Initial Research 2024-05-29

Lipum: A new approach to chronic inflammation

- Addressing a large patient group in need of new treatment alternatives
- Phase I to be concluded in 2024
- We initiate coverage with a fair value of SEK 10.81 per share

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Stock ticker:	LIPUM
Industry:	Biotech
Listed on:	Nasdaq First North
Latest share price (SEK):	6.45
Market cap (MSEK):	136.8
Enterprise Value (MSEK):	137.1
Total number of shares (M):	21.2
- of which free float (M):	12.1

VHCF fair value per share

DCF model	SEK 10.81

	Lipum
Address:	Tvistevägen 48C 907 36 Umeå
Webpage:	lipum.se
CEO:	Ola Sandborgh

Main owners (31 Mar 2024)	**Capital (%)**
Flerie Invest AB	32.0
Försäkringsbolaget Avanza Pension	11.6
Nordnet Pensionsförsäkring AB	10.0
Craafordska Stiftelsen	7.4
Tibia Konsult AB	3.8

Share price history (SEK)

	-1m	**-3m**	**-12m**
Change (%)	9.4	-27.0	-32.0
52 wk range (Low/Hi) - SEK			5.85 / 12.50

Source: Västra Hamnen Coporate Finance

Chronic inflammation, such as rheumatoid arthritis, affects millions of people globally. Available treatment options are often insufficient and new approaches are much needed. Umeå-based Lipum develops SOL-116, a new way to treat inflammation. The company expects to conclude the phase I study by late 2024 and plans for the next development step.

The strategy is to achieve proof of concept in phase II and find a suitable partner for the late-stage development and marketing. To model the value of SOL-116, we theoretically assume that Lipum will take SOL-116 to the market.

We have also estimated the value of a prospective deal. The value is based on actual deals made in the area with benchmark valuation multiples.

Given the potential of becoming a treatment option for a large patient group, we find an upside in the current valuation of Lipum. Additionally, SOL-116 could be applied in other indications, however, this opportunity is not included in our financial forecast at this point.

The investment case is associated with certain risks. Development risk is the most significant. Competition is fierce in the relevant markets, from existing treatments and emerging alternatives. There is also a financial risk as the phase II study needs to be funded.

The support from committed shareholders such as Flerie Invest and the Craaford Foundation, diminishes the funding risk to some extent. In April 2024, Lipum raised MSEK 73 to fund the company up to the phase II study.

We expect SOL-116 to reach the market in 2031 and generate sales of BSEK 1.4, with peak sales of BSEK 6.3 in 2039, representing a 5 per cent market share. Our risk-adjusted DCF model suggests a fair value of SEK 10.81 per share.

Table 1: Financial Overview

MSEK	2023	2024e	2025e	2026e	2027e
Total revenues	0.2	0.1	0.0	0.0	0.0
Growth (%)	-66.7%	-43.0%	-100.0%	0.0%	0.0%
EBITDA	-37.2	-43.2	-54.1	-46.7	-36.5
EBITDA margin (%)	neg	neg	neg	neg	neg
EBT	-37.2	-43.6	-54.7	-46.8	-36.5
Cash holdings	10.2	39.7	85.4	37.2	701.0
Total assets	12.1	41.9	87.7	39.7	703.7
Total equity	4.6	32.9	78.3	31.5	694.9
Solidity (%)	37.8%	78.7%	89.2%	79.3%	98.7%
P/E	neg	neg	neg	neg	neg
ROE	neg	neg	neg	neg	neg
EV/EBIT (x)	neg	neg	neg	neg	neg
EV/Sales (x)	neg	neg	neg	neg	neg

Source: Västra Hamnen Corporate Finance

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What does Lipum do?

Lipum in short

Treatments against chronic inflammatory diseases

Lipum is a Swedish biopharmaceutical company developing treatments against chronic inflammatory diseases. Based in Umeå and incorporated in 2010, the company was listed on Nasdaq First North Growth Market in 2021.

Lipum's drug development evolves around the drug candidate *SOL-116.* The candidate is a humanised antibody aimed to block the enzyme bile salt-stimulated lipase (BSSL). SOL-116 is currently undergoing a phase I study for the treatment of rheumatoid arthritis (RA).

Background

Lipum was founded after a discovery by researchers at Umeå University. In the 1970s, Olle Hernell, later Professor of Paediatrics, studied a fat-cleaving enzyme in breast milk. Hernell then discovered another fat-cleaving enzyme in breast milk that was important for the child's utilisation of the fat in the milk.[1]

BSSL linked to inflammation

The protein was named Bile Salt-Stimulated Lipase. Later, Hernell's research team found that BSSL is also present in the blood. This was unexpected, and they tried to understand why an enzyme active in fat digestion in the small intestine was present in the bloodstream. The fact that the enzyme in the bloodstream would enter the blood via the gut seemed unlikely, so the research team started looking for other sources. They then found elevated levels of BSSL in inflamed organs, including the liver of patients with fatty liver disease, an inflammatory condition.

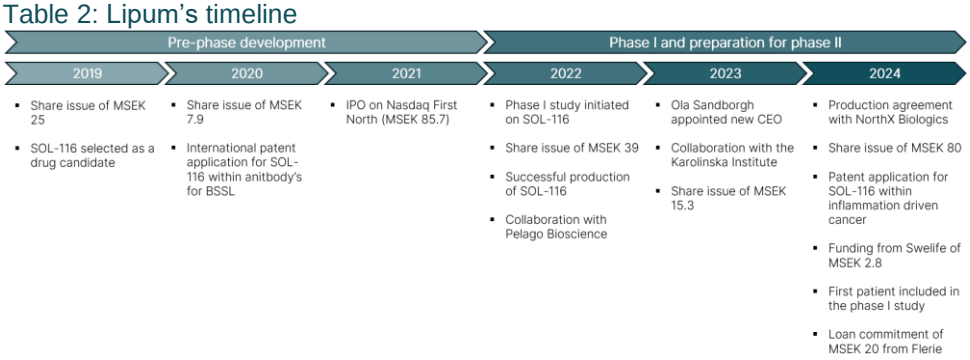
Professor Hernell and Associate Professor Susanne Lindquist discovered that BSSL is also present and secreted from granulocytes, a subset of white blood cells. The discovery indicated a different and previously unknown function of BSSL, namely that it plays an important role in inflammation.[2] The research group changed focus to investigate and explain the role of the enzyme in inflammatory processes. Preclinical results

[1] Lindquist and Hernell, (2010), *Lipid digestion and absorption in early life: an update*, Current Opinion in Clinical Nutrition and Metabolic Care, https://doi.org/10.1097/MCO.0b013e328337bbf0

[2] Lindquist, Andersson, Lundberg and Hernell, (2012), *Bile Salt-Stimulated Lipase Plays an Unexpected Role in Arthritis Development in Rodents*, PLoS One, https://doi.org/10.1371/journal.pone.0047006

demonstrated the medical potential of the discovery, leading Professor Hernell, Associate Professor Lindquist and Professor **Lennart Lundberg** to founding Lipum in 2010.

Table 2: Lipum's timeline



Source: Lipum

Financing

Recently raised MSEK 73

Since Lipum is in a development stage and does not generate any sales, they are dependent on external financing. Lipum has conducted several share issues to fund its activities. Most recently the company raised MSEK 73 in Q2 2024. Lipum has also been successful in applying for and receiving grants for its research and development. For example, the company received a grant from the EU in 2017 of MSEK 0.5 and in 2018 of MSEK 23. Lipum has also been granted funds from **Swelife** of MSEK 1 in 2018 and MSEK 2.8 in 2024. In Q1 2024, a loan commitment of MSEK 20 was received from Flerie Invest.

