 %	-196.0 %	-126.5 %	-199.7 %	-71.4 %	-136.7 %	-36.1 %	-40.8 %	-7.5 %	-10.5 %	-21.5 %	-5.0 %	6.8 %	21.4 %
Adjusted EBIT-%	-301.4 %	-186.6 %	-212.1 %	-329.4 %	-153.9 %	-203.5 %	-98.4 %	-99.0 %	-56.2 %	-51.2 %	-72.4 %	-42.4 %	-15.4 %	4.2 %
Net earnings-%	-293.1 %	-177.2 %	-202.0 %	-307.5 %	-46.0 %	-157.5 %	-100.3 %	-90.4 %	-49.0 %	-45.2 %	-67.2 %	-35.0 %	-13.2 %	3.1 %

Source: Inderes

Balance sheet

Assets	2023	2024	2025e	2026e	2027e
Non-current assets	33.8	35.2	35.4	35.5	36.3
Goodwill	0.0	0.0	0.0	0.0	0.0
Intangible assets	8.9	10.9	12.0	13.0	15.2
Tangible assets	24.9	24.3	23.4	22.5	21.0
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	0.0	0.0	0.0	0.0
Deferred tax assets	0.0	0.0	0.0	0.0	0.0
Current assets	30.2	21.1	16.7	13.1	10.8
Inventories	2.6	2.3	2.8	2.9	2.3
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	2.5	1.4	1.1	1.4	1.8
Cash and equivalents	25.1	17.4	12.8	8.8	6.7
Balance sheet total	64.0	56.3	52.1	48.6	47.1

Source: Inderes

Liabilities & equity	2023	2024	2025e	2026e	2027e
Equity	55.7	49.2	43.9	40.1	38.1
Share capital	0.1	0.1	0.1	0.1	0.1
Retained earnings	-19.7	-26.2	-31.5	-35.3	-37.3
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	75.3	75.3	75.3	75.3	75.3
Minorities	0.0	0.0	0.0	0.0	0.0
Non-current liabilities	4.5	2.8	5.0	5.0	5.0
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	4.5	2.8	5.0	5.0	5.0
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	0.0	0.0	0.0	0.0	0.0
Current liabilities	3.7	4.2	3.2	3.5	4.0
Interest bearing debt	2.0	1.8	2.0	2.0	2.0
Payables	1.7	2.5	1.2	1.5	2.0
Other current liabilities	0.0	0.0	0.0	0.0	0.0
Balance sheet total	63.9	56.3	52.1	48.6	47.1

Valuation and recommendation 1/4

Valuation relies on sales-based multiples and DCF

With Modulight being loss-making and our projected profitability turnaround taking several years, we cannot rely on earnings multiples for valuation. On a sales basis, we can mirror the EV/S multiple to future growth prospects, profitability potential and the valuation of peers and the industry. In our view, the DCF calculation of the present value of projected cash flows is also a useful valuation method when pricing risk, unlike the EV/S multiple. However, forecasting cash flows in the case of Modulight is highly uncertain.

Uncertain growth and profitability outlook reduces accuracy of valuation

Long-term rapid growth in line with our estimates would be a valid justification for accepting even high valuation multiples. However, we believe that the forecast risk for growth is very high, as growth will depend on the success of the new pricing model, the penetration of new laser-based treatments, and possibly also market capture from large competitors in competitive business areas (dermatology, flow cytometry, genetics). We believe that this uncertainty should be reflected in the adopted multiples.

In terms of profitability, Modulight had a long positive period in the last decade. The company’s median EBIT margin in 2012-2022 was 23%. However, this continuity was broken after 2022, when the revenue and profitability of the project business were at a low level. We don’t believe that historical highly profitable business performance can be directly translated into future profitability potential. Due to the increased cost structure,




the short- and medium-term profitability outlook appears clearly weaker than historical levels. We also expect the changing nature of the business from small batches of customized products to larger batches and partly more competitive markets to put pressure on profitability. On the other hand, the company's success in PPT model pricing could increase the profitability potential in the long term to rather attractive levels.

In summary, we believe that Modulight's growth and profitability have both high potential and considerable uncertainties, which we try to balance in our valuation. The uncertainties and low predictability have been concretely reflected in the highly volatile market pricing and accepted multiples since the IPO (IPO price of EUR 6.49 per share and a range of EUR 0.77-17.65 per share thereafter).

EV/S multiples are not low, but justifiable with the growth and profitability outlook

Modulight's EV/S multiples for 2025-2026 are 5.8x and 4.6x. The multiple decreases further in the coming years with the revenue growth we predict. We believe the stock's current valuation includes the assumption of faster growth than the market in the coming years. We feel that Modulight has the potential to achieve growth from the low base values. At this stage, we rely on near-term multiples, as visibility on longer-term growth is very low.

