

## Initiation of coverage

### PILA PHARMA

Pila Pharma is a Swedish biotech company. It owns an asset package with multiple TRPV1 antagonists, including its lead candidate, XEN-D0501, which is in development for obesity, with potential applications in diabetes mellitus, erythromelalgia, and other diseases with an inflammatory background. Pila Pharma AB (publ) was incorporated in 2014, listed in 2021 and is headquartered in Malmö, Sweden.

CEO: Gustav Hanghøj Gram

CoB: Dorte X. Gram

<https://pilapharma.com/>

List: Nasdaq First North Stockholm

Last: SEK 1.57

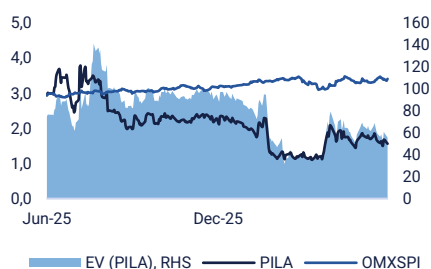
Market cap: SEK 71m

Enterprise value: SEK 59m

Bloomberg: PILA:SS

Refinitiv Eikon: PILA.ST

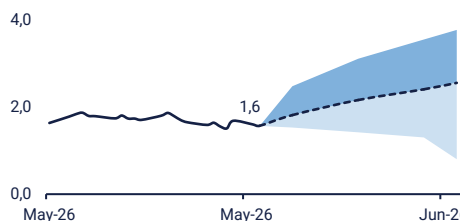
### VALUATION RANGE



	12M	YTD	6M	1M
Development (%)	-48	-24	-26	-12

Source: S&P Capital IQ

### VALUATION RANGE



	BEAR	BASE	BULL
Share price (SEK)	0.8	2.5	3.8
Up-/downside (%)	-49	63	140

Source: S&P Capital IQ and Carlsquare estimates

### CARLSQUARE EQUITY RESEARCH

Niklas Elmhammer  
Senior Equity Analyst

Herman Kuntscher  
Equity Analyst

## Sizing up a small molecule in obesity

Pila Pharma is developing its lead candidate, XEN-D0501, a TRPV-1 antagonist in metabolic disease, with potential applications in pain and other inflammatory indications, such as Erythromelalgia (EM). With a candidate dosed in 300 humans, PILA appears to have a unique TRPV1 antagonist profile, safety-wise. The data provide a rationale for investigating higher oral dosing in the planned Phase Ib/IIa trials for the piping-hot obesity indication.

### Clinical stage research company punching above its weight

Pila Pharma is developing XEN-D0501, a potential first-in-class oral treatment that is a selective small molecule TRPV1 antagonist (also known as the "chilli or capsaicin receptor"). This mechanism is known to regulate neurogenic inflammation, a key factor in many diseases. The candidate has demonstrated enhanced endogenous insulin response in Phase 2a trials in overweight people with type 2 diabetes. The company's focus is now to expand the data package by assessing XEN-D0501 in obesity. Injectable peptide solutions have established a multi-billion-dollar market. After injectable single GLP-1 agonists and the dual agonist tirzepatide, orals are the next emerging segment in obesity drugs. Recent launches by Novo Nordisk and Eli Lilly in 2026 indicate strong demand for obesity pills.

### Broad effect enables secondary indications

Given that the target, TRPV1, is a key regulator of inflammation and pain, the company's candidate is expected to have several applications. The FDA, for example, granted Pila Pharma Orphan drug designation for Erythromelalgia in July 2022, a rare and painful autoimmune disease. Currently, no targeted therapies are approved, suggesting that XEN-D0501 could be a first-in-class treatment. Due to its small-molecule nature, Pila Pharma could, in addition to its currently developed tablet formulation, explore a dermal/topical formulation to better align with patient needs. With a perceived potent direct anti-inflammatory effect, the application possibilities also include cardiovascular conditions, skin conditions, and other inflammatory diseases.

### Preparing to restart clinical development

We believe Pila Pharma's valuation reflects sluggish sentiment toward early-stage Nordic biotech companies. Also, the preclinical obesity studies initiated in 2025 could not be conducted with the intended formulation, and the results were inconclusive, creating some uncertainty. As a result, the subscription rate in the TO2 warrant program was low. We see a clear road to higher valuation when PILA restarts its clinical development with a primary focus on obesity. Currently, the company is preparing a CTA (clinical trial application) suggesting a trial start in 6-12 months, in our view. Our base-case valuation is SEK 2.5 per share, after expected financing for planned clinical development. We view the bet on obesity as high risk/high reward; however, secondary indications provide some downside protection if obesity trials do not pan out.

### Key figures (SEKm)

	2024	2025	2026E	2027E	2028E	2029E
Net sales	1	1.1	0.0	0.0	0	126
Total operating income	1	1	0	0	0	126
Gross profit on net sales	1	1	0	0	0	126
EBITDA	-7	-7	-21	-28	-24	116
EBIT	-8	-8	-21	-28	-24	116
EBT	-11	-17	-21	-28	-24	116
Basic EPS	-0.5	-0.5	-0.4	-0.3	-0.3	1.2
Growth, net sales	-47.0%	45.4%	-99.1%	0.0%	0.0%	NM
Gross margin	100.0%	100.0%	NM	NM	NM	100.0%
EBIT margin	neg	neg	neg	neg	neg	92.4%
EV/Sales	NM	NM	NM	NM	NM	-0.4x
EV/EBITDA	NM	NM	NM	NM	NM	-0.4x
EV/EBIT	NM	NM	NM	NM	NM	-0.4x
P/E	NM	NM	NM	NM	NM	1.3x

Source: Company information and Carlsquare estimates

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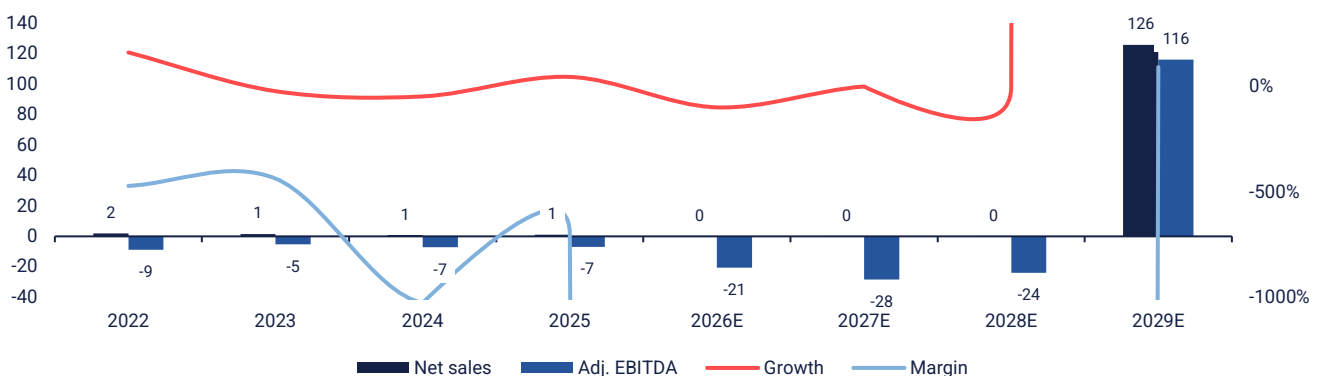
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# Investment case

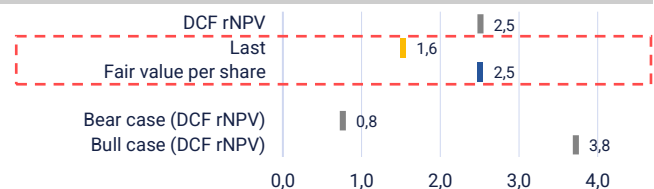
## An early-stage bet on metabolic disease - and more

- Differentiated oral drug candidate for obesity and diabetes:** Pila Pharma has a Phase 2-ready oral drug candidate, XEN-D0501, for obesity and diabetes. In previous studies, it has demonstrated a promising safety profile and early signs of efficacy on insulin release and glucose control. By targeting the TRPV1 ion channel, the approach is differentiated from currently available treatments (i.e., gut hormone analogues), offering opportunities as add-on or follow-on treatments.
- PILA team carry weight in the field:** The management, board and scientific advisory board have solid backgrounds and networks in the diabetes and obesity spaces, from e.g., Novo Nordisk, Lilly and Sanofi. The founder and CSO, Dorte X. Gram, is still one of the largest owners. We believe it signals long-term commitment and provides incentives outside of the scientific merit of accomplishing the goal of seeing through her discovery to a marketable drug.
- Appetite for growth:** The obesity and diabetes drug markets are estimated at USD 25 billion and USD 186 billion, according to IQVIA, with an expected growth of 25 and 12 per cent annually, respectively. This is significantly stronger than the pharmaceuticals market overall. The growth outlook fuels mergers and acquisitions (M&A) and business development, which have picked up markedly in recent years. Danish biotechs, such as Zealand and Gubra, have made headlines with billion-dollar deals with Big Pharma.
- Still flying below the radar:** The valuation of Pila Pharma is undemanding, at an Enterprise Value of ~SEK 60m. Some potential investors are likely on the sidelines, awaiting the start of clinical development in obesity and greater clarity on the patent strategy.

### Revenue and profitability (SEKm), base case



- A fair value of SEK 2.5 per share** is calculated in a base case scenario within the interval SEK 0.8-3.8 per share. A fair value per share of SEK 2.5 corresponds to a potential upside of 63%

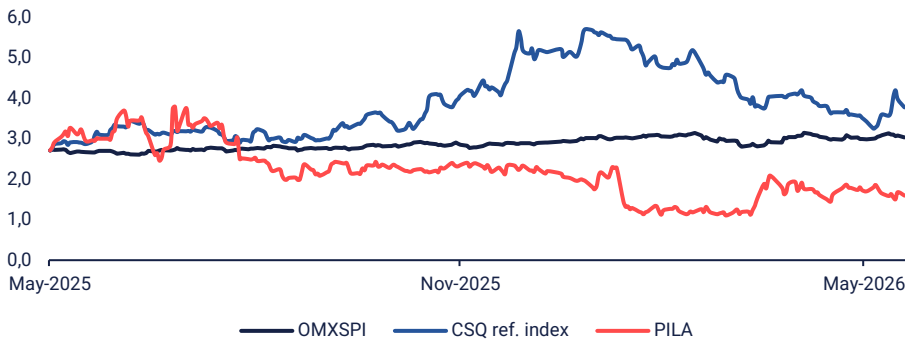


- Early stage of development entails risk.** The company is still in the early stages of development, with technical and regulatory risks affecting the likelihood of success.
- Will need a partner for development and commercialisation.** The company will most likely need to license or sell its projects before clinical development is completed. However, the timing of a any potential partnership is highly uncertain.
- Will need to raise substantial amounts of money.** PILA will require additional funding to develop XEN-D0501. Hence, it is vital that the company is successful in raising sufficient capital

## Share and valuation trends

The chart below illustrates the performance of the PILA share relative to OMXSPI, CSQ reference index (consisting of the stocks active in the development of obesity drugs or targeting TRPV1). The share has underperformed, evidently impacted by the rights issue in the summer. In contrast, our reference group of primarily obesity drug developers has increased by some 30 per cent in value over the last year. This is driven by positive preclinical and clinical updates, as well as business development and M&A, boosting overall sentiment in the field.

### Indexed share price development of reference index



Source: S&P Capital IQ and Carlsquare. Reference group: Aardvark Therapeutics, Alzecure Pharma, D&D Pharmatech, Gubra, iBIO and Structure Therapeutics

## Introduction to the company

After ten years of project maturation, PILA PHARMA has set its target to further evaluate its lead candidate, the oral TRPV1 antagonist, XEN-D0501, in obesity, a USD +25 billion drug market (2024) according to IQVIA. XEN-D0501 has several potential advantages, including the tablet convenience, a differentiated safety profile which is presumed to include no gastrointestinal side-effects, and a simple synthesis for high scalability. The next milestone of the project is achieving preclinical proof of concept in two obesity models

## PILA PHARMA, a brief overview

### A combination of data and new pre-clinical studies

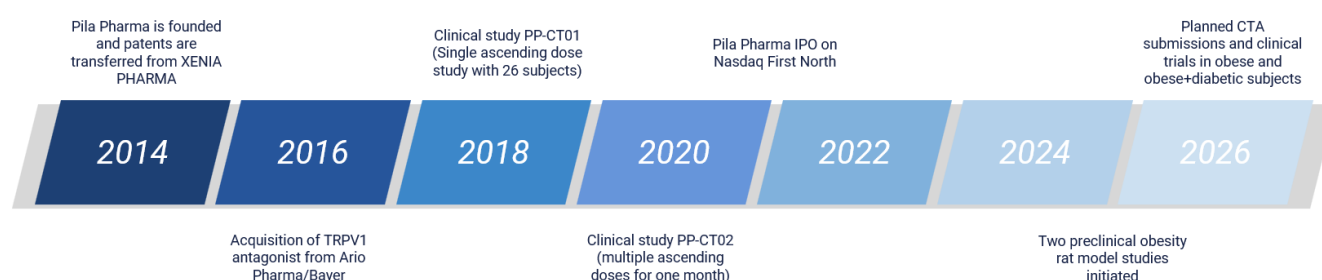
PILA PHARMA, founded in 2014, is a Swedish biotech company in the clinical stage (Phase 2) that is developing a new type of treatment for obesity and type 2 diabetes. The company owns an asset package with multiple TRPV1 antagonists, but its lead product candidate is XEN-D0501, a so-called TRPV1 antagonist. TRPV1 is a receptor found on all sensory afferent nerves and is a key regulator of pain and inflammation. Pila Pharma positions this new approach as a potential new class of medication for metabolic diseases where inflammation is a component, expected to exert its effect by regulating neurogenic inflammation, thereby improving insulin response in, for example, type 2 diabetics (who often have "low grade inflammation"). In obesity it is speculated to play a role in appetite inhibition by inhibition of nervus vagus. Furthermore, TRPV1 antagonists have commonly been known to elevate temperature (hyperthermia). PILA hypothesises that it could potentially be a sign of increased thermogenesis, so that moderate increases should be seen as beneficial and not as a safety issue. Additionally, XEN-D0501 is expected to have other benefits, including an anti-inflammatory profile, fewer side effects, and lower production costs than existing alternatives. Furthermore, it is administered as a small tablet with a very long shelf life.

The principle of treating diabetes (and obesity) with TRPV1 antagonists was discovered by the company's founder and CSO, Dorte X. Gram, during her doctoral studies at Novo Nordisk in Denmark. In 2008, she acquired the rights to the discovery from Novo Nordisk in the form of a use-patent application. This application was later granted in 2011 and 2013 to her parent company, XENIA PHARMA, Denmark, with rights to treat obesity and all obesity related diseases and disorders (USA) and diabetes (USA and Europe) using any TRPV1 antagonist. These patents were transferred to the subsidiary PILA PHARMA upon its formation in 2014.

In 2016, PILA PHARMA in-licensed and subsequently acquired a TRPV1 antagonist asset from Ario Pharma, including the clinical development candidate XEN-D0501. The asset was originally developed by Bayer. Since 2017, PILA PHARMA has conducted two clinical studies with XEN-D0501 in patients with type 2 diabetes. In PP-CT01, a single ascending dose was tested in 26 subjects between 2017 and 2018. For the PP-CT02 study in 2019-2020, patients with type 2 diabetes mellitus received multiple ascending doses over a one-month period. The standout result was a profound reduction in ANP, a key biomarker for assessing the risk of heart failure. It thus appeared XEN-D0501 had previously unknown cardioprotective benefits. A longer period followed hereafter with increasingly challenging capital markets, restraining the company's ability to progress. It conducted extended toxicology

studies, thus allowing clinical trials of up to 3 months duration. In addition, the company commenced new CMC developments, tablet manufacture, obtained FDA orphan drug designation for Erythromelalgia, and achieved pre-clinical proof of concept in aortic aneurysms. In 2025, the tables turned, PILA PHARMA successfully launched a new strategy with heavy emphasis on obesity, which resulted in a heavily oversubscribed rights issue to 293,5%. This secured funds to initiate two preclinical proof-of-concept studies in obesity rat models in late 2025. The plan is to submit CTAs and start clinical trials in obese and obese diabetic subjects. PILA PHARMA currently operates from its headquarters in Malmö and through a wholly owned subsidiary in Copenhagen, Denmark, where most of its research and development activities are carried out.

