Qlife Holding

Sector: Biotech

Testing is coming home

Redeye initiates coverage of Qlife, which aims to bring clinical grade biomarker testing to the home setting thanks to its Egoo system. Qlife has already achieved sales of SEK77m of devices and tests for SARS-CoV-2, but it will now concentrate on CRP biomarker tests. We believe the technology may prove to be disruptive in the market.

Quick testing at home

Qlife aims to revolutionize lab testing thanks to its Egoo device and capsules, which can offer a result at home within 30 minutes. Egoo can, in theory, cover around 80% of whole blood biomarkers. In the short term, Qlife will focus on private clinics and the consumer market, followed by professional markets after obtaining approvals.

Expanding the number of tests

So far, Qlife has only sold Covid-19 PCR tests for the professional market. Next in line is CRP (inflammation). The PHE (an amino acid) test will follow in 2024. The ultimate goal is to create a portfolio of tests (covering e.g. infections, fat and vitamin levels etc.) that the private consumer can order, preferably online through a subscription model.

Estimates and valuation range

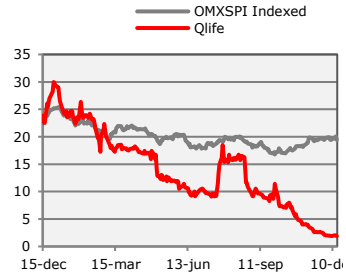
As Qlife is restructuring its business and launching new products to drive sales, forecasts are imprecise. We forecast a decline in sales in 2023 followed by substantial growth until 2028, with a CAGR of 44% in 2022-2028, leading to a diluted Base Case of SEK 4.2. However, this depends on the company obtaining (dilutive) financing. For potential investors, there is a material financial risk to consider, as only 70% of the recent rights issue was subscribed. The current cash position of around SEK30m will not last until the TO2 period next June. Qlife will need to find a new source of funding by Q2 2023 at the latest. An inability to do so would likely force Qlife to cease operations. This is represented in our Bear Case of SEK0.

Key Financials (EURm)	2020	2021E	2022E	2023E	2024E
Sales	21	40	18	8	27
Sales growth	NA	91%	-55%	-56%	239%
EBITDA	-19	-35	-106	-42	-37
EBIT	-31	-55	-119	-48	-47
EBIT Margin (%)	-151%	-138%	-665%	-611%	-175%
Net Income	-20	-49	-112	-44	-47
EV/Sales	14,4	9,7	1,8	10,0	4,9
EV/EBITDA	NA	NA	NA	NA	NA
EV/EBIT	NA	NA	NA	NA	NA

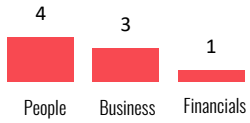
FAIR VALUE RANGE

BEAR	BASE	BULL
0	4.2	9.9

Qlife VERSUS OMXS30



REDEYE RATING



KEY STATS

Ticker	QLIFE.ST
Market	First North
Share Price (SEK)	2
Market Cap (SEKm)	50
Net Debt (SEKm)	0
Free Float (%)	78
Avg. daily volume ('000)	24000

Redeye, Mäster Samuelsgatan 42, 10tr, Box 7141, 103 87 Stockholm. Tel. +46 8-545 013 30, E-post: info@redeye.se

Investment Thesis

Case: Professional grade biomarker testing for home use

Qlife produces and sells the Egoo system, a portable lab device with single-use biomarker capsules. The company has recently sold Covid-19 tests and is still doing so, although this market is now declining rapidly. Qlife is instead gearing up to sell tests for CRP (inflammation), beginning in the wellness segment in early 2023 and then to professional clinics later in 2023. Initially users such as dieticians or other private clinics and sports trainers will be targeted. It will also be sold directly to private users. This will be the initial step in building the Egoo system of several tests available to private users. In 2024, the PKU test should be launched. After CE marking for home use is obtained for the CRP and PKU tests, Qlife will target rheumatoid and PKU centres, providing patients with the system. PKU patients should typically take a test once a week and send it to a lab. Qlife has worked together with PKU organisations to develop the PHE test, which matches well with PKU patients' needs and is something they have been requesting. We thus expect a quick uptake in this segment (worth almost SEK1bn). CRP testing represents a significantly larger market. The founders of the company have previously successfully built and sold other companies.

Evidence: Substantial Covid Sales

Qlife has already validated the Egoo system commercially through sales of Covid-19 tests and devices, with sales totalling SEK77m since 2020 (SEK40m in 2021), starting from zero. Qlife did not originally plan to launch a Covid-19 test, but it opportunistically developed one in response to the pandemic. This shows Qlife can commercialise its product in new segments.

Challenge I: Need to accelerate sales and obtain approvals

Qlife has comparatively high fixed costs, even after streamlining its organisation (leading to annual savings of SEK34m by the beginning of 2023). The company will need to demonstrate it can sell the CRP tests as soon as possible. A too slow uptake may lead to a weakened sentiment and difficulty in attracting new capital. Delays at the notified body (Presafe), which is already overbooked, in obtaining approvals for professional and home use would likely make sales more challenging. Self-certification might help in the short term.

Challenge II: More capital needed

The price of TO2 will be 70% of the VWAP in late May and early June 2023, to a maximum of SEK10.

Placing new IVDR diagnostic or biomarkers solutions on the market is capital intensive. Qlife is dependent on further financing. Its current cash is unlikely to last until June 2023 when the TO 2022 warrants mature, so we expect Qlife to need additional financing before this. Industry collaborations and partnering may help furthering sales and reducing costs. If the company is unable to obtain new financing in H1 2023, it will likely need to cease its operations.

Valuation: We include substantial dilution

We value Qlife based on forecasts for CRP, PHE and other capsules. We add expected dilution from TO2 and a rights issue of SEK60m as the last rights issue was only subscribed at 70%. We apply a WACC of 12.5%, which results in a Base Case of SEK4.2. In our forecasts, the company turns profitable in 2027.

Counterpoints

Significantly larger competitors with more resources, in particular Cue Health, may start selling systems similar to Egoo in Europe in the future, potentially leading to reduced sales for Qlife or the need to discount prices.

Contents

Company Description

Background

Qlife was founded in 2019. As of Q3 2022, the company had 61 employees, down from a peak of 64. Its staff base will decrease further to around 35 FTEs from January 2, 2023, due to cost-saving measures.

The company has invented the Egoo system: a smartphone/computer-connected device that uses cartridges or capsules to detect a wide variety of biomarkers with clinical grade results. The device is intended for private use at home but can be used in a point-of-care context as well. So far, Qlife has sold a PCR-based Covid-19 test for professional use, but it plans to expand the Egoo system into a wide range of biomarkers, essentially taking the clinical laboratory into a home setting. The first two biomarkers will be CRP for inflammation (2023), of particular interest for RA patients, and phenylalanine (PHE, 2024), intended for the small and well-defined population of patients who suffer from a genetic condition such that they need to regularly measure their PHE levels.

Business strategy

Qlife can sell its Egoo Health System through various sales channels. Test centres have been the main channel so far. Selling directly to consumers is the company's ultimate goal, though. It intends to begin commercialization with the CRP test through (i) direct sales to private individuals and (ii) sales to private clinics, such as dieticians, physiotherapists or professional sports facilities (to optimize training and recovery). Later in 2023 after obtaining professional approval, it aims to sell the Egoo system via professional clinics active in chronic diseases. It will be important to find the right distributor for this segment. After approval for home testing (likely in 2024), specialist clinics will be able to provide the system to patients (e.g. with RA). In 2024, the PHE test might also be approved and help drive sales.

The next step after this will be to validate the Egoo system in the clinical retail market, such as by making tests available in pharmacies and health-related clinics. A larger menu of tests beyond CRP and PHE will be required for this, which is also planned. In the long term, Qlife aims for the consumer healthcare segment. According to the company, there are an estimated 8.3 million households using technology to monitor their health, and this is its ideal target group. This group will be targeted initially with the CRP test. However, the Egoo system will need a menu of tests to achieve a widespread use in this setting.

Competitive advantages

The Egoo system has many advantages over traditional laboratory testing. It can be used by consumers at home, is reasonably priced (can be compared to the cost of the latest smartphone), provides clinical grade biomarker results, and is connected to the cloud, potentially allowing data to be shared with healthcare personal via electronic medical records, which is useful for prescriptions or monitoring.

Value proposition

Baumol's cost disease is the increase of salaries in jobs with little increase in productivity, such as an orchestra musician, when other salaries rise due to productivity increases.

Qlife can take advantage of two mega-trends: personal non-prescription medical devices (for a healthy lifestyle), and the decentralisation and rationalisation of healthcare, examples of which include outpatient care and home care. Decentralisation of healthcare will become increasingly important as populations age and suffer more from chronic diseases. To avoid unsustainably rising costs, healthcare will have to be conducted more and more by patients themselves in the future. Baumol's cost disease is an issue in the sector since automatization of healthcare is difficult. Qlife's Egoo system contributes to solving this problem by enabling patients, or private individuals wishing to optimize their health, to measure biomarkers themselves at home.