Owners

Flerie Invest as largest shareholder

As of March 31st, with 32 per cent of the shares, **Thomas Eldered** through **Flerie Invest** is Lipum's largest shareholder. In the recent rights issue, Flerie committed to subscribe for new shares. Excluding Avanza pension and Nordnet pension, the next largest shareholder is the **Crafoord Foundation** with 7.41 per cent of the shares. The foundation also committed to subscribing for new shares. **Adam Dahlberg** and **Christian von Koenigsegg** are among the other larger shareholders who also committed to subscribe for new shares in April 2024 and held 3 per cent and 1.8 per cent respectively before the rights issue.

Key personnel and management

Ola Sandborgh joined Lipum in December 2023 as CEO. Sandborgh has over 30 years of experience in the pharmaceuticals industry, with leading positions at **Sobi**, **Sanofi** and **Pfizer**. Stock ownership including relatives: 37,500 shares.

Susanne Lindquist co-founded Lipum in 2010 and was appointed Chief Scientific Officer in 2016. Susanne holds a PhD in microbiology from **Umeå University**. Lindquist has over 20 years of research in BSSL and has expertise in preclinical models of arthritis and other inflammatory diseases. Stock ownership including relatives: 324,696 shares.

Olle Hernell co-founder of Lipum and currently a senior medical advisor and board member. Hernell has more than 30 years of experience as a senior consultant, responsible for pediatric gastroenterology, hepatology and nutrition. His research spans from basic science to clinical trials, including a large phase III RCT conducted by Sobi. Hernell has a PhD from Umeå University. Stock ownership including relatives: 341,369 shares.

Pernilla Abrahamsson is the Chief Operating Officer and joined in 2019. Abrahamsson has more than 25 years of experience in the medical science field, with 15 years dedicated to product development, innovation and life science. Abrahamsson holds a PhD

in anesthesiology from Umeå University. Stock ownership including relatives: 7,125 shares. Warrants TO A2 2021/2025: 8,000.

Marina Norberg is the Chief Financial Officer and joined Lipum in 2020. Norberg has extensive experience as an approved auditor at **PwC** and as an authorized accounting consultant at **Aspia**. Stock ownership including relatives: 16,300 shares. Warrants TO A2 2021/2025: 4,000.

Lennart Lundberg co-founded Lipum and is currently a member of its scientific advisory board. Previous experiences include several positions at **AstraZeneca**, the most recent as a business development manager. Lundberg has a PhD in biotechnology from the **University of Gothenburg**. Stock ownership of 264,006 through his company LGL Bioconsult.

Chronic inflammatory diseases

Inflammation is a natural part of the body's defences. The condition can become chronic when the acute inflammation does not go away but lingers and puts the body in a permanent inflammatory state. A large number of different conditions are related to varying degrees of chronic inflammation such as rheumatic diseases, diabetes, asthma, cardiovascular disease, inflammatory bowel disease and certain types of cancer.

Need for safer treatments

There is an ever-increasing need for safer and more effective treatments for patients suffering from disabling chronic inflammatory diseases. Today, a significant group of patients lack adequate treatment options.

This also implies significant societal costs. Inflammatory diseases inflict a cost to the US healthcare system of about BUSD 90 annually.[3]

Lipum focuses on rheumatoid arthritis

Lipum has chosen to focus its development work on the treatment of RA as a model indication. RA is the most common of the approximately 100 different rheumatic diseases. In 2020, around 18 million people were estimated to be affected globally.[4] [5]

Rheumatoid arthritis

RA is an autoimmune disease characterised by chronic joint inflammation. The disease is significantly more common in women than men. Symptoms include joint pain, tenderness, redness, heat build-up, swelling, stiffness and, in case of inadequate treatment, deformity.

The condition usually affects both major and minor joints where constant inflammation can result in major damage to cartilage and neighbouring bones, tendons, and blood

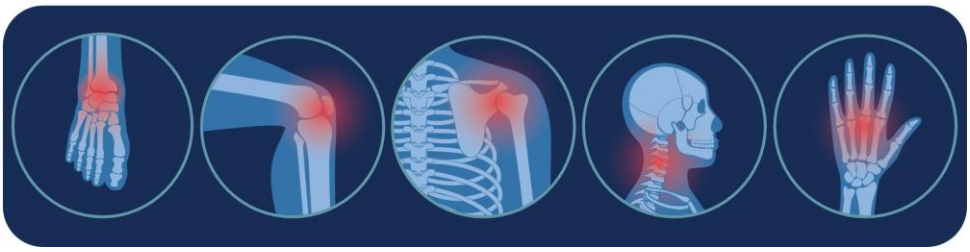
[3] Wylezinski et al., (2019), *Iluminating an Invisible Epidemic: A Systemic Review of the Clinical and Economic Benefits of Early Diagnosis and Treatment in Inflammatory Disease and Related Syndromes*, J Clin Med, https://doi.org/10.3390/jcm8040493

[4] The Lancet Rheumatology, (2021), *Global, regional, and national burden of rheumatoid arthritis, 1990–2020, and projections to 2050: a systematic analysis of the Global Burden of Disease Study 2021*, Volume 5, Issue 10, Pages e594-e610. GBD 2021 Rheumatoid Arthritis Collaborators, https://www.thelancet.com/journals/lanrhe/article/PIIS2665-9913(23)00211-4/fulltext

[5] United States Bone and Joint Initiative, (2024), *The Burden of Musculoskeletal Diseases in the United States* (BMUS), Fourth Edition, 2020. Rosemont, IL., February 2024, https://www.boneandjointburden.org/fourth-edition/iiib21/rheumatoid-arthritis

vessels and ultimately destruction of the joint. In some cases, extra-articular manifestations may occur, i.e. organs other than the joints are affected.[6]

Picture 1: Affected areas



Source: Lipum

In the past decades, the way to treat RA has shifted. From initial treatment with non-steroidal anti-inflammatory drugs (NSAIDs), followed by progressive addition of disease-modifying antirheumatic drugs (DMARDs), to the current treatment approach of initiation of DMARD therapy soon after the diagnosis of RA has been made. This change is supported by data showing improved prognosis and outcomes with the initiation of DMARD therapy early in the disease progression.[7]

However, according to Lipum, the treatment options have not always met the needs of RA patients. Insufficient efficacy, tolerance difficulties and increased susceptibility to infection are problems related to current alternatives.

Treatment methods

30 per cent require other treatments

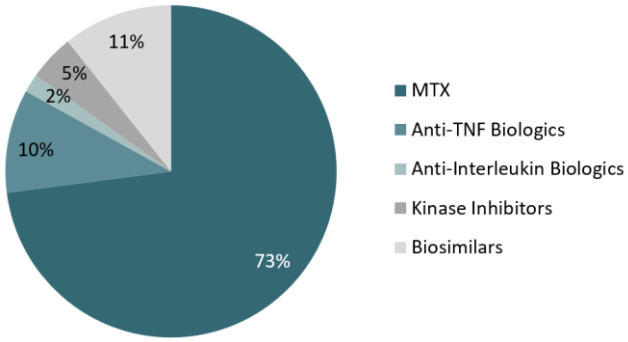
For RA patients with moderate to high disease activity, methotrexate (MTX) monotherapy is often recommended as the first-line treatment. MTX is a conventional disease-modifying antirheumatic drug (csDMARD) that suppresses the immune system to control inflammation. However, around 30 per cent of patients require more advanced treatment with biological drugs (bDMARDs), mainly TNF-α inhibitors. Also, targeted synthetic DMARDs (tsDMARDs), such as janus kinase (JAK) inhibitors have emerged as an alternative for a large patient group.[8] Despite significant progress in the last two decades, many patients still experience a lack of efficacy or problematic side effects.

[6] Mayo Foundation for Medical Education and Research, (2023), https://www.mayoclinic.org/diseases-conditions/rheumatoid-arthritis/symptoms-causes/syc-20353648

[7] Demoruelle and Deane, (2012), *Treatment strategies in early rheumatoid arthritis and prevention of rheumatoid arthritis*, Curr Rheumatol Rep, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3616381/

[8] Smolen et al., (2022), *recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2022 update*, EULAR, Ann Rheum Dis 2023;82:3–18, https://doi.org/10.1136/ard-2022-223356

Graph 1: Treatment methods



Source: GlobalData

SOL-116

Lipum's biological drug candidate SOL-116 is a humanised antibody aimed to block BSSL in the immune system. The ambition is to provide a safer and more efficacious alternative compared to conventional treatments.