### Pila Pharma, company timeline



Source: Company information and Carlsquare

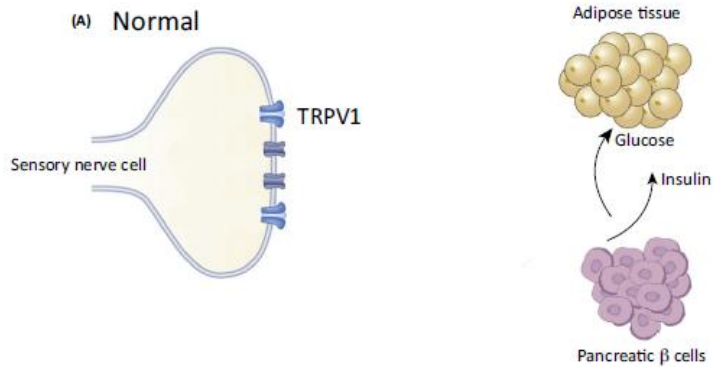
### TRPV1 and Pila's approach

From the outset, Pila has focused on targeting the Transient Receptor Potential Vanilloid 1 (TRPV1) ion channel. It is present on sensory neurons and is activated by heat, capsaicin (the active ingredient in chili peppers), and endovanilloid lipids. Expression of TRPV1 is also observed in non-neuronal sites, such as the epithelium of the bladder and lungs, as well as in hair cells of the cochlea in the inner ear.

TRPV1 is believed to have a key role in some pathologies. It is central in detecting thermal and chemical pain. Activation during tissue inflammation leads to enhanced pain sensitivity. Medical capsaicin, e.g., Qutenza, locally desensitises TRPV1 to help treat pain in conditions like diabetic neuropathy and arthritis. TRPV1 knockout animal studies confirm the role of the pathway in sensory heat/pain perception.

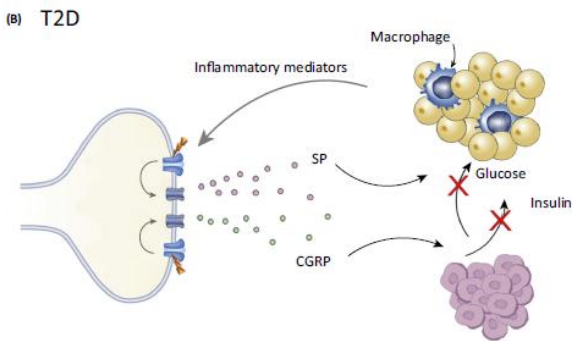
Additionally, TRPV1 modulates inflammation associated with diabetes. In type 1 diabetes, preclinical research suggests that TRPV1-expressing sensory neurons influence autoimmune destruction of islet cells. In type 2 diabetes and obesity, they may contribute to insulin resistance by releasing calcitonin gene-related peptide (CGRP). According to this hypothesis, put forward by the researchers behind PILA, proinflammatory substances generated by obesity by activating the TRPV1-expressing neurons. This is supported by targeted TRPV1 modulation via agonists (desensitisation), showing promise in preclinical models for improving glucose tolerance and weight management. (Brito, R., et al. "TRPV1: A Potential Drug Target for Treating Various Diseases", *Cells* (2014).

**Healthy subjects with insulin regulating blood glucose uptake in e.g. adipose tissue (body fat)**



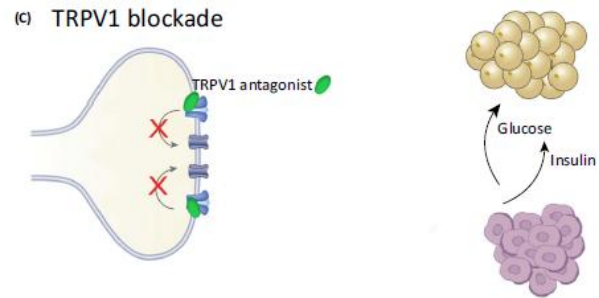
Source: Gram, D., et al "TRPV1: A Potential Therapeutic Target in Type 2 Diabetes and Comorbidities?" Trends in Molecular Medicine, 2017.

**Type 2 diabetes: TRPV1 activation via inflammation decreases insulin secretion**



Source: Gram (2017)

**TRPV1 blockade helps restore insulin function, glucose uptake**



Source: Gram (2017)

**Potential treatments based on TRPV1 targeting**

Capsaicin creams are used clinically for neuropathic pain, exploiting TRPV1 desensitization, but side effects limit their use.

Several TRPV1 antagonists have been under development, mainly investigated for pain relief. Challenges include species-specific effects, poor pharmacokinetics, non-selectivity, and undesirable drug-induced hyperthermia. Recent antagonist design focuses on blocking multiple activation modes and improving brain penetration for broader efficacy. Notably, TRPV1 antagonists sometimes cause hyperthermia due to interference with thermoregulation, necessitating further refinement for safe clinical use.

As a further reference outside the scope of metabolic disease, Sweden's Alzecure develops a TRPV1 antagonist, ACD440, for neuropathic pain as a topical gel for the skin. In a randomised, double-blind crossover trial, 14 patients applied either the ACD440 gel or a placebo for 7-day periods. The key finding was that the ACD440 gel significantly reduced thermally induced hyperalgesia (exaggerated pain from a heat stimulus) by approximately 50%. The treatment was found to be safe and well-tolerated, with no reported treatment-related adverse events. Although there was no significant change in overall spontaneous pain, this was expected given the study's short duration.

## Leading safety for the drug class

Pila's drug candidate, XEN-D0501, appears to exhibit one of the mildest and most manageable safety profiles in the class. From clinical development so far, hyperthermia is mild, dose-dependent, and attenuates with repeated dosing (1–5 mg BID dosing). There are observations of reported taste changes or numbness in the mouth. In a multiple-dose study, the 10 mg twice-daily dose was discontinued due to adverse events, including a case of transient urinary retention. As a reference, several TRPV1-antagonists such as AMG 517 (Amgen), AZD 1386 (AstraZeneca) and ABT 102 (AbbVie) have all been discontinued or repurposed due to clinically significant or severe hyperthermia or sensory adverse events.

## Liver toxicity a potential concern in oral obesity drug development

In 2025, Pfizer discontinued the development of its weight loss pill danuglipron, a small molecule GLP-1 agonist, after a trial patient in Phase 2 trials experienced potential drug-induced asymptomatic liver injury that was resolved after the medication was stopped. The company said the overall frequency of liver enzyme elevations across the over 1,400 participant safety database of danuglipron was in-line with approved agents in the class. There had been signs of liver injury already earlier in clinical development, which motivated the decision to switch from twice daily to once daily dosing.

The case underscores a potential risk under the spotlight with oral obesity drugs. Late-stage trials will be scrutinised for potential liver toxicity, and the acceptance is very low as obesity drugs are targeting mass markets. While there were no hepatic safety signals reported in clinical trials for a similar drug candidate, Lilly's orforglipron (Foundayo), there have been reports of cases of liver failure after the launch.

## No liver toxicity signals reported for XEN-D0501

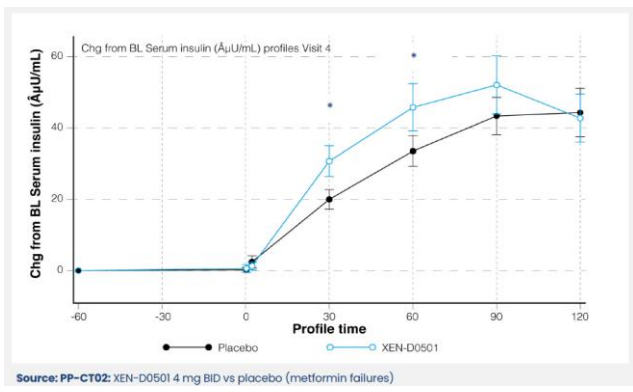
Drug-induced liver toxicity usually is diagnosed by studying liver enzymes such as ALT, AST, ALP and bilirubin for elevated levels, typically more than twice the upper limit of normal levels. XEN-D0501, which is a different molecule compared to, e.g., danuglipron, has been tested in about 300 study subjects in up to one month of treatment. There are no reports of liver toxicity so far, which is encouraging, as the time to onset for drug-induced liver toxicity typically is relatively short. However, larger, longer studies will eventually be required to rule out this risk. Furthermore, PILA expects XEN-D0501 to have no gastrointestinal side effects. If this hypothesis is validated in future clinical development, it would represent a potentially significant advantage over existing obesity and diabetes drugs.

## Early efficacy signals

XEN-D0501 has also demonstrated promising results in two completed Phase 2a randomised clinical trials. The first was a dose-escalating study in 26 patients with type 2 diabetes who were on metformin. The second was a dose expansion study with four weeks of daily dosing in a similar patient group (54 subjects), also on metformin treatment. The maximum tolerated dose in individuals without diabetes was established to be 4 mg twice daily. However, diabetic patients appear to have a higher tolerance. In sum, both studies demonstrated good safety of XEN-D0501 (with temporary and mild to moderate side effects). The most recent study additionally achieved statistical significance by showing that one month of treatment

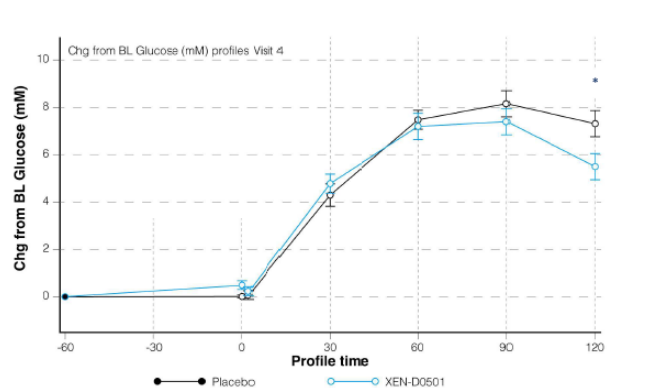
with XEN-D0501 enhances the body's own insulin response to oral glucose ("sugar") compared to placebo during a 2-hour oral glucose tolerance test ("OGTT"), a gold standard in diabetes research). According to Pila, there was also a significant effect on blood glucose using the same test. In addition, Pila has reported a significant positive effect on the ANP biomarker for heart failure. In 2023, Pila reported new tox studies with good tolerability of XEN-D0501 following 13 weeks of administration at very high doses in two animal species. This finding suggested that XEN-D0501 could now progress into longer clinical trials.

**Serum insulin in diabetes patients on metformin, XEND-0501 vs placebo**



Source: Pila Pharma and Carlsquare

**Glucose response**



Source: Pila Pharma and Carlsquare

**The preclinical obesity study did not tip the scales**

In the late summer of 2025, Pila Pharma contracted CRO Gubra to perform preclinical proof of concept studies in two rat obesity models; DIO and Zucker rats. The DIO rat is a standard obesity model in which normal rats are fed a high-fat diet to induce obesity. The Zucker rat is another relevant obesity model where rats, due to a mutation, spontaneously overeat and develop obesity on a regular diet, simply due to the excess amount of calories consumed. The rats were treated for a period of four weeks.

However, as the rats did not tolerate the intended oral formulation of XEN-D0501, a lipid-soluble substance, PILA agreed to use a new water-based solution instead. In January, PILA reported that the two studies on rat obesity had been completed according to protocol, and that the results were inconclusive. Specifically, no effect on weight was reported. In a subsequent analysis, the drug exposure was determined to have been too low to evaluate if XEND0501 had any effect. According to the CSO Dorte X Gram, "we have learned that the used formulation was not a suitable choice for oral delivery of XEN-D0501 to rats and we will never use it again". One plausible explanation is that XEN-D0501 is poorly soluble in water, which hampered the uptake of the preclinical liquid formulation.

The mentioned obesity models have been useful to evaluate obesity drug development in external projects in the past. As an example, semaglutide appears to achieve 10-22 per cent weight loss after three weeks in DIO rodent models, depending on the dose levels. A successful study for XEN-D0501 would likely have made a splash in the biopharma space and could possibly have accelerated partnering discussions ahead of Phase 2 development. As we understand it, the decision to conduct a preclinical proof-of-concept study in obesity was indeed based on feedback from potential partners. However, because of the inconclusive

evidence, PILA has reworked its plans with a Phase Ib dose escalation trial as the next planned step to evaluate higher dosing (instead of the Phase 2a study previously outlined).

We should note that PILA has not yet presented the exposure analysis data, only the top-line results. Additional information may influence our interpretation of the analysis.

## Patents

Historically, Pila Pharma has acquired and held a portfolio covering TRPV-1 agonism broadly, as well as its use in obesity and related diseases. These originate from the research of Dorte X Gram and Bayer. However, all patents have now expired or will expire soon.

Pila has expressed that it has a late-patenting strategy, and that it is evaluating new patent applications for diseases, method of manufacture and formulation. The company is optimistic that it will be successful in these pursuits. It is natural to assume that the scope of future patent applications will be narrower. This is illustrated by Pila having previously filed a patent application specifically for XEN-D0501 in the treatment of diabetes; however, it has been withdrawn. We would expect a similar strategy for obesity once the preclinical data is in place. Applying for method-of-use patents in new indications is a common strategy. However, they require that further medical use is indeed new and non-obvious (e.g., it has not been described in the scientific literature), which leaves them more vulnerable to challenge.

The strength of the IP is critical for biotechs, as their business model typically involves out-licensing rights to larger partners in exchange for royalties and other fees. We assume that a patent application will be filed before the Pila initiates clinical development for obesity. As a reference, the primary US patents covering the oral formulation of semaglutide (marketed as Rybelsus) are set to expire in January 2026, but secondary and formulation patents may extend protection in some major markets up to 2031 or even 2039 in specific cases. This staggered expiry is due to multiple patent layers, including composition and delivery method claims, with the key US expiry dates for Rybelsus typically cited as January 2026 (core patent) and 2031 (formulation patent).

Pila has also been granted an Orphan Drug Designation for XEN-D0501 for the treatment of erythromelalgia, a rare vascular disorder that causes episodes of severe burning pain, redness, and warmth, most often in the feet and hands. This, if turned to orphan drug status, could yield additional protection.

## Management, incentive schemes, and owners

### The management team



**Gustav Hanghøj Gram** is the CEO since 2024 and has been with the company since 2016, in roles within business administration and finance. He co-owns investment company Gram Equity Invest AB together with Dorte X. Gram. Gustav personally holds 276,213 shares (direct and indirect).



**Dorte X. Gram** is Founder, Chairman of the Board, and CSO of Pila Pharma AB, having also served as CEO from 2014 to 2024 and as Director/Chairman since 2014. She originated the concept of treating diabetes and obesity with TRPV1 antagonists during her PhD at Novo Nordisk, acquired the invention rights in 2008, issued use-patents via XENIA PHARMA, and transferred these patents to Pila Pharma AB after founding it in 2014. She owns 6,303,507 shares (direct and indirect).



**Hampus Darrell** joined Pila Pharma AB as a part-time Chief Financial Officer (CFO) hired in from Aspia AB in December 2024. He has previously been CFO at Setterwalls Advokatbyrå Malmö office and held senior leadership positions at KPMG.

Source: Company information

### The board of directors



**Dorte X. Gram** (see above) has been the Chairman of the Board since 2024.



**Richard Busellato** is a Director of the Board at Pila Pharma, bringing over 30 years of financial industry experience and expertise in managing large portfolios at major financial institutions and hedge funds, including Bank of America. He has direct ownership of 83,957 shares.



**Julie Waras Brogren** joined Pila Pharma in 2024 as a Director of the Board, bringing over 20 years of experience in pharma asset development, finance, and investor relations including Novo Nordisk. She holds direct ownership of 105,507 shares and currently serves as CEO of Gedea Biotech with extensive leadership experience in pharma commercialization and strategy.



