

Prolight Diagnostics AB

Important milestone amidst mixed news flow

Johan Widmark | 2024-04-25 08:00

There has been a somewhat mixed news flow from Prolight after the close of Q1'24. The finalization of the cartridge design to be used on the commercial platform marks an important step in product development and opens up for assay performance evaluation. Prolight has also announced a positive SEK 5.6m revision to the FY'23 result stemming from understated claim on the UK tax authority regarding R&D. Additionally, the SEK 113m write down the capitalized development costs regarding troponin testing on the analogue POC system MicroFlex, is of course noteworthy but has no impact on cash flow and means no real changes to the case we're seeing in the company's digital POC system Psyros.

All in all, with proof-of-performance for its proprietary digital technique for detection of high-sensitive biomarkers even in whole blood, we now expect the company to continue it's progress with prototype development and IVDR certification towards launch in 2026. This in turn should catalyze a revaluation that better reflects the long term prospects we're seeing, where we continue to find support for a fair value of SEK 1.1 - 1.2 per share.

SEK 113m write down not affecting the case we're seeing

Earlier in April, Prolight announced that it had decided to write down the capitalized development costs regarding troponin testing on the analogue POC system MicroFlex with SEK 113 million. While the impairment impacts the result for 2023 it has no effect on the cash balance. The impairment is motivated by the fact that testing single biomarker troponin on the MicroFlexPOC system is no longer believed to be successful as Prolight's digital POC system Psyros™ has demonstrated superior performance. As for the commercialization agreement with The Technology Partnership plc (TTP) signed in 2022, this will not be affected as it covers several other biomarkers with big market potential. The write down and its effect on reported numbers will be published in the annual report on April 30, 2024.

Finalization of the cartridge design an important milestone

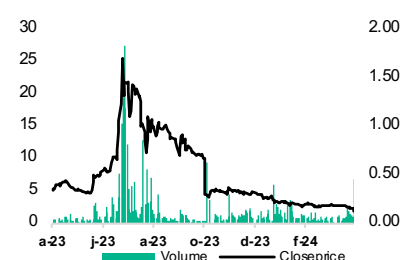
Besides the upwards adjustment of 2023 result stemming from the understated claim on the UK tax authority, the most noteworthy news item is the finalization of the cartridge design to be used on the commercial platform. With that, the process of design transfer to Prolight's contract manufacturing partner Flex Medical Solutions can begin, and the pilot manufacturing processes can now be ready for internal validation by the end of 2024, ahead of the clinical validation during 2025. Prolight's cartridge has a number of key competitive features including: Simple low part count design, a design for large scale manufacturing ensuring a competitive low cost. It contains all the reagents required to complete the test with dried cartridge chemistry to avoid the complexity and cost of expensive liquid reagents/blister packs. It is also compatible with venous and capillary blood (fingerstick), and plasma samples, and has multiplex capability for multiple analytes on a single cartridge.

Significant long term potential

Prolight has developed a single molecule counting (digital) immuno analysis device that enables detection of biomarkers at extremely low concentrations, using a single drop of blood. Following the proof-of-performance announced in mid-June, followed by whole blood in November 2023, Prolight now focuses on the development of the commercial instrument prototype for digital immune analysis and the preparations for the IVDR certification, with commercialization of the troponin test expected in 2026. Adding the potential for BNP and D-Dimer POC-tests, this translates to a NPV of SEK 680m, supporting a fair value of SEK 1.1-1.2 per share, factoring in additional new equity of a total of around SEK 100m.

Prolight Diagnostics

Fair Value, SEK	1,1 - 1,2
Current Price, SEK	0.160
Shares (M)	499.8
Market Cap (MSEK)	80.0
Net Debt (MSEK) Est.	-44.5
EV (MSEK) Est.	35.5
Market	Nordic SME



Prolight Financial Summary

Prolight Financial Summary		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenue	SEKm	0.0	0.0	44.0	125.0	20.6	29.5	111.7	158.1	157.8	204.3	288.0	368.7	396.3
EBIT	SEKm	-22.5	-35.8	4.4	81.5	-26.7	-21.8	56.3	99.4	96.7	140.7	221.7	299.4	323.8
EV/Sales	SEKm	-	-	1.4	0.5	3.1	2.2	0.6	0.4	0.4	0.3	0.2	0.2	0.2
EV/EBIT	SEKm	-	-	14.6	0.8	-2.4	-2.9	1.1	0.6	0.7	0.5	0.3	0.2	0.2

Source: Emergers, Prolight

Prolight in short

Prolight Diagnostics was founded in 1999 in Lund by Masoud Khayyami, PhD in Chemistry from Lund University. The objective was to develop a diagnostic POC-test that could quickly determine whether a patient had suffered a heart attack or not.

In early 2022 Prolight acquired British company Psyros Diagnostics, and with it, its groundbreaking, proprietary digital immunoassay POC testing technology. A compact and portable device with specialized cartridges that can perform tests directly from a drop of blood, with results available within 10 minutes.