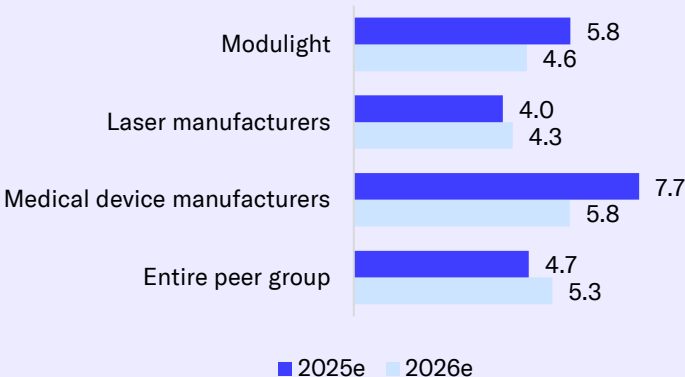
Scenario assumptions

	 High ¹	 Estimate	 Low ²
Revenue growth CAGR, 2024-34	34.2%	29.6%	11.7%
Growth (TERM)	4%	3%	2%
Median EBIT %	23%	18%	13%
EBIT (TERM)	30%	25%	20%
WACC	11%	11.5%	12%

- 1) In this scenario, revenue growth is 5 percentage points faster than our estimates for 2025-2034, and terminal growth is also higher. EBIT is 5 percentage points higher in the estimate period.
- 2) In this scenario, growth is 15 percentage points below our estimates, and terminal growth is lower. EBIT is 5 percentage points lower in the estimate period.

Source: Inderes

EV/S multiples



Valuation and recommendation 2/4

There are few direct listed peer companies, as photodynamic therapy companies are mostly unlisted and laser devices are often only a small part of the larger companies' business. In our opinion, the best direct competitor is the French laser company Lumibird SA, which designs and manufactures semiconductor lasers for a range of industries, including ophthalmology. Lumibird's EV/S ratio is 2.5x for 2025-2026. The median multiples for the peer group of laser manufacturers are 4.0x and 4.3x. Modulight is thus highly valued compared to Lumibird and slightly highly valued compared to the peer group of laser manufacturers. However, based on the growth potential, higher multiples than for the peers are acceptable.

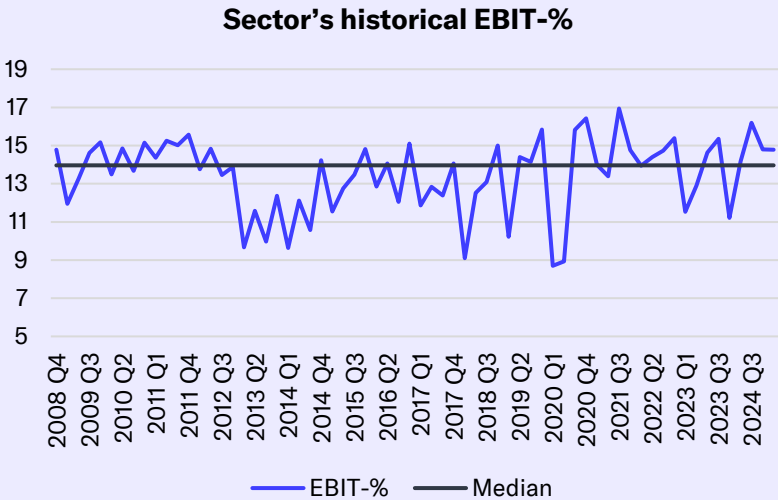
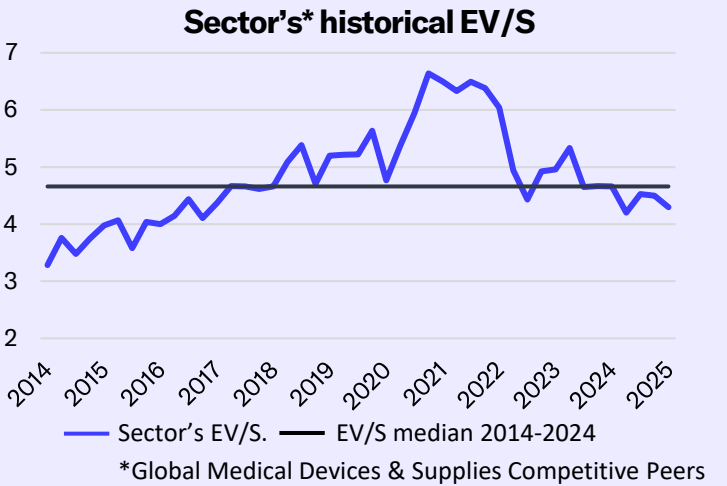
We believe that Modulight's core business is the supply of laser solutions for medical projects. Therefore, we also consider medical technology companies to be a good peer group, with median EV/S ratios of 7.7x-5.8x for 2025-2026. Modulight is valued at more favorable multiples compared to laser manufacturers and medical technology companies, measured by 2025-2026 EV/S multiples.