**Lasse Richter Petersen** joined the Board in April 2024 as a Director, bringing extensive expertise in global pharmaceutical strategy and leadership. He has over 30 years of experience in the pharmaceutical industry, having held senior roles at Eli Lilly and Sanofi, including managing large markets and launching drugs in diabetes and cardiovascular fields. Lasse holds 94,351 shares.

Source: Company information

## Shares and stock options

In August 2025, PILA secured SEK 29,9m in a heavily oversubscribed (294 %) unit rights issue. In total, 14.96m shares and TO2 warrants were issued with exercise period in February 2026. As the shares fell below the subscription price of SEK 1.5 in the wake of the inconclusive results from the preclinical obesity study, participation in exercise of the TO2 warrants was low at about 12 per cent. PILA received SEK 5.4m before costs.

## Ten largest shareholders in PILA Pharma

The largest shareholder is the Finnish family-owned industrial group Virala Oy. Virala's other holdings include Fiskars Corporation, YIT and Ahlstrom-Munksjö Oyj. The founder, Dorte X Gram, is the second largest owner.

### Ten largest shareholders

Owner	% capital	% votes	Verified
Virala Oy Ab	15.0%	15.0%	2026-04-28
Dorte X. Gram	13.8%	13.8%	2026-04-28
The Mohsen Zaki Fahmi and Maria Gabriella Fahmi living trust	6.8%	6.8%	2026-04-28
BNY Mellon Sa/Nv For Jyske	5.9%	5.9%	2026-04-28
W BNY Mellon Sa/Nv	4.9%	4.9%	2026-04-28
Saxo Bank A/S Client Assets	2.5%	2.5%	2026-04-28
JP Morgan Chase Bank NA	1.1%	1.1%	2026-04-28
Avanza Pension	1.1%	1.1%	2026-04-28
Peter Odsgard	1.0%	1.0%	2026-04-28
Nordnet Pensionsförsäkring	1.0%	1.0%	2026-04-28

Source: Holdings.se and Carlsquare

# Market Landscape

PILA PHARMA develops new drug candidates in the metabolic and inflammatory fields. The approach has potential applications in very large patient populations, such as obesity, as well as in pain and rare inflammatory diseases. While clinical development is risky, we see a relevant opportunity in Erythromelalgia for XEN-D0501 if PILA's ambitions in the metabolic field should not pan out as desired.

## Overview of Obesity and Diabetes

### Disease overview

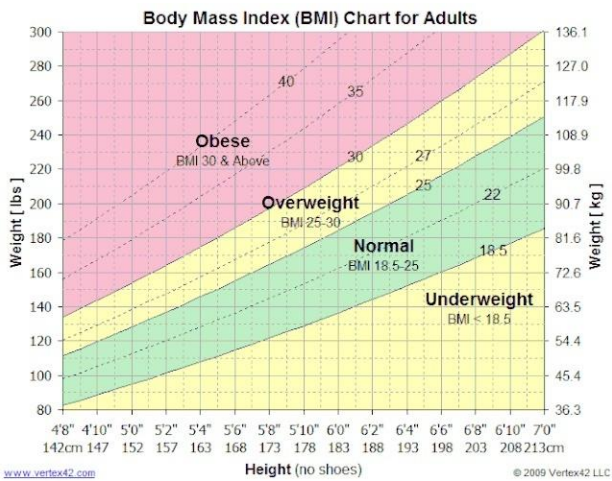
Obesity and diabetes, diseases that have many overlaps, has been increasingly in the spotlight recently, with a lot of development going into rapid weight loss and disease prevention. In spite of this, prevalence rates are expected to increase for both diseases in the coming years. Given that both diseases are, in turn, also associated with increased risk of other diseases, such as cardiovascular disease, renal disease, kidney disease and pancreatic cancer, it is vitally important to stop the increasing incidence rates.

Type 2 diabetes is strongly associated with weight; for men with BMIs over 35 kg/m<sup>2</sup>, the lifetime risk is over 70%

### Obesity

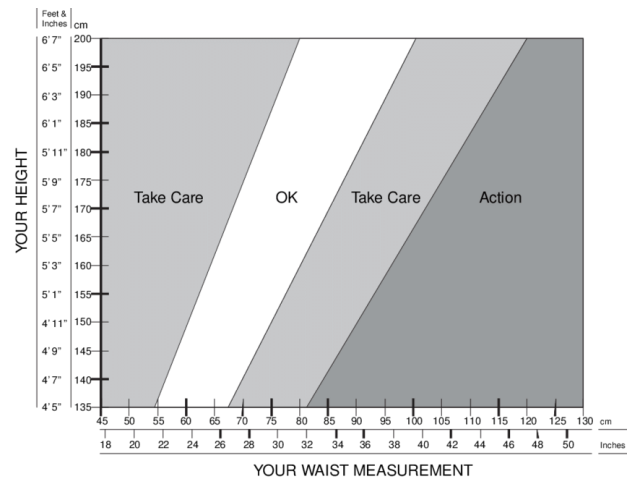
Too much weight, obesity, has reached a high enough prevalence to be considered an epidemic. Overweight represents the first step towards obesity, with risks for various diseases scaling, continuously rather than incrementally, with weight. For the sake of definition, a common denominator between being overweight and being obese is the accumulation of excess fat throughout the body, including inside and around organs, that increases the risk for adverse health outcomes and other diseases. In medical terms, excess adiposity can be defined as a high body mass index (BMI), high body fat percentage and a large waist circumference. BMI, although a simple indicator, is not perfect, as it does not distinguish between muscle and fat. Rather, it is simply the ratio of weight per unit of height, although some variants consider gender and age as well. For Europeans, the cutoff for obesity is defined as a BMI of over 30 kg/m<sup>2</sup>, with overweight covering the span 25.0-29.9 kg/m<sup>2</sup>. Furthermore, although not part of the BMI formula, waist circumference is also an important measurement, with increased circumference a marker for increased risk for a variety of diseases due to high intra-abdominal adiposity levels.

**BMI chart**



Source: NHI and Carlsquare

**Waist-to-height (WHR) chart**

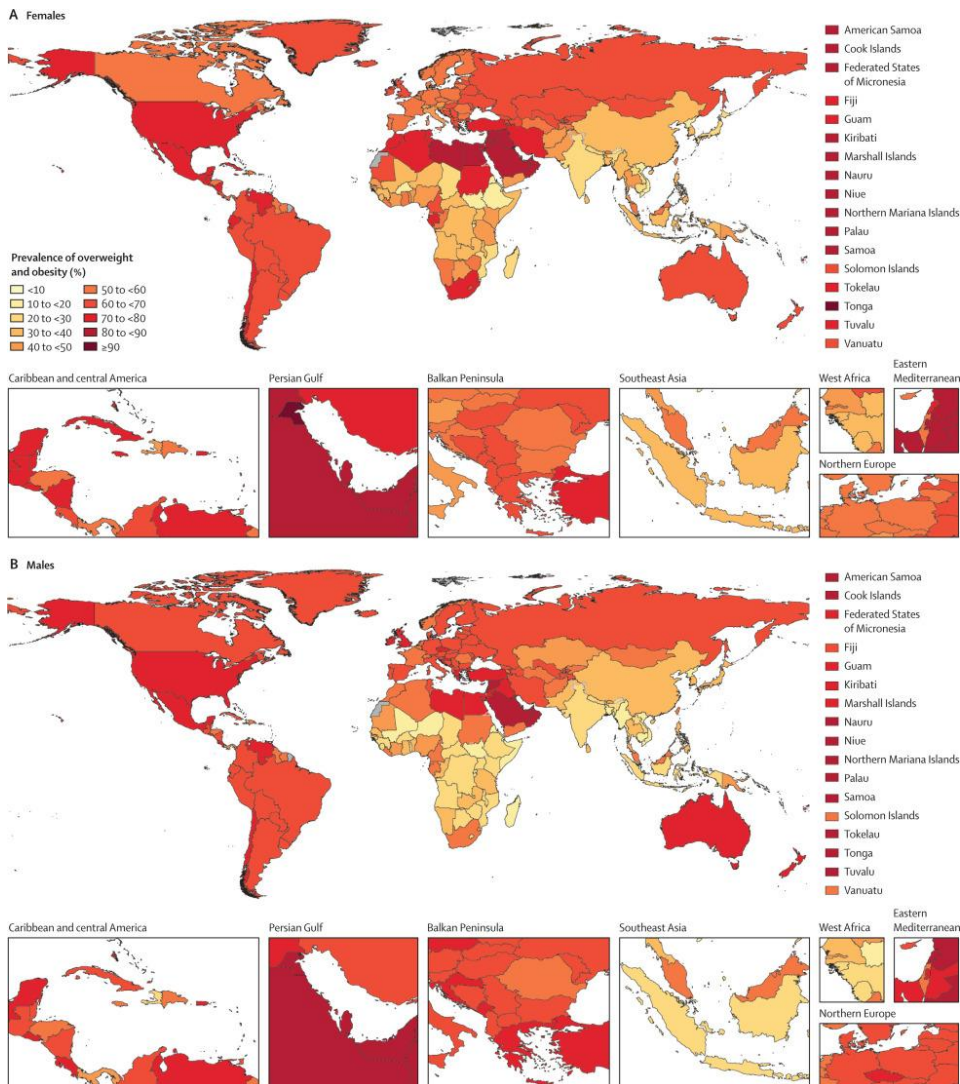


Source: International Journal of Food Sciences and Nutrition and Carlsquare

Body fat percentage and fat distribution are more relevant clinically, albeit less convenient to assess. It can be measured using imaging techniques such as DEXA (dual-energy x-ray absorptiometry), scanning, or MRI (magnetic resonance imaging). The distribution of fat has been found to play a part in modifying disease risk, with higher concentration around the abdomen, rather than the extremities, being associated with an increased risk of diabetes and a host of other diseases.

According to a Lancet study, rates of both overweight and obesity increased globally between 1990 and 2021 across nations and regions. An estimated 1 billion adult males, and 1.11 billion adult females, were obese, with China hosting the largest population of overweight or obese adults, followed by India and the USA. Respectively, 402 million, 180 million and 172 million overweight or obese adults reside in the respective countries.

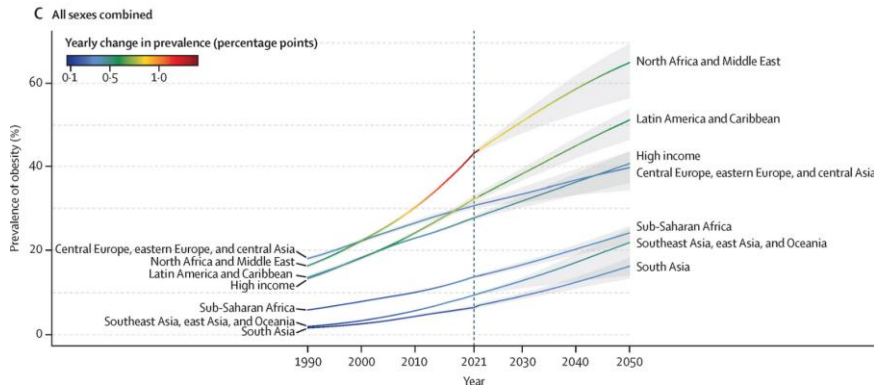
**Age-standardized prevalence of overweight and obesity in adults aged 25+**



Source: *The Lancet* Vol. 405 and Carlsquare

The 2021 data revealed significant variations between different geographical areas. In a majority of countries, 133 out of 204, over half of their adult population was overweight or obese when adjusted for age. The nations with the most severe rates were primarily found in Oceania, North Africa, and the Middle East. For instance, the prevalence among men was higher than 87% in Nauru, American Samoa, the Northern Mariana Islands, the Cook Islands, and Kuwait. For women, the figures were even more pronounced, reaching 88% or more in Tonga, Kuwait, the Cook Islands, Nauru, and Samoa. Furthermore, the prevalences are expected to grow in all major regions, for both sexes. According to the Lancet study, should the historical trends continue, by 2050, the total number of individuals over 25 years of age with overweight and obesity will rise to 3.8 billion globally. Of these, 1.95 billion would be obese, and the top 3 in terms of absolute prevalence, China, India, and the USA, would remain in the top.

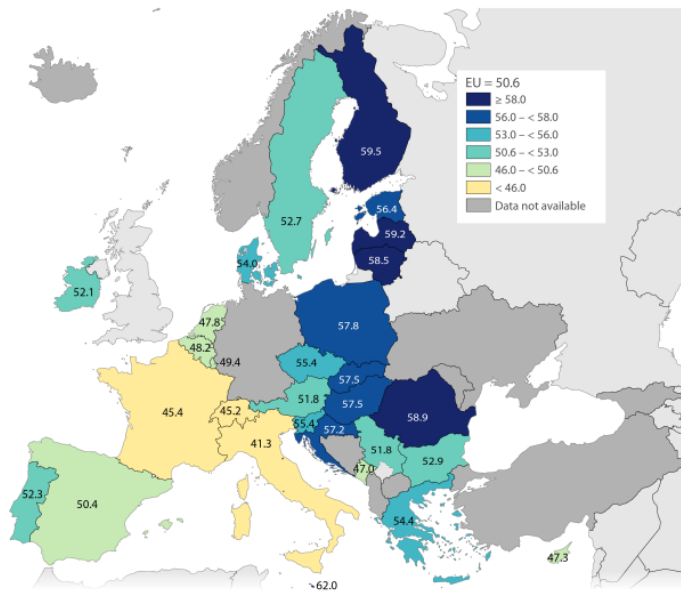
**Age-standardized prevalence of overweight and obesity in adults aged 25+**



Source: *The Lancet* Vol. 405 and Carlsquare

Zooming in on Europe, one of the potentially significant markets for Pila, at least in terms of geography, prevalence rates vary between countries, with CEE countries displaying higher incidence rates of overweight and obesity compared to countries in Western Europe. For most countries, age was positively correlated with a higher percentage of overweight. On the other hand, higher education was negatively correlated with being overweight.

**Incidence of overweight people aged 16+ in 2022**



Source: Eurostat and Carlsquare

As mentioned previously, overweight and obesity are deeply correlated with further prevalence of a variety of diseases. Obesity affects many different parts of the body, but can be broken down into different categories:

- **Cardiovascular system:** There are a variety of cardiovascular diseases that increase in incidence with obesity. Some common examples include hypertension, coronary artery disease, heart failure, atrial fibrillation, stroke, and venous thromboembolism. With hypertension there’s also added risk of developing renal disease and liver disease such as MASLD.

- **Respiratory system:** Obesity impacts breathing, with obstructive sleep apnea being positively correlated with weight. Coupled with reduced respiratory muscle strength, increased abdominal splinting, and less effective breathing patterns, obesity leads to a significant ventilation/perfusion (V/Q) mismatch.
- **Gastrointestinal system:** Many serious chronic diseases that affect the GI system are positively associated with obesity, like nonalcoholic fatty liver disease (NAFLD), which affects 30% of the population. The risk for gallstones and the development of gastroesophageal reflux disease (GERD) increase with weight. With regard to the latter, obese patients are more likely to experience GERD-associated erosions, strictures, and pre-cancerous transformations, such as Barrett's oesophagus, as well as oesophageal adenocarcinoma.
- **Reproductive system:** When it comes to the reproductive systems of both males and females, obesity leads to several deficiencies. Obesity is also associated with sexual dysfunction in both women and men. Obese women tend to present with higher scores of sexual dysfunctions. In men, obesity is an independent risk factor for the development of erectile dysfunction, with 80% of those experiencing erectile issues having a BMI of 25 or greater.
- **Musculoskeletal system:** Perhaps the most obvious damage of obesity pertains to the musculoskeletal system, with excess weight damaging joints and promoting osteoarthritis. The knee is the most affected joint, a fact that can lead to a negative cycle where being stationary promotes further weight gain. Recent data from the phase 3 trial for retatrutide, showed significant pain relief in osteoarthritis, also marking a paradigm shift where pain management and arthritis management will be central secondary outcomes for obesity treatments. With a perceived direct pain-relieving effect from TRPV1 inhibition, this could play in favor of PILA's drug candidate, either as monotherapy or in combination.
- **Endocrine system:** Type 2 diabetes is closely linked to obesity, with approximately 80% of individuals diagnosed with type 2 diabetes also being obese. The main factor driving the onset of type 2 diabetes in those with obesity is insulin resistance. Fat tissue releases non-esterified fatty acids (NEFAs), which contribute to problems such as dysfunction of blood vessel linings, inflammation caused by obesity, and impaired  $\beta$ -cell function in the pancreas. Higher levels of NEFAs are positively correlated with insulin resistance, and these fatty acids are particularly elevated in abdominal (truncal) obesity compared to fat stored in other parts of the body, indicating that visceral fat has greater lipolytic activity. Evidence for the connection between obesity and insulin resistance is further supported by findings that even a modest weight loss of 5% can enhance  $\beta$ -cell performance and increase insulin sensitivity, with greater improvements seen as more weight is lost.