Initially the device will be used to measure levels of the cardiac biomarker troponin, which is used as an aid to determine whether or not a patient is suffering from a myocardial infarction. The new ground-breaking technology may also open up the possibility of developing new POC-tests in a wide range of clinical areas that were previously only possible to carry out in specialised laboratories. Psyros is now fully integrated with Prolight and functions as a fully owned subsidiary.

A partnership with Cambridge based The Technology Partnership (TTP) was initiated to develop the MicroFlex POC-platform. Prolight has contributed to the development of the well-proven ELISA technology into a Microformat, which has been combined with the Flex membrane technology, developed by TTP. The further developed combination of these two technologies, Micro Flex, has the potential to achieve equivalent test performance as hospital laboratories, very well suited for distributed testing. In late 2022 Prolight signed a commercialisation agreement with TTP regarding the Micro Flex system, where Prolight will receive a share of future revenues. This however, is not included in our valuation.

The Market for POCT and Cardiac Biomarkers

There is a clear and pressing demand for quick and accurate tests that can be conducted near the patient. The market is calling for more tests to be moved out of large hospital laboratories and closer to the healthcare providers who treat the patients. During the COVID-19 pandemic, there was a significant increase in interest for point-of-care testing (POCT), which helped people recognize the value of fast, easy, and effective testing right where the patient is being treated.

Today, many companies, clinics, individuals, politicians, and others understand that these kinds of tests can bring great benefits to patients, the healthcare system, and companies alike. As a result, the need for secure, precise, and high-quality POC-tests is expected to keep growing.

On Dec 29, 2023 Roche announced that it will pay USD 295 m to acquire LumiraDx with an additional USD 55 m to fund operations until acquisition is completed in mid 2024.

There are also other transactions in the field in the last couple of years. In early 2023, French POC company Biosynex acquired Chembio Diagnostics for USD 17,2 m to gain access to the company's POC tests for infectious diseases.

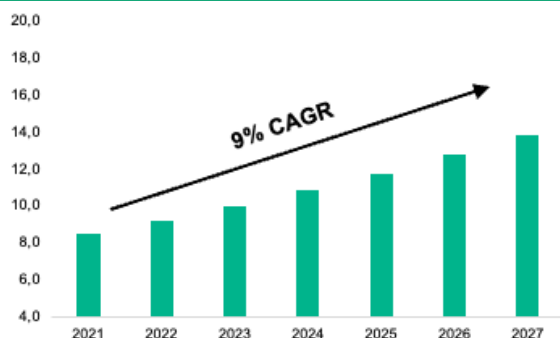
In 2022, Biomerieux acquired Specific Diagnostics for USD 417 million for the Specific Reveal Rapid AST system. Specific Diagnostics is not really POC but it is a rapid system, i.e., providing quick result for immediate decision making. In 2021 Thermo Fisher Scientific acquired POC company Mesa Biotech for USD 450 m.

It is also worth mentioning in this context Abbott's acquisition of Alere for USD 5.8 billion in 2016, a deal that positioned them as a leader in the POC market. The acquisitions not only demonstrate that there has been a long-standing interest in point-of-care testing, but also that this interest is increasing.

In addition, the four founders of Psyros Diagnostics, today significant shareholders and working full time in Prolight, have previously developed another POC system, Vivacta, which they sold to the pharmaceutical company Novartis for 90 million USD.

According to Fortune Business Insights, the global POC market is expected to grow from USD 45.9 billion in 2023 to USD 78.11 billion by 2030. The primary drivers behind the overall growth of POC testing, are projected to be the increased need for diagnostics in developing countries, the growing demand for central laboratory tests being shifted to clinics closer to the patient, such as primary care and elderly care facilities, rapid technological advancements, digitization in healthcare, increasing investments in research and development, and an aging population in the Western world.

Global Cardiac Biomarkers Market (USDbn)



Source: GMInsights, Emergers

The global market for bio-cardiac markers was valued at approximately USD 9.0 billion in 2021, and it is projected to grow at a rate of around 9 percent annually until 2027, reaching an estimated value of around USD 14.9 billion. The market for POC tests for bio-cardiac markers is driven by the increasing number of individuals with heart diseases and the growing awareness of the importance of early diagnosis and demand for prompt and targeted medical interventions.

Potential paradigm shift with new POC-tech

In Sweden, around 250,000 patients seek medical attention for chest pains every year, but less than 10% of these cases are ultimately confirmed as myocardial infarctions. The current diagnostic process involves an ECG and troponin test that is sent to a centralized laboratory, resulting in lengthy waiting periods. Therefore the need for fast and accurate near patient testing has a very high demand on the market. Moreover, this means that the remaining 90% of patients who do not have myocardial infarctions still undergo the same examination. However, Prolight's device offers results within 10 minutes, enabling caregivers to allocate resources more efficiently to patients requiring urgent assistance.

Other advantages of the portable, proprietary single molecule counting POC-system is the simplicity and low production costs. Today, low production costs is a pre-requisite to be able to offer a very competitive price and to achieve successful sales on the POC market.