The multiples can also be compared to the average historical valuation multiples for the medical technology sector. The long-term (2014-2024) median EV/S ratio of the Global Medical Devices & Supplies Competitive Peers index (Bloomberg) has been 4.7x based on the previous 12 months' revenue. The most recent index is 4.3x (Q1'25). The sector index consists of large, high-quality, mainly US-based health technology companies with a different profitability and growth profile from Modulight. Large companies are defensive and on average very profitable (median EBIT 13%), and moderately growing (median revenue growth 2014-2024: 7.2%). Given its high growth

and profitability potential, we believe Modulight deserves slightly higher multiples than the Global Medical Devices & Supplies sector.

As a whole, we consider Modulight's valuation based on EV/S ratios cautiously attractive. With the current outlook, we are ready to accept a multiple of 5-8x for the stock with this year's estimates, which means that with our estimates, the multiples fall into the lower half of the range. The valuation falls below the range with our forecasts in 2026. We are prepared to raise the acceptable multiples if the company achieves the growth and profitability performance we forecast.

If Modulight's 2028e growth materializes according to our forecasts and the stock is valued at a neutral multiple of 5x at that stage of development, the stock would be worth EUR 1.7 discounted to the present. In the pessimistic scenario and at the lower EV/S ratio (3x), the stock's present value would be EUR 0.6. Similarly, with higher estimates and a higher valuation (8x), the present value of the share would be EUR 3.0. The stock could therefore have upside in our baseline scenario if the growth estimates materialize and the market continues to price the stock at relatively high sales-based multiples in the future. In our opinion, high multiples are likely if growth is confirmed. Exceeding or falling below growth estimates and the resulting assumed change in valuation multiples produces a very wide range of stock valuations.



Valuation and recommendation 3/4

In the DCF baseline scenario, the stock is slightly overvalued

The DCF model in the baseline scenario indicates a present value of future cash flows of EUR 1.5 per share. We have used a weighted average cost of capital (WACC) of 11.5% to reflect the risk profile of the investment. The WACC is brought up by the loss-making nature of the business, the high risk of estimates materializing and the fact that positive cash flows are located far into the future. In turn, the WACC is driven down by a strong balance sheet, historical evidence of profitability and good growth prospects in a defensive industry.

Due to the negative cash flows projected for the coming years, the impact on the share's present value between 2025 and 2029 is negative (-26%). With the growth in revenue and the expected profitability turnaround, by 2030-2034 cash flows account for 33% of the present value. Terminal cash flows projected beyond 2034 represent 93% of the present value. The heavy weighting of cash flows to the period after 2034 highlights the stock's high risk profile and the valuation's dependence on the realization of long-term growth.

The value of the stock is quite sensitive to the WACC employed when the estimated cash flows are far in the future, so the discount rate used has a strong impact on their present value. The WACC we estimate is dynamic and can change depending on the risk level of the company and the risk tolerance of the market. For example, positive signs of broad commercial success of projects and a sustained return to profitability would, in our view, be news that could have a downward impact on the WACC.

DCF values in different scenarios

In the positive scenario, the DCF is EUR 3.7 and in the negative scenario EUR 0.7. The main factor explaining the differences between the scenarios is revenue growth, which is followed by profitability. In particular, the higher terminal profitability (EBIT of 30%) used in the positive scenario has a clear upward effect on the value. In the negative scenario, terminal profitability remains at 20%. We note that the scenarios do not represent our view of the best and worst possible path for the business but are intended to provide investors with a perspective on the sensitivity of the valuation assumptions used, which in the case of Modulight is high.

Valuation summary

Our view of the fair value of Modulight's share is EUR 0.6-3.7 based on various methods. Given the company's profile, significant estimate risk, and low visibility, we believe a wide fair value range is justified. Central to the view are the EV/S multiples and DCF model and its scenarios, which suggest that the stock is cautiously attractively valued with our assumptions in the basic scenario. The various methods suggest a significant upside or downside for the stock in high and low growth scenarios.