Ownership

Qlife was founded by Thomas Warthoe, Peter Warthoe, Ebbe Finding and Lars Bangsgaard. Together they held 27% of the shares and votes before the rights issue. This figure should be around 18% after it. Thomas Warthoe holds around 6.2% (previously 9.3%), while Lars Bangsgaard and Peter Warthoe each has 5.1% (previously 7.6%), and Ebbe Finding holds 1.3% (previously 1.9%) via PKV Consult IV S. The list below is based on the share ownership before the rights issue.

Qlife: Shareholders

Owners	Number of shares	Value (mSEK)	Capital	Votes
Thomas Warthoe	1 507 053	16	9,33%	9,33%
Lars Bangsgaard	1 201 200	13	7,76%	7,76%
Peter Warthoe	1 201 200	13	7,76%	7,76%
Avanza Pension	807 417	9	5,21%	5,21%
Uddannelses og Forskningsministeriet	549 588	6	4,92%	4,92%
Fjärde AP-fonden	740 000	8	4,78%	4,78%
PKV Consult IVS	296 400	3	1,91%	1,91%
Nordnet Pensionsförsäkring	283 208	3	1,83%	1,83%
Leif Jonsson	253 800	3	1,64%	1,64%
Preseed Ventures A/S	145 392	2	1,30%	1,30%
John Moll	163 524	2	1,06%	1,06%
Kmd Venture A/S	161 851	2	1,05%	1,05%
Joel Bergman Flink	103 763	1	0,67%	0,67%
Torbjörn Seifert	75 000	1	0,48%	0,48%
Mette Gross	69 766	1	0,45%	0,45%
Others	7 925 765	88	49,85%	49,85%

Source: Redeye Research & Holdings (2022-09-30)

All four have worked at the company since its founding. Lars Bangsgaard was previously CFO but retired in early 2022, with Kasper Damgaard Rousøe stepping into the role. Entrepreneurial companies that are led by founders with a large ownership typically perform better than those led by a management without skin in the game.

The 15 largest holders controlled 46% of the capital and votes before the rights issue. In addition to the four founders, this includes some institutional investors, smaller funds, and private persons.

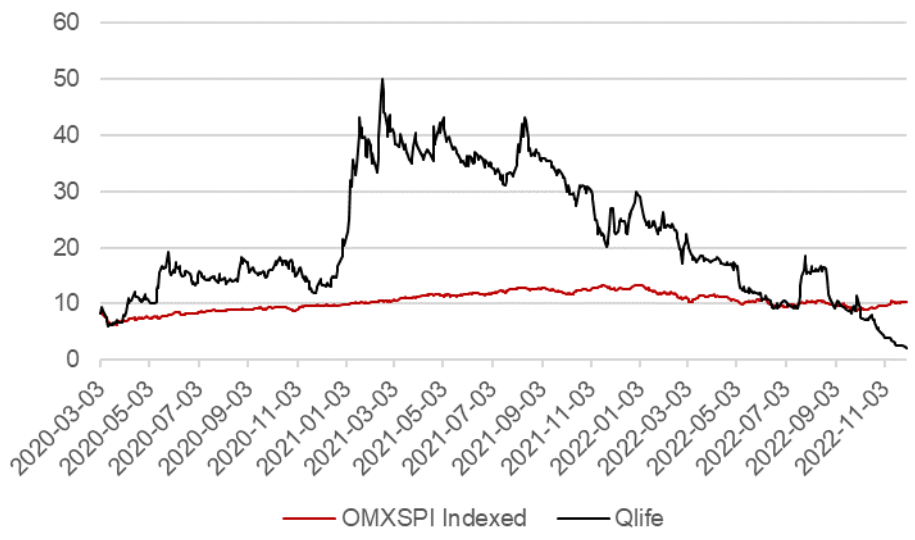
Board and management

Two of the founders remain in the management team: Thomas Warthoe is CEO and Peter Warthoe is chief scientific officer. Ebbe Finding is chief technology officer but is not part of management. Mette Gross is chair of the board, which comprises six people, five of whom are independent. Two have experience as independent entrepreneurs and have performed successful exits.

Share price performance

Qlife was listed on First North on 2 March 2020 at a subscription price of SEK12.3. It traded below this during the first month, but then rose to a range of SEK15–20. In the midst of the pandemic and further lockdowns in December 2020, Qlife's share price began picking up. On 22 December 2020, the company announced a loan agreement of SEK15m to fund working capital for the professional launch of the Egoo system for Covid-19 testing, and this was subsequently CE-marked on 7 January 2021. The share price passed SEK40 the same month, and it stayed around that level until September 2021, supported by strong Covid-19 test sales. Since then, the share price declined to around SEK10 by June 2022, likely in anticipation of decreased Covid-19 test sales. After a brief rise in July to almost SEK20, the share price dropped back to around SEK10 after the announcement of the rights issue on 24 August 2022. The price plummeted after the rights issue was subscribed at around 28%, leaving underwriters (guarantors) to subscribe to the remaining 42% (up to the 70% level underwritten). Due to heavy sales of shares from the latter, the share price has collapsed to around SEK2.

Share price performance since IPO (SEK)



Source: Redeye Research

The Egoo health system

The Egoo health system comprises the Egoo instrument, an Egoo app for a smartphone or computer, and the Egoo assay capsules. The instrument is very small in size at around 10cm high and only weighs 470g. The detection method and its biomarker detection unit have been patented with validity until 2039.

Egoo device with capsule

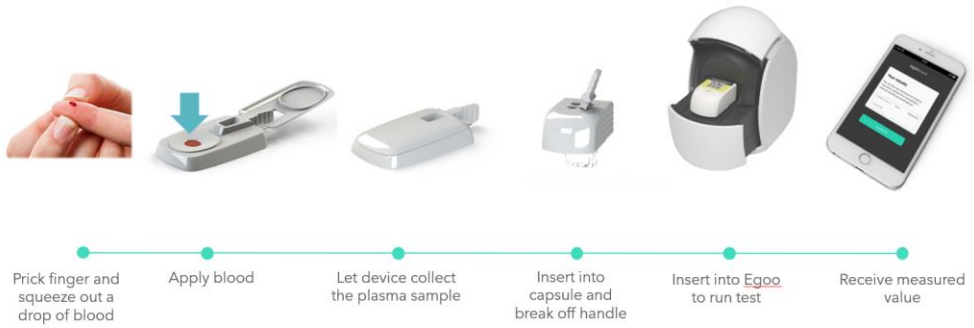
Source: Qlife

The sensor that measures the liquid sample is an integrated optical micro-electromechanical system (optical MOEM). It has dual optical units that can measure both fluorescence (light reflected from the sample) and absorbance (light absorbed by the sample). The optical units are attached to a unit that heats and mixes the sample with the reagents from the capsule, which are freeze-dried. The assay capsules sold so far have not contained freeze-dried reagents. Freeze-drying of all relevant reagents is essential for entry into the home market, however.

The Egoo health system can run several different assays methods, including both biochemical and PCR tests, the latter being used to detect SARS-CoV-2. Biochemical tests are usually designed to measure a number (intensity), while the Covid/19 test gives either a positive or negative response.

The capsules are designed to receive blood, saliva or urine, or oropharyngeal swabs to detect SARS-CoV-2. The sample is inserted into the capsule with the appropriate small device that is included. An example of using blood for plasma is shown below.

Testing with blood plasma

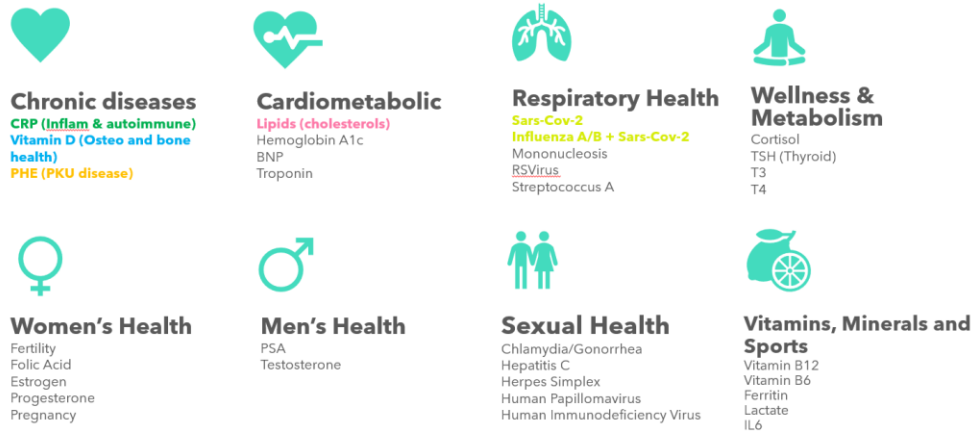


Source: Qlife

Tests are run from either a smartphone or computer through the Egoo app. Most tests take five to 30 minutes. The device has an integrated memory board so it can be temporarily disconnected while performing the test. When finished, the application connects to the cloud where the algorithms are stored. This will also allow data to be collated for future use, such as Big Data analysis. It could potentially be monetised or used to improve the system. Integration with electronic medical records is another important function, allowing data to be shared with a doctor. The first product to be integrated in this way will be the PKU test, which should be ready as of product launch.