Showcasing strong evidence

In late November 2022, Prolight unveiled evidence of the high-performance capability of its high-sensitivity immunoassay detecting single molecules of TSH (Thyroid Stimulating Hormone) at low levels. In June and November 2023 Prolight announced that the device also showed proof-of-performance for high-sensitive troponin. By utilizing serum and whole blood samples from human subjects, quantitative measurements of troponin levels were conducted within the range of single digit nanograms per liter (ng/L). This strengthens Prolight's case relative to competing solutions because it means avoiding centrifugation and cell separation, which lowers costs. It also requires a smaller volume of blood, which is an advantage for capillary blood samples. These concentrations are indicative of those required for rule out of myocardial infarction as defined by the European Cardiology Society's Guidelines on Fourth Universal Definition of Myocardial Infarction.

The company's pioneering research led to a prestigious grant from SBRI Healthcare. During 2023, phase two of the grant, totaling approximately GBP 1m, was successfully completed. The grant was conditional upon achieving certain milestones, all of which have now been met or exceeded, including the development of six fully functional prototypes. The grant has accelerated the development of the digital POC-system and represents a significant recognition.

Significant potential gains with POC-testing

Prolight's POC-testing device comprises a user-friendly disposable test cartridge and a portable analysis unit. It eliminates the need for costly components, leading to cost-effective production. This innovative technology also unlocks opportunities for the development of novel POC tests in diverse clinical domains that were previously limited to specialized laboratories offering high sensitivity and precision. Potential future clinical applications encompass neuropathology (such as dementia and traumatic brain injuries), immune system disorders (like sepsis and autoimmune diseases), and virus detection.

Expanding into additional USD multibillion areas

Clinical Area	Market Value (USD)
Neuropathology	5.9 billion (2019)
Immune System Dysfunctions, such as sepsis	5.5 billion (2022)
Virus Detection	4.1 billion (2021)

Source: Emergers, Marketsandmarkets, MordorIntelligence.

The sensitivity and accuracy of this single molecule POC immunoassay, are expected to match or exceed those of PCR tests currently performed on large laboratory instruments to detect infectious virus particles like COVID. The highly significant difference is that the response time can be as short as 10 minutes or less and not hours or days.

Short roadmap to launch

After announcing the proof-of-performance in mid-June and November, Prolight is now focused on developing a state-of-the-art commercial

instrument for its POC digital immunoassay system in compliance with all regulatory standards required by IVDR. They have partnered with Integrated Technologies Limited (ITL) for industrialization of the instrument and are preparing for the IVDR certification. Due to the shortage of Notified Bodies, we do not expect launch and commercialization until early 2026.

Expected Timeline

2024

Assay development design freeze	POC System design freeze	POC system verification	Pilot Manufacturing lines (instrument and cartridge validation)	Commercial POC system ready for clinical validation
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2025

Clinical validation	Stockbuild for commercial launch	Regulatory approval (IVDR) Notified Body
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2026

Commercial launch Troponin

2027

2028

Commercial launch BNP

2029

2030

Commercial launch D-Dimer

2031

Troponin 20% penetration

Source: Prolight, Emergers

High potential for the long-term investor

While we acknowledge the potential for Prolight and its POCT-device to venture into other lucrative clinical areas and incorporate multiplexing, our current valuation focuses exclusively on the POCT-device's application for troponin.

Since there are no digital POC systems available in the market yet, it is difficult to make accurate estimates about revenue, costs, and cash flow. However, based on an estimated average price of USD 20 per high-sensitive troponin POC-test and an annual suspected heart attack rate of 2.5% of the population, we can make some rough calculations about Prolight's potential earnings. Assuming the product launches in 2026, and with a projected peak market penetration of 30% in 2034, corresponding to 10m tests globally, we estimate sales of SEK 2.4 billion in 2035. It's worth noting we do not expect Prolight to take the project all the way to market alone and will probably seek a commercial partner instead.

Following the proof-of-performance, we now estimate a cumulative 75% probability that Prolight will successfully complete the remaining steps, including developing the fully functional commercial product, obtaining IVDR approval including the required clinical validation, and finding a commercial partner for the launch, on expected time. Future revenues may come from various partner set-ups. In our model we have chosen one alternative and used it as a possible proxy where we estimate USD 20 million

in combined upfront and milestone payments (USD 5m when finding a licensee, USD 5m when IVDR approval is in place and USD 10m at market launch), along with a 15% royalty on sales. However, since the final partnership set up may look very different for Prolight this is just one model we have used as an assumption.

For BNP and D-Dimer, we anticipate an incidence rate of 2% and 0.5% within the population, with a projected peak market penetration of 10%. This would result in approximately 1.9 million and 700,000 tests respectively by the year 2034. Assuming a price per test of USD 40 and USD 100 for BNP and D-Dimer tests respectively, the combined sales revenue is estimated to reach USD 150 million in 2034.

Furthermore, we anticipate that these tests will be introduced through a partnership, wherein Prolight will receive a 12.5% royalty. All future earnings have been adjusted for risk with a 70% likelihood that the tests reach commercial phase, leaving Prolight with earnings of a combined (troponin + BNP + D-Dimer) of around SEK 350m in 2034.