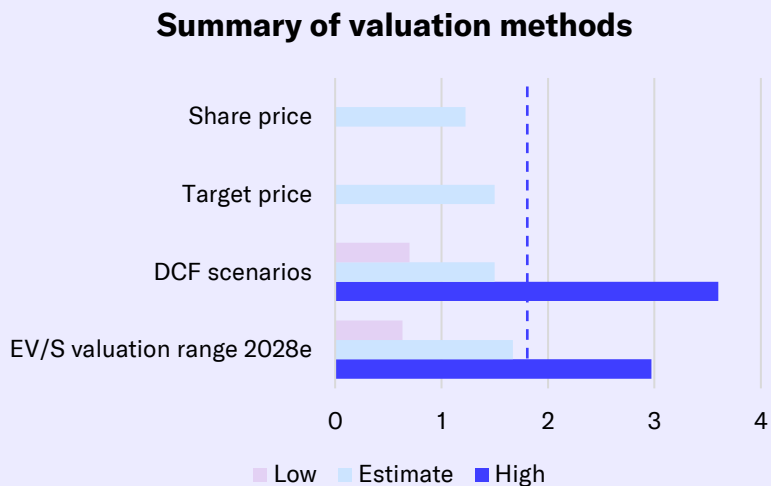
According to the guidance, Modulight will pay little or no dividends in the 2023-2025 strategy period. The investor's return will probably only consist of changes in the share price, also in the future. Given the low visibility and the remoteness of cash flows, we expect the share price to continue to fluctuate significantly, in line with news flow, market-accepted valuation and company developments. In the long term, we believe that the success of the company and the investment will be primarily determined by the success of the company's project business.

EV/S valuation range 2028			
Scenarios by 2028	Pessi-mistic	Current estimates	Optimistic
Revenue	11.3	20.7	23.7
Pricing multiple (EV/S)	3x	5x	8x
Market cap 2028e (MEUR)	34	104	190
Net cash 2028e	-5.6	-0.6	4.4
EV 2028e (MEUR)	40	104	185
Per share (EUR)	0.9	2.4	4.3
Per share currently (EUR)	0.6	1.7	3.0

Sensitivity of the share price to changes in the EV/S ratio				
EV/S multiple 2028e	Market cap	Enterprise value (EV)	EV/share	EV/share in the present
3x	62.1	62.7	1.5	1.0
4x	82.8	83.4	2.0	1.3
5x	103.5	104.1	2.4	1.7
6x	124.2	124.8	2.9	2.0
8x	165.6	166.2	3.9	2.7
10x	207.0	207.6	4.9	3.3

Valuation and recommendation 4/4

In our view, the risk level of the stock's business is very high (level 5), and the valuation risk is high (level 4) at the time of publication of the report. In addition to the forecast and pricing risk, uncertainty is compounded by the currently continuing loss-making nature of the business. From a capital loss perspective, we estimate that the main risks are related to a shortfall in revenue growth and/or profitability compared to our estimates and a simultaneous decline in the valuation multiples accepted by the market. The return on the stock, as indicated by the DCF, could then be very poor. We believe the stock is suitable for a patient investor seeking strong growth and tolerant of risk.



Source: Inderes

Valuation table

Valuation	2020	2021	2022	2023	2024	2025e	2026e	2027e	2028e
Share price		11.4	2.95	0.90	1.10	1.22	1.22	1.22	1.22
Number of shares, millions	30.7	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
Market cap		484	126	38	47	52	52	52	52
EV	3.9	430	90	20	34	46	50	52	53
P/E (adj.)	0.0	neg.	neg.	neg.	neg.	neg.	neg.	neg.	81.5
P/E	0.0	neg.	neg.	neg.	neg.	neg.	neg.	neg.	81.5
P/B	0.0	8.4	1.9	0.7	1.0	1.2	1.3	1.4	1.3
P/S	0.0	53.3	27.3	9.5	11.4	6.5	4.8	3.4	2.5
EV/Sales	0.4	47.4	19.6	4.9	8.3	5.8	4.6	3.4	2.5
EV/EBITDA	0.7	>100	neg.	neg.	neg.	neg.	neg.	50.5	11.9
EV/EBIT (adj.)	0.8	neg.	neg.	neg.	neg.	neg.	neg.	neg.	59.9
Payout ratio (%)	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	50.0 %
Dividend yield-%		0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.6 %