According to Qlife, the Egoo can analyse up to 80% of all whole blood biomarkers. Biomarkers could be developed for a wide variety of diseases, as shown below.

Disease areas where Egoo can be used



Source: Qlife

The Egoo instrument has been CE-marked since January 2021 and is ready for sale. The capsules, however, need to undergo a regulatory procedure, according to the IVDR, which includes clinical studies. As of now, a SARS-CoV-2 capsule is available, but as it is not freeze-dried, it is not suitable or approved for the consumer market. A CRP capsule is available for pre-order and a PHE capsule is under development though it will be delayed, likely until 2024, because of lack of funds. The dual SARS/INFL A+B capsule developed under a financing agreement with FIND has been put on hold because of lack of funds. The first new capsule to be launched will be CRP in the wellness segment in Q1 2023. Vitamin D and Lipids capsules are also in the planning stage for a launch after 2024.

Planned biomarker tests

Biomarker	CRP	PHE	Vitamin D	Sars/Flu	Lipids
Application	**Chronic conditions such as** rheumatoid arthritis, other arthritis severe back pain, autoimmune diseases.	PKU disease	Additional to CRP application: Osteoporosis and bone health in general. VitD being now associated to various types of conditions.	Initial LMICs focus. Occupational health expected big virus testing focus, and transition to home-use testing with installed device base.	Cardiovascular and diabetes
Global TAM	EUR 2,600 m[1]	EUR 103 m[2]	EUR 600 m[3]	EUR 3,400 m[4]	EUR 11,900 m[5]
Commercial status	Launch Q1 23	Launch 24	Launch 25	Launch postponed	Launch 25/26

Source: Qlife and Redeye

Production of the Egoo unit will be by Scanfil from 2023 with an increased production capacity of 1,000 devices per month (up from 100 per month). Around 500 devices were sold in 2021. Production of capsules is carried out at Qlife's premises of 4,000m^2, where capacity is 50,000 per month. The plan is to eventually increase the capacity to 150,000 capsules per month, which is equivalent to 36,000 patients using 50 capsules per year.

For the professional market (clinical institutions), the company envisions either a razor-razorblade or a standard sales model. Other sales models will be applied for the private and health optimization market. For example, a prescription-based sales model will be used for private users.

IVDR and regulatory pathways

In Europe, the Egoo system has been regulated under the Diagnostic Medical Devices Regulation (IVDR) since 26 May 2022. Any new devices registered after that date will have to be CE-marked, according to the IVDR. The new rules include several changes, including the introduction of a risk-based classification system with four risk classes of in-vitro diagnostic medical devices across classes A-D.

The IVDR classification system

Source: Qlife

Instruments such as the Egoo device are generally classified as class A non-sterile, while the tests (capsules) are classified as B, C or D depending on application. Devices in classes B, C,

and D require conformity assessment by a notified body. For grades C and D, this includes clinical tests in the form of comparison studies of the assay to standard reference tests in the case of the Egoo system. This is followed by usability studies to ensure the patients can perform the test by themselves at home for self-test approval. Such studies are necessary for both the PHE and CRP tests to be certified by the notifying body. Qlife's notified body is Presafe. These studies require some investments to bring new tests to the market.

Qlife has three regulatory pathways to bring new capsules to the market:

- OTC/wellness – no medical claim (Danish Medicines Agency)
- Professional use – classes B, C or D (notified body)
- Self-test – classes C or D (notified body)

The CRP test has been CE-marked for professional use since 2020, according to the old rules; it will have to be updated. An application for professional use was planned for the end of 2022, but since the notified body (Presafe) is overbooked and does not have enough capacity, the handing in of the technical dossier has been postponed until June-September 2023. However, it will likely be possible to self-certify the CRP test before this in order to obtain a certification for professional use. The self-test certification, which is needed for patient home users, will be delayed compared to the original plans.

Qlife will also prepare the PHE capsules for approval as a self-test in 2024, but in the short term, investments in this project have been reduced. The Covid-19 test has been CE-marked since January 2021; however, sales are declining and will likely go to 0 eventually. We believe it may be supplanted by the SARS/INFL A+B capsule in the future, but it is not a prioritised project due to lack of funds.

In the future, Qlife's strategy will be to begin launching new capsules in the OTC/wellness segment, followed by a launch in the professional segment some six months later. Certification for self-testing will come after that. There is also the potential to involve partners in developing new tests that the partner might ask for.

In the future, expansion into the US market will be essential to maximize the economic potential of the Egoo platform. Qlife can follow the standard 510(k) pathway with the FDA since there is already a predicate device for every test. Egoo is a class 2 device.

SARS-CoV-2/INFL A+B

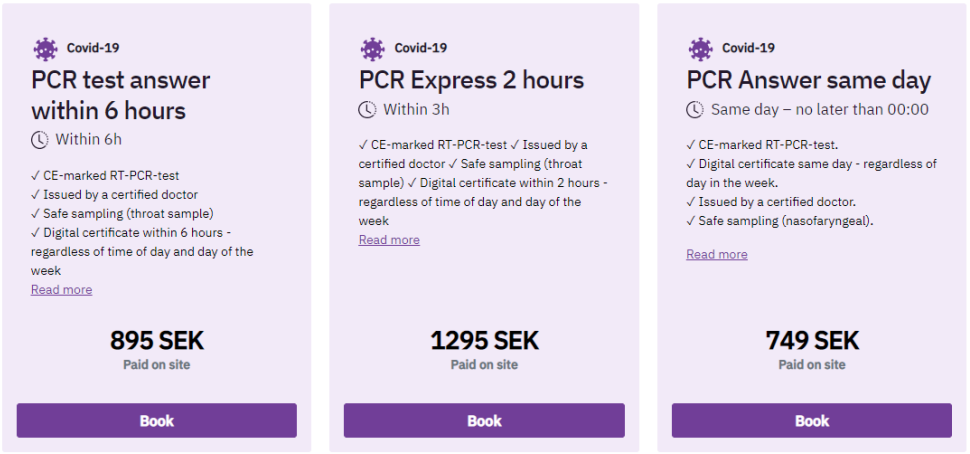
All of Qlife's revenue so far has come from Egoo devices and capsules used for PCR-based SARS-CoV-2 testing. Like laboratory PCR tests, this test has a high sensitivity of around 98%, compared with around 50% for the more common antigen tests (sensitivity signifies the proportion of cases detected). The capsules are not freeze-dried and are only approved for professional use. Qlife has sold tests through Testmottagningen, distributor Aidan, and by itself in Denmark, where it operated a test centre at Symbion in Copenhagen from May 2020 to August 2021. It has also sold tests to sports organisations, in particular to test football players, which allowed the Danish professional league to continue playing during 2020. This experience has allowed Qlife to make adjustments to the Egoo device so it functions optimally and gain experience in developing tests.

Qlife is developing a new dual test for Covid-19 and influenza, which will be freeze-dried and available for various categories of users. Development is sponsored by FIND, which wants a test for low- and middle-income countries. Development was paused in H2 2022 due to technical delays and lack of funds.

Testmottagningen

Testmottagningen has been the main sales driver of Qlife's Covid-19 tests since Q3 2021. It consists of several facilities in Sweden and provides private persons with Covid-19 travel certificates, either via antigen or PCR tests. Using the Egoo system for the PCR tests enables rapid response times, down to within three hours. Pricing ranges from SEK749 to SEK1,295 per test. Egoo was fundamental in establishing the Testmottagningen. All this demonstrates the robustness of the Egoo system, both in its use and its logistics (i.e., the supply from Qlife).

PCR tests using Egoo at Testmottagningen



Source: Testmottagningen (as of October 2022)

CRP

The CRP biomarker, which will be the second test after the SARS-CoV-2, was CE-marked for professional use in early 2020, according to the IVD. It is now being updated to the IVDR. Qlife will launch it in the OTC/wellness segment in Q1 2023 while it prepares it for professional approval in 2023 and then for self-testing.

A CRP test may be used to find or monitor conditions that cause inflammation, including:

- Bacterial infections
- Fungal infections
- Inflammatory bowel disease
- Autoimmune disorders such as rheumatoid arthritis

C-reactive protein (CRP) is a protein released during infection. Its role is to activate part of the complement system, which is an integral part of the immune system. In labs, it can be measured in the range of 0.5–1,000 mg/L. Egoo can measure in the 1-200 mg/mL range. For a healthy person, under 1 mg/L is considered low, 1-3 is average, and above 3 is high. Mild inflammation results in levels of 10-100 mg/L, while a severe infection can lead to levels above 500mg/L. Autoimmune diseases such as RA can cause mild inflammation. Low levels of inflammation can also be caused by intensive training. An unhealthy lifestyle, in particular consuming a lot of sugar, can lead to chronic inflammation.