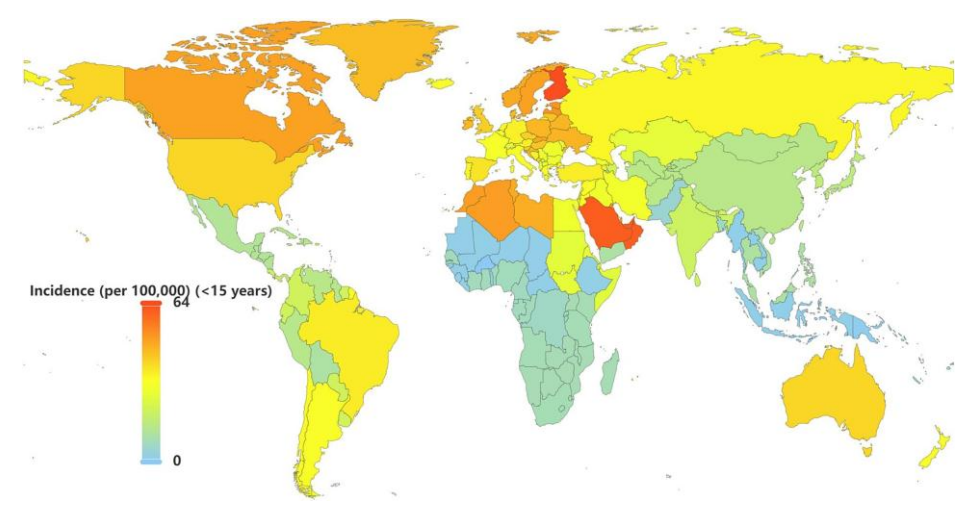
## Diabetes

Diabetes is a chronic metabolic disease defined by persistently elevated blood glucose levels. It results either from insufficient insulin production or the body's inability to use insulin effectively, as described by the WHO. Chronic hyperglycemia can lead to serious complications affecting the cardiovascular system, kidneys, eyes, and nerves. Globally, diabetes has become a major public health challenge,

with mortality from diabetes increasing since 2000, and millions of people affected worldwide. There are two types of diabetes, with Type 1 diabetes having an unknown cause, while Type 2 is directly caused by obesity and being overweight.

Type 1 diabetes is an autoimmune disease characterised by the destruction of the insulin-producing beta cells in the pancreas, affecting approximately 1% of the population in developed countries and often associated with the presence of autoantibodies. It can occur at any age, and studies show that a substantial proportion of diagnoses happen in adulthood. The countries with the highest published incidence rates are, in order: Finland, Sweden, Norway, Kuwait, Qatar, Denmark, Algeria, Estonia, Ireland, the United Kingdom, and Saudi Arabia. For the modelled 2025 incidence, the ranking shifts because some nations' most recent observed data are relatively old (for example, Saudi Arabia and Slovakia). After adjusting for incidence trends over time, their projected rates increased. As a result, the top ten countries for projected 2025 incidence are Finland, Saudi Arabia, Kuwait, Estonia, Qatar, Algeria, Sweden, Canada, Slovakia, and Norway.

**Modelled incidence of Type 1 diabetes**



Source: Diabetes Research and Clinical Practice Vol 225 and Carlsquare

Type 2 diabetes, by contrast, is driven primarily by insulin resistance combined with impaired insulin secretion. In type 2 diabetes, the pancreas still produces insulin, but the body's cells do not respond effectively, and insulin production may decline over time. As previously mentioned, it is caused by overweight and obesity, which, when considering the epidemiology of obesity and overweight, means that it is also increasing in prevalence. Furthermore, diabetes type 2 has several other known correlates; lower socio-economic position, tobacco smoking as well as race, with non-Hispanic black and Hispanic people observed to suffer more from diabetes mellitus than Asian or non-Hispanic white people. Epidemiologically speaking, the disease is increasing in prevalence, in most geographies, with Europe and the USA expected to see increases in incidence rates over the coming years

## Prevalence of diabetes mellitus (type 2 diabetes)

Region	cases per 100,000
<b>Global</b>	<b>6,059</b>
<b>Europe</b>	<b>8,529</b>
Germany	9,091
France	6,843
Italy	9,938
Spain	8,796
Netherlands	11,344
Switzerland	10,040
Sweden	10,448
Turkey	6,483
Russia	6,865
United Kingdom	8,663
<b>Asia</b>	<b>5,961</b>
China	6,262
India	4,770
Japan	6,737
South Korea	8,835
Taiwan	10,012
Saudi Arabia	7,661
Iran	7,000
Australia	5,235
<b>America</b>	<b>7,060</b>
United States	8,911
Canada	7,095
Brazil	4,240
<b>Africa</b>	<b>3,916</b>
South Africa	7,360

Source: Journal of Epidemiology and Carlsquare

## The market for obesity

The market for obesity treatment has expanded rapidly in recent years. The main drivers include

- The approvals of semaglutide (Wegovy) and tirzepatide (Zepbound) in 2021 and 2023, respectively, for weight management in obese adults or overweight adults with weight-related conditions. Both target mechanisms of so-called **incretins**, i.e. hormones released in the gut that control the release of insulin, by mimicking the effect of these hormones while crucially lasting longer. The difference is that semaglutide is an analogue of the GLP-1 hormone, while tirzepatide mimics both GLP-1 and GIP.
- Compared to liraglutide (brand name: Saxenda) (an older GLP-1 analogue), these newer-generation obesity drugs are dosed **once weekly** instead of daily and are more efficacious.
- Evidence that GLP-1 analogue semaglutide **reduces cardiovascular risk** by 20 per cent in adults with obesity and heart disease.
- Evidence of **reducing the risk of diabetes** in pre-diabetic obese patients.
- Clinical evidence supporting **longer treatment durations** with incremental weight loss up to one year and beyond.

Besides the molecules mentioned above, approved treatments include

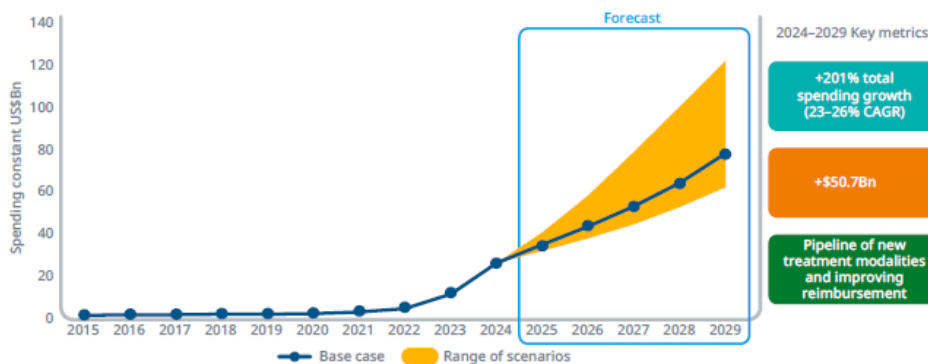
- **Orlistat** (Xenical), an oral inhibitor of various lipase enzymes responsible for the metabolism of fat. It reduces fat uptake from food by around 30 per cent.

- Phentermine-topiramate (**Qsymia**), an oral combination of two active ingredients. Phentermine is classified as a sympathomimetic amine, a central nervous system stimulant, and an appetite suppressant. Topiramate is an anticonvulsant (seizure medicine) used to treat epilepsy and for migraine headache prevention. It decreases appetite and causes feelings of fullness after meals. It is contraindicated in e.g. pregnant women.
- **Naltrexone/bupropion** is also a combination drug containing an opioid antagonist and an antidepressant. It influences appetite and energy use. Since it is an antidepressant, it carries a boxed warning (may lead to suicidal thoughts).

Xenical reached peak sales of USD 600 million in 2001, making it the top-selling obesity drug in history at the time. Sales of Qsymia are not disclosed; however, the manufacturer, Vivus LLC, reported that gross revenue since 2020 exceeded USD 500 million as of the beginning of 2025. Sales of non-incretin drugs have so far been hampered by side effects (e.g., gastrointestinal side effects for orlistat) and boxed warnings in combination with lower efficacy on weight loss compared to incretin analogues. The placebo-adjusted weight loss after one year is up to 10.8 per cent for Qsymia, compared to 12.3 per cent for semaglutide and 18 per cent for tirzepatide (note: these are not results from head-to-head studies).

According to IQVIA, global spending on obesity drugs amounted to around USD 25bn in 2024. IQVIA projects spending to increase to USD 76 billion in 2029, with a range of USD 60 billion to USD 119 billion. It implies an average annual growth of around 25 per cent. The market is currently dominated by two drugs mentioned above – Zepbound/Mounjaro (tirzepatide) and Wegovy (semaglutide).

**Global obesity drug spending**



Source: IQVIA and Carlsquare

Behind the astounding commercial success is the rapidly increasing prevalence of obesity. Obesity rates are rising in most countries, creating health concerns and comorbidities, including diabetes, coronary heart disease, osteoarthritis and fatty liver disease. In the US, obesity rates have doubled in the last 30 years.

**Strong launches for GLP-1 obesity pills**

The number of available obesity drugs is expected to expand significantly in the coming years. At the end of 2025, FDA approved oral semaglutide (“**Wegovy in a pill**”) for chronic weight management. Early in Q2 2026, **orforglipron** (oral small-

molecule GLP-1) was approved by the FDA and launched under the brand name Foundayo. Unlike Wegovy in a pill, orforglipron does not require an empty stomach. In its Q1 2026 earnings report, Novo Nordisk reported that the Wegovy pill has reached more than one million people in the US since its launch on 5 January 2026. Novo reported about USD 354m in sales in the first quarter (the pill has only been launched in the US market). About 80 per cent of subscriptions are new to brand, implying limited cannibalising on injectables so far. Overall, volumes in the obesity market appear to grow faster than previously expected, partly driven by the introduction of GLP-1 pills. At the same time, the price/mix pressure in the US is significantly hampering the value growth. This is also reflected in the pricing of the Wegovy pill and Foundayo in the self-pay channel.

## Pipeline focuses on new receptors and multiple agonists

Important projects in the external pipeline include

- **CagriSema**, an injectable combination drug of cagrilinitide (a dual amylin and calcitonin receptor agonist), and semaglutide, developed by Novo. Amylin is a pancreatic gut hormone co-released with insulin in response to a meal. CagriSema is in phase III development.
- **Retatrutide**, a triple receptor agonist of GLP-1, GIP and glucagon, is in Phase III development by Lilly. Based on promising efficacy in clinical development so far, it has the potential to become a best-selling obesity medication in the coming years, provided it is successful in pivotal trials. Seven (sic) phase 3 trial readouts are expected in 2026.
- **HRS-9531**, a dual GLP-1/GIP receptor agonist with promising activity. It is in Phase II development.
- **Amymcretin** is a dual GLP-1 and amylin receptor agonist in Phase 2 development. It is widely regarded as one of Novo's most promising pipeline projects.
- **Aleniglipton** (GSBR-1290), an oral and biased GPCR small molecule agonist of the glucagon-like-peptide-1 receptor, is in two phase 2 clinical trials for the treatment of obesity, overweight, and related conditions. Recently, top-line results demonstrated a placebo-adjusted mean weight loss of 11.3% after nine months with a 120 mg dose.

GLP-1 analogues and multi-specific incretin analogues comprise the largest portion of the development pipeline. Besides the current incretin analogues, including GLP-1 and multiple agonists, amylin receptor agonists are likely to become approved as add-ons to semaglutide or monotherapies in the coming years. By targeting a complementary but distinctly different pathway involved in blood sugar control and appetite, clinical evidence shows amylin analogues have an additive effect. The combination therapy CagriSema has been studied in a similar population as, e.g. semaglutide. While side effects are somewhat more frequent than with semaglutide alone, the overall profile of effect versus risk appears beneficial.

According to IQVIA, the current obesity pipeline has over 80 clinical-stage assets being investigated in trials specifically for this condition. Other sources suggest this figure might be a severe underestimation. While currently approved obesity

treatments have been wildly successful commercially and are expected to continue to grow in the coming years, there are still unmet needs in this indication:

- Demand for fewer and milder side effects, e.g, nausea that is commonly associated with GLP-1 analogues. Side effects likely contribute to high rates of discontinuation of around 50 per cent at 12 months for semaglutide and tirzepatide.
- Treatments that avoid or reduce the rebound in weight post-treatment. Clinical trial results suggest that two-thirds of the weight loss achieved with GLP-1 RA treatment is regained within one year. Solutions may include switching to more affordable and convenient alternatives.
- Avoiding muscle loss associated with obesity treatments (lean mass or fat-free mass is some 40 per cent of weight loss for Wegovy). To address this important issue, biotechs are developing new targets, such as activin receptor inhibitors.
- Demand for less frequent dosing favours long-acting agents. Some drug candidates are administered monthly, such as Amgen's MariTide.
- Oral treatment is typically preferred to subcutaneous administration. However, GI side effects appear more frequent for oral GLP-1 RAs compared to injectables. This generally favours small molecules and also new mechanisms of action.
- The drive for lower drug costs, including manufacturing costs. The cost factor typically puts small molecules at a relative advantage
- Drugs suitable to be provided directly to consumers (DTC) are projected to constitute a large part of the market. Safety, convenient administration, and cost are likely crucial factors.

XEN-D0501 is still in early development. TRPV1 is a novel target in obesity, and it is premature to speculate on its relative importance. Some apparent advantages include oral administration, good bioavailability, and perceived low manufacturing cost due to a simple chemical synthesis. The potential for fewer or no GI side effects is also promising as a key differentiator from many other candidates in clinic.

## Secondary indications

### Disease overview

Erythromelalgia is a rarely occurring disease entity characterized by a triad of erythema, warmth, and recurrent burning pain, most notably affecting the extremities. Although erythromelalgia is typically bilateral, it can be present unilaterally, especially in secondary cases. Atypical cases presenting lesions and symptoms solely involving the face have been observed; however, they are extremely rare and are often misdiagnosed. This activity outlines the evaluation of erythromelalgia in addition to highlighting the role of the interprofessional team in managing and treating patients with this condition.

### Erythromelalgia

Erythromelalgia is an uncommon disorder marked by three main symptoms: redness, increased warmth, and repeated episodes of burning pain, most commonly affecting the hands and feet. While it usually appears on both sides of the body, it can sometimes occur on just one side, particularly in secondary forms of the

disease. Rarely, atypical cases have been reported where symptoms and skin changes are limited to the face, but these are frequently misdiagnosed.

### Left hand during a flare-up



Source: Wiki Commons and Carlsquare

There are three classifications of erythromelalgia:

- Erythromelalgia in thrombocythemia: platelet-mediated and aspirin-responsive. This occurs in association with essential thrombocytosis and polycythemia vera.
- Primary erythromelalgia: idiopathic or inherited disorder. Also called aspirin-resistant erythromelalgia of unknown origin.
- Secondary erythromelalgia: Aspirin-resistant and associated with different medical conditions.