Source: Inderes

Peer group valuation

Peer group valuation Company	Market cap MEUR	EV MEUR	EV/EBIT		EV/EBITDA		EV/S		P/E		Dividend yield-%		P/B
			2025e	2026e	2025e	2026e	2025e	2026e	2025e	2026e	2025e	2026e	2025e
Carl Zeiss Meditech	5120	5716	15.6	24.3	12.7	17.9	2.7	2.8	19.0	30.7	1.9	1.5	2.4
Coherent Corp	11571	16592	19.7	27.6	15.7	19.4	3.8	4.1	29.5	52.9			1.9
IPG Photonics Corp	2487	1696	8.0		6.1	94.7	1.6	2.0	14.6				1.3
Lumentum	5612	7068	24.3	233.4	17.1	58.2	4.7	6.1	21.0	96.7			4.2
Lumibird SA	431	521	23.9	40.1	13.6	15.8	2.5	2.5	39.2	64.0			2.0
Medtronic	94057	110946	15.8	15.8	14.0	13.9	4.2	4.0	16.3	16.5	3.2	3.2	2.2
Nexstim	91	93		23.2		23.2	13.3	5.8		27.0			32.6
nLIGHT	828	746					4.2	4.4					
Optomed	84	78					5.0	5.3					3.7
Revenio Group	742	732	27.9	28.2	24.5	23.8	7.7	7.1	37.6	39.2	1.4	1.4	7.4
Stryker	128352	140617	33.9	29.3	30.8	26.6	8.1	7.3	37.8	32.6	0.7	0.8	8.0
Theralase	28	28					43.4	58.1					18.0
Xvivo Perfusion	822	796	195.9	78.1	90.7	49.7	14.4	10.8	252.2	61.8			4.7
Modulight Oyj (Inderes)	52	46	-8.0	-11.0	-27.1	-93.4	5.8	4.6	-9.7	-13.7	0.0	0.0	1.2
Average			40.6	55.6	25.0	34.3	8.9	9.3	51.9	46.8	1.8	1.7	7.4
Median			23.9	28.2	15.7	23.5	4.7	5.3	29.5	39.2	1.6	1.5	4.0
Diff-% to median			-134%	-139%	-272%	-498%	24%	-13%	-133%	-135%	-100%	-100%	-70%

Source: Refinitiv / Inderes

DCF-calculation

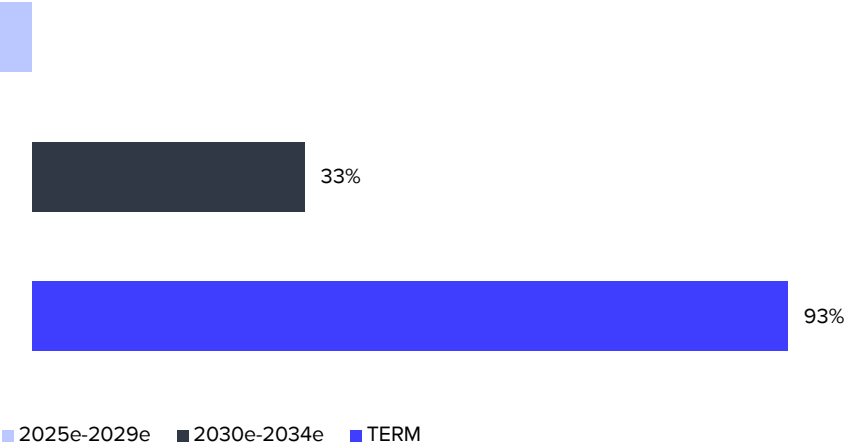
DCF model	2024	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	TERM
Revenue growth-%	1.7 %	94.6 %	36.1 %	41.4 %	35.1 %	30.0 %	25.0 %	25.0 %	16.0 %	12.0 %	7.0 %	3.0 %	3.0 %
EBIT-%	-203.5 %	-72.4 %	-42.4 %	-15.4 %	4.2 %	8.0 %	12.0 %	18.0 %	22.0 %	22.0 %	22.0 %	22.0 %	22.0 %
EBIT (operating profit)	-8.3	-5.8	-4.6	-2.4	0.9	2.2	4.0	7.6	10.7	12.0	12.9	13.3	
+ Depreciation	2.7	4.1	4.1	3.4	3.5	3.7	3.7	3.9	3.9	3.9	3.9	4.0	
- Paid taxes	0.0	0.0	0.0	0.4	-0.1	-0.4	-0.7	-1.3	-1.9	-2.1	-2.3	-2.3	
- Tax, financial expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	
+ 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	
- Change in working capital	2.1	-1.5	-0.1	0.7	-0.3	0.1	-0.8	-0.2	-0.3	-0.4	-0.3	-0.1	
Operating cash flow	-3.5	-3.2	-0.7	2.1	3.9	5.5	6.3	9.9	12.4	13.4	14.2	14.7	
+ Change in other long-term liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Gross CAPEX	-4.1	-4.3	-4.2	-4.2	-4.1	-4.1	-4.0	-4.0	-4.0	-3.9	-3.9	-3.8	
Free operating cash flow	-7.6	-7.5	-4.8	-2.0	-0.2	1.4	2.2	5.9	8.5	9.4	10.3	10.9	
+/- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FCFF	-7.6	-7.5	-4.8	-2.0	-0.2	1.4	2.2	5.9	8.5	9.4	10.3	10.9	133
Discounted FCFF		-7.1	-4.1	-1.5	-0.1	0.9	1.2	2.9	3.8	3.8	3.7	3.5	42.5
Sum of FCFF present value		49.4	56.4	60.5	62.1	62.2	61.3	60.1	57.2	53.4	49.7	46.0	42.5
Enterprise value DCF		49.4											
- Interest bearing debt		-4.5											
+ Cash and cash equivalents		17.4											
-Minorities		0.0											
-Dividend/capital return		0.0											
Equity value DCF		62.2											
Equity value DCF per share		1.5	2025e-2029e	-26%									