Financial position

The company has outstanding subscription options (TO6 and TO7) which can provide up to SEK 169m before cost in Q2'24 and Q4'24. A signed agreement, with a potential industrial partner ahead of the estimated launch may provide even more capital to the company.

As for financing of the continued development, we estimate that Prolight will need around SEK 100 million in additional capital. Taking this into account, we estimate a fair value range of SEK 1.1 – 1.2 per share. It is important to note that the company's expansion into other clinical areas and the implementation of multiplexing would substantially enhance its valuation, but these endeavors are anticipated to occur several years down the line.

Sum of the Parts NPV

Troponin	USDm	48,51
BNP	USDm	9,80
D-Dimer	USDm	6,82
Total	USDm	65,13
USDSEK		10,5
Fair Value	SEKm	683,8
New Equity	SEKm	100,0
Existing Shareholders	SEKm	583,8
Current NOS		499,8
Fair Value	SEK	1,17

Source: Emergers

NPV Calculation for Prolight and potential Licensee, Troponin

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Suspected Heart Attacks in 7MM	19,5	19,8	20,1	20,4	20,7	21,0	21,3	21,6	22,0	22,3	22,6	23,0	23,3	
Suspected Heart Attacks in ROW	10,5	10,7	10,8	11,0	11,1	11,3	11,5	11,7	11,8	12,0	12,2	12,4	12,6	
Total Suspected Heart Attacks	30,0	30,5	30,9	31,4	31,8	32,3	32,8	33,3	33,8	34,3	34,8	35,3	35,9	
Penetration			0%	1%	3%	7%	12%	15%	18%	25%	28%	30%	28%	
Number of tests	M	0,0	0,0	0,1	0,2	1,0	2,3	3,9	5,0	6,1	8,6	9,7	10,6	10,0
Average price per test	USD			20,00	20,20	20,40	20,61	20,81	21,02	21,23	21,44	21,66	21,87	22,09
Sales	USDm			1,6	4,1	19,5	46,6	81,9	105,0	129,1	183,9	211,1	231,9	221,9
Sales Forecasts	USDm	-	-	1,6	4,1	19,5	46,6	81,9	105,0	129,1	183,9	211,1	231,9	221,9
Upfront Payments to Prolight USDm	-	5,0												
Milestone Payments														
Proof of Performance	USDm	-	-	-	-	-	-	-	-	-	-	-	-	
Development Prototype	USDm	-	-	-	-	-	-	-	-	-	-	-	-	
IVDR Approval	USDm	-	-	5,0	-	-	-	-	-	-	-	-	-	
Launch	USDm	-	-	10,0	-	-	-	-	-	-	-	-	-	
RISK ADJUSTED	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Risk Adjusted Sales Forecas 75,3%	-	-	1,2	3,1	14,7	35,1	61,7	79	97	139	159	175	167	
Risk Adjusted Upfront & Milestones	-	4,2	11,7	-	-	-	-	-	-	-	-	-	-	
Licensee Cash Flows and NPV	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
COGS	25%	0%	0%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	
SG&A	20%	0%	0%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
Royalties Payable to Licensor														
Royalty Rate	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	
Royalty Payments to Licensor	0,0	0,0	0,2	0,5	2,2	5,3	9,3	11,9	14,6	20,8	23,9	26,2	25,1	
Licensee Cash Flows (pre-tax)	0,0	-4,2	-11,2	1,2	5,9	14,0	24,7	31,6	38,9	55,4	63,6	69,9	66,9	
Taxable Profit	0,0	-4,2	-11,2	0,0	0,0	5,7	24,7	31,6	38,9	55,4	63,6	69,9	66,9	
Income Tax	0,0	0,0	0,0	0,0	0,0	1,2	5,2	6,6	8,2	11,6	13,4	14,7	14,0	
Licensee Cash Flows (after-tax)	0,0	-4,2	-11,2	1,2	5,9	12,8	19,5	25,0	30,7	43,8	50,3	55,2	52,8	
Discount Period	0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5	
Discount Rate	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	
Discount Factor	0,96	0,88	0,82	0,75	0,69	0,64	0,59	0,54	0,50	0,46	0,42	0,39	0,36	
Net Present Value	204,93													
Terminal Value	189,06													
Licensee NPV	393,99													
Prolight Cash Flows and NPV	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Prolight Cash Flows (pre-tax)	0,00	4,19	11,90	0,47	2,20	5,27	9,26	11,87	14,60	20,78	23,86	26,21	25,08	
Income Tax	0,0	0,9	2,5	0,1	0,5	1,1	1,9	2,5	3,1	4,4	5,0	5,5	5,3	
Prolight Cash Flows (after-tax)	0,0	3,3	9,4	0,4	1,7	4,2	7,3	9,4	11,5	16,4	18,9	20,7	19,8	
Discount Period	0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5	
Discount Rate	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	
Discount Factor	0,92	0,78	0,66	0,56	0,48	0,41	0,34	0,29	0,25	0,21	0,18	0,15	0,13	
Net Present Value	40,70													
Terminal Value	7,81													
Licensor NPV	48,51													