Estimates of the disease burden of erythromelalgia vary, with one estimate considering an incidence rate between 0.25 and 2 people per 100,000 every year. It is still unclear whether there is a gender preference or not, with some studies indicating that females are more likely to be affected than males. Abnormal platelet clumping and increased platelet utilisation are responsible for erythromelalgia associated with blood disorders such as essential thrombocytosis and polycythemia vera. Prostaglandins and the cyclooxygenase enzyme are thought to be key contributors to this process. In cases of primary erythromelalgia, the condition is caused by changes in the voltage-gated NaV 1.7 sodium channels. These channels are mainly located on pain-sensing (nociceptive) neurons and are vital in setting the threshold for triggering nerve impulses. Mutations in the SCN9A gene make these sodium channels overly responsive, allowing nociceptive neurons to fire even with minimal stimulation. As a result, stimuli that would not normally cause pain can trigger the intense burning pain characteristic of erythromelalgia. Most primary erythromelalgia cases begin early in life, typically within the first decade. However, some later-onset cases—starting in the second decade—are linked to a newly identified NaV 1.7 mutation, Q10R, which produces less excitability in the dorsal root ganglion and leads to delayed symptom onset. This concept also supports a genotype-phenotype relationship across clinical, cellular, and molecular (ion channel) levels.

## Market and treatment overview

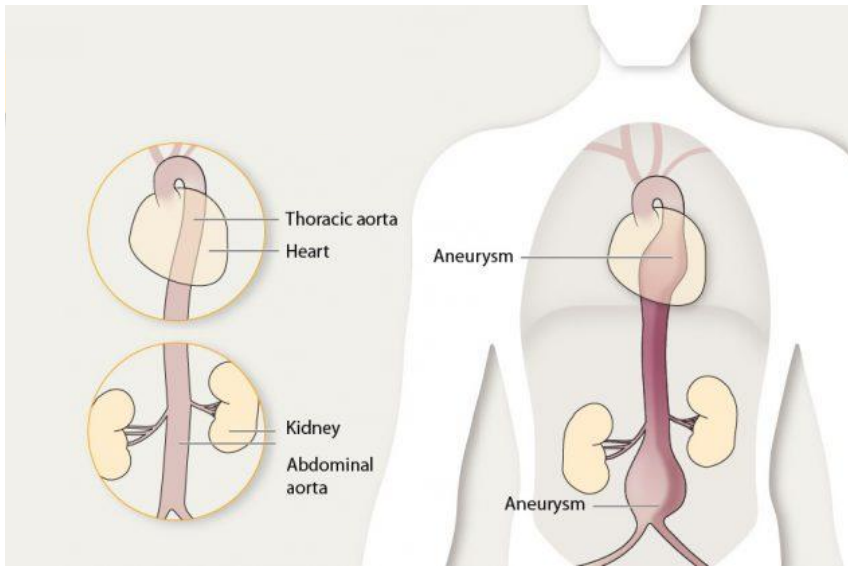
There is no curative treatment for erythromelalgia, and management of the disease involves medication as well as behavior modifications. Most notably, patients are advised to avoid sources of heat, intense exercise or standing, as well as excessive clothing. Many patients elect to use a lot of cold water, ice, or simply stand near the refrigerator to induce a cooling sensation in the enflamed area. The primary drug of choice for management of the pain is aspirin, although topical creams of various make are also used. Some studies have found that topical application of capsaicin, targeting the same receptors as Pila, improves pain perception. Furthermore, a more systemic approach, medications that hit the voltage-gated sodium channels have shown some promise. Mexiletine (sold as Mexitil and Namuscla) is primarily used to treat abnormal heart rhythms, but some evidence points to it being helpful in dealing with the pain caused by erythromelalgia. A standard regimen therefore could consist of behavior modification, aspirin, topical application, as well as systemic drugs such as mexiletine.

Given the lack of a dedicated treatment option, one could argue that a new drug focused on the indication would be able to grab significant market share quickly. Furthermore, orphan drug status will enable premium pricing compared to comparable drugs like Galise or Lyrica. However, this opportunity is tempered by the fact that the drug will be competing against cheap and highly convenient options such as open refrigerators or cold water from the tap. Irrespective of this, through cross-referencing of the current treatment environment with data on pricing of orphan drugs, one can estimate that the market size of Erythromelalgia in the European union and the USA to consist of ~79,000 patients in 2025, based on an estimated prevalence rate of 10 per 100,000. This prevalence is line with data found in an examination of over 400,000 registered participants in the All of Us database. With a pricing per patient and year of USD 40,000 in the USA and ~25,000 in Europe, based on existing treatments for similar conditions but applying an orphan drug pricing level, this would entail the TAM to be worth around USD 1.6bn in total for both geographies.

## Abdominal Aortic Aneurysm (AAA)

A life-threatening condition, Abdominal Aortic Aneurysm (AAA) is a dilation and swelling of the aorta. More precisely, it is a permanent localized dilation of the vessel that often goes undetected. Although believed to be a multifactorial disease, arterial hypertension and smoking are believed to be the strongest risk factors. Obesity is also positively associated with AAA, with abdominal obesity and a high WC being linked to an increased risk of presenting with AAA. As the aneurysm grows, so does the risk of rupture, according to the Law of Laplace. Upon rupture, mortality jumps to 50% with most patients dead before reaching the hospital. Based on autopsies, aneurysm frequency ranged between 0.5 and 3%, with common risk factors being old, white and male. However, it is worth noting that the true prevalence is hard to estimate because the condition is often asymptomatic. Imaging for other diseases often catch AAAs before they rupture, but most undiagnosed AAAs are found during autopsy.

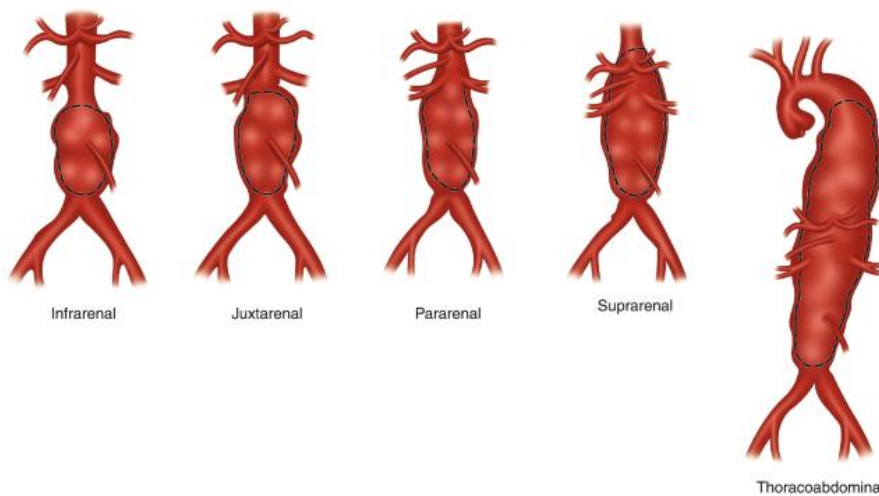
**Thoracic and Abdominal Aortic Aneurysm (AAA)**



Source: CDC

While typical AAAs occur below the renal arteries, 30% of patients see aneurysms extend to the common iliac arteries. Aortoiliac aneurysms (AIA) can differ from normal AAAs when it comes to treatment options. On the other side, aneurysms occurring near the renal arteries are known as *complex*, seeing as they tend to be more complex in terms of morphology. Most often included in the complex category are juxta renal (immediately below renal arteries), pararenal (at renal arteries) suprarenal (above the renal arteries) and thoracoabdominal (extensive aneurysms involving both thoracic and abdominal aorta).

**Aneurysm locations**



Source: Diseases of the Aorta, 2019

# Competition and reference group evaluation

The obesity space, as well as the wider metabolic sector in general, has evolved from being one of the least attractive disease areas to one of the hottest in under a decade. This has spurred the development of new drugs aimed at weight loss as well as other metabolic conditions.

## Sector colleagues

### Aardvark Therapeutics

Aardvark Therapeutics, Inc., a clinical-stage biopharmaceutical company, focuses on developing small-molecule therapeutics to activate innate homeostatic pathways for the treatment of metabolic diseases. Its lead product candidate is ARD-101, an oral gut-restricted small-molecule agonist of certain bitter taste receptors expressed in the gut lumen, which is in Phase 3 clinical trials for hyperphagia associated with Prader-Willi Syndrome and in Phase 2 clinical trials for hyperphagia associated with acquired hypothalamic obesity. The company is also developing ARD-201, an oral combination of a DPP-4 inhibitor and TAS2R agonist, which is in the Phase 1 clinical trial for the treatment of obesity.

### Alzecure

AlzeCure Pharma AB develops drug therapies for the treatment of severe diseases and conditions that affect the central nervous system. The company is involved in the development of drug candidates based on the NeuroRestore, Alzstatin, and Painless research platforms. Its product pipeline includes ACD440, a topical TRPV1 antagonist that has completed a phase I clinical trial for neuropathic pain indications.

### D&D Pharmatech

D&D Pharmatech Inc., a clinical-stage biotech company, has a broad pipeline including the ORALINK oral peptide technology for improved bioavailability, which is partnered to Metsera/Pfizer.

### Neumora Therapeutics

Neumora Therapeutics, Inc., a clinical-stage biopharmaceutical company, engages in developing treatments for brain diseases, neuropsychiatric disorders, and neurodegenerative diseases in the United States. Recently, Neumora announced that NMRA-215, a highly brain-penetrant oral NLRP3 inhibitor, demonstrated class-leading weight loss of up to 19% as a monotherapy with semaglutide-like induction and 26% in combination with semaglutide in preclinical DIO mouse studies. The company plans to initiate a Phase 1 clinical study in Q1 2026.

### Gubra

Gubra A/S, a biotech company, focuses on the pre-clinical contract research and peptide-based drug discovery within metabolic and fibrotic diseases in Europe, North America, and internationally. The company operates through three segments: Pre-Clinical Contract Research (CRO), Discovery & Partnerships, and Gubra Green. The company has partnerships with AbbVie and Boehringer Ingelheim for the treatment of obesity and Amylyx Pharmaceuticals, Inc. to develop a novel long-acting GLP-1 receptor antagonist for the treatment of post-bariatric hypoglycemia and other rare diseases.

## **iBIO**

iBio is leveraging AI for precision antibody development in the cardiometabolic and obesity space. IBIO-610, an activin E-targeting antibody, achieved development candidate nomination based on strong preclinical data in fat-specific weight loss, demonstrating a 26% reduction in fat mass with no measurable loss of lean mass in a 4-week study in diet-induced obese mice. IBIO-600, a long-acting anti-myostatin antibody, is now progressing into clinical development.

## **Palatin Technologies**

Palatin Technologies develops first-in-class medicines based on molecules that modulate the activity of the melanocortin receptor system. It is developing an oral small molecule PL7737 MC4R agonist in preclinical studies, long-acting peptide MC4R agonists, and Bremelanotide co-administration with tirzepatide to treat obesity in a Phase 2 trial.

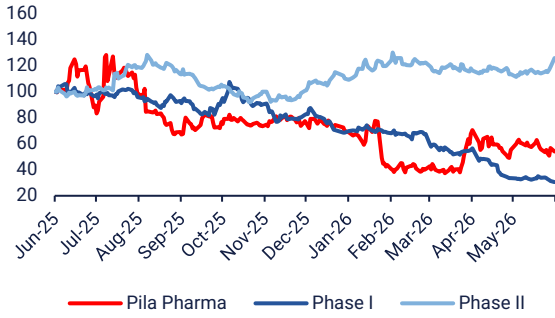
## **Structure Therapeutics**

Structure Therapeutics Inc., a clinical-stage global biopharmaceutical company, develops and delivers novel oral small-molecule therapeutics to treat various chronic diseases with unmet medical needs. Its lead product candidate is aleniglipron (GSBR-1290), an oral and biased small molecule agonist of glucagon-like-peptide-1 receptor, which is in two phase 2 clinical trials for the treatment of obesity, overweight, and related conditions. Recently, top-line results demonstrated a placebo-adjusted mean weight loss of 11.3% after nine months with a 120 mg dose.

## **Listed phase I and II companies in the Nordics**

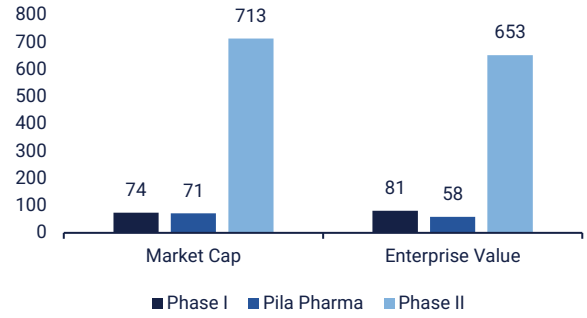
Given the much higher liquidity and funding alternatives present in the USA, we believe that reasonable comparables for Pila are found primarily in the Nordics. Furthermore, although clinical development is not ongoing, there is a fair amount of human data for XEN-D0501 compared to many other early-stage biotech projects. This makes it prudent to compare Pila to Nordic companies currently in phase I and II, rather than pre-clinical companies without human data. When comparing the market cap of Pila to its Nordic peers, it becomes clear that there is a big range in valuations. The median valuation of a Nordic phase II company is close to SEK 700m. For phase I companies, the median valuation falls to <SEK 100m. Overall, our overview suggests that PILA is valued slightly below the median Phase I company. If and when PILA advances XEN-D0501 into Phase II development, the comparison suggests further significant upside potential in valuation. At the same time, it is difficult to identify close peers to PILA on the Nordic stage targeting similar indications and at a similar stage of development.

**Pila Pharma indexed share price development (SEK)**



Source: S&P Capital-IQ and Carlsquare

**Pila Pharma Market Cap and EV (SEKm) 2026-06-01**



Source: S&P Capital-IQ and Carlsquare

# Financial history and Carlsquare forecasts

In 2025, PILA focused on preclinical development to validate the potential advantage of TRPV1 antagonism for the treatment of obesity. Following the inconclusive results of these studies, PILA aims to move into human trials soon to test higher doses, which are believed to be more relevant in an obese population.

## Financial history and forecasts

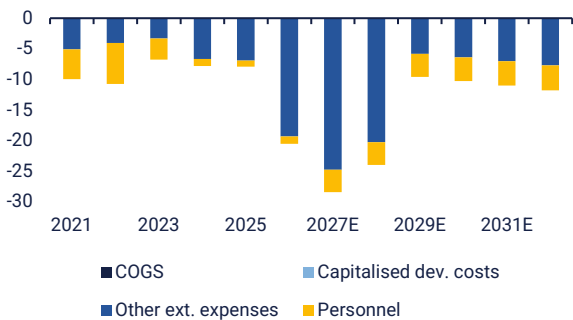
In recent years, PILA has not conducted any clinical studies. Since 2023, it has also been a virtual company with no employees. Since the IPO, the main activities have been preclinical toxicology studies to allow for three months of dosing in man and preclinical obesity studies. Also, there have been CMC activities with external contractors to establish a manufacturing method for the API for XEN-D0501 and produce new tablets.

In 2025, operating expenses in the income statement were almost unchanged at SEK 7.9m (8.1). However, it is reasonable to also include “shareholder contribution to group companies”, which increased to SEK 8.7m (3), to measure the relevant cash burn related to OPEX, which mainly pertains to R&D. R&D expenses increased markedly in H2 2025 due to the preclinical studies in obesity with Gubra. To gather a comprehensive obesity data package, PILA completed a rights issue in July 2025.

For 2026, we understand the main priority is to prepare for a Phase Ib/IIa study in obese and obese diabetic individuals. We expect stable costs for the full year, including some expenses related to the completed Gubra studies. To help complete Phase I/II clinical trials, and cover other operating costs, we estimate additional financing will be needed. We have assumed some SEK 50-60 million over 2026-2028.

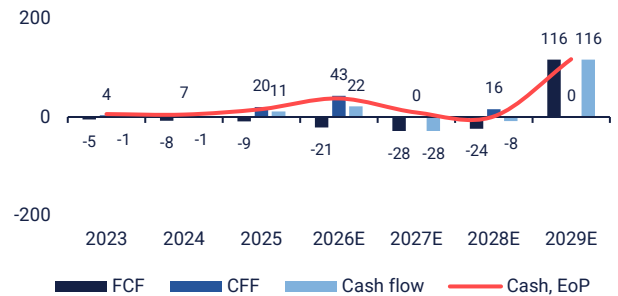
In our base case forecast and valuation, we have assumed a licensing deal for metabolic disease and an upfront payment in 2029. We assume that a collaboration partner will then take over costs for further clinical development and commercialization. For a more detailed discussion, see below.