WACC

Tax-% (WACC)	20.0 %
Target debt ratio (D/(D+E))	10.0 %
Cost of debt	8.0 %
Equity Beta	1.90
Market risk premium	4.75%
Liquidity premium	0.50%
Risk free interest rate	2.5 %
Cost of equity	12.0 %
Weighted average cost of capital (WACC)	11.5 %

Source: Inderes

Cash flow distribution



Summary

Income statement	2022	2023	2024	2025e	2026e	Per share data	2022	2023	2024	2025e	2026e
Revenue	4.6	4.0	4.1	8.0	10.8	EPS (reported)	-0.20	-0.28	-0.15	-0.13	-0.09
EBITDA	-5.9	-8.5	-5.6	-1.7	-0.5	EPS (adj.)	-0.20	-0.28	-0.15	-0.13	-0.09
EBIT	-7.8	-12.1	-8.3	-5.8	-4.6	OCF / share	-0.08	-0.18	-0.08	-0.07	-0.02
PTP	-8.6	-11.8	-6.5	-5.4	-3.8	FCF / share	-0.40	-0.41	-0.18	-0.17	-0.11
Net Income	-8.6	-11.8	-6.5	-5.4	-3.8	Book value / share	1.59	1.31	1.16	1.03	0.94
Extraordinary items	0.0	0.0	0.0	0.0	0.0	Dividend / share	0.00	0.00	0.00	0.00	0.00
Balance sheet	2022	2023	2024	2025e	2026e	Growth and profitability	2022	2023	2024	2025e	2026e
Balance sheet total	78.3	64.0	56.3	52.1	48.6	Revenue growth-%	-49%	-12%	2%	95%	36%
Equity capital	67.6	55.7	49.2	43.9	40.1	EBITDA growth-%	-1428%	44%	-34%	-69%	-68%
Goodwill	0.0	0.0	0.0	0.0	0.0	EBIT (adj.) growth-%	935%	56%	-31%	-31%	-20%
Net debt	-35.6	-18.6	-12.9	-5.8	-1.8	EPS (adj.) growth-%	69%	38%	-45%	-17%	-29%
Cash flow	2022	2023	2024	2025e	2026e	EBITDA-%	-129.0 %	-212.0 %	-136.7 %	-21.5 %	-5.0 %
EBITDA	-5.9	-8.5	-5.6	-1.7	-0.5	EBIT (adj.)-%	-169.5 %	-301.4 %	-203.5 %	-72.4 %	-42.4 %
Change in working capital	2.6	1.0	2.1	-1.5	-0.1	EBIT-%	-169.5 %	-301.4 %	-203.5 %	-72.4 %	-42.4 %
Operating cash flow	-3.3	-7.5	-3.5	-3.2	-0.7	ROE-%	-11.9 %	-19.1 %	-12.3 %	-11.5 %	-9.0 %
CAPEX	-13.7	-9.7	-4.1	-4.3	-4.2	ROI-%	-9.6 %	-17.6 %	-14.4 %	-11.0 %	-9.4 %
Free cash flow	-17.0	-17.3	-7.6	-7.5	-4.8	Equity ratio	86.3 %	87.1 %	87.5 %	84.3 %	82.5 %
						Gearing	-52.7 %	-33.4 %	-26.1 %	-13.2 %	-4.5 %
Valuation multiples	2022	2023	2024	2025e	2026e						
EV/S	19.6	4.9	8.3	5.8	4.6						
EV/EBITDA	neg.	neg.	neg.	neg.	neg.						
EV/EBIT (adj.)	neg.	neg.	neg.	neg.	neg.						
P/E (adj.)	neg.	neg.	neg.	neg.	neg.						
P/B	1.9	0.7	1.0	1.2	1.3						
Dividend-%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %						

Source: Inderes

Disclaimer and recommendation history

The information presented in Inderes reports is obtained from several different public sources that Inderes considers to be reliable. Inderes aims to use reliable and comprehensive information, but Inderes does not guarantee the accuracy of the presented information. Any opinions, estimates and forecasts represent the views of the authors. Inderes is not responsible for the content or accuracy of the presented information. Inderes and its employees are also not responsible for the financial outcomes of investment decisions made based on the reports or any direct or indirect damage caused by the use of the information. The information used in producing the reports may change quickly. Inderes makes no commitment to announcing any potential changes to the presented information and opinions.