Please note: Model continues beyond 2035 but is cut off for the sake of overview

WACC			Probability of Success		Cumul.
	Licensee	Licensor			
Equity Beta					
Unlevered beta	1,30	2,50			
Debt to Total Capital (D/(D+E))	20,0%	0,0%			
Equity to Total Capital ratio (E/(D+E))	80,0%	100,0%			
Debt to Equity (D/E)	25,0%	0,0%			
Tax rate	21,0%	21,0%			
Relevered beta	1,56	2,50			
Capital Asset Pricing Model					
Risk-free rate (20 yr. U.S. gov. bond yield)	4,0%	4,0%			
Market Risk Premium (Damodaran)	3,5%	3,5%			
Size premium	0,0%	5,0%			
Cost of equity	9,4%	17,8%			
WACC					
Cost of Equity	9,4%	17,8%			
Pre-tax cost of debt	6,0%	6,0%			
Post-tax cost of debt	4,7%	4,7%			
% net debt	20,0%	0,0%			
Discount Rate	8,5%	17,8%			

TOTAL RISK ADJUSTED NPV		
Licensee NPV		393,99
Prolight NPV		48,51
Total NPV		442,50

PROLIGHT FAIR VALUE		
Fair Value	USDm	48,51
USD/SEK		10,5
Fair Value	SEKm	509,4

Source: Emergers

NPV Calculation for Prolight and potential Licensee, BNP

		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Suspected Heart Failures in 7MM		7,8	7,9	8,0	8,2	8,3	8,4	8,5	8,7	8,8	8,9	9,1	9,2	9,3
Suspected Heart Failures in ROW		7,8	7,9	8,0	8,2	8,3	8,4	8,5	8,7	8,8	8,9	9,1	9,2	9,3
Total Suspected Heart Failures		15,6	15,8	16,1	16,3	16,6	16,8	17,1	17,3	17,6	17,8	18,1	18,4	18,7
Penetration							1%	2%	4%	6%	8%	10%	10%	10%
Number of tests	M	0,0	0,0	0,0	0,0	0,0	0,2	0,3	0,7	1,1	1,4	1,8	1,8	1,9
Average price per test	USD						40,00	40,40	40,80	41,21	41,62	42,04	42,46	42,89
Sales Forecasts	USDm	-	-	-	-	-	6,7	13,8	28,3	43,5	59,4	76,1	78,0	80,0
Upfront Payments to Prolight USDm		-	-	-	2,0	-	-	-	-	-	-	-	-	-
Milestone Payments														
Proof of Performance	USDm	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Prototype	USDm	-	-	-	-	-	-	-	-	-	-	-	-	-
IVDR Approval	USDm	-	-	-	-	1,0	-	-	-	-	-	-	-	-
Launch	USDm	-	-	-	-	-	7,0	-	-	-	-	-	-	-

RISK ADJUSTED		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Risk Adjusted Sales Forecas 60,8%		-	-	-	-	-	4,1	8,4	17	26	36	46	47	49
Risk Adjusted Upfront & Milestones		-	-	-	1,5	0,6	4,3	-	-	-	-	-	-	-

Licensee Cash Flows and NPV		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
COGS	25%	0%	0%	0%	0%	0%	25%	25%	25%	25%	25%	25%	25%	25%
SG&A	20%	0%	0%	0%	0%	0%	20%	20%	20%	20%	20%	20%	20%	20%
Royalties Payable to Licensor														
Royalty Rate		12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%
Royalty Payments to Licensor		0,0	0,0	0,0	0,0	0,0	0,5	1,0	2,1	3,3	4,5	5,8	5,9	6,1
Licensee Cash Flows (pre-tax)		0,0	0,0	0,0	-1,5	-0,6	-2,5	3,6	7,3	11,2	15,3	19,7	20,1	20,7
Taxable Profit		0,0	0,0	0,0	-1,5	-0,6	-2,5	0,0	6,2	11,2	15,3	19,7	20,1	20,7
Income Tax		0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,3	2,4	3,2	4,1	4,2	4,3
Licensee Cash Flows (after-tax)		0,0	0,0	0,0	-1,5	-0,6	-2,5	3,6	6,0	8,9	12,1	15,5	15,9	16,3
Discount Period		0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5
Discount Rate		8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%
Discount Factor		0,96	0,88	0,82	0,75	0,69	0,64	0,59	0,54	0,50	0,46	0,42	0,39	0,36
Net Present Value		51,63												
Terminal Value		40,87												
Licensee NPV		92,50												

Prolight Cash Flows and NPV		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Prolight Cash Flows (pre-tax)		0,00	0,00	0,00	1,50	0,61	4,76	1,05	2,15	3,30	4,51	5,78	5,93	6,07
Income Tax		0,0	0,0	0,0	0,3	0,1	1,0	0,2	0,5	0,7	0,9	1,2	1,2	1,3
Prolight Cash Flows (after-tax)		0,0	0,0	0,0	1,2	0,5	3,8	0,8	1,7	2,6	3,6	4,6	4,7	4,8
Discount Period		0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5	12,5
Discount Rate		17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%
Discount Factor		0,92	0,78	0,66	0,56	0,48	0,41	0,34	0,29	0,25	0,21	0,18	0,15	0,13
Net Present Value		8,47												
Terminal Value		1,32												
Licensor NPV		9,80												