Qlife envisions three main customer segments for the CRP test in the short term.

- Direct-to-customers
- Private clinics
- Professional clinics

The CRP test will initially be offered to the first two groups above based on a certification as an OTC/wellness product. For private customers, it will be offered as a healthcare gadget while professional users in private clinics will be able to use it in their work; this includes professions such as physiotherapists, dieticians and sport trainers. Private groups that might be interested include health or training enthusiasts with an interest in technology, such as biohackers (do-it-yourself biology). The Egoo system will be available on Qlife's e-commerce platform for sales in the EU in Q1 2023. The CRP product is already available for pre-ordering.

The next step will be a launch in professional clinics after the CE marking for professional use is obtained, which could be later in 2023. For this segment, sales through a distributor is envisioned. The professional certification would allow the sales of the product as a point-of-care device. Certification for home use, potentially in 2024, would allow specialized clinics (e.g. in RA) to give the device to patients. Testing regularly will be useful for patients to measure how their values change from the baseline during flare-ups. The ability to quantify the severity of flare-ups can help the patient and health personnel to better understand the disease or condition. It can also help with medication and dosing in several ways, e.g., in determining whether a dose is too low, or whether drug resistance is beginning to set in.

PHE

The PHE test is intended for patients suffering from phenylketonuria (PKU), a rare metabolic disorder that leaves a person unable to break down the amino acid phenylalanine (PHE). Consumption of protein-rich food leads to elevated levels of the neuro-toxic PHE. Long-term elevated levels cause brain damage and cognitive dysfunction, particularly in children as their brains grow. For example, untreated children have a very low IQ, typically less than 50. It is therefore of the utmost importance to maintain PHE levels, particularly in children and adolescents.

The Egoo device used for the PHE test is custom-made and cannot be used with other capsules. It will enable patients diagnosed with PKU to measure levels weekly at home, instead of having to travel to a testing centre, or to send tests to such a centre.

Qlife plans to launch this test in 2024 after the PHE capsule has been CE-marked according to the IVDR for self-testing, for which clinical studies will be required.

Market

Global healthcare expenditure was estimated at USD8.8trn in 2021 (according to Cue Health's IPO prospectus), with the markets for digital health and diagnostics estimated at USD120bn and USD85bn, respectively. At-home and point-of-care testing account for around USD30bn of the diagnostics market. Of this USD30bn, around USD20bn stems from point-of-care testing and USD10bn from at-home testing. Point-of-care testing could grow to USD50bn by 2025. The market Qlife addresses is so large and growing so rapidly that we do not expect market saturation by any player within our forecast period. We only address the CRP and PKU markets below.

Autoimmune disorders (CRP test)

CRP laboratory testing is believed to be worth some billions of dollars (Allied Market Research). The market is so large it is not meaningful to make any assumptions about future market share (top down) for Qlife. Instead, revenues will be limited by marketing and uptake (bottom up).

Qlife will initially focus on the private and clinical market (wellness category). After obtaining the necessary certifications, it will further focus on specialised professional clinics, such as RA centers. Customers will be rheumatic specialist centres that will provide patients with the Egoo device and capsules. Sales in this category is likely to come from distributors.

We believe one of the main sources of growth for CRP tests in the short to medium term will be patients with autoimmune diseases. These are very common: around one in every five Americans has an autoimmune disease. Rheumatoid arthritis alone affects 0.5–1% of the global population. This amounts to around 4–8 million people in the US and the EU plus the UK. This constitutes the professional market. CRP testing can also be useful in detecting other inflammations, e.g., due to cancer. High levels can also predict various types of lifestyle diseases, such as diabetes or cardiovascular disease. Testing for general inflammation pertains to the consumer market. We estimate a pricing of EUR 995 for the unit and EUR 18 for the tests at launch. We estimate prices will decrease as volumes increase in the future.

Phenylketonuria (PKU)

Phenylketonuria (PKU) is a rare metabolic disorder that, if left untreated, leads to profound and irreversible cognitive damage. It is diagnosed through screening programmes done on all newborns. The gene defect for PKU is an autosomal recessive genetic defect – in other words, only those who inherit the gene from both parents could have the disorder. There are currently some 45,000 people in Europe living with PKU and around 16,500 in the US. It affects around one in 10,000–20,000 depending on the country of origin.

Treatment consists mainly of a low PHE diet – in other words, a diet with no proteins – combined with amino acid supplements. Drugs are also available for some patients. Treatment and follow-up of PKU is lifelong and is managed at specialist centres. Both blood PHE monitoring and assessment of nutritional treatment according to blood PHE levels require frequent outpatient clinic admissions. Results are available for patients several days after a visit. The treatment goal is to keep plasma phenylalanine levels within a target range. The Egoo system has the potential to substantially facilitate this testing process at home.

We will assume 38,000 patients in the EU, practically all of whom can be reached through just a few specialist centres. According to Qlife, there are just 37 such centres. We assume a 20% market share in the EU for Qlife and 30% in the US (being a single market) at a later point in

time. As a comparison, around 30% of European patients are comfortable with self-administered blood tests (according to research carried out by Qlife).

Qlife collaborates with the Danish, European (ESPKU), and US (NPKUA) PKU organisations, performing testing and product development with them. Having these organizations as ambassadors is, of course, highly advantageous for when sales begin, which estimate may occur in 2024. Even with just a few sales reps covering the European centres, sales could potentially be expanded rapidly and reach a high level of saturation in just a few years. As an example, around 900 families are members of the National Society for Phenylketonuria (UK) and represent, in our view, the most obvious first adopters, who could be reached almost immediately upon the test's approval.

We assume a price per capsule of EUR30 (including VAT), 52 capsules being used per year, and a price per device of EUR1,000 (including VAT), with each device being used for 2.5 years. We thus estimate peak sales of SEK200m. We calculate the market opportunity at around SEK900m.

Competitor – Cue Health

Cue Health is the most significant competitor to Qlife. It has developed the Cue health monitoring system, a system that is analogous to Egoo. Cue Health was listed on US Nasdaq in September 2021, raising USD200m. It had raised USD235m earlier that May to finance a wider roll-out of its coronavirus test. It has sold significant numbers of readers and capsules to the US government and the private sector. It had sales of more than USD600m in 2021 and was profitable. In Q1-Q3 2022, it had sales of USD340m, though it is reporting losses in Q2 (USD-100m) and Q3 (USD-66m). At its peak, the company had around 1,600 employees, but it has been downsizing since then.

Its first new product will be an influenza test. It is also developing a combined Covid-19 and influenza test following that. Next year, it intends to bring out tests for RSV (a virus) and chlamydia and gonorrhoea. In the short term, the company will thus only have a competing product in Covid-19, which we do not expect to be a main driver of sales for Qlife. Furthermore, Cue Health is not currently active in the European market. A disadvantage with the Cue System is the reliance on electronics in the capsules, which makes them more expensive and less versatile compared to the Egoo System. Nevertheless, in the long term Cue Health may become a significant competitor.

Financial history

Income

Qlife's revenues in 2020 reached SEK21m, stemming mainly from Denmark. An important proportion came from sports testing, such as sales to the Danish Football League (Divisionsforeningen).

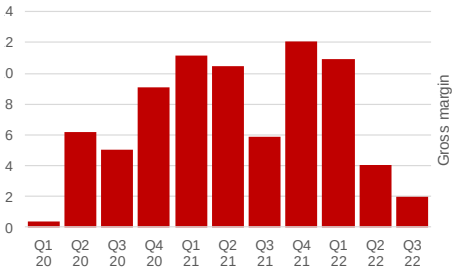
Sales per geographical area							
(SEKm)	**Q1'21**	**Q2'21**	**Q3'21**	**Q4'21**	**Q1'22**	**Q2'22**	**Q3'22**
Sweden	0	1.60	3.23	8.81	7.88	3.46	1.51
Finland	0	0.38	0.48	3.12	2.68	0.55	0.38
Denmark	11.2	8.36	1.43	0.15	0	0	0
Other countries	0.003	0.15	0.73	0	0.35	0.01	0.08
Total Sales	**11.2**	**10.5**	**5.9**	**12.1**	**10.9**	**4.0**	**2.0**
Sweden	*0%*	*15%*	*55%*	*73%*	*72%*	*86%*	*77%*

Source: Redeye Research

In 2021, sales in Denmark began declining as Qlife stopped operating its Sars-CoV-2 test centre at Symbion in Copenhagen around the middle of the year and began instead generating revenues from product sales. Testmottagningen in Sweden thus became its main customer and has accounted for most sales from Q3 2021.