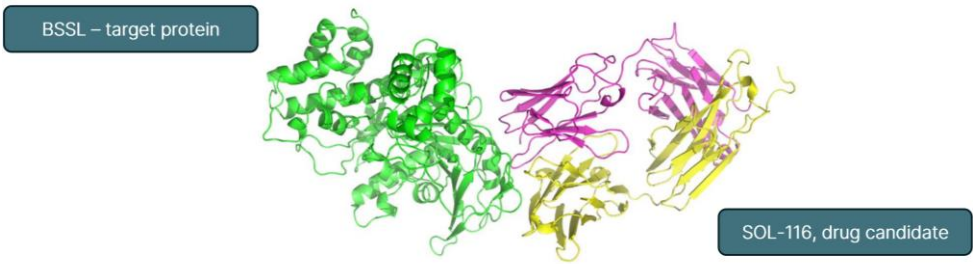
SOL-116 blocks BSSL

The development of SOL-116 involved the preparation of a long series of experimental antibodies that were used and studied in preclinical trials. In 2016, with support from the Swedish research centre Science for Life Laboratories (SciLifeLab), Lipum developed an antibody with a potentially therapeutic effect that could bind to and inhibit the inflammatory properties of BSSL. After extensive screening and further development work, SOL-116 was selected as a drug candidate in the summer of 2019.

Milder side effects

Based on the data available, Lipum assesses that SOL-116 has a less negative effect on the immune system through its mechanism of action. Thus, the company expects fewer and milder side effects than current csDMARDs. SOL-116 could become an available option if first-line treatment fails. Additionally, it could also replace other bDMARDs and tsDMARDs or be used in combination with other therapies.

Picture 2: SOL-116 blocking the BSSL molecule



Source: Lipum

Biological medicines are characterised by the fact that the active substance has been produced by living cells or from biological material. The most common type is antibodies, which are proteins with a complex structure that have a high selectivity to bind and inhibit other biological or synthetic substances. In this way, they can prevent or slow down a process in the body that causes or accelerates disease.

An advantage of antibodies compared to small synthetic molecules is that antibodies can be targeted more specifically and that the link between the antibody and its target is very strong. This is reflected, among other things, by the increasing number of antibody medicines receiving market authorisation.[9] [10]

Of all the medicines entering clinical trials, biologics stand out as being more successful in achieving regulatory approval.[11] [12] [13]

Another difference compared to synthetic small molecules is the need to invest in manufacturing early in the process, which can make the initial development costs of antibody drugs higher. The most obvious difference for the patient is that the drug is not in tablet form but is usually administered through injection or infusion.

Additional potential of SOL-116

A large number of conditions are related to chronic inflammation, as accounted for above. Lipum will use RA as a model indication, and the company will continue to explore whether SOL-116 could have therapeutic potential in other indications.

Patent submitted within cancer

In April 2024, Lipum submitted a patent application regarding SOL-116 in inflammation-driven cancer. Inflammation can drive cancer and SOL-116 has in preclinical trials, by blocking BSSL, been shown to inhibit the growth of patient-derived cancer tumours, indicating the potential for the treatment of various inflammatory diseases with the drug candidate.

Phase I initiated in 2022

In October 2022, Lipum initiated a randomised, double-blind and placebo-controlled phase I study with SOL-116 including 40 subjects. Since then, the company has reported positive interim results from the single ascending dose part of the study. The data shows that SOL-116 is well-tolerated with few and no serious adverse events observed at five dose levels.

The interim data also indicate that the drug candidate shows expected and preferred pharmacokinetic properties, meaning that SOL-116 was well absorbed and had a half-life of 20 days. Further, the drug candidate reduced the amount of BSSL in plasma to undetectable levels after three days, a level which was maintained for 90 days post-dose. The results suggest that SOL-116 is a potent BSSL-binding antibody that can effectively eliminate freely circulating BSSL in humans after a single dose of SOL-116.

The company is evaluating the participants in the second part, the multiple ascending dose study. This part included eight healthy subjects each receiving four doses of the antibody or a placebo about one month apart.

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[9] Lu, Hwang, Liu et al., (2020), *Development of therapeutic antibodies for the treatment of diseases*, J Biomed Sci 27, https://doi.org/10.1186/s12929-019-0592-z

[10] Crescioli et al., (2024), *Antibodies to watch in 2024,* mAbs, 16(1), https://doi.org/10.1080/19420862.2023.2297450

[11] BIO, Biomedtracker, Amplion, (2016), *Clinical Development Success Rates 2006–2015*, https://www.bio.org/sites/default/files/legacy/bioorg/docs/Clinical%20Development%20Success%20Rates%202006-2015%20-%20BIO,%20Biomedtracker,%20Amplion%202016.pdf

[12] BIO, Informa Pharma Intelligence, and QLS Advisors, (2021), *Clinical Development Success Rates and Contributing Factors 2011–2020*, https://www.bio.org/clinical-development-success-rates-and-contributing-factors-2011-2020

[13] Hay et al., (2014), *Clinical development success rates of investigational drugs*, Nature Biotechnology 32, 40-51, https://doi.org/10.1038/nbt.2786

Phase I to be concluded in 2024

In the third part of the phase I study, eight patients with RA will each receive one dose of SOL-116 or a placebo. The first patient was included in March 2024 and the recruitment of the remaining patients is ongoing.

The phase I study is expected to be concluded during the second half of 2024.

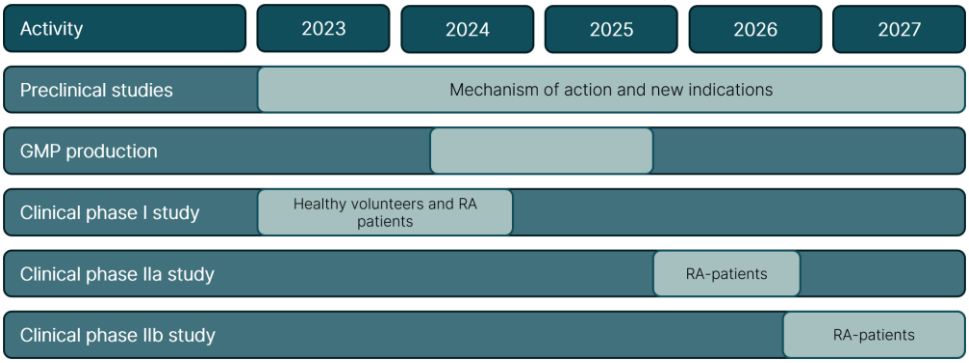
Further clinical development

Phase II

Lipum has started working on the appropriate design for the next stage of the development. The final clinical protocol for the study will be finalised when the phase I study is completed and evaluated.

The tentative plan includes a double-blind and placebo-controlled study in two parts, a dose-finding phase IIa part and subsequently a phase IIb, aiming to evaluate the efficacy of the drug candidate in RA patients. Lipum's communicated timeline is provided in table 3.