Please note: Model continues beyond 2035 but is cut off for the sake of overview

WACC		
Equity Beta	Licensee	Licensor
Unlevered beta	1,30	2,50
Debt to Total Capital (D/(D+E))	20,0%	0,0%
Equity to Total Capital ratio (E/(D+E))	80,0%	100,0%
Debt to Equity (D/E)	25,0%	0,0%
Tax rate	21,0%	21,0%
Relevered beta	1,56	2,50
Capital Asset Pricing Model		
Risk-free rate (20 yr. U.S. gov. bond yield)	4,0%	4,0%
Market Risk Premium (Damodaran)	3,5%	3,5%
Size premium	0,0%	5,0%
Cost of equity	9,4%	17,8%
WACC		
Cost of Equity	9,4%	17,8%
Pre-tax cost of debt	6,0%	6,0%
Post-tax cost of debt	4,7%	4,7%
% net debt	20,0%	0,0%
Discount Rate	8,5%	17,8%

Probability of Success		Cumul.
Proof of Performance	75,0%	75,0%
Development Prototype	90,0%	67,5%
IVDR Approval	90,0%	60,8%
Launch	100,0%	60,8%

TOTAL RISK ADJUSTED NPV	
Licensee NPV	92,50
Prolight NPV	9,80
Total NPV	102,30

PROLIGHT FAIR VALUE	
Fair Value	USDm 9,80
USD/SEK	10,5
Fair Value	SEKm 102,9

Source: Emergers

NPV Calculation for Prolight and potential Licensee, D-Dimer

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Total D-Dimer Tests 7MM	4,0	4,0	4,1	4,2	4,2	4,3	4,3	4,4	4,5	4,5	4,6	4,7	4,8
Total D-Dimer Tests in ROW	2,0	2,0	2,0	2,1	2,1	2,1	2,2	2,2	2,2	2,3	2,3	2,3	2,4
Total D-Dimer Tests	6,0	6,1	6,1	6,2	6,3	6,4	6,5	6,6	6,7	6,8	6,9	7,0	7,1
Penetration							1%	2%	3%	4%	10%	10%	10%
Number of tests	M	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,2	0,3	0,7	0,7	0,7
Average price per test	USD						100,00	101,00	102,01	103,03	104,06	105,10	106,15
Sales	USDm				0,0	0,0	6,5	13,4	20,6	28,1	72,1	73,9	75,7
Sales Forecasts	USDm	-	-	-	-	-	6,5	13,4	20,6	28,1	72,1	73,9	75,7
Upfront Payments to Prolight USDm		-	-	-	-	1,0	-	-	-	-	-	-	-
Milestone Payments													
Proof of Performance	USDm	-	-	-	-	-	-	-	-	-	-	-	-
Development Prototype	USDm	-	-	-	-	-	-	-	-	-	-	-	-
IVDR Approval	USDm	-	-	-	-	-	1,0	-	-	-	-	-	-
Launch	USDm	-	-	-	-	-	6,0	-	-	-	-	-	-
RISK ADJUSTED													
Risk Adjusted Sales Forecas 60,8%		-	-	-	-	-	4,0	8	12	17	44	45	46
Risk Adjusted Upfront & Milestones		-	-	-	-	-	0,6	4,3	-	-	-	-	-
Licensee Cash Flows and NPV													
COGS	25%	0%	0%	0%	0%	0%	25%	25%	25%	25%	25%	25%	25%
SG&A	20%	0%	0%	0%	0%	0%	20%	20%	20%	20%	20%	20%	20%
Royalties Payable to Licensor													
Royalty Rate		12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%
Royalty Payments to Licensor		0,0	0,0	0,0	0,0	0,0	0,5	1,0	1,6	2,1	5,5	5,6	5,8
Licensee Cash Flows (pre-tax)													
Taxable Profit		0,0	0,0	0,0	0,0	-0,6	-2,6	0,3	5,3	7,3	18,6	19,1	19,6
Income Tax		0,0	0,0	0,0	0,0	0,0	0,0	0,1	1,1	1,5	3,9	4,0	4,1
Licensee Cash Flows (after-tax)		0,0	0,0	0,0	0,0	-0,6	-2,6	3,4	4,2	5,7	14,7	15,1	15,4
Discount Period		0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5
Discount Rate		8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%	8,5%
Discount Factor		0,96	0,88	0,82	0,75	0,69	0,64	0,59	0,54	0,50	0,46	0,42	0,39
Net Present Value		40,90											
Terminal Value		25,80											
Licensee NPV		66,70											
Prolight Cash Flows and NPV													
Prolight Cash Flows (pre-tax)		0,00	0,00	0,00	0,00	0,61	4,75	1,02	1,56	2,14	5,47	5,61	5,75
Income Tax		0,0	0,0	0,0	0,0	0,1	1,0	0,2	0,3	0,4	1,1	1,2	1,2
Prolight Cash Flows (after-tax)		0,0	0,0	0,0	0,0	0,5	3,8	0,8	1,2	1,7	4,3	4,4	4,5
Discount Period		0,5	1,5	2,5	3,5	4,5	5,5	6,5	7,5	8,5	9,5	10,5	11,5
Discount Rate		17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%	17,8%
Discount Factor		0,92	0,78	0,66	0,56	0,48	0,41	0,34	0,29	0,25	0,21	0,18	0,15
Net Present Value		5,99											
Terminal Value		0,84											
Licensor NPV		6,82											