The reports produced by Inderes are intended for informational use only. The reports should not be construed as offers or advice to buy, sell or subscribe investment products. Customers should also understand that past performance is not a guarantee of future results. When making investment decisions, customers must base their decisions on their own research and their estimates of the factors that influence the value of the investment and take into account their objectives and financial position and use advisors as necessary. Customers are responsible for their investment decisions and their financial outcomes.

Reports produced by Inderes may not be edited, copied or made available to others in their entirety, or in part, without Inderes' written consent. No part of this report, or the report as a whole, shall be transferred or shared in any form to the United States, Canada or Japan or the citizens of the aforementioned countries. The legislation of other countries may also lay down restrictions pertaining to the distribution of the information contained in this report. Any individuals who may be subject to such restrictions must take said restrictions into account.

Inderes issues target prices for the shares it follows. The recommendation methodology used by Inderes is based on the share's 12-month expected total shareholder return (including the share price and dividends) and takes into account Inderes' view of the risk associated with the expected returns. The recommendation policy consists of four tiers: Sell, Reduce, Accumulate and Buy. As a rule, Inderes' investment recommendations and target prices are reviewed at least 2–4 times per year in connection with the companies' interim reports, but the recommendations and target prices may also be changed at other times depending on the market conditions. The issued recommendations and target prices do not guarantee that the share price will develop in line with the estimate. Inderes primarily uses the following valuation methods in determining target prices and recommendations: Cash flow analysis (DCF), valuation multiples, peer group analysis and sum of parts analysis. The valuation methods and target price criteria used are always company-specific and they may vary significantly depending on the company and (or) industry.

Inderes' recommendation policy is based on the following distribution relative to the 12-month risk-adjusted expected total shareholder return.

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

The assessment of the 12-month risk-adjusted expected total shareholder return based on the above-mentioned definitions is company-specific and subjective. Consequently, similar 12-month expected total shareholder returns between different shares may result in different recommendations, and the recommendations and 12-month expected total shareholder returns between different shares should not be compared with each other. The counterpart of the expected total shareholder return is Inderes' view of the risk taken by the investor, which varies considerably between companies and scenarios. Thus, a high expected total shareholder return does not necessarily lead to positive performance when the risks are exceptionally high and, correspondingly, a low expected total shareholder return does not necessarily lead to a negative recommendation if Inderes considers the risks to be moderate.

The analysts who produce Inderes' research and Inderes employees cannot have 1) shareholdings that exceed the threshold of significant financial gain or 2) shareholdings exceeding 1% in any company subject to Inderes' research activities. Inderes Oyj can only own shares in the target companies it follows to the extent shown in the company's model portfolio investing real funds. All of Inderes Oyj's shareholdings are presented in itemised form in the model portfolio. Inderes Oyj does not have other shareholdings in the target companies analysed. The remuneration of the analysts who produce the analysis are not directly or indirectly linked to the issued recommendation or views. Inderes Oyj does not have investment bank operations.