Table 3: Lipum's estimated timeline

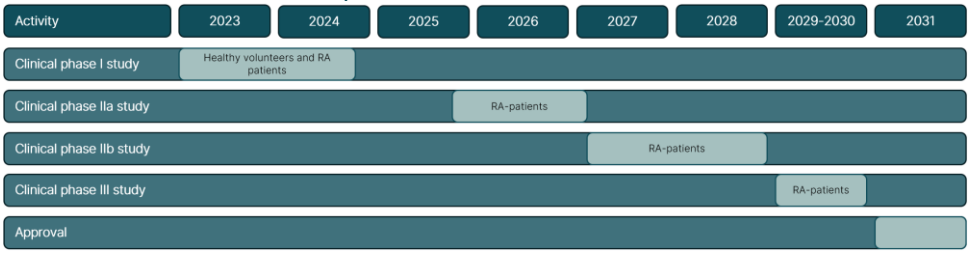


Source: Lipum, GMP = Good manufacturing practice

Estimated to reach the market in 2031

In our model, we forecast a similar timeline but with some delay. We account for unexpected events regarding financing, production, planning, and execution which could affect the timeline. We estimate that the phase I study will be completed in 2024 and that phase II will be initiated in late 2025 and completed in late 2028. We estimate that phase III will be conducted between 2029 and 2030 and that Lipum will receive regulatory approval in 2031 and will be able to start marketing SOL-116 by that same year. The first sales of SOL-116 are estimated to be generated in 2031.

Table 4: Västra Hamnen Corporate Finance's estimated timeline



Source: Västra Hamnen Corporate Finance

Production

Lipum is dependent on subcontractors to manufacture SOL-116 following applicable regulatory requirements. In 2019, Lipum entered an agreement with **Abzena** regarding the development and production of Lipum's drug candidate SOL-116. This collaboration continues throughout the completion of the phase I programme. Abzena will perform its existing commitments regarding stability analyses and more until at least May 2025. After that, the collaboration will end.

Agreement with NorthX Biologics

In February 2024, Lipum and NorthX Biologics entered an agreement regarding production-related research, development and manufacturing of SOL-116 intended for use in Lipum's phase II trial.

What is the market potential?

RA as the model indication

Estimated total market of BSEK 288

To estimate Lipum's total addressable market, we have chosen the US, EU4 (Germany, France, Italy, and Spain), the UK, and Japan. The total population in this region amounts to 786 million of which 628 million are 18 or older.[14] We assume the RA prevalence to be 0.8 per cent based on sources stating an interval of 0.6-1.0 per cent. Of this group, 75 per cent have moderate or severe symptoms.[15] [16] Firstly, RA is treated with a conventional csDMARD such as MTX, but around 30 per cent are non-responders and need a different treatment method.[17] This group is Lipum's addressable market. We estimate the number of patients to be around 1.1 million. With an estimated yearly treatment cost of SOL-116 amounting to TSEK 255, the total market value is BSEK 288. See section *Prices* for more details.

Table 5: Total addressable market

Number of patients (millions)	Share of population	US	EU4+UK	Japan	Sum
Total population		340.0	322.2	123.3	785.5
Total population over 18 years	80%	272.0	257.7	98.6	628.4
Prevalence > 18 years	0.80%	2.2	2.1	0.8	5.0
Moderate and severe	75%	1.6	1.5	0.6	3.8
Non responders of first line treatment	30%	0.5	0.5	0.2	**1.1**

Source: Population Pyramid, Xu and Wu (2021), *WHO, Smolen et al.* (2022)

How is the competitive situation?

Leading treatments is based on TNF-α inhibitors

Lipum's ambition is to address patients not responding adequately to MTX or any other first-line treatment. Second-line treatments include bDMARDs, tsDMARDs, and other alternative approaches under development.

The leading biological treatment is based on TNF-α inhibitors, such as AbbVie's *Humira*, Amgen's *Enbrel*, and UCB's *Cimzia*. In 2023, these drugs generated sales of BUSD 14.4, BUSD 3.7, and BEUR 2, respectively. The original TNF-α inhibitors are now challenged by biosimilars pressing prices on the leading markets.[18] [19] [20]

In the Nordics, SynAct Pharma and Cyxone are two listed companies developing new treatments for RA patients not responding adequately to MTX.

SynAct Pharma

SynAct Pharma is a clinical-stage biotechnology company focused on the resolution of inflammation through the selective activation of the melanocortin system. SynAct is

[14] PopulationPyramid.net, (2023), https://www.populationpyramid.net/

[15] Xu and Wu, (2021), *Prevalence Trend and Disparities in Rheumatoid Arthritis among US Adults, 2005-2018*. J Clin Med. 2021 Jul 26;10(15):3289, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8348893/#B3-jcm-10-03289

[16] World Health Organization, (2023), https://www.who.int/news-room/fact-sheets/detail/Rheumatoid-arthritis

[17] Smolen et al., (2022), *recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2022 update*, EULAR, Ann Rheum Dis 2023;82:3–18, https://doi.org/10.1136/ard-2022-223356

[18] AbbVie, (2024), https://news.abbvie.com/2024-02-02-AbbVie-Reports-Full-Year-and-Fourth-Quarter-2023-Financial-Results

[19] UCB, (2024), https://www.ucb.com/investors/download-center

[20] Amgen, (2024), https://www.amgen.com/newsroom/press-releases/2024/02/amgen-reports-fourth-quarter-and-full-year-2023-financial-results

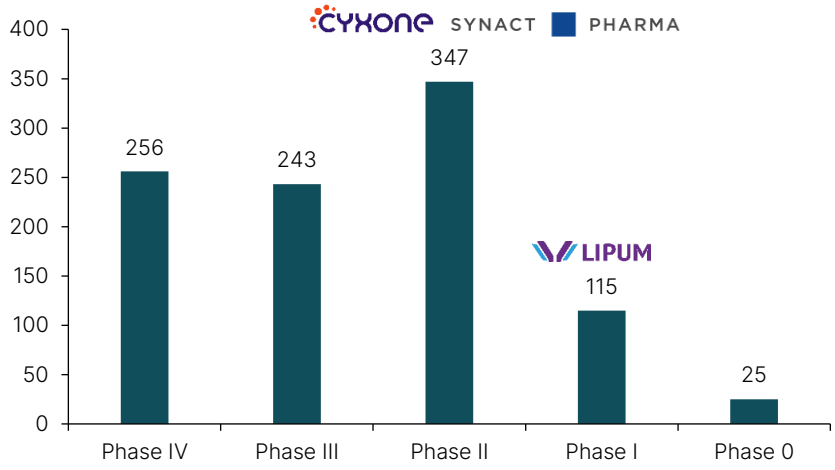
currently in a phase II study with their lead drug candidate *resomelagon (AP1189)* which is intended to be used alongside MTX in treatment. The company aims to induce anti-inflammatory and inflammation resolution activity in autoimmune and inflammatory diseases through a broad portfolio of oral and injectable selective melanocortin agonists.[21]

Cyxone

Cyxone is a clinical-stage biotechnology company specialising in the development of new treatments for autoimmune and autoinflammatory diseases. The lead drug candidate *rabeximod*, is a small molecule drug candidate, currently in phase II. It is directed to patients suffering from moderate to severe RA and will be positioned to patients not benefitting from first-line treatment or bDMARDs, including TNFα inhibitors.[22]

In conclusion, competition in the market of RA drugs is strong, and many new projects are under development. There are currently 986 clinical RA trials registered globally, but how many of these are likely to be biopharmaceuticals similar to Lipum is unknown.

Graph 2: Global clinical trial overview



Source: GlobalData

Prices

Estimated price for SOL-116 of TUSD 25

The current prices for second-line RA treatments are high with a median cost of TUSD 77.[23] We believe increased competition from biosimilars and drugs with new mechanisms of action in the coming years will lower the overall price point. We find it reasonable to expect that biosimilars of Humira and Cimzia whose patents expired in 2023 and 2024 respectively, will enter the market in the short to mid term. The 32 per cent decline in Humira sales in 2023 is evidence for this effect.

We believe a reasonable price for SOL-116 is around TUSD 25. In our model, we have used a price of TUSD 25 for SOL-116 in the US and TUSD 10 in Lipum's other markets.