Please note: Model continues beyond 2035 but is cut off for the sake of overview

WACC		
Equity Beta	Licensee	Licensor
Unlevered beta	1,30	2,50
Debt to Total Capital (D/(D+E))	20,0%	0,0%
Equity to Total Capital ratio (E/(D+E))	80,0%	100,0%
Debt to Equity (D/E)	25,0%	0,0%
Tax rate	21,0%	21,0%
Relevered beta	1,56	2,50
Capital Asset Pricing Model		
Risk-free rate (20 yr. U.S. gov. bond yield)	4,0%	4,0%
Market Risk Premium (Damodaran)	3,5%	3,5%
Size premium	0,0%	5,0%
Cost of equity	9,4%	17,8%
WACC		
Cost of Equity	9,4%	17,8%
Pre-tax cost of debt	6,0%	6,0%
Post-tax cost of debt	4,7%	4,7%
% net debt	20,0%	0,0%
Discount Rate	8,5%	17,8%

Probability of Success		
		Cumul.
Proof of Performance	75,0%	75,0%
Development Prototype	90,0%	67,5%
IVDR Approval	90,0%	60,8%
Launch	100,0%	60,8%
TOTAL RISK ADJUSTED NPV		
Licensee NPV		66,70
Prolight NPV		6,82
Total NPV		73,52
PROLIGHT FAIR VALUE		
Fair Value	USDm	6,82
USD/SEK		10,5
Fair Value	SEKm	71,6

Source: Emergers

Risks

Development risk. Even though the company has achieved proof of performance for its technology, there are still development risks on the road to a commercial product, primarily with the development of a commercial instrument, ensuring that this meets the expected cost profile, and obtaining regulatory approval according to IVDR and other national regulations.

Delays. In addition to the potential development risks, delays are common in the development of medical technology, which then shifts revenue and profitability further into the future.

Liquidity. With prolonged regulatory processes, or difficulties finding the right licensee, there's a risk Prolight might run out of cash before reaching market launch.

Unbroken ground. The digital immunoassay market is a new market on which Prolight is set to conquer. This provides both great opportunities but also higher risks as the technology will be new to everyone.

Small player. Prolight doesn't have the financial muscle nor the sales force to single handedly take their device to market and will therefore be in the hands of a future partner, which could leverage their big size, disadvantaging Prolight.

Experienced management team

Chairman of the board Masoud Khayyami is Doctor of Applied Biochemistry from Lund University. Extensive experience in research, medicine, medtech, and biotechnology sectors. Solid entrepreneurial experience (such as Prolight Diagnostics AB, Lumito AB, and Gasporox AB) and expertise in applied medicine, microbiology, and biotech, particularly in the development of various types of biomolecules for commercial use and research in biological applications. Masoud serves as a board member in both medtech companies and other companies. Engaged with Prolight Diagnostics since 1999 and a founder of the company.

CEO Ulf Bladin holds a Degree of Bachelor of Science in Medical Science from Karolinska Institutet and an MSc from the Stockholm School of Economics. Ulf has previously held positions such as General Manager, Vice President for the EMEA region at Hycor Biomedical, Vice President of Commercial Operations Europe at Thermo Fisher Scientific Immuno Diagnostics Division, Vice President with global responsibility for Marketing, Health Economy, Corporate Communications, Scientific & Regulatory Affairs at Phadia. He has also held leading commercial positions in the pharmaceutical industry at Pfizer and Merck Sharp & Dohme.

CTO Steve Ross holds two degrees, one in Chemistry and one in Mathematics with Statistics, completed a PhD at Edinburgh University in Synthetic Chemistry, and conducted postdoctoral research at the University of Utah (Royal Society Fellowship), CNRS in Toulouse, France (Marie Curie Fellowship), and the University of Oxford. Co-founder of Psyros Diagnostics and has been working in in vitro diagnostics for over 15 years. The industrial career began in 2001 at PiezoOptic, where he developed pyroelectric sensors for monitoring exposure to toxic gases. In 2006, he co-founded Vivacta, a startup company that utilized the same pyroelectric technology, this time for point-of-care diagnostics.

CSO Aileen McGettrick completed a PhD at the University of Oxford in Biochemistry and Genetics, followed by a postdoctoral research fellowship at

Oxford and at the Joslin Diabetes Center in Boston, USA (affiliated with Harvard Medical School), focusing on genetics of type 2 diabetes. Co-founder of Psyros Diagnostics and has 15 years of experience in developing tests for medical technology products. Formerly served as the Group Head of Assay Development, leading a multidisciplinary team at Vivacta Ltd and Novartis in patient-side testing, specializing in the detection of targeted analytes in whole blood for point-of-care diagnostics.