**OPEX plus COGS (risk-adjusted), SEKm**



Source: Company information and Carlsquare estimates

**Cash flow (risk-adjusted), SEKm**



Source: Company information and Carlsquare estimates

## Obesity rates are climbing

### Obesity in children and adolescents display a worrying trend

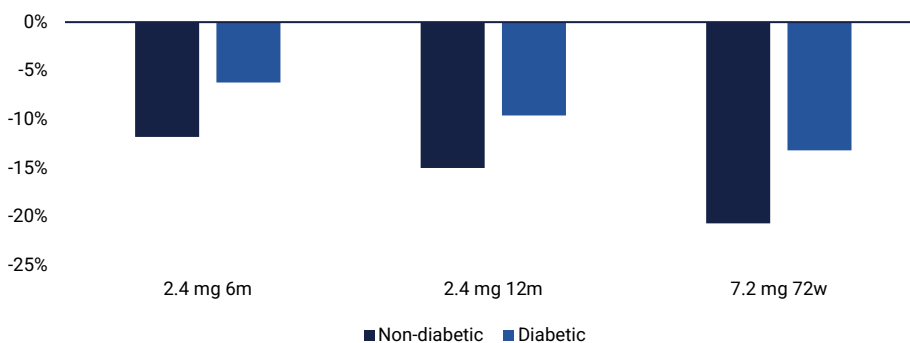
The obesity “pandemic” has been rampant, not least in the US, the largest market for pharmaceutical drugs. The obesity rate here has doubled since 1990 to some 40 per cent of the adult population. Obesity is driven by multiple, interacting social, structural, and environmental factors. These factors have evolved over the past 30 years, with economic, demographic, and technological transitions leading to increased energy intake and decreased physical activity, which are now socially normalised behaviours. Obesity prevalence has risen rapidly in all age groups since 1990, outpacing overweight increases, especially among adolescents and women. Most observers are predicting that obesity rates will continue to rise in the US, citing high shares of obesity already in childhood and adolescence as a key predictor of adult obesity. According to some projections the obesity rate will exceed 55 per cent in 2050. (GBD 2021 US Obesity Forecasting Collaborators, “National-level and state-level prevalence of overweight and obesity among children, adolescents, and adults in the USA, 1990–2021 and forecasts up to 2050”, *Lancet* 2024; 404: 2278–98). However, there are also reports based on surveys suggesting that the adult rate has flattened out and perhaps peaked (Witters, D., “Obesity Rates Declining in the US”, *Gallup*, 28 October 2025), helped by increasing usage of incretin analogues for weight management.

For our forecasts, we have assumed a continued increasing share of obesity going forward based on trends among younger people, and since there is still uncertainty regarding the long-term impact of weight-loss drugs on the population. However, we have assumed a plateau at some 42-43 per cent.

### Diabetics have a harder time losing weight on incretins

There is a considerable overlap between obesity and diabetic individuals. According to sources, 24-28 per cent of obese people also have type 2 diabetes (Gwira, J. “Prevalence of Total, Diagnosed, and Undiagnosed Diabetes in Adults: United States, August 2021–August 2023”, *NCHS DATA Brief*, November 2024). Unfortunately, GLP-1 analogs and other weight loss drugs, albeit helpful, does not seem to be as effective for weight reduction in diabetic patients as in non-diabetic patients. Differences may be due in part to metabolic factors, possibly due to lower glycosuria as blood sugar control improves, and baseline metabolic adaptation.

### Wegovy weight loss effect in diabetic and non-diabetic obese patients



Source: Company information, Carlsquare

Also, many diabetic patients are already on incretin analog treatment for glucose control. Hence, we regard non-diabetic obesity individuals as the principal target group for new non-incretin obesity drugs.

### **The market penetration of obesity drugs is still low**

In summary, the future landscape for obesity drugs is difficult to forecast. Available forecasts vary considerably as pundits seem to compete in posting the highest forecast. One should be wary as many estimates are expressed at list prices which are typically considerably higher than the net revenue for the drug company. In terms of penetration, it is however clear that only a fraction of obese people have used e.g. GLP-1 agonists for weight management so far, suggesting plenty of room for volume growth. According to Novo, Wegovy was prescribed to 2.7 million patients in the US between June 2021 and January 2025. That translates to 2.5 per cent of the obese non-diabetic population that has been exposed to the drug in that time period.

### **Obesity drug prices under scrutiny**

In the US the prices of leading drugs semaglutide and tirzepatide are expected to come down because of patent expirations, the Inflation Reduction Act and an MFN (Most Favored Nation) pricing deal with the Trump administration announced on 6 November, 2025. According to the statement in the press release from the White House, "prices of Ozempic and Wegovy will fall from \$1,000 and \$1,350 per month, respectively, to \$350 when purchased through *TrumpRx*". Also, "Medicare prices of Ozempic, Wegovy, Mounjaro, and Zepbound will be \$245... These low prices will enable Medicare to cover Wegovy and Zepbound for patients with obesity and related comorbidities for the first time". The net impact on the drug makers' revenue is uncertain as net prices in Medicare and commercial insurance already are below current list prices. However, the measures could put pressure on out-of-pocket prices. At the same time, a possible expansion of access through Medicare programs should increase treatment volume. We should note Medicare reimbursement for obesity without comorbidities is currently prohibited by law. The exact implementation details of the MFN obesity plan are not yet clear.

In conclusion, a possible scenario is that demand and volumes will grow rapidly, but value growth will lag at least temporarily as the prices of GLP-1 analogues decrease from 2026 onwards. This view is supported by the guidance provided by Novo Nordisk, as it "expects an estimated direct, negative low single-digit impact on global sales growth in 2026" from the agreement with the US administration.

To deal with the new dynamics of the obesity market, drug developers could shift focus to second-line treatments targeting patients who do not achieve sufficient weight loss on, e.g. semaglutide alone or experience a rebound. Alternatively, combination treatments with relatively cheap incretins are a possible route. Thus, new mechanisms of action are desirable. As most weight-loss drugs are for mass markets, production costs will be important.

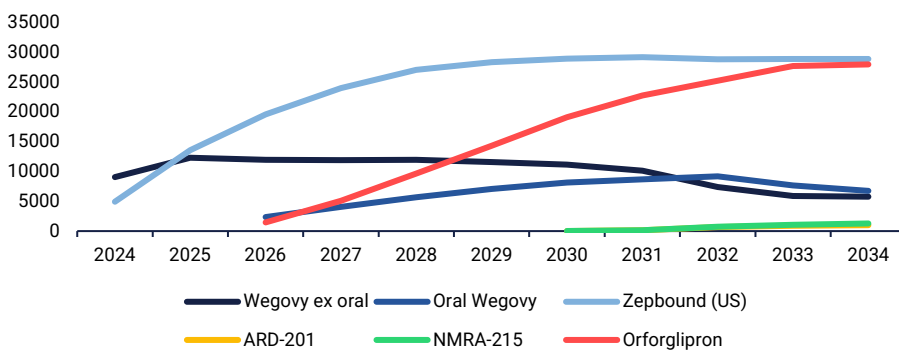
We believe the US market can grow at an average rate in the high teens until 2030. According to Evaluate Pharma, the GLP-1 category is expected to grow by 20+ per cent on average until at least 2030. However, recent events might lead to a gradual moderation of expert forecasts.

**A multibillion-dollar opportunity even with conservative assumptions**

According to analyst estimates, Lilly’s dual agonist tirzepatide is expected to generate a whopping USD 74bn in net sales in 2030 (including diabetes sales). Zepbound, i.e., the obesity brand of tirzepatide marketed in the US, represents approximately USD 29 billion of this forecast. For Novo’s Wegovy, the forecast is approximately USD 11 billion globally (excluding oral semaglutide). Sales of oral Wegovy are expected to amount to USD 8 billion. Interestingly, Lilly’s oral GLP-1 agonist, Orforglipron, is expected to generate USD 19 billion in 2030. Both estimates are global sales. The sales expectations for Novo’s and Lilly’s oral obesity drugs have been boosted dramatically in the last six months.

Oral (small-molecule) obesity drugs in early development, such as ARD-201 and NMRA-215, are expected to reach peak sales of USD 2 billion and USD 1.6 billion, respectively (not shown in the graph below). NMRA-215 is a notable reference for Pila Pharma, as it is an inhibitor of inflammasome pathways.

**Selected obesity drug sales forecasts (USDm)**



Source: Visible alpha and Carlsquare

Below we present assumptions for our peak sales forecast for XEN-D0501 in obesity. Our forecasts are predicated on further successful clinical and regulatory development.

- A primary addressable market of adult obese individuals in the US, Europe and China. Taking large regional differences in obesity rates into consideration, we estimate an obese population of more than 300 million (the US representing more than 1/3). If we narrow it down to the *non-diabetic* obese population, we have assumed 228 million.
- As we have already discussed above, only a small fraction of this group has of yet been exposed to regulated obesity treatment drugs. In the US, the figure is probably between 3-4 per cent; elsewhere, the shares are lower still. However, it is unlikely that all obese people who will be exposed to obesity drugs will be on treatment simultaneously, since patients discontinue for various reasons. We have assumed that the annual treatment rate will plateau at five per cent of the obese population in the US, which still implies a very high accumulated penetration over time. Sales of obesity drugs outside the US are considerably lower compared to the US. This reflects lower prices but also less mature markets and significantly lower adoption rates. In conclusion, we assume a long-term treatment rate of 3.5 per cent in Europe and 2.7 per cent in China.

- At this early stage, we assume an 8 per cent penetration in the drug-treated obese non-diabetic population in the US. For now, we have assumed incretins and gut hormone analogs will continue to dominate the market. In general, analysts are also somewhat cautious regarding the outlook for oral obesity drugs at least compared to injectables. This is possibly due to the need for more frequent dosing, lower efficacy, and more gastrointestinal side effects for orals compared to injectables. For Europe and China, we assume a lower penetration rate of around five per cent due to more heterogeneous markets.
- We have assumed a price (net) of USD 300 per month in the US and USD 200 and USD 133 in Europe and China, respectively. We acknowledge that future pricing is an uncertain factor given that obesity drug prices appear to be under pressure from regulators. Also, the cash prices for oral Wegovy and Foundayo in the US have at least initially been set relatively low, between USD 149 and USD 349 per month, depending on dosage.
- Our assumptions result in a peak sales estimate of about USD 1.6bn.
- The future value of the obesity market will depend on gross to net pricing and penetration rates in different regions as discussed above. If we apply the same price assumptions to the total market as we do for XEN-D0501, we estimate an addressable market equivalent to approximately USD 65 billion in ten years across the combined US, European, and Chinese markets, with the US market corresponding to approximately USD 46 billion. This is more conservative than many other estimates out there; however, we believe changing pricing dynamics may not have been fully accounted for. Of course, if we assume higher average pricing for obesity drugs, the value of the market expands correspondingly.

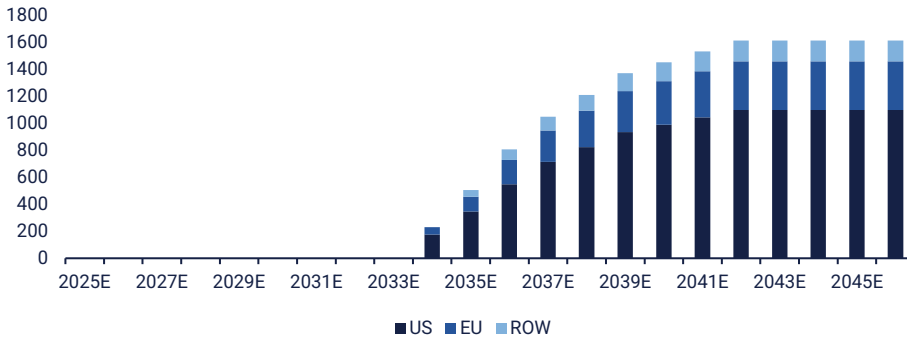
### Assumptions for peak sales estimation for XEN-D0501 in obesity

Based on 2024P prevalence	USA	Europe	China	Total
Prevalence adult obesity	108	114	75.7	
% of population	40%	27%	9%	
Non-diabetics share	76%	76%	76%	
Addressable population (million)	82	86	55	
Share on treatment 2024	1.2%	0.8%	0.2%	
Share on treatment 2035	5%	3.4%	2.7%	
Assumed share XEN-D0501 (at peak)	20%	13%	13%	
Assumed # peak treated (million)	0.36	0.18	0.11	0.65
Net monthly revenue per treatment, USD	300	200	133	
<b>Net sales, USDm</b>	<b>1100</b>	<b>360</b>	<b>150</b>	<b>1610</b>

Source: Company information and Carlsquare estimates

Below, we illustrate the base case scenario as a graph of estimated derisked gross sales of XEN-D0501 in the treatment of obesity.

**Estimated unrisks gross sales of XEN-D0501 in obesity, USDm**



Source: Carlsquare estimates

**Erythromelalgia - an untapped orphan indication and entry to broader pain therapy**

The average number of erythromelalgia episodes experienced by patients is 72 episodes per person-year, which equates to approximately 1.38 episodes per week. This figure is based on patient-reported data from a large cohort study and reflects the typical frequency among those with active symptoms. However, there is significant variability between individuals, with some experiencing more frequent or less frequent episodes over time.

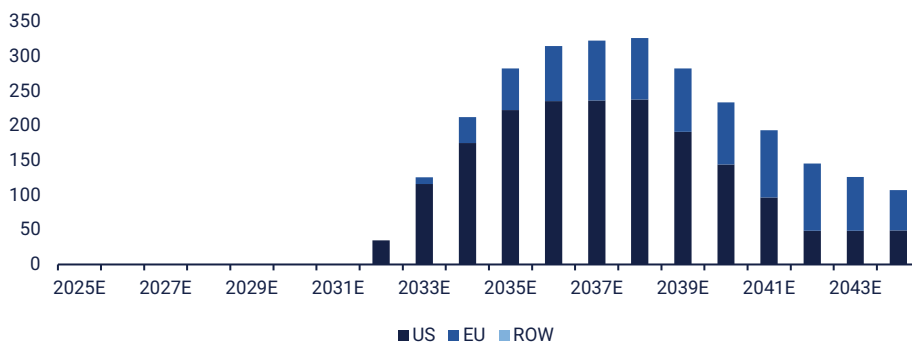
Medication adjustments have been extensively studied, but the evidence demonstrates highly variable efficacy. Systemic agents such as aspirin, gabapentin, tricyclic antidepressants, serotonin reuptake inhibitors, calcium channel blockers, opioids, and NSAIDs are frequently used, often in combination, yet most patients report only limited or inconsistent relief. Aspirin provides no benefit in the majority of cases, except in some patients with myeloproliferative-associated erythromelalgia. Gabapentin and antidepressants may help select individuals, but robust, consistent efficacy is lacking. Opioids and NSAIDs are generally discouraged due to poor efficacy and risk of adverse effects. Intravenous iloprost, a prostacyclin analog, has shown moderate benefit in approximately 63% of treated patients in one cohort, but its use is limited by availability and side effect profile.

- Estimates regarding prevalence are uncertain and vary. We have assumed a prevalence of primary erythromelalgia of 10.3 per 100,000 (Sidiq, S., et al, "Prevalence of erythromelalgia in the United States: a cross-sectional study using the All of Us database", *Arch Dermatol Res*, 2024).
- From a survey by TEA (The Erythromelalgia Association) we deduce that around 60 per cent of respondents report having some or a lot of control over erythromelalgia flares. Hence, we consider the remaining 40 per cent as the main target population for new and hopefully more effective medical treatment. In conclusion, we assume a peak penetration of 25 per cent of patients on any medical treatment in the US and 17 per cent in Europe.
- Our research indicates that medical treatment with branded pain drugs in the US such as Qutenza and Lyrica costs around USD 16,000 per year. For a drug specifically indicated for erythromelalgia, an orphan indication, we

assume a net revenue USD 40,000 per year. According to *EvaluatePharma Orphan Drug Report 2019* mean orphan drug cost per patient in the US at the time was almost 4.5 times greater than non-orphan drug cost. Some reports suggest that the gap is narrowing. For Europe, we have assumed a price equivalent to USD 27,000 per year.