[21] SynAct Pharma, (2024), https://synactpharma.com/sv/

[22] Cyxone, (2024), https://cyxone.com/

[23] Drugs.com, (2024), https://www.drugs.com/

Table 6: Price comparison (USD)

Drug	Type	Recommended dose (RA)	Price per dose	Price per year
Humira	TNF inhibitor	40 mg every other week	3 120	81 120
Cimzia	TNF inhibitor	400 mg monthly	5 720	68 640
Enbrel	TNF inhibitor	50 mg weekly	1 850	96 200
Simponi	TNF inhibitor	50 mg monthly	6 435	77 220
Olumiant	JAK inhibitor	2 mg daily	96	35 210
Xeljanz	JAK inhibitor	10 mg daily	182	66 430
Rinvoq	JAK inhibitor	15 mg daily	214	78 244
Yearly average cost				71 866
Yearly median cost				77 220
SOL-116				**25 000**

Source: Drugs.com, Västra Hamnen Corporate Finance

Patent expires in 2040

To remain competitive, patents are deciding factors. Lipum's most important patent regarding anti-BSSL antibodies will expire in 2040. The years between commercialisation and patent expiry are vital for the company to capture market share and generate sales. After the patent expiry, the market is likely to be supplied by biosimilars which increases supply and decreases Lipum's market share and the drug price.

Table 7: Patent overview

Patent family	Patent publication	Title	Status	Valid until
BSSL within inflammation	WO2010117325	*New methods for treatment of inflammatory diseases*	Patents in Australia, France, Ireland, Italy, Canada, China, the Netherlands, New Zealand, Switzerland, Spain, United Kingdom, Sweden, Germany and USA. Patent application submitted to the European Patent Office	2030
Anti-BSSL antibodies	WO2021010888A1	*Novel BSSL antibodies*	Patent application in Australia, Brazil, Hong Kong Kong, India, Israel, Japan, Canada, China, Mexico, Russia, Singapore, South Africa, South Korea and USA. Patent application submitted to the European Patent Office	2040
Cancer treatment	N/A	*Novel use of anti-BSSL antibodies*	Patent Cooperation Treaty (PCT) application	2043

Source: Lipum

What is the earnings outlook?

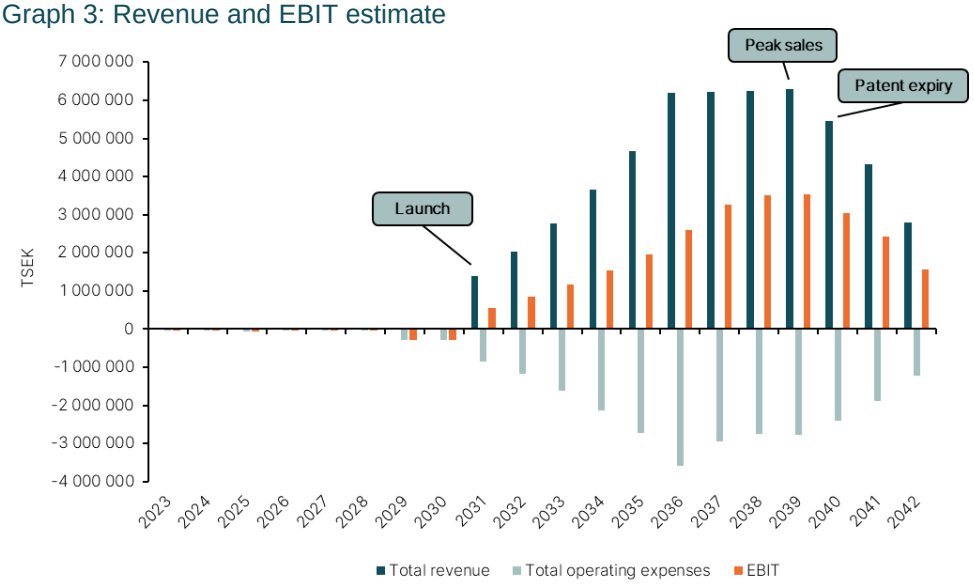
In our model, we project that SOL-116 will reach the market in 2031. Graph 3 shows that the company will generate sales of MSEK 1,382 and a net profit of MSEK 541 in 2031. This is calculated based on an estimated net price of SOL-116 of TSEK 255 in the US and TSEK 102 in EU4, UK and Japan. We have used a gross-to-net price of 80 per cent, representing a 20 per cent discount to distributors compared to end customers, following the industry benchmark.[24]

5 per cent market share in 2037-2039

We estimate that the commercialisation of SOL-116 will follow a launch curve, reaching a market share of 5 per cent in 2039, with peak sales of MSEK 6,294 the same year. Thereafter, sales are estimated to decline due to patent expiry in 2040 and increased competition from biosimilars and other treatments. Treated patients in 2039 are estimated to be 46,000.

[24] Thornblad and Carlsson (2021), *Biotech Valuation, A playbook for dealmakers*, MSC Nordics

Graph 3: Revenue and EBIT estimate



Source: Västra Hamnen Corporate Finance

On the cost side, we estimate the total costs associated with the clinical development to amount to MSEK 831.

Table 8: Cost overview

Phase I to approval			
2024	2025-2028	2029-2030	2031
▪ Complete phase I, MSEK 67	▪ Phase II, MSEK 152	▪ Phase III, MSEK 561	▪ Approval and launch costs, MSEK 51

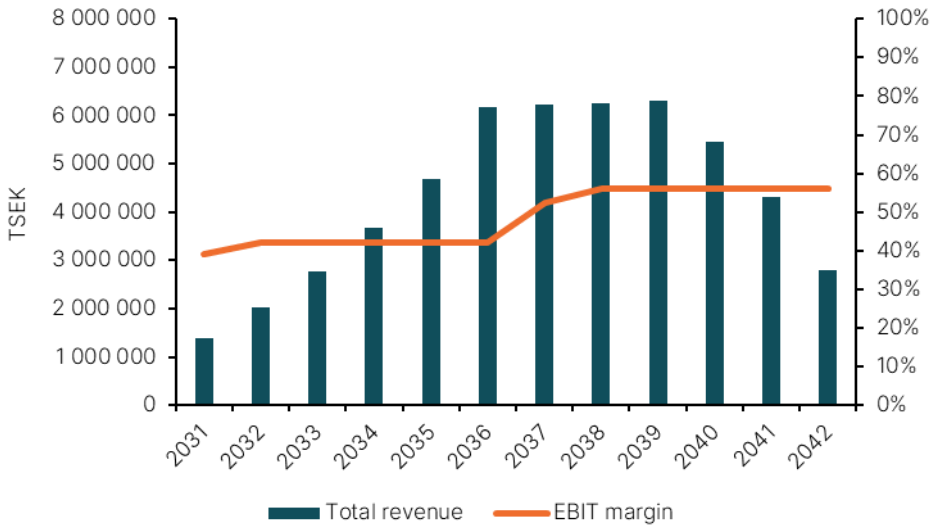
Source: Västra Hamnen Corporate Finance

EBIT-margin of 39 to 56 per cent

After launch, we have modelled for different cost items as a percentage of sales, according to industry benchmarks.[25] The cost of goods sold (COGS) is 18 per cent of sales in our model. We assume selling, general and administrative expenses (SG&A) to be 20 per cent until peak market share in 2037, and six per cent thereafter. Research and development (R&D) amount to 20 per cent of sales in our model.[26] Hence, the EBIT margin will initially be 39 per cent during launch, and it will increase to 56 per cent from 2038 until the end of our projection period.

[25] Thornblad and Carlsson (2021)
[26] Ibid.

Graph 4: EBIT margin

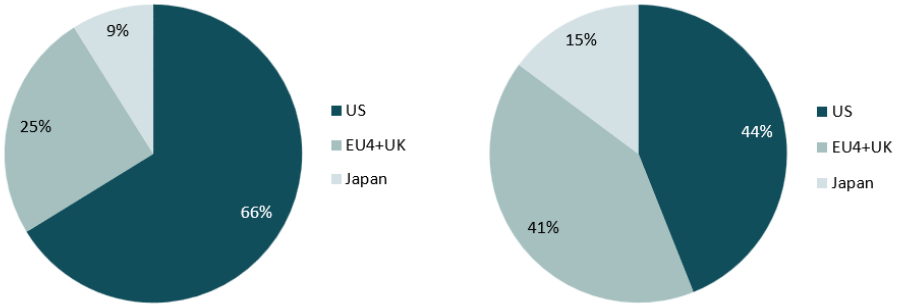


Source: Västra Hamnen Corporate Finance

The US to be the largest market

We assume a similar launch curve in all regions. The US, EU4, the UK and Japan are estimated to be in similar size in terms of treated patients. Due to a higher price level in the US, we estimate that this market will account for 66 per cent of Lipum's total sales in 2039, the peak year.