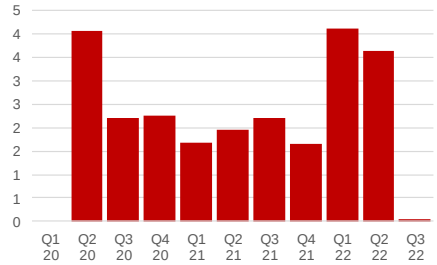
Additional sales have mainly been through the Finnish distributor Aidan, which is active in clinical diagnostics, with Sweden and Germany as its main markets. Typical segments are test centres, the offshore industry, pharmacies, retirement homes and schools. As the CRP and PHE tests will be brought to the market via direct sales, the collaboration with Aidan will diminish in the future. Sales of the Sars-CoV-2 test have been declining in 2022 and will likely approach 0 in 2023.

Qlife: Net Sales (MSEK)



Source: Redeye Research

Qlife: Tax (MSEK)



Source: Redeye Research

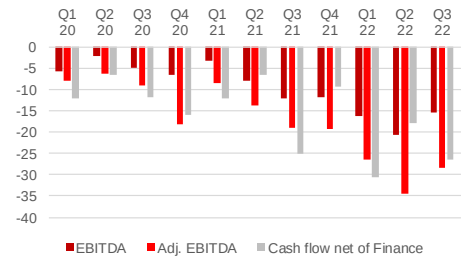
Qlife has had substantial income from R&D tax grants from the Danish state. It had positive tax in 2020 (SEK11.7m) and 2021 (SEK7.5m), largely stemming from the tax value of research and development costs. A tax payment for R&D costs of SEK4.6m from 2019 is included in the financial statements for 2020. The amount in Q3 was only SEK37k since the maximum annual tax credit of SEK8.075k has been reached.

Expenditure

From Q1 2020 to Q3 2022, adjusted EBITDA (defined as EBITDA minus capitalised development work) has been a reasonable proxy for Qlife's cash flows net of financing cash flows (to adjust for the raising of money). The total cash flows net of financing for the period

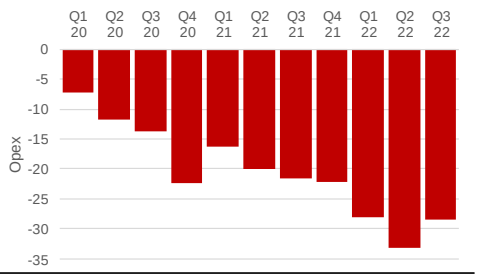
are SEK-174m, while adjusted EBITDA has been SEK-192m. Part of the difference is explained by the positive tax payments.

Qlife: EBITDA & Cash Flow (MSEK)



Source: Redeye Research

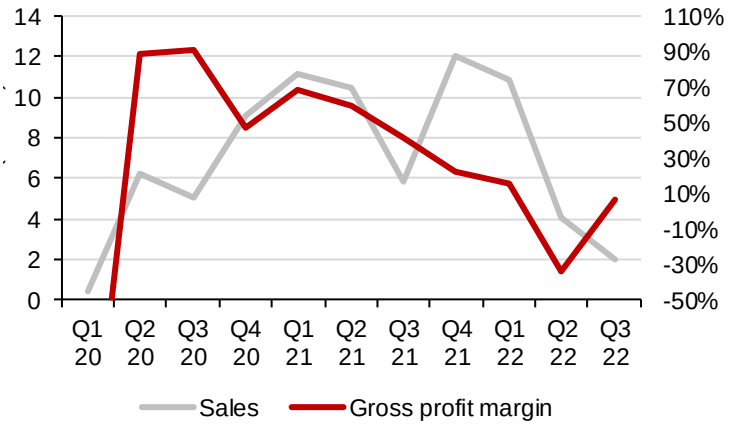
Qlife: Operating Expenditure (MSEK)



Source: Redeye Research

Qlife will restructure its operations and reduce costs, mainly by cutting its workforce. The annual savings will amount to SEK34m, with full effect from Q1 2023. In the past four quarters, operating expenses (excluding materials) amounted to SEK-112m. A reduction of SEK34m would take annual operating costs to around SEK-78m. We believe the annual costs for 2023 will be lower than that (in the range SEK-60m – SEK-70m), as the last twelve months included development costs for three new tests as well as for the organisation for the Covid-19 test.

Qlife: Sales and Gross margin (MSEK)



Source: Redeye Research

Qlife does not post the cost of goods sold in its quarterly reports. We have used "raw materials and consumables" as a substitute when calculating the gross profit margin above. This has steadily declined since Q2 2020, following the sales introduction of the Covid-19 tests. This corresponds to the change from selling Covid-19 tests as a service in Denmark to the product sales of Egoo and capsules in other markets. According to Qlife, it had a gross margin of 41% on its Covid-19 testing business. However, this is likely lower than what can be expected in the CRP and PHE businesses. As a comparison, Cue Health's profit margin has been on average 52% between Q3 2020 and Q1 2022. When benchmarking against some other large diagnostics companies or segments (in the case of Roche), we see a similar average gross profit margin of 47% for the past four years.

Gross profit margin				
%	2018	2019	2020	2021
Roche diagnostics	48%	48%	52%	49%
bioMérieux	54%	55%	56%	58%
Quest diagnostics	35%	35%	38%	39%
Average				**47%**

Source: Redeye Research

We believe it is reasonable to expect a similar gross profit margin for Qlife. We have made our forecasts using a 60% gross margin for Qlife in the short term, followed by 50% in the long run. Heavy sales in the professional category could bolster margins compared to those from the private segment, where pricing is more important. We thus believe gross margins could decline if production is scaled up to cater to a larger mass market in the future.

To benchmark long-term potential margins, we have looked at figures from other large diagnostic companies or diagnostics segments.

Operating profit margin				
%	2018	2019	2020	2021
Roche diagnostics	4.8%	1.9%	15%	19%
Danaher diagnostics	17%	17%	21%	23%
Abbott Diagnostics	25%	25%	34%	40%
bioMérieux	15%	15%	20%	24%
Quest diagnostics	15%	16%	21%	22%
Thermo Fisher specialty diagnostic	26%	25%	26%	15%
Average				**20%**

Source: Redeye Research

On average, these large diagnostic companies and segments have an operating (EBIT) margin of 20%. Assuming a gross margin of 50% and operating expenses (sales and administrative) of 30%, we believe it reasonable to expect a similar EBIT margin for Qlife, i.e., 20% in the long term. In the very long term, it could be lower if Qlife were to target a large private mass market.

Financing

Qlife raised SEK50.5m in its IPO (SEK-6m in transaction costs) and SEK38m (SEK-1.4m in transaction costs) from the TO1 in June 2021 (strike price of SEK17.5). The company raised SEK90m (SEK-5.3m in transaction costs) in a direct share issue on 29 April 2021 at a strike price of SEK42. This amounts to around net SEK166m.

As of 30 September 2022, Qlife's net cash position was SEK11m. It should receive around net SEK23m from the rights issue after amortization of loans. The rights issue in October 2022 was subscribed to 70%, raising SEK53m or around net SEK43m. This results in a net pro-forma cash position of SEK34m.

Results

Qlife's reported Q1-Q3 2022 results included revenues of SEK17m and EBIT of SEK-61m. Its cash flows were SEK-82m when adjusted for loans of SEK21m (i.e., we subtract the loan to arrive at SEK-82m). The cash position after the rights issue should be around SEK34m.

Assuming that costs will decline with SEK34m per year, Qlife's cash position would last the company around half a year after the end of Q3 2023. The cash position should thus last well into Q1 2023 and likely into Q2, but likely not until June 2022 unless additional restructurings are made. In our view, it is unlikely that income from sales will extend this time in any significant way.

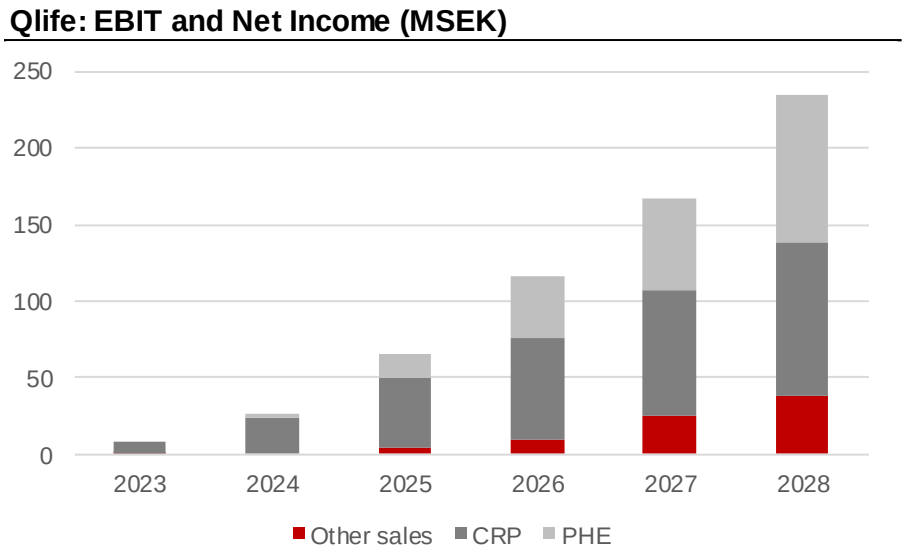
Financial forecasts

Qlife has seen impressive growth thanks to its Covid-19 tests, growing from zero to SEK21m in the first year (2020) and to SEK40m in 2021, proving the company can grow quickly in a prioritised segment. Sales will decline in 2022 as sales of Covid-19 test will eventually reach 0. Sales in 2023 will depend on a rapid launch of the CRP test.