- Our assumptions result in a peak sales estimate of about USD 330m in 2038, seven years after launch in a base case scenario. Subsequently, we expect sales to drop as market protection from Orphan Drug Designation expires.

**Estimated unrisks gross sales of XEN-D0501 in erythromelalgia, USDm**



Source: Carlsquare estimates

**Likelihood of Approval**

Based on drug development statistics, the probability of reaching the market is estimated at 7.9% for an average Phase I drug project. For metabolic diseases and endocrinology, the corresponding possibility is 15.5% and 6.6%, respectively ("Clinical Development Success Rates and Contributing Factors 2011-2020", Bio/In-forma Pharma/QLS). Factors influencing the likelihood are indication, target molecule, and modality. According to the same source, peptides (such as semaglutide) and small molecules have roughly the same LOA, ceteris paribus.

However, as discussed above PILA has not demonstrated any preclinical proof of concept of weight loss effect for XEN-D0501. In addition, there is some uncertainty regarding the IP/market protection in this indication on the back of patent expirations. This might affect the outlook for finding a partner for mid- and late-stage clinical development. Also, further financing is needed to advance into clinical development. In summary, until we see more evidence in the weight loss indication from the planned Phase Ib/IIa studies, we assume a comparatively conservative LOA in the obesity indication of around six per cent.

For rare diseases, the Phase I LOA is 17 per cent or roughly double the industry average. We assume a lower LOA due to, e.g., the lack of published data in this indication and limited financing.

**Assumptions Probability to Market**

Project	Indication	Precl.	Phase I	Phase II	Phase III	NDA	LOA
XEN-D0501	Obesity	80%	75%	18%	64%	88%	6.0%
XEN-D0501	Erythromelalgia	80%	75%	31%	65%	94%	11%

Source: Bio/In-forma Pharma/QLS and Carlsquare estimates

Unless indicated otherwise, our estimates are accordingly risk-adjusted.

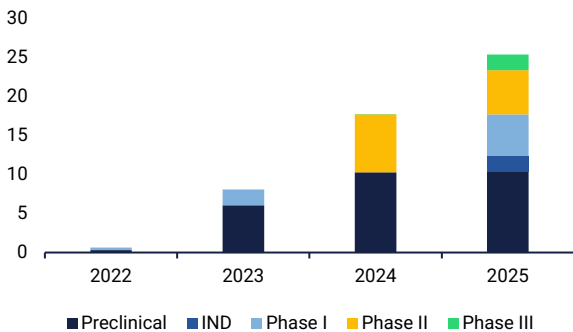
**Obesity license deal values are off the scale**

The goal for the company is to demonstrate safety and efficacy in obesity, diabetes and other cardio-metabolic conditions where inflammation is involved. One clear focus is the safety profile which is one possible differentiating factor.

We assume that licensing deals with larger biopharma partners is the preferred strategy since Pila are too small to conduct late-stage clinical development in obesity or diabetes as Phase III studies require at least 4,500 subjects.

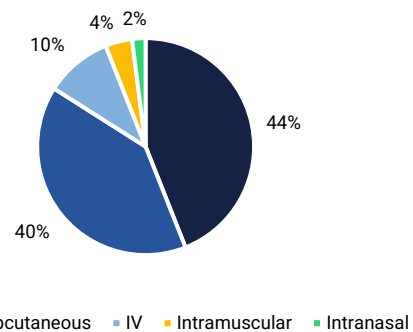
There is a visible interest from e.g. Big Pharma to pick up projects in the obesity indication. Naturally, the rapid growth and huge potential market are key drivers. In recent years, there has been a rapid increase in the total value of deals. While the highest values are for subcutaneous assets, oral assets lead in deal volume.

**License deals in obesity, value (USDbn)**



Source: Biomedtracker and Carlsquare

**Deals by route of administration (%)**



Source: Biomedtracker and Carlsquare

As seen above, published deals suggest a substantial interest in early-stage clinical development. To some extent, it probably reflects that the market has not matured. Further, the upfront component is substantial in several cases. We discern that licensees are willing to take considerable risk, possibly due to fears of missing out. However, the largest deals concern well-known MOAs such as GLP-1-receptor agonists and amylin. Below we list a selection of license deals related to obesity.

**Selection of license deals in the obesity field**

Licensor	Partner	Project	Target/MoA	Phase	Value	Upfront (MUSD)	Royalties	Date
Zealand	Roche	Petrelinitide	Amylin	2	4900	1650	High teens	Mar-25
Gubra	Abbvie	GUBamy	Amylin	1	2225	350	Tiered	Mar-25
United I.	Novo	UBT251	GLP-1/GIP/Glucagon	2	2000	200	Tiered	Mar-25
Hengrui	Kailero	KAI-9531	GLP-1/GIP oral	2	6035	100	LSD to HDD	May-24
Eccogene	AstraZeneca	ECC5004	GLP-1 RA oral	1	2010	185	Tiered	Nov-23
Verdivia	Sciwind	XW004	GLP-1 oral	2	2470	70	Tiered	Oct-25
Sunshine Lake	Apollo	APL-18881	FGF21/GLP-1	2	938	12	HSD to LDD	Dec-24
<b>Median</b>					<b>2225</b>	<b>185</b>		

Source: Company information and Carlsquare. LSD: Low single digits. HSD: High single digits. HDD: High double digits.

We calculate a median value of USD 2.2bn in total and USD 185m in up-front payments, and generally double-digit royalty rates on sales.

In terms of orphan drug indication, primarily erythromelalgia, it is harder to identify relevant deals. Often, even small drug developers opt for a go-to-market strategy rather than a licensing strategy. Below is a list of potential references:

### Selection of license deals in the orphan drug field

Licensor	Partner	Project	Indication	Phase	Value	Upfront (MUSD)	Royalties	Date
Mabwell Therapeutics	Disc Medicine	9MW3011	Polycythemia Vera (PV)	IND	412,5	10	LDD	Jan-23
Cantargia	Otsuka	CAN10	Not specified	1	613	33	LDD	Jul-25
Mereo BioPharma	Ultragenyx	Setrusumab	Osteogenesis Imperfecta	2	354	50	LDD	Dec-20
Novimmune	SOBI	emapalumab	HLH	BLA	450	50	NA	Jul-18
Blueprint	Ipsen	BLU782	FOP	1	535	25	LDD	Oct-18
<b>Median</b>					<b>450</b>	<b>33</b>		

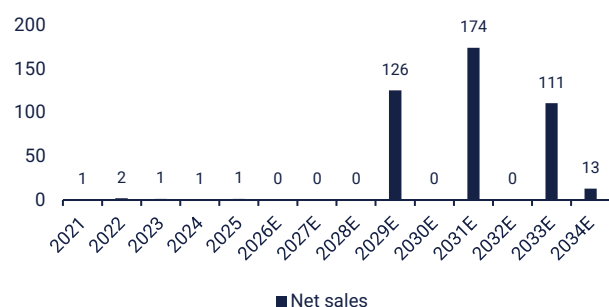
Source: Company information and Carlsquare. LSD: Low single digits. HSD: High single digits. HDD: High double digits.

We calculate a median value of USD 450m in total and USD 33m in up-front payments, and generally double-digit royalty rates on sales.

### Sales forecast driven by milestones and royalties

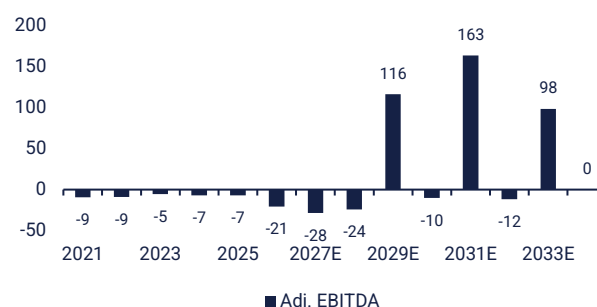
Below are our forecasts for revenue and operating results. We have assumed a licensing deal worth up to a total of USD 1,080 million in obesity, including an up-front payment of USD 84 million. While this is still a considerable amount for most biotechs, this is lower than some of the larger deals recently announced in this field. We make more conservative assumptions to account for some uncertainty regarding the strength of future patents. Also, the competition in the external pipeline is likely to intensify as more capital is being poured into development and the field matures. We have assumed a ten per cent royalty rate.

#### Net sales (SEKm) (risk-adjusted)



Source: Company information and Carlsquare

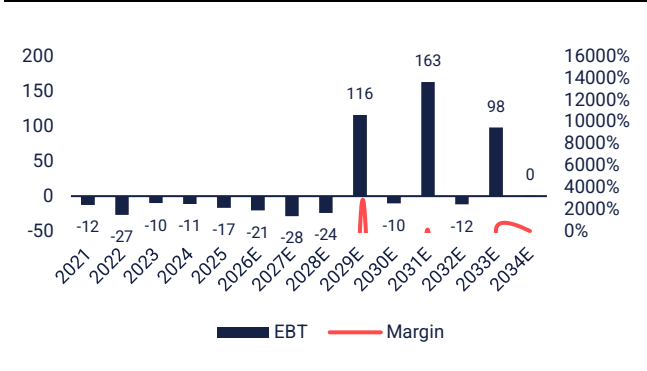
#### EBITDA (SEKm) (risk-adjusted)



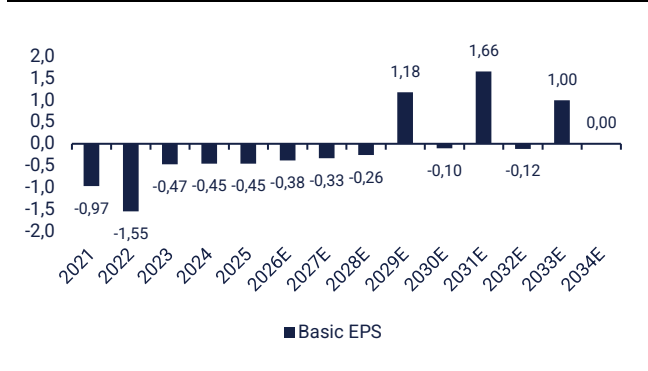
Source: Company information and Carlsquare

#### EBT (SEKm) and margin (%)

#### EPS (SEK)



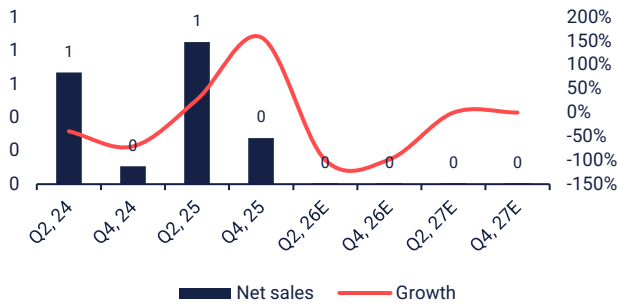
Source: Company information and Carlsquare estimates



Source: Company information and Carlsquare estimates

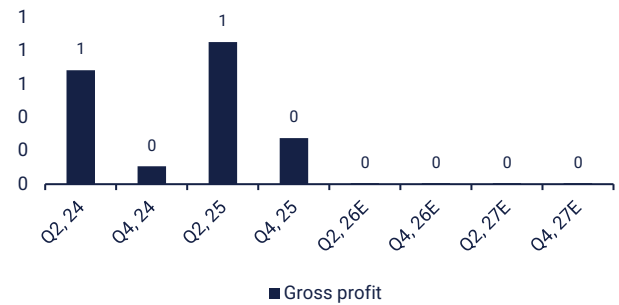
**On a quarterly basis**

**Net sales (SEKm) and growth (%)**



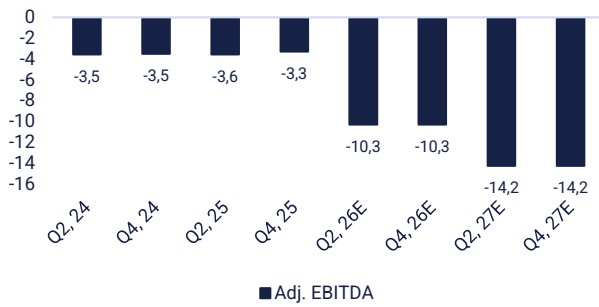
Source: Company information and Carlsquare estimates

**Gross profit (SEKm)**



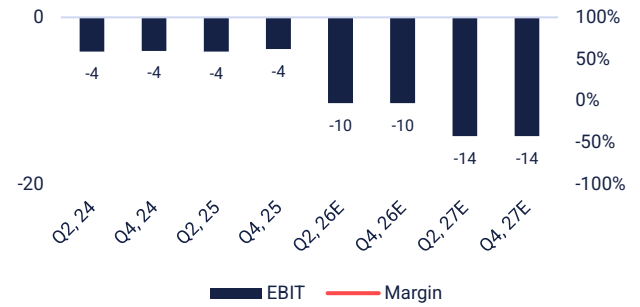
Gross profit is calculated on total operating income. Source: Company information and Carlsquare estimates

**Adj. EBITDA (SEKm)**



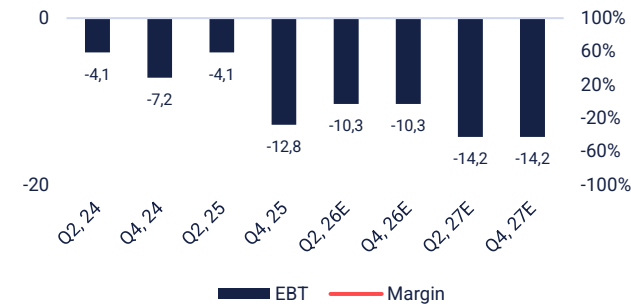
Source: Company information and Carlsquare estimates

**EBIT (SEKm) and margin (%)**



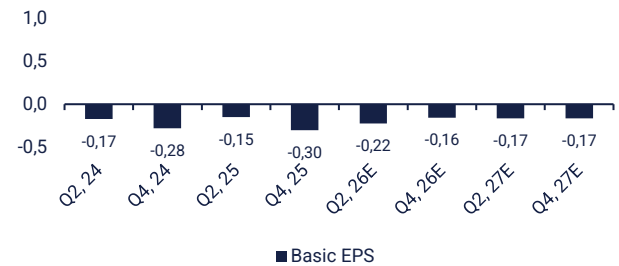
Source: Company information and Carlsquare estimates

**EBT (SEKm) and margin (%)**



Source: Company information and Carlsquare estimates

**Earnings per share (SEK)**



Source: Company information and Carlsquare estimates

# Valuation

With our risk-adjusted DCF valuation we calculate a base case valuation of SEK 2.5 per share after assuming financing and dilution. Our valuation is predicated on the successful Phase Ib/2a development of candidate XEN-D0501, as well as subsequent partnering of the asset. In case of a positive project development in obesity, we see room for gradual appreciation in value. EM provides a secondary opportunity for XEN-D0501, somewhat mitigating the downside risk in the readout from future obesity studies.

## Fair value within a range

### Clinical development could lead to gains

Our valuation is based on the sales assumptions described in the forecast section above. We have used a risk-adjusted DCF valuation, as described below. In our base and bull case scenarios, we consider obesity as the target indication; for the bear case scenario, we instead assume Pila will opt for the erythromelalgia primary indication.

The risk adjustment in the different scenarios is based on the development risks we have discussed, where we estimate the probability of reaching market between six and 14 per cent, with the most significant risk adjustment for obesity. In our model, we have used a discount rate of 16.3 per cent. This is based on a risk-free interest rate of 2.8 per cent, a beta value of 1.3, and a risk premium of 13.5 per cent. The latter is based on PwC's Risk Premium Study 2025 and consists of a market risk premium of 5.9 per cent and a size premium of 4.5 per cent.

We calculate an enterprise value of approximately SEK 187 million. Our valuation is based on PILA's ability to secure a partner for XEN-D0501 following the successful completion of Phase 2a development. For clinical development, we calculate that additional capital is required. Therefore, we take into account the dilution resulting from future rights issues as illustrated by a discount to fair value per share before financing and dilution in the table below. Adjusted for dilution, the risk-adjusted fair value, is SEK 2.5 per share in our base scenario.