Graph 5: Sales split by region 2039 (left), treated patients split by region 2039 (right)



Source: Västra Hamnen Coprorate Finance

46,000 treated patients at peak

To conclude, we expect Lipum to reach commercialisation in 2031, generating sales of MSEK 1,382 and a net profit of MSEK 541. Sales will follow a launch curve, reaching peak sales of MSEK 6,257 in 2039, representing a 5 per cent market share and 46,000 treated patients. We expect Lipum to achieve an EBIT margin of 39 to 56 per cent and the US to be its largest market.

What is the cash situation?

Additional funds needed for phase II

By Q1 2024, Lipum reported cash holdings of MSEK 1.5. In April 2024, Lipum carried out a share issue, adding MSEK 73 after transaction costs. This capital injection will be visible in the Q2 report. The capital raised will finance the planning of the next clinical stage and the production of the drug candidate for this purpose. Lipum also received a loan commitment of MSEK 20 from Flerie Invest.

We model that Lipum will have to raise additional funds of MSEK 100 by Q4 2025 to fund the phase II study. Moreover, we see additional financing of MSEK 612 for a future phase III study, the filing and approval process, and the market launch of SOL-116.

What is behind the numbers?

Deferred tax asset

Accumulated losses of MSEK 172

In our research we try to look beyond the reported numbers to see if the company uses accounting methods or reports items off the income statement or balance sheet, that could impact our interpretation of its official figures. The underlying financials of the company could be stronger or weaker than they look at first glance and this could be important for our valuation.

Due to previously reported losses, we estimate that Lipum has accumulated losses of MSEK 172. Due to the uncertainty of when the firm would reach profitability, the deferred tax asset is not recognised on the balance sheet.

Incurred losses can be used to offset future tax payments, we estimate that the company's accumulated loss of MSEK 172 will grow to MSEK 943 in 2031 before Lipum's first year of profitability in 2031. We estimate that this tax asset will decrease until mid-2032 when Lipum will start paying taxes.

The convertible loan

A convertible bond with conversion in 2025

Norrlandsfonden, a Swedish foundation, held a convertible bond of nominally SEK 2,000,000 with conversion by the end of 2025. The loan matures in Q1 2026. The loan carries an annual interest of STIBOR 90 plus three per cent. The conversion share price was set to SEK 32.2 and has not changed. In connection with Flerie Invest's mandatory bid to Lipum's shareholders in March 2024, Flerie also included the convertible loan at nominal value. Norrlandsfonden accepted the offer, which means that Flerie Invest holds the convertible bond from Q2 2024 onwards.

What could go wrong?

Financial risk

Drug development is costly, lengthy, and uncertain. As accounted for, Lipum will need to raise capital to advance SOL-116 in its clinical development in RA. The company is also exploring other indications for the drug candidate which may require additional external funding.

Committed and financially solid main shareholders, such as Flerie Invest, the Craaford Foundation and others, diminish some of the funding risks. However, Lipum will still need to raise a significant amount of capital to reach its strategic goal of achieving proof of concept for SOL-116 in clinical phase II.

Development risk

This is the largest risk for any drug-developing company. Lipum is concluding its first-in-human study in 2024. Promising readouts at this stage do not guarantee that SOL-116 will meet its endpoints in phase II.

SOL-116 is Lipum's only drug candidate. If not successful in clinical trials, the company has to evaluate the BSSL approach to find arguments for further development.

Commercialisation risks

The market for RA treatments is crowded. Even if Lipum is targeting a large patient group that currently lacks adequate treatment options, several new approaches are under development. Lipum needs to strategically, clinically and commercially convince a future partner of SOL-116's potential.

Competition from biosimilars and new treatments could change market prices more than in our model and affect profitability.

People

Lipum is a small organisation and is highly dependent on keeping the staff. Development plans and timelines could be severely affected if Lipum is not able to keep its personnel.

What is the fair value of the share?

DCF valuation

Our DCF calculation comprises two steps, see the appendix for details of the method. In the first step, we estimate the fair enterprise value based on our estimated projections. In the second step, we multiply the enterprise value with a risk coefficient, reflecting the probability of it reaching our forecast. This method is recommended for developing companies before reaching sustainable profits. See the *What is the earnings outlook?* segment for estimates, assumptions and calculations.

We derive the discount factor, the weighted average cost of capital (WACC), from the *capital asset pricing model* (CAPM). We use benchmarks for the equity risk premium and additional risk premia associated with smallcap companies as accounted for in PwC's report *Equity Risk Premium on the Swedish market* from 2023.[27] We also include the interest rate from Lipum's long-term debt. The WACC in our model amounts to 21.6 per cent.

Moreover, we have used a terminal growth rate of 2 per cent.

Table 9: DCF model assumptions

DCF model assumptions

MSEK	2023	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	2036e	2037e	2038e	2039e	2040e	2041e	2042e
Total revenues	0.2	0.1	-	-	-	-	-	-	1 382.0	2 024.7	2 766.6	3 670.0	4 675.9	6 184.5	6 220.6	6 257.1	6 293.8	5 444.5	4 314.5	2 802.5
EBIT	-37.3	-43.2	-54.2	-46.7	-36.5	-37.3	-280.4	-281.2	541.4	850.3	1 161.9	1 541.3	1 963.8	2 597.3	3 266.2	3 503.8	3 524.4	3 048.8	2 415.9	1 569.2
EBIT margin	neg	neg	neg	neg	neg	neg	neg	neg	neg	42.0%	42.0%	42.0%	42.0%	42.0%	52.5%	56.0%	56.0%	56.0%	56.0%	56.0%
Adj. taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-92.4	-239.3	-317.5	-404.5	-535.1	-672.8	-721.8	-726.0	-628.0	-497.7	-323.3
NOPLAT (= EBIT - taxes)	**-37.3**	**-43.2**	**-54.2**	**-46.7**	**-36.5**	**-37.3**	**-280.4**	**-281.2**	**541.4**	**757.9**	**922.5**	**1 223.8**	**1 559.2**	**2 062.3**	**2 593.3**	**2 782.0**	**2 798.4**	**2 420.7**	**1 918.2**	**1 246.0**
Depreciation	-0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Capex + change in NWC	0.7	1.1	0.3	0.3	0.3	0.4	0.4	0.4	104.6	35.7	47.9	64.2	65.0	73.4	2.1	2.1	2.1	-55.1	-72.3	-98.0
Unlevered free cash flow	**-36.6**	**-42.1**	**-53.8**	**-46.4**	**-36.2**	**-36.9**	**-279.9**	**-280.8**	**646.1**	**793.7**	**970.5**	**1 288.1**	**1 624.3**	**2 135.9**	**2 595.6**	**2 784.3**	**2 800.7**	**2 365.8**	**1 846.1**	**1 148.2**

DCF	
WACC	21.6%
Enterprise value (EV)	1 551.2
LOA	14.8%
Risk adjusted EV	229.6
Warrants	0.0
Net debt	-0.3
Equity value	**229.3**
Shares outstanding	21.21
Fair value share price (SEK)	**10.81**

Sensitivity analysis (value per share, SEK)

WACC \ LOA	4.8%	9.8%	**14.8%**	19.8%	24.8%
19.6%	4.49	9.18	13.87	18.57	23.26
20.6%	3.96	8.10	12.24	16.37	20.51
21.6%	3.50	7.15	**10.81**	14.47	18.12
22.6%	3.09	6.33	9.56	12.80	16.03
23.6%	2.74	5.60	8.47	11.34	14.20

Källa: Västra Hamnen Corporate Finance

Source: Västra Hamnen Corporate Finance

[27] PwC Riskpremiestudien 2023. https://www.pwc.se/sv/corporate-finance/riskpremiestudien.html

LOA of 14.8 per cent

To adjust for the development risk, we use a likelihood of approval (LOA) to be 14.8 per cent from phase I to approval for SOL-116. This specific probability is a benchmark for the development of biologic drug candidates. The LOA is applied to the final enterprise value in our DCF valuation.