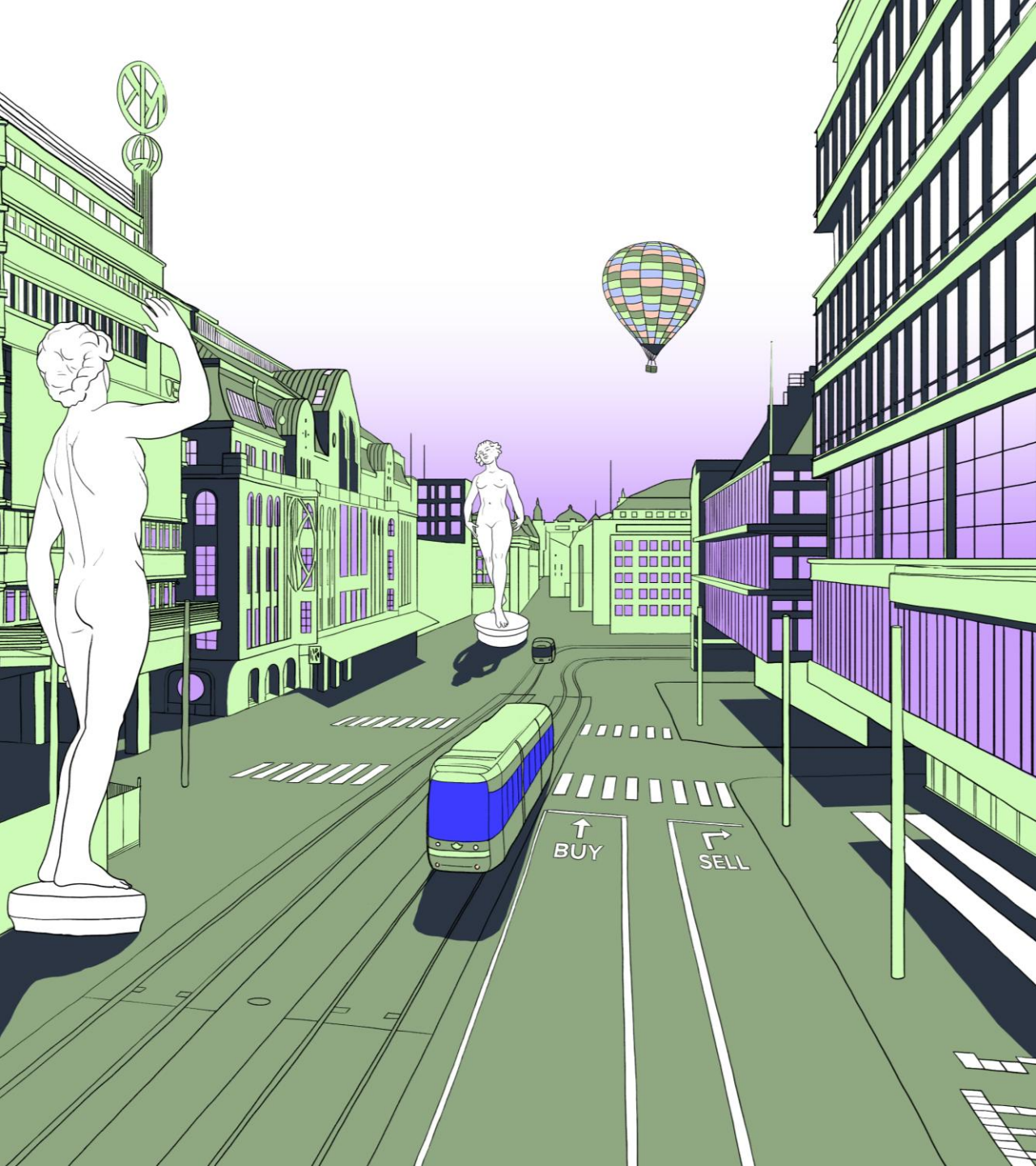
Inderes or its partners whose customer relationships may have a financial impact on Inderes may, in their business operations, seek assignments with various issuers with respect to services provided by Inderes or its partners. Thus, Inderes may be in a direct or indirect contractual relationship with an issuer that is the subject of research activities. Inderes and its partners may provide investor relations services to issuers. The aim of such services is to improve communication between the company and the capital markets. These services include the organisation of investor events, advisory services related to investor relations and the production of investor research reports.

More information about research disclaimers can be found at www.inderes.fi/research-disclaimer.

Inderes has made an agreement with the issuer and target of this report, which entails compiling a research report.

Recommendation history (>12 mo)

Date	Recommendation	Target	Share price
3/15/2023	Reduce	2.30 €	2.42 €
5/2/2023	Reduce	2.30 €	2.31 €
8/11/2023	Reduce	2.30 €	2.15 €
8/21/2023	Reduce	1.60 €	1.50 €
20.10.23	Reduce	1.50 €	1.39 €
1/2/2023	Reduce	1.20 €	1.17 €
2/26/2024	Reduce	0.90 €	0.85 €
4/29/2024	Reduce	0.90 €	0.83 €
8/19/2024	Reduce	0.90 €	1.14 €
10/22/2024	Reduce	0.90 €	0.99 €
2/24/2025	Accumulate	1.30 €	1.15 €
4/28/2025	Accumulate	1.50 €	1.34 €
7/1/2025	Accumulate	1.50 €	1.22 €



CONNECTING INVESTORS AND COMPANIES.

Inderes connects investors and listed companies.

We serve over 400 Nordic listed companies that want to better serve investors. The Inderes community is home to over 70,000 active investors.

We provide listed companies with solutions that enable seamless and effective investor relations. The Inderes service is built on four cornerstones for high-quality investor relations: Equity Research, Events, IR Software, and Annual General Meetings (AGM).

Inderes operates in Finland, Sweden, Norway, and Denmark and is listed on the Nasdaq First North Growth Market.

Inderes was created by investors, for investors.

Inderes Ab

Vattugatan 17, 5tr
Stockholm
+46 8 411 43 80

Inderes Oyj

Porkkalankatu 5
00180 Helsinki
+358 10 219 4690

inderes.se

inderes.fi

**inde
res.**