Qlife: Estimate (MSEK)																	
(SEKm)	2020	2021Q1	2021Q2	2021Q3	2021Q4	2021	2022Q1	2022Q2	2022Q3	2022Q4	2022	2023	2024	2025	2026	2027	2028
Revenues	20,8	11,2	10,5	5,9	12,1	39,6	10,9	4,0	2	1	18	8	27	66	116	168	228
Gross Profit	35,7	13,0	12,0	9,3	10,2	44,5	11,8	12,5	13,1	-1	-1	4	15	40	58	84	114
EBITDA	-19,4	-3,2	-8,1	-12,2	-11,9	-35,4	-16,3	-20,6	-15	-17	-106	-42	-37	-21,7	-1	23	45
EBIT	-31,3	-7,7	-12,8	-17,2	-17,1	-54,9	-19,1	-23,8	-19	-20	-119	-48	-47	-32	-15	8	25
EPS	-1,3	-0,6	-0,7	-1,0	-1,0	-3,2	-1,0	-1,2	-0,9	-0,9	-4,9	-0,7	-0,7	-0,4	-0,2	0,1	0,3
Growth (%)	na	2803%	70%	16%	32%	91%	-2%	-62%	-66%	-92%	-55%	-56%	239%	146%	75%	45%	36%
Gross margin	172%	116%	114%	159%	85%	112%	108%	311%	667%	-100%	-3%	57%	57%	60%	50%	50%	50%
EBITDA margin (%)	-94%	-29%	-77%	-208%	-98%	-89%	-149%	-512%	-779%	-1708%	-594%	-529%	-137%	-33%	-1%	14%	20%
EBIT margin (%)	-151%	-69%	-122%	-292%	-142%	-138%	-176%	-590%	-968%	-2008%	-665%	-611%	-175%	-48%	-13%	5%	11%
Net income margin (%)	-97%	-60%	-108%	-255%	-131%	-123%	-136%	-473%	-1076%	-2008%	-627%	-560%	-175%	-36%	-13%	4%	9%

Source: Redeye Research

In our initial forecast period, 2022–2028, we forecast a sales CAGR of 44% in our Base Case. We forecast profitability by 2027. This will need additional financing, which should not be difficult to obtain if such a growth materialises. It is rare for companies that grow profitably (and do not invest heavily in commercialisation) to have such a high growth rate.



Source: Redeye Research

We forecast sales across three categories: CRP, PKU and Other sales (which includes other capsules). We expect CRP to be the main driver of sales in 2023-2024. We have estimated sales under wellness and professional certifications, assuming that sales growth will be slower than that of the Covid-tests in the first year and reach SEK 8m. Building on this, and adding the approval for self-testing by 2024, we believe sales could be expanded substantially in 2024 and reach SEK 27m.

We forecast sales of the PHE tests to start later in 2024. We believe such a product will be quickly accepted by the PKU community and rapidly achieve a high market penetration, thus becoming a strong driver of growth in 2025-2028, as demonstrated in the graph above. We assume entry into the US market in 2027.

We forecast the launch of further tests in 2025. We assume gross margins of 60% in 2023-2025 and 50% after this as we expect prices of Egoo products to decline over time. In the long term, we expect EBIT margins to reach 20% (as discussed in the previous section).

In the longer run, beyond our initial forecast period, we expect the CRP and other tests to dominate total sales. Our forecasts are based on the current financial situation of the company. We believe a higher growth rate, in particular in segments beyond PKU, will require more investments, which will need a higher share price.

Financing

Guarantors received around 41.6% of the October 2022 rights issue. Assuming an average daily trading volume of around 25,000 shares, the guarantors' share amounts to around 180 days' trading volume. The subscription period for TO2 is 22 May 2023 up to and including 2 June 2023, which is more than seven months from the rights issue. The overhang may have been cleaned up by then.

Assuming the rights issue had been fully subscribed and TO2 had been subscribed with the share trading at SEK7 with a 30% discount, Qlife would have received net SEK115m (after financial costs). Given the actual results and assuming TO2 can be subscribed when the share trades SEK2 (with 30 percent discount), Qlife would receive in total net SEK54m from the rights issue and TO2. We take into account the difference of around SEK60m by assuming another rights issue in 2023 of net SEK60m, with financial costs of 10%. This leads to a substantial dilution in our Base Case.

We find it unlikely that Qlife's cash will last until June 2022, when TO2 can bring in more money. It must find a financing solution by the end Q1 2023. We find it unlikely that a rights issue can be completed in this space of time, as underwriters will stay away, at least until the overhang is cleared up. The company will thus need to find another financial solution, such as a direct rights issue to a strategical investor or industrial partner. The company might also have to drastically to cut down on planned activities.

Our Base Case, in which we forecast profitability in 2027, is built on the assumption that Qlife does obtain financing in 2023. We assume that this funding is dilutive. It will likely need further financing after this, which will also likely be dilutive. The company will need a high growth momentum and improving profitability to attract investors. Slower growth than planned would likely mean the company needs to raise more money earlier and at a lower share price, leading to substantial dilution or the inability to gain further funding. Assuming commercial success, we expect the company will try to raise money in directed share issues in the future at a higher share price so as to accelerate sales and product development.

DCF valuation

We have used a discounted cash flow model (DCF) with a WACC of 12.5% to value Qlife. We have forecast seven years in our initial detailed period, set 2036 as the terminal year and applied a terminal growth rate of 2% with an EBIT margin in perpetuity of 20%. We have forecast a sales CAGR of 44% for 2022–2028 and of 25% for the entire period of 2022–2036. Our valuation range is SEK0-9.9 with a fully diluted Base Case of SEK 4.2.

We have calculated using 64 million shares outstanding, including the new shares from TO2 and another rights issue in 2023 and assuming that SEK71m (SEK11m + SEK60m) is added to the cash position. The undiluted Base Case is SEK8.5.

Bear Case: SEK0

We assume the company does not manage to find the capital to continue its operations in 2023.

Base Case: SEK4.2

We assume average sales growth of 26% for 2022–2036.

We set the terminal growth rate at 2% with a terminal EBIT margin of 20%.

We assume Qlife becomes profitable in 2027 and cash flow positive in 2028.

Bull Case SEK9.9

The main difference in our bull case is that we assume a lower sales decline in 2023 leading to sales of SEK 14m in. Assuming the same growth in the years after this as in the Base Case, this leads to much higher total cash flows until 2036.

We assume average sales growth of 30% for 2022–2036.

As in our Base Case, we set the terminal EBIT margin at 20% and the terminal growth rate at 2%.

We assume Qlife becomes profitable and cash flow positive in 2026.

Sensitivity analysis

Sensitivity analysis		Weigthed Average Cost of Capital				
		14,5%	13,5%	12,5%	11,5%	10,5%
EBIT margin	16%	2,5	2,9	3,5	4,3	5,3
	18%	2,7	3,2	3,9	4,7	5,8
	20%	2,9	3,5	4,2	5,1	6,3
	22%	3,1	3,8	4,5	5,5	6,8
	24%	3,4	4,0	4,9	5,9	7,3
		14,5%	13,5%	12,5%	11,5%	10,5%
Growth	1,0%	2,7	3,2	3,9	4,7	5,7
	1,5%	2,8	3,4	4,0	4,9	6,0
	2,0%	2,9	3,5	4,2	5,1	6,3
	2,5%	3,0	3,6	4,4	5,4	6,6
	3,0%	3,1	3,8	4,6	5,7	7,0

Source: Redeye Research

A sensitivity analysis shows our Base Case is quite sensitive to the WACC. It is somewhat less sensitive to the terminal growth rate and EBIT margin.

Peer group

As a complement to our DCF model, we provide a peer group analysis. Since there is no fully comparable company to Qlife listed in the Nordic region, our peer group includes a number of Nordic medtech and diagnostics companies with high sales growth.