We estimate a fair value per share of SEK 10.81

Partnership deals

Median deal of MUSD 116

In this scenario, we have valued Lipum based on partnership deals made in the sector. According to Thornblad and Carlsson, the median partnership deal value (out of 148 deals) within immunology and inflammation between 2008 and 2018 was MUSD 116. This total value includes upfront payment and milestone payments but to simplify we have modelled that the total deal value will occur in 2029 to finance and complete the phase III study.

If we discount this value with our WACC and apply an EV/Sales multiple of 3x we get an enterprise value of MSEK 1,338. In this scenario, we have chosen an EV/sales multiple of 3x based on a discount to peers Sobi and Calliditas which are valued at 5x. We then apply an LOA of 14.8 per cent, adjust for net debt and divide by the outstanding shares we get a share price of SEK 9.32.

Table 10: Calculation overview

TSEK	Median	Number of deals
Immunology och inflammation	1 185 520	148
Discounted value (t=5, Wacc=21,6%)	445 992	
EV/Sales	3x	
EV	1 337 975	
LOA	14.8%	
Risk adjusted EV	198 020	
- Debt	-1 761	
+ Cash	1 473	
Equity value	197 732	
Share price (SEK)	9.32	

Source: Thornblad and Carlsson, CapitalIQ, Västra Hamnen Corporate Finance

Table 11: Sensitivity analysis

		LOA				
		4.8%	9.8%	**14.8%**	19.8%	24.8%
EV/Sales	1x	1.00	2.05	3.10	4.15	5.20
	2x	2.00	4.11	6.21	8.31	10.41
	3x	3.01	6.17	**9.32**	12.48	15.63
	4x	4.02	8.23	12.43	16.64	20.84
	5x	5.03	10.29	15.54	20.80	26.06

Source: CapitalIQ, Västra Hamnen Corporate Finance

A recent example of a deal is **Alfasigma's** acquisition of *Jyseleca*, a JAK inhibitor, from **Galapagos** in January 2024 for a total deal value of up to MUSD 158. Alfasigma adds to its product portfolio an innovative and specialised pharmaceutical in the gastrointestinal and rheumatological areas.[28] As can be seen in table 12, these deal values can range from MUSD 80-6,500, compared to Lipum's current market cap of MUSD 11.5.

[28] Alfasigma Group, (2024), https://www.alfasigma.com/corporate/alfasigma-completes-transaction-to-acquire-the-jyseleca-business-from-galapagos-for-up-to-e170-million/

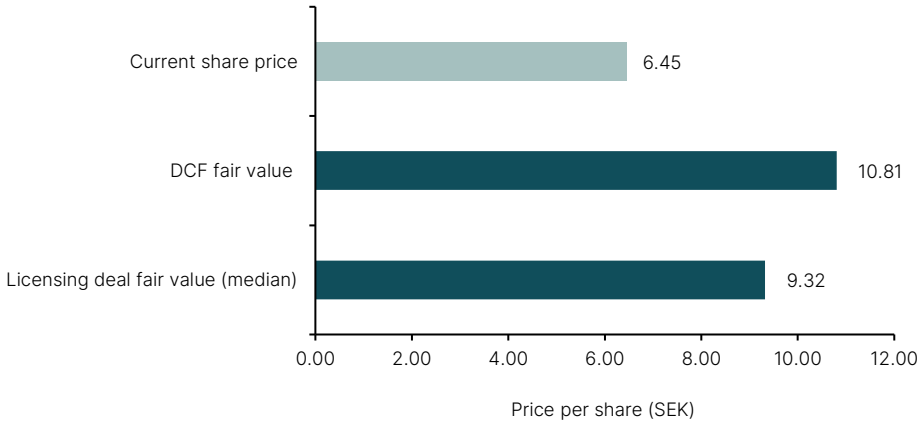
Table 12: Licence deals (MUSD)

Year	Licensee	Licensor	Area/drug/candidate	Upfront	Total value	Type
2024	Alfasigma	Galapagos	RA, Jyseleca	47	158	Acquisition
2024	Ono	Shattuck	Autoimmune diseases	10	227	Licence
2023	Gilead	EVOQ	RA and lupus		650	Licence
2023	Merck KGaA	Aqiiion	Autoimmune diseases	10	1 020	Licence
2023	Aditum	Daewoong	DWP213388	10	477	Licence
2023	BMS	Zenas	obexelimab	50		Licence
2022	Biogen	Xbrane	Xcimzane	8	80	Licence
2021	Pfizer	Imcyse	RA		180	Licence
2021	Biogen	Bio-Thera	BAT1806	30		Licence
2020	JNJ	Momenta	Autoimmune diseases		6 500	Acquisition
2020	Abbvie	Sosei Heptares	Autoimmune diseases	32	377	Licence

Source: Västra Hamnen Corporate Finance, Note: Alfasigma transaction in MEUR

To summarise the valuation, we see that the methods used imply an upside of around 70 per cent from today's level.

Graph 6: Valuation summary



Source: Västra Hamnen Corporate Finance

Potential triggers

Study results

Lipum is concluding its phase I study during the second half of 2024. The results from the last group, the one with RA patients, will be interesting for the coming development plans.

Licencing deals

A common practice in the life science industry is that larger pharmaceutical companies invest in smaller firms' development projects. In that sense, Lipum's strategy does not differ from the industry. A licencing deal after showing proof of concept in phase II will deliver significant value for the shareholders.

Additional indications

Lipum has chosen RA as the model indication. The company is hoping to find support to treat other diseases of chronic inflammation. During the spring of 2024, Lipum also filed for patents protecting SOL-116 when applied in certain cancer forms.

Funding

The rights issue that Lipum carried out in April 2024 will take the company through preparations for the phase IIa study. Resolving funding for the next clinical stage will be a milestone. We model that a phase IIa study could start by late 2025.

Upcoming events

Financial calendar

26 Jul 2024	Q2 report 2024
25 Oct 2024	Q3 report 2024
28 Feb 2025	Year-end report 2024

Appendix: Valuation method

Early-stage companies usually report negative net profits and may have many years left until they turn a profit. Sometimes they even have years until their first significant sales revenues. The difficulty in valuing growth companies with limited historical records is that the valuation rests on uncertain estimates of future earnings, more uncertain than for companies with years of stable profits on record. There is little in terms of historical figures on which to base estimates of future revenues, future profit margins and other items.

To handle these challenges, we choose to follow a generally accepted method for valuing growth companies described by finance professor Aswath Damodaran among others. Instead of scaling the discount rate (WACC) to account for all the risks and uncertainties associated with a young company, we use a two-stage valuation approach: [29]

- First, we estimate fair enterprise value under the explicit assumption that the company survives until its first year of sustainable profits. We use a WACC commensurate with the circumstances of the company once it reaches profitability.

- - Second, we adjust the estimated enterprise value by multiplying it with a probability factor reflecting the likelihood that the company survives.

With each passing period after the initial valuation, the probability factor may be adjusted based on the company's development and our updated assessment of its chances of survival.

Discount rate WACC

To estimate the fair value of the company, we use a well-established model to calculate the present value of future cash flows. In this model, there are several assumptions and parameters that we discuss here.