### Sum-of-the-parts valuation, base case (SEKm)

Project	Indication	LOA*, %	Royalty, %	Peak Sales, USDm	Launch	rNPV, SEKm
XEN-D0501	Obesity	6.0%	10.0%	1 600	2034	298
XEN-D0501	Erythromelalgia*	-	10.0%	330	2032	-
<b>Technology value</b>						<b>298</b>
Overhead and taxes						-112
<b>EV</b>						<b>187</b>
Net cash (26'Q1E)						13
<b>Shareholder value</b>						<b>200</b>
Number of shares						45.7
Per share, SEK						4.4
Discount for assumed future financing						42%
<b>Value per share, SEK (after financing and dilution)</b>						<b>2.53</b>

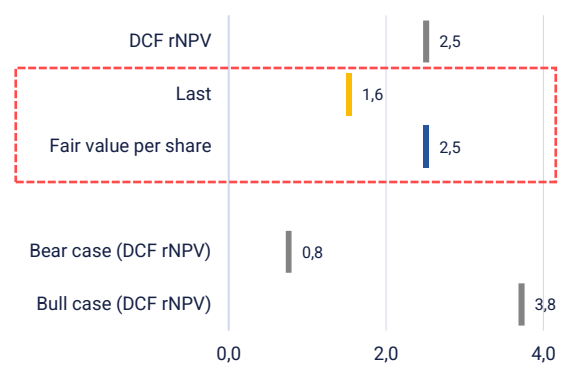
Source: Carlsquare estimates. \*Not included in the base case valuation

### Fair value (SEK/share), base case

	weight	
Currency, SEK/SEK	1,0	
EV/Sales, NTM	0%	
EV/EBITDA, NTM	0%	
EV/EBIT, NTM	SEK 0%	
DCF valuation	SEK 100%	2,5
<b>Fair value per share</b>	<b>SEK</b>	<b>2,53</b>
Potential up-/downside		46%
Shares outstanding, fully financed, and diluted	M	98,6
Equity value	SEKm	249
Cash (last rep. Q)	SEKm	13,2
Debt (last rep. Q)	SEKm	0
PV cash from equity financing	SEKm	49,5
EV	SEKm	187

Source: Carlsquare estimates

### Fair value within a range (SEK/share)



Source: Carlsquare estimates

## Valuation range

In an optimistic **bull case scenario**, realistic over the next twelve months, we expect:

- PILA initiates clinical development in obesity as planned. We consequently increase the LOA in obesity to around nine per cent.
- We assume better terms (e.g., a lower TERP discount) in future capital raises

We calculate a risk-adjusted enterprise value of SEK 332 million, corresponding to a shareholder value of SEK 3.8 per share after assumed financing and dilution.

In a **bear case scenario**, we assume the company will prioritise development in erythromelalgia after spending resources only to achieve disappointing observation of clinical development in obesity. We also assume further financing and significant dilution.

We calculate a risk-adjusted shareholder value of SEK 0.8 per share after financing and dilution.

## Risks and Challenges

Pila Pharma, although de-risked from several perspectives, still faces development risks as well as other risks associated with striking a licensing deal and competing in an increasingly crowded space.

### An untested mechanism of action in obesity

Previous clinical work indicates some positive effect on insulin and glucose control from TRPV1 antagonism. However, it is uncertain whether this will translate into a clinically meaningful effect on weight loss, as there is still limited published evidence in this regard.

### Further financing is required before partnership

Pila Pharma has been prudent in its approach to raising capital so far, albeit in a weak market for rights issues. The latest capital raise is one example of this, the company raising SEK 35m before issuing costs in the latest round of rights issue and exercise of T02 warrants. The rights issue itself was heavily oversubscribed. We believe more financing is needed for the next steps in clinical development,

### Deal timing and conditions uncertain

With significant interest in the space of obesity & diabetes, there are many potential licensing partners. However, as is par with the course with small biotech companies, deal particulars can be very hard to predict. Given the significant number of assets in development, one could expect competitive pressures to skew the balance of power toward big pharma, rather than toward the smaller biotech's.

### Crowded space with intense competition in obesity

Competition in the obesity space will likely not be limited to who gets the best licensing deal, but also when it comes to actually treating the patients. With GLP-1s and GLP-1 analogues, novel drugs, as well as new medical devices, in the pipeline, it is likely that patients will have a slew of options to choose from. This means that our assumptions regarding the penetration of XEN-D0501 face a significant amount of uncertainty. The ease of use will undoubtedly boost it against competitors with an injectable type of administration, but the risk remains significant that higher-than-expected competition can erode some percentage points of our estimated penetration.

# Accounts and key figures

## Income statement (SEKm), quarterly basis

	Q2. 24	Q4. 24	Q2. 25	Q4. 25	Q2. 26E	Q4. 26E	Q2. 27E	Q4. 27E
Net sales	1	0	1	0.3	0.0	0.0	0	0
Total revenue	1	0	1	0	0	0	0	0
Gross profit on net sales	1	0	1	0	0	0	0	0
EBITDA	-4	-3	-4	-3	-10	-10	-14	-14
EBIT	-4	-4	-4	-4	-10	-10	-14	-14
EBT	-4	-7	-4	-13	-10	-10	-14	-14
Net profit/loss	-4	-7	-4	-13	-10	-10	-14	-14
Basic EPS (SEK)	-0.17	-0.28	-0.15	-0.30	-0.22	-0.16	-0.17	-0.17
<b>Growth</b>	<b>Q2. 24</b>	<b>Q4. 24</b>	<b>Q2. 25</b>	<b>Q4. 25</b>	<b>Q2. 26E</b>	<b>Q4. 26E</b>	<b>Q2. 27E</b>	<b>Q4. 27E</b>
Net sales*	-39%	-71%	27%	158%	-99%	-98%	0%	0%
Total revenue	-38%	-71%	25%	158%	-99%	-98%	0%	0%
Gross profit on net sales	-38%	-71%	25%	158%	-99%	-98%	0%	0%
EBITDA	-16%	-55%	0%	6%	-189%	-215%	-38%	-38%
EBIT	-13%	-44%	0%	6%	-151%	-170%	-38%	-38%
EBT	43%	-156%	0%	-78%	-151%	19%	-38%	-38%
Net profit/loss	43%	-156%	0%	-78%	-151%	19%	-38%	-38%
<b>Margins</b>	<b>Q2. 24</b>	<b>Q4. 24</b>	<b>Q2. 25</b>	<b>Q4. 25</b>	<b>Q2. 26E</b>	<b>Q4. 26E</b>	<b>Q2. 27E</b>	<b>Q4. 27E</b>
Gross margin	98%	100%	100%	100%	100%	100%	100%	100%
EBITDA margin	NM	NM	NM	NM	NM	NM	NM	NM
EBIT margin	NM	NM	NM	NM	NM	NM	NM	NM
EBT margin	NM	NM	NM	NM	NM	NM	NM	NM
Profit margin	NM	NM	NM	NM	NM	NM	NM	NM

Source: Company information and Carlsquare estimates

**Income statement (SEKm)**

	2022	2023	2024	2025	2026E	2027E	2028E	2029E
Net sales	2	1	1	1	0	0	0	126
Total operating income	2	1	1	1	0	0	0	126
COGS	0	0	0	0	0	0	0	0
Gross profit on net sales	2	1	1	1	0	0	0	126
Tot. operating expenses less COGS and D&A	-11	-7	-8	-8	-21	-28	-24	-10
EBITDA	-9	-5	-7	-7	-21	-28	-24	116
Depreciation of tangible assets incl. leasing	0	-1	-1	-1	0	0	0	0
EBITA	-9	-6	-8	-8	-21	-28	-24	116
Adj. EBITA	-9	-6	-8	-8	-21	-28	-24	116
Amortisation of intangible assets	0	0	0	0	0	0	0	0
EBIT	-9	-6	-8	-8	-21	-28	-24	116
Net finances	-18	-4	-3	-9	0	0	0	0
EBT	-27	-10	-11	-17	-21	-28	-24	116
Tax	0	0	0	0	0	0	0	0
Net profit/loss	-27	-10	-11	-17	-21	-28	-24	116
Adj. net profit/loss	-27	-10	-11	-17	-21	-28	-24	116
Tot. comp. PL attributed to parent company	-27	-10	-11	-17	-21	-28	-24	116
Adj. PL attributed to parent company	-27	-10	-11	-17	-21	-28	-24	116
Basic EPS	-1.55	-0.47	-0.45	-0.45	-0.38	-0.33	-0.26	1.18
EPS aft. dilution	-1.55	-0.47	-0.45	-0.45	-0.38	-0.33	-0.26	1.18
<b>Growth</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>
Net sales	162%	-22%	-47%	45%	-99%	0%	0%	NM
Total operating income	162%	-22%	-46%	43%	-99%	0%	0%	NM
Gross profit on net sales	176%	-22%	-47%	45%	-99%	0%	0%	NM
EBITDA	4%	40%	-32%	3%	-201%	-38%	16%	NM
EBIT	4%	28%	-27%	3%	-160%	-38%	16%	NM
EBT	-115%	63%	-14%	-50%	-22%	-38%	16%	NM
Net profit/loss	-115%	63%	-14%	-50%	-22%	-38%	16%	NM
Basic EPS	-60%	70%	4%	0%	18%	20%	16%	NM
<b>Margins</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>
Gross profit on net sales	100%	100%	100%	100%	100%	100%	100%	100%
EBITDA	NM	NM	NM	NM	NM	NM	NM	92%
EBIT	NM	NM	NM	NM	NM	NM	NM	92%
EBT	NM	NM	NM	NM	NM	NM	NM	92%
Net profit/loss	NM	NM	NM	NM	NM	NM	NM	92%

Source: Company information and Carlsquare estimates

## Balance sheet (SEKm)

	2022	2023	2024	2025	2026E	2027E	2028E	2029E
Tot. intangible assets	3	2	1	0	0	0	0	0
Tot. tangible assets	0	0	0	0	0	0	0	0
Tot. other fixed assets	0	0	0	0	0	0	0	0
<b>Total LT assets</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Inventories	0	0	0	0	0	0	0	0
Accounts receivables	0	0	0	0	0	0	0	0
Other current assets	0	0	0	0	0	0	0	0
Cash & cash eqv.	7	6	5	16	38	9	1	117
<b>Total current assets</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>16</b>	<b>38</b>	<b>9</b>	<b>1</b>	<b>117</b>
<b>Total assets</b>	<b>11</b>	<b>8</b>	<b>6</b>	<b>16</b>	<b>38</b>	<b>9</b>	<b>1</b>	<b>117</b>
Total equity	10	7	5	15	37	8	0	117
Provisions	0	0	0	0	0	0	0	0
LT debt to creditors	0	0	0	0	0	0	0	0
Other LT liabilities	0	0	0	0	0	0	0	0
<b>Tot. long-term liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
ST debt to creditors	0	0	0	0	0	0	0	0
Accounts payable	0	0	0	0.2	0	0	0	0
Other current liabilities	1	1	1	1	0	0	0	0
<b>Tot. short-term debt</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Tot. equity and debt</b>	<b>11</b>	<b>8</b>	<b>6</b>	<b>16</b>	<b>38</b>	<b>9</b>	<b>1</b>	<b>117</b>
<b>Liquidity</b>	<b>2022</b>	<b>2 023</b>	<b>2 024</b>	<b>2 025</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>
Current ratio	5.6x	3.5x	5.2x	11.3x	53.7x	12.0x	1.5x	217.6x
Quick ratio	5.3x	3.3x	5.1x	11.1x	53.7x	12.0x	1.5x	217.6x
CF operations/current liabs.	-6.7x	-2.7x	-8.1x	-6.4x	-30.1x	-37.2x	-33.9x	215.6x
<b>Leverage</b>	<b>2022</b>	<b>2 023</b>	<b>2 024</b>	<b>2 025</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>
Net debt(+)/Net cash(-)	-7	-6	-5	-16	-38	-9	-1	-117
Net debt(+)/Net cash(-), excl. leasing	-7	-6	-5	-16	-38	-9	-1	-117
Net debt/EBITDA	0.8x	1.1x	0.7x	2.3x	1.8x	0.3x	0.0x	-1.0x
Tot. debt/Equity	0%	0%	0%	0%	0%	0%	0%	0%
Tot. equity/tot. assets	88%	79%	85%	91%	98%	92%	38%	100%
<b>Efficiency</b>	<b>2022</b>	<b>2 023</b>	<b>2 024</b>	<b>2 025</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>
ROA	-125%	-102%	-153%	-150%	-76%	-122%	-464%	196%
ROE	-134%	-122%	-189%	-168%	-80%	-125%	-541%	199%
ROIC	-194%	-165%	-336%	-759%	-8412%	-33717%	-28448%	137661%

Source: Company information and Carlsquare estimates

## Cash flow (SEKm),

	2022	2023	2024	2025	2026E	2027E	2028E	2029E
CFO b4 delta WC	-9	-5	-7	-10	-21	-28	-24	116
Delta WC	0	1	-1	0	0	0	0	0
CF operations	-9	-5	-8	-9	-21	-28	-24	116
CF investing	0	0	0	0	0	0	0	0
FCF	-9	-5	-8	-9	-21	-28	-24	116
CF financing	-12	4	7	20	43	0	16	0
Cash flow	-21	-1	-1	11	22	-28	-8	116
Cash, BoP	28	7	6	5	16	38	9	1
Cash, EoP	7	6	5	16	38	9	1	117
<b>Key ratios</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>
Delta WC/Total operating income	NM	NM	NM	NM	NM	NM	NM	0%
CF operations/Total operating income	NM	NM	NM	NM	NM	NM	NM	92%
CF operations/EBITDA	NM	NM	NM	NM	NM	NM	NM	100%
CF investing/Total operating income	NM	NM	NM	NM	NM	NM	NM	0%
FCF/EBITDA	NM	NM	NM	NM	NM	NM	NM	100%

Source: Company information and Carlsquare estimates

**Key figures (SEK)**

	2022	2023	2024	2025	2026E	2027E	2028E
SEK/SEK	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Share price (SEK)	3.1	1.6	3.8	2.1	1.7	1.7	1.7
Market cap (SEKm)	50	38	102	87	79	79	79
EV (SEKm)	45	38	99	86	41	66	66
P/S	26.5x	26.0x	131.3x	76.9x	NM	NM	NM
P/E	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
P/CF operations	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
EV/Sales	23.8x	26.3x	128.0x	76.0x	NM	NM	NM
EV/Gross profit	23.8x	26.3x	128.0x	76.0x	NM	NM	NM
EV/EBITDA	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
EV/EBIT	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
CSQ fair value per share (SEK)	3.1	1.6	3.8	2.1	2.5	2.5	2.5
CSQ market cap (SEKm)	50	38	102	87	249	249	249
CSQ EV (SEKm)	45	38	99	86	212	240	248
P/S, CSQ implied	26.5x	26.0x	131.3x	76.9x	24 931.8x	24 931.8x	24 931.8x
P/E, CSQ implied	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
P/CF operations, CSQ implied	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
EV/Sales, CSQ implied	23.8x	26.3x	128.0x	76.0x	NM	NM	NM
EV/Gross profit, CSQ implied	23.8x	26.3x	128.0x	76.0x	NM	NM	NM
EV/EBITDA, CSQ implied	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
EV/EBIT, CSQ implied	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Shares outstanding (M, EoP)	18.4	23.8	27.1	42.1	85.7	85.7	98.6
Shares outstanding (M, Avg.)	17.3	21.1	25.5	34.6	63.9	85.7	92.1
Shares outstanding, aft. dil. (M, Avg.)	17.3	21.1	25.5	34.6	63.9	85.7	92.1
Shares outstanding, fully dil. (M, Avg.)	17.3	21.1	25.5	34.6	63.9	85.7	92.1
EPS (SEK)	-1.55	-0.47	-0.45	-0.45	-0.38	-0.33	-0.26
DPS (SEK)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BV per share (SEK)	0.6	0.3	0.2	0.4	0.6	0.1	0.0
tBV per share (SEK)	NA	NA	NA	NA	NA	NA	NA
EV per share (SEK)	2.6	1.8	3.9	2.5	0.6	0.7	0.6
Equity per share (SEK)	0.6	0.3	0.2	0.4	0.6	0.1	0.0
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF yield	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.

Source: Company information and Carlsquare estimates

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