Peer valuation

Nordic Medtech	EV	EV/Sales			EV/EBITDA			Sales Growth			EBITDA margin		
Company	(SEKm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
ArcticZymes Technologies ASA	3 846	23,5x	18,1x	13,7x	61,3x	35,2x	24,9x	22%	30%	32%	38%	52%	55%
BONESUPPORT HOLDING AB	5 141	16,0x	10,5x	7,0x	-109,2x	134,4x	34,0x	51%	52%	50%	-15%	8%	21%
Boule Diagnostics AB	561	1,0x	1,0x	0,9x	7,6x	5,5x	4,8x	16%	8%	6%	14%	18%	19%
CellaVision AB	6 244	9,3x	7,9x	7,1x	30,5x	24,9x	21,1x	19%	17%	12%	30%	32%	33%
Enzymatica AB	622	10,6x	7,2x	4,2x	-12,0x	-18,8x	-95,6x	2%	47%	72%	-89%	-38%	-4%
Genovis AB	3 065	29,0x	13,9x	8,3x	98,9x	27,8x	13,0x	14%	108%	67%	29%	50%	64%
Mentice AB	951	4,1x	3,3x	2,7x	364,8x	20,6x	11,7x	24%	27%	20%	1%	16%	23%
RaySearch Laboratories AB Clas	2 536	3,2x	2,8x	2,5x	7,9x	6,9x	5,9x	26%	12%	14%	40%	41%	42%
Redsense Medical AB	116	9,3x	5,3x	2,5x	-9,7x	-16,6x	10,6x	36%	76%	109%	-96%	-32%	24%
Revenio Group Oyj	11 357	10,7x	9,3x	8,1x	31,7x	27,6x	23,1x	27%	14%	15%	34%	34%	35%
Sedana Medical AB	1 214	9,7x	5,4x	3,4x	-15,2x	-46,7x	61,1x	-22%	80%	57%	-64%	-12%	6%
Surgical Science Sweden AB	7 642	9,8x	8,5x	7,2x	37,0x	27,7x	20,7x	113%	15%	18%	26%	31%	35%
SyntheticMR AB	1 367	18,9x	13,2x	10,1x	75,6x	34,0x	21,3x	20%	43%	31%	25%	39%	47%
Xvivo Perfusion AB	5 608	14,3x	10,3x	7,1x	97,3x	50,5x	26,5x	52%	38%	46%	15%	20%	27%
Qlife Holding	**33**	**1,8**	**4,1**	**1,2**	**-0,3**	**-0,8**	**-0,9**	**-55%**	**-56%**	**239%**	**-594%**	**-529%**	**-137%**
Mean*	**3 591**	**12,1x**	**8,3x**	**6,1x**	**47,6x**	**22x**	**13,1x**	**29%**	**41%**	**39%**	**-1%**	**18%**	**30%**
Median*	**2 801**	**10,2x**	**8,2x**	**7,0x**	**31,1x**	**26,3x**	**20,9x**	**23%**	**34%**	**31%**	**20%**	**26%**	**30%**

Source: FactSet and Redeye Research

Qlife is in an earlier stage than the companies in the comparison group. It is too early to make any comparisons based on earnings. Qlife has a moderate valuation based on our projected sales and sales growth in 2024.

Appendix: Management and board

Management

Name	Position	Shares	Options
Thomas Warthoe	CEO		
 Thomas Warthoe has been employed at Qlife Aps since founding it in 2018. He has more than 20 years' experience as an entrepeneur in the healthcare industry and diagnostics. He has founded and developed three biotech companies, two of which, Display System Biotech and Ampligon, were successfully exited. Other assignments: Board member of Petel Holding A/S, PKV Consult IVS and Chip Diagnostics Inc.		1 507 053	
Peter Warthoe	Chief Scientific Officer		
 Peter Warthoe is co-founder of Qlife and has been employed since its founding in 2018. He is an entrepreneur and inventor who has co-founded companies in life sciences, diagnostics and technology. His discovery of a gene profiling technique has over 1000 citations. He has submitted more than ten patent applications.		1 201 200	
Maiken Worsø Rosenstierne	Director R&D		
 Maiken Worsø Rosenstierne is a biochemist with an MSc and PhD. She was previously a Senior Scientist at Statens Serum Institut.			
Kristina Christensen	Director QA/RA		
 Kristina Christensen has extensive experience in IVD and Medical Devices. She specializes in quality assurance, design control, risk management, product development of reagents and instruments and clinical evaluations.			
Kasper Boel Rousøe	Chief Financial Officer		
 Kasper began working at Qlife in March 2022. He has more than 20 years of experience in the financial area. He holds a MSc in Economics and an EMBA from IMD in Lausanne, Switzerland.			120 000
Jakob Broberg Lind	Global Sales Director		
 Jakob Broberg Lind is has more than 12 years' experience with business development and strategic sales within medical devices. He has previously worked at companies such as Boston Scientific and Medtronic.		22 663	110 000

Source: Redeye Research

Board

Name	Position	Shares	Options
Mette Gross	Chairman of the board		
	Mette Gross has been chairman since 2019. She has 20 years experience as a CFO. She has a Master of Finance and Mathematics. Previous assignments include: CFO Iconovo AB, CFO Vigmed Holding AB, Director Controlling Coloplast Group and CFO MTG A/S. Other assignments include: Board member of Anatomic Studios AB, Rehaler, Octaquest, Tendo AB and Queen Invest AB.	67 766	129 629
Thomas Warthoe	Director		
	Thomas Warthoe has been a member of the board since 2020. He has more than 20 years' experience as entrepeneur in the healthcare industry and diagnostics. He has founded and developed three biotech companies, two of which, Display System Biotech and Ampligon, were successfully exited. Other assignments: Board member of Petel Holding A/S, PKV Consult IVS and Chip Diagnostics Inc.	1 507 053	
John Moll	Director		
	John Moll has been member a of the board since 2018. He is a Swedish entrepreneur and experienced business angel with a focus on Life Science. He has founded and sold two companies. He has a degree in pharmaceutical chemistry. Other assignments include: Board member of Spermosens AB, TIRmed Pharma and Torna Kapital AB.	144 024	64 815
Ulrik Harrysson	Director		
	Ulrik Harrysson has been a member of the board since 2021. He has more than 25 years' experience in international management with roles in global companies such as Hermes Medical Solution, HemoCue, Danaher and Pfizer. He has a master's degree in Business Administration, specialization in Marketing. Other assignments include: CEO of SyntheticMR since 2019.	2 000	15 000
Mikael Persson	Director		
	Mikael Persson has been a member of the board since 2021. He has previous experience in the global medtech industry with senior positions in Supply Chain and Product Development within Alfa Laval, Flûgger A/S, ArjoHuntleigh AB and Getinge. He has no other assignments.	10 000	25 000
Mette-Marie Harild	Director		
	Mette-Marie Harild has been a member of the board since 2021. She has a long managerial experience from the pharma/medical industry, most recently from Medtronic as Regional Vice President ABGI & Nordic. She is originally a trained dentist and has an Executive MBA in Change Management. Other assignments include: board member of Neurescue and Occlutech and chairperson of Ossiform as well as membership in several public committees.		

Source: Redeye Research

Catalysts

Approval of the CRP essay for professional use.

The CE marking of the CRP capsule for professional use will render it ready for launch in professional clinics, and sales should ramp up in the months following this. This could occur in H1 2023. In a second stage (likely in 2024), we expect approval for self-testing, which should further drive sales.

IMPACT				
Downside		Upside		Time Frame
Significance	Likelihood	Significance	Likelihood	
Major	Unlikely	Moderate	Likely	Medium

Quarterly sales growth

Sales of Covid-19 tests are declining, and the company is restructuring. Sales starting to grow again will be a trigger. The stronger the growth, the more robust the trigger will be. This means all quarterly reports will be catalysts.

IMPACT				
Downside		Upside		Time Frame
Significance	Likelihood	Significance	Likelihood	
Major	Possible	Major	Possible	Short

Subscription of TO2

Qlife will need further financing before it can become cash flow neutral. The TO2 warrants can raise its cash position to net SEK70m as of June 2023 if the share trades above SEK14.3. Otherwise, they can bring in up to 70% of the volume-weighted average price. The higher the strike price and the higher the subscription rate, the more capital will be available for Qlife to develop new products and push sales, which will be a trigger.

IMPACT				
Downside		Upside		Time Frame
Significance	Likelihood	Significance	Likelihood	
Major	Possible	Major	Possible	Mid

Summary Redeye Rating

People: 4

The four founders, three of whom are still in the company, have previous experience of having worked together and founded successful enterprises. This experience is important not only in developing but also when commercialising the Egoo system. The four founders still have a significant ownership in the company at 27% of the total capital and votes. However, they have been diluted by around 29% after the rights issue. The founder and CEO is the largest shareholder of the three. Institutional ownership stood at 14% before the rights issue. Board ownership is relatively low, however.

Business: 3

The company has a proven track record, having sold Covid-19 tests and devices for SEK77m. We expect long-term gross margins of around 50%. The company is switching from Covid-19 diagnostics to professional biomarker testing in a home setting. This transition will have to be managed adroitly. It will be important that the company demonstrates high organic growth to the market to obtain financing, in particular through the TO2. In the longer term, expansion into the private setting (self-testing) would lead to a larger market.

Financials: 1

Qlife has never been profitable. It intends to be cash flow neutral by the end of 2024. It strengthened its balance sheet with a rights issue that brought in around net SEK53m. TO2 warrants can bring in up to net SEK70m in June 2023, but this would require a high share price. We therefore believe that an additional SEK60m will have to be raised in 2023.