Board Member Tobias Volker Holds a doctoral degree in Biochemistry and an MBA from INSEAD. Over the past decades, he has made significant contributions to the development of point-of-care diagnostics for cardiovascular diseases and other medical areas. Led the international development of the Triage platform and introduced the cardiac panel and the first reimbursable BNP analysis in Europe while working at Biosite. Was responsible for the launch of Quo-Test HbA1c at Quotient Diagnostics and participated in the reverse acquisition that later became EKF Diagnostics. Further gained insights into the POC industry while working at Cholestech, Alere, and more recently at Expand Healthcare Consulting GmbH, where he provided high-level advisory services to private companies and nonprofit organizations. Serves as Chairman of the Board at Expand Healthcare Consulting GmbH and as a Board Member at Ominilabs.

COO Karl Bullen holds a Bachelor of Engineering from the University of Greenwich. Karl has a proven track record within operational leadership roles having a wide range of experience in regulated manufacturing encompassing aerospace, medical devices and pharmaceuticals. Karl previously held the position of Head of Operations for Swedish contract pharmaceutical manufacturer Recipharm and has also held manufacturing leadership roles at defense giant BAE Systems and medical science company Olympus. Karl has a strong knowledge of lean principles and operational excellence that has been used to develop high performing teams and effective processes that deliver results.

Board member Maria Holmlund holds a degree of Bachelor of Science in Chemistry and Biology from Uppsala University, and a Master of Science from the University of North Carolina. 30 years of experience in life sciences and diagnostics. Held senior positions focusing on marketing in international diagnostics companies such as Pharmacia Diagnostics, Boehringer Mannheim, Roche Scandinavia, Phadia, and Thermo Fisher Scientific. Board member of Biovica AB. CEO of Prolight Diagnostics AB between 2016-2020.

Prolight Diagnostics

Income Statement

MSEK	2022	2023	2024E	2025E	2026E
Revenue	0.0	0.0	0.0	44.0	125.0
Operating Costs	-10.4	-21.7	-35.0	-38.8	-42.7
EBITDA	-10.4	-21.7	-35.0	5.1	82.3
Depreciation	-0.1	-0.8	-0.8	-0.8	-0.8
Amortisation of Goodwill	0.0	0.0	0.0	0.0	0.0
EBIT	-10.5	-22.5	-35.8	4.4	81.5
Non-recurring Items	0.0	0.0	0.0	0.0	0.0
Associated Companies	0.0	0.0	0.0	0.0	0.0
Net Financial Items	0.3	0.4	-0.3	-0.3	-0.3
Pre-tax Result	-10.2	-22.2	-36.1	4.1	81.3
Tax	0.0	0.0	0.0	-0.9	-16.8
Minority Interest	0.0	0.0	0.0	0.0	0.0
Net Result	-10.2	-22.2	-36.1	3.2	64.5

Capital Expenditure

	2022	2023	2024E	2025E	2026E
Capital Expenditure, Absolute	3.1	2.8	0.0	2.2	1.0
As a Pct of Sales	-	-	-	-	-
Depreciation Multiple	28.1	3.6	0.0	2.8	1.3

Key Ratios

Share Price: SEK 0.16

	2022	2023	2024E	2025E	2026E
EPS (Reported)	-0.04	-0.04	-0.07	0.01	0.13
EPS (Adjusted)	-0.04	-0.04	-0.07	0.01	0.13
CEPS	-0.04	-0.04	-0.07	0.01	0.13
P/CEPS	n.a.	n.a.	n.a.	46.9	2.3
Book Value/Share	0.7	0.6	0.7	0.9	0.8
P/BV	0.3	0.5	0.5	0.3	0.4
Dividend	0.00	0.00	0.00	0.00	0.00
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0
Dividend Payout Ratio (%)	0.0	0.0	0.0	0.0	0.0
EV/Sales	-	-	-	0.8	0.3
EV/EBITDA	-	-	-	6.9	0.4
EV/EBIT	-	-	-	8.1	0.4
P/E (Adjusted)	-	-	-	24.9	1.2
Sales Growth, Y/Y (%)	-	-	-	-	1.8
EBIT Growth, Y/Y (%)	51.2	113.7	59.0	-112.2	1771.4
EPS Growth (Adjusted), Y/Y (%)	-21.2	23.0	61.9	-108.9	1909.4
EBITDA Margin (%)	-	-	-	-	-
EBIT Margin (%)	-	-	-	-	-
Return on Equity (%)	-5.8	-9.9	-16.2	1.6	-10.4
Tax Rate (%)	0.0	0.0	0.0	-0.2	-0.2

Financial Position

	2022	2023	2024E	2025E	2026E
Interest-Bearing Net Debt	-54	-44	-9	-11	-44
Net Debt/Equity	-0.3	-0.2	0.0	-0.1	-0.2
Equity Ratio	1.0	0.9	1.0	1.0	1.0
Net Debt/EBITDA	5.2	2.0	0.3	-2.2	-0.5

Source: Emergers, Company reports

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