	2020	2021	2022E	2023E
INCOME STATEMENT				
Revenues	21	40	18	8
Cost of Revenues	-15	-5	19	3
Gross Profit	36	45	-1	4
Operating Expenses	55	80	106	46
EBITDA	-19	-35	-106	-42
Depreciation & Amortization	12	19	13	6
EBIT	-31	-55	-119	-48
Net Financial Items	-1	-1	-2	0
EBT	-32	-56	-121	-48
Income Tax Expenses	-12	-8	-8	-4
Non-Controlling Interest	0	0	0	0
Net Income	-20	-49	-112	-44
BALANCE SHEET				
Assets				
Current assets				
Cash & Equivalents	21	73	14	24
Inventories	5	8	8	11
Accounts Receivable	9	3	1	1
Other Current Assets	10	19	14	14
Total Current Assets	45	103	37	50
Non-current assets				
Property, Plant & Equipment, Net	5	4	5	13
Goodwill	42	31	0	0
Intangible Assets	35	55	90	85
Right-of-Use Assets	0	0	49	48
Shares in Associates	0	0	0	0
Other Long-Term Assets	0	0	3	0
Total Non-Current Assets	82	90	147	146
Total Assets	127	194	184	196
Liabilities				
Current liabilities				
Short-Term Debt	1	1	0	0
Short-Term Lease Liabilities	0	0	0	0
Accounts Payable	12	10	12	2
Other Current Liabilities	22	17	20	15
Total Current Liabilities	34	28	32	18
Non-current liabilities				
Long-Term Debt	3	3	3	3
Long-Term Lease Liabilities	0	0	46	46
Other Long-Term Liabilities	0	0	0	0
Total Non-current Liabilities	3	3	49	49
Non-Controlling Interest	0	0	0	0
Shareholder's Equity	90	163	102	129
Total Liabilities & Equity	127	194	184	196
CASH FLOW				
NOPAT	-20	-48	-111	-44
Change in Working Capital	9	-12	12	-17
Operating Cash Flow	-17	-38	-99	-35
Capital Expenditures	-5	-3	-5	-9
Investment in Intangible Assets	-21	-25	-22	0
Investing Cash Flow	-27	-28	-27	-9
Financing Cash Flow	59	0	35	65
Free Cash Flow	-44	-66	-126	-44

DCF Valuation Metrics	**Sum FCF (SEKm)**
Initial Period (2022–2028)	-166
Momentum Period (2029–2035)	133
Stable Period (2036–)	196
Firm Value	163
Net Debt (last quarter)	-58
Equity Value	221
Fair Value per Share	4,2

	2020	2021E	2022E	2023E
CAPITAL STRUCTURE				
Equity Ratio	0,7	0,8	0,6	0,7
Debt to equity	0,0	0,0	0,0	0,0
Net Debt	-17	-70	-11	-21
Capital Employed	93	166	152	178
Working Capital Turnover	-2,2	12,9	-2,0	1,0
GROWTH				
Revenue Growth	NA	91%	-55%	-56%
Basic EPS Growth	NA	142%	54%	-86%
Adjusted Basic EPS Growth	NA	142%	56%	-86%
PROFITABILITY				
ROE	-45%	-39%	-84%	-38%
ROCE	-34%	-33%	-78%	-27%
ROIC	-55%	-57%	-125%	-46%
EBITDA Margin (%)	-94%	-89%	-594%	-529%
EBIT Margin (%)	-151%	-138%	-665%	-611%
Net Income Margin (%)	-97%	-123%	-627%	-560%
VALUATION				
Basic EPS	NA	-3,2	-4,9	-0,7
Adjusted Basic EPS	NA	-3,2	-4,9	-0,7
P/E	NA	NA	NA	NA
EV/Revenue	NA	9,7	1,8	10,0
EV/EBITDA	NA	NA	NA	NA
EV/EBIT	NA	NA	NA	NA
P/B	NA	2,8	0,4	0,8

SHAREHOLDER STRUCTURE	**CAPITAL %**	**VOTES %**
Thomas Warthoe	9,3%	9,3%
Lars Bangsgaard	7,8%	7,8%
Peter Warthoe	7,8%	7,8%
Avanza Pension	5,2%	5,2%
Uddannelses og Forskningsministeriet	4,9%	4,9%

SHARE INFORMATION	
Reuters code	QLIFE.ST
List	First North
Share price	1,89
Total shares, million	23,0725

MANAGEMENT & BOARD	
CEO	Thomas Warthoe
CFO	Kasper Boel Rousøe
Chairman	Mette Gross

ANALYSTS
Douglas Forsling
Hjalmar Ahlberg

Redeye AB
Mäster Samuelsgatan 42, 10tr
111 57 Stockholm

Redeye Rating and Background Definitions

Company Quality

Company Quality is based on a set of quality checks across three categories; PEOPLE, BUSINESS, FINANCE. These are the building blocks that enable a company to deliver sustained operational outperformance and attractive long-term earnings growth.

Each category is grouped into multiple sub-categories assessed by five checks. These are based on widely accepted and tested investment criteria and used by demonstrably successful investors and investment firms. Each sub-category may also include a complementary check that provides additional information to assist with investment decision-making.

If a check is successful, it is assigned a score of one point; the total successful checks are added to give a score for each sub-category. The overall score for a category is the average of all sub-category scores, based on a scale that ranges from 0 to 5 rounded up to the nearest whole number. The overall score for each category is then used to generate the size of the bar in the Company Quality graphic.

People

At the end of the day, people drive profits. Not numbers. Understanding the motivations of people behind a business is a significant part of understanding the long-term drive of the company. It all comes down to doing business with people you trust, or at least avoiding dealing with people of questionable character.

The People rating is based on quantitative scores in seven categories:

- Passion, Execution, Capital Allocation, Communication, Compensation, Ownership, and Board.

Business

If you don't understand the competitive environment and don't have a clear sense of how the business will engage customers, create value and consistently deliver that value at a profit, you won't succeed as an investor. Knowing the business model inside out will provide you some level of certainty and reduce the risk when you buy a stock.

The Business rating is based on quantitative scores grouped into five sub-categories:

- Business Scalability, Market Structure, Value Proposition, Economic Moat, and Operational Risks.

Financials

Investing is part art, part science. Financial ratios make up most of the science. Ratios are used to evaluate the financial soundness of a business. Also, these ratios are key factors that will impact a company's financial performance and valuation. However, you only need a few to determine whether a company is financially strong or weak.

The Financial rating is based on quantitative scores that are grouped into five separate categories:

- Earnings Power, Profit Margin, Growth Rate, Financial Health, and Earnings Quality.

Redeye Equity Research team

Management

Björn Fahlén
bjorn.fahlen@redeye.se

Tomas Otterbeck
tomas.otterbeck@redeye.se

Technology Team

Hjalmar Ahlberg
hjalmar.ahlberg@redeye.se

Henrik Alveskog
henrik.alveskog@redeye.se

Alexander Flening
alexander.flening@redeye.se

Douglas Forsling
douglas.forsling@redeye.se

Forbes Goldman
forbes.goldman@redeye.se

Jessica Grünewald
jessica.grunewald@redeye.se

Jesper von Koch
jesper.henriksson@redeye.se

Anton Hoof
anton.hoof@redeye.se

Rasmus Jacobsson
rasmus.jacobsson@redeye.se

Viktor Lindström
viktor.lindström@redeye.se

Fredrik Nilsson
fredrik.nilsson@redeye.se

Mark Siöstedt
mark.siostedt@redeye.se

Jacob Svensson
jacob.svensson@redeye.se

Niklas Sävås
niklas.savas@redeye.se

Danesh Zare
danesh.zare@redeye.se

Fredrik Reuterhäll
fredrik.reuterhall@redeye.se

Life Science Team

Gergana Almquist
gergana.almquist@redeye.se

Oscar Bergman
oscar.bergman@redeye.se

Christian Binder
christian.binder@redeye.se

Filip Einarsson
filip.einarsson@redeye.se

Mats Hyttinge
mats.hyttinge@redeye.se

Ethel Luvall
ethel.luvall@redeye.se

Gustaf Meyer
gustaf.meyer@redeye.se

Erik Nordström
erik.nordstrom@redeye.se

Richard Ramanius
richard.ramanius@redeye.se

Kevin Sule
kevin.sule@redeye.se

Fredrik Thor
fredrik.thor@redeye.se

Johan Unnerus
johan.unnerus@redeye.se

Disclaimer

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Redeye AB ("Redeye" or "the Company") is a specialist financial advisory boutique that focuses on small and mid-cap growth companies in the Nordic region. We focus on the technology and life science sectors. We provide services within Corporate Broking, Corporate Finance, equity research and investor relations. Our strengths are our award-winning research department, experienced advisers, a unique investor network, and the powerful distribution channel redeye.se. Redeye was founded in 1999 and since 2007 has been subject to the supervision of the Swedish Financial Supervisory Authority.
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Redeye Rating (2022-12-20)

Rating	People	Business	Financials
5	29	14	4
3-4	159	139	47
0-2	5	40	142
total	193	193	193

Duplication and distribution

CONFLICT OF INTERESTS

Richard Ramanius owns shares in the company : No
Johan Unnerus owns shares in the company : No
Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.