An important factor in the model is the discount rate for the future cash flows. We use the company's weighted average cost of capital (WACC) and other recognised risk premiums. The WACC is derived from the weighted cost of equity and debt. To calculate the cost of equity, we use the Capital Asset Pricing Model (CAPM), with an added small-cap premium:

$$Re = Rf + Rp + \beta(Rm - Rf)$$

[29] Damodaran, Aswath, (2009), Valuing Young, Start-up and Growth Companies: Estimation Issues and Valuation Challenges", Stern School of Business, New York University.

The risk-free rate (Rf), the market premium (Rm-Rf) and the small cap premium (Rp) are all taken from PwC's 2023 risk premium study.[30] The beta value for Lipum's share is based on beta values for peers. The process can be described in three steps:

1. First, we calculate each company's beta where, according to Koller et.al (2020), we used monthly returns over five years. As the identified peer companies are active on a global level, we have used the broad index S&P 500 as the market index.
2. We then calculate the unlevered beta for each company according to the formula: $\frac{B_L}{(1+\frac{D}{E}*(1-t))} = B_u$
   We can now calculate a median value of the beta values of the peer group without debt.
3. In the last step, we take into account the indebtedness of the Lipum according to the formula: $B_u * \left(1 + \frac{D}{E} * (1-t)\right) = B_L$

By taking the capital structure into account in the beta calculation, we create a more dynamic beta value. This approach captures a leverage effect on equity which increases as leverage increases.

To conclude, we get a WACC of 21.6 per cent.

Table 13: Glossary

Abbreviation	Name	Description
bDMARD	Biological disease-modifying antirheumatic drug	-II-
BSSL	Bile Salt Stimulated Lipase	Protein that contributes to efficient utilization of milk fat in breast fed infants
csDMARD	Conventional synthetic disease-modifying antirheumatic drug	-II-
DMARD	Disease-modifying antirheumatic drug	-II-
GMP	Good manufacturing practice	Minimum standard that a drug manufacturer has to meet in their production process
JAK	Janus Kinase	Family of intracellular, non-receptor tyrosine kinases that transduce cytokine-mediated signals via the JAK-STAT pathway
LOA	Likelihood of approval	The probability of getting a drug development from phase I to regulatory approval
MTX	Methotrexate	Chemotherapy agent and immune-system suppressant
RA	Rheumatoid arthritis	Chronic inflammatory disorder
TNF-α	Tumor necrosis factor alpha	Cytokine and member of the TNF superfamily, which consists of various transmembrane proteins with a homologous TNF domain
tsDMARD	Targeted synthetic disease-modifying antirheumatic drug	-II-

Source: Västra Hamnen Corporate Finance

[30] PWC, (2023), *Riskpremiestudien*, https://www.pwc.se/riskpremiestudien

Income Statement - Annual Data

TSEK	2022	2023	2024e	2025e	2026e	2027e	2028e	2029e
Net revenues	0	0	0	0	0	0	0	0
Other revenues	496	165	94	0	0	0	0	0
Total revenues	**496**	**165**	**94**	**0**	**0**	**0**	**0**	**0**
Cost of goods sold	0	0	0	0	0	0	0	0
Research and development cost	-31 606	-30 300	-35 933	-46 608	-38 564	-27 692	-27 692	-270 000
Personnel expenses	-6 189	-6 872	-7 334	-7 514	-8 134	-8 804	-9 530	-10 316
Sales expenses	0	0	0	0	0	0	0	0
Other operating income	0	0	0	0	0	0	0	0
Other operating expenses	-615	-207	-25	0	0	0	0	0
EBITDA	**-37 914**	**-37 214**	**-43 198**	**-54 123**	**-46 698**	**-36 497**	**-37 222**	**-280 316**
Amortisation & depreciation	-11	-40	-40	-41	-45	-50	-55	-61
EBIT	**-37 925**	**-37 254**	**-43 238**	**-54 164**	**-46 743**	**-36 547**	**-37 278**	**-280 377**
Financials, net	-160	76	-405	-493	-62	0	0	0
EBT	**-38 085**	**-37 178**	**-43 643**	**-54 657**	**-46 805**	**-36 547**	**-37 278**	**-280 377**
Taxes	0	0	0	0	0	0	0	0
Net profit	**-38 085**	**-37 178**	**-43 643**	**-54 657**	**-46 805**	**-36 547**	**-37 278**	**-280 377**
Earnings per share (SEK)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Growth (%)								
Net revenues	na	na	na	na	na	na	na	na
EBITDA	na	na	na	na	na	na	na	na
EBIT	na	na	na	na	na	na	na	na
Net profit	na	na	na	na	na	na	na	na
Of revenues (%)								
EBITDA margin	neg	neg	neg	neg	neg	neg	neg	neg
EBIT margin	neg	neg	neg	neg	neg	neg	neg	neg
EBT margin	neg	neg	neg	neg	neg	neg	neg	neg
Profit margin	neg	neg	neg	neg	neg	neg	neg	neg
Personnel costs	neg	neg	neg	neg	neg	neg	neg	neg
Total OPEX	neg	neg	neg	neg	neg	neg	neg	neg
Profitability (%)								
ROE	neg	neg	neg	neg	neg	neg	neg	neg
ROIC	neg	neg	neg	neg	neg	neg	neg	neg

Source: Västra Hamnen Corporate Finance

Balance Sheet - Annual Data

TSEK	2022	2023	2024e	2025e	2026e	2027e	2028e	2029e
Accounts receivables	0	0	0	0	0	0	0	0
Prepaid costs & accrued income	243	374	392	424	459	497	538	582
Inventories	0	0	0	0	0	0	0	0
Tax claims	0	0	0	0	0	0	0	0
Other short-term receivables	1 422	1 313	1 550	1 678	1 817	1 966	2 128	2 304
Cash and cash equivalents	32 837	10 226	41 010	86 681	38 467	702 298	665 429	385 493
Total current assets	**34 502**	**11 913**	**42 952**	**88 783**	**40 742**	**704 761**	**668 095**	**388 379**
Shares in subsidiaries	0	0	0	0	0	0	0	0
Tangible assets	49	197	198	219	241	266	294	325
Intangible assets	0	0	0	0	0	0	0	0
Financial assets	0	0	0	0	0	0	0	0
Total fixed assets	**49**	**197**	**198**	**219**	**241**	**266**	**294**	**325**
Total assets	**34 551**	**12 110**	**43 151**	**89 002**	**40 984**	**705 028**	**668 389**	**388 704**
Accounts payable	944	4 100	5 852	6 334	6 856	7 421	8 033	8 695
Short term tax liabilities	496	515	260	281	305	330	357	386
Short term debt	0	0	0	0	0	0	0	0
Other short term liabilities	228	230	169	163	162	162	162	162
Accrued cost & prepaid income	3 175	932	880	890	894	894	894	894
Total current liabilities	**4 843**	**5 777**	**7 161**	**7 669**	**8 217**	**8 807**	**9 446**	**10 138**
Long term liabilities	**1 661**	**1 761**	**1 761**	**1 761**	**0**	**0**	**0**	**0**
Total equity	**28 046**	**4 572**	**34 229**	**79 572**	**32 767**	**696 220**	**658 943**	**378 566**
Total equity and liabilities	**34 550**	**12 110**	**43 151**	**89 002**	**40 984**	**705 028**	**668 389**	**388 704**

Source: Västra Hamnen Corporate Finance

Cash flow statement

TSEK	2022	2023	2024e	2025e	2026e	2027e	2028e	2029e
Operating activities	-37 979	-37 038	-43 603	-54 616	-46 760	-36 497	-37 222	-280 316
Changes in w orking capital	-14 427	912	1 130	348	375	403	436	472
Investing activities	-60	-188	-42	-62	-68	-75	-83	-92
Financing activities	38 250	13 703	73 300	100 000	-1 761	700 000	0	0
Cash flow for the period	**-14 216**	**-22 611**	**30 784**	**45 670**	**-48 214**	**663 831**	**-36 869**	**-279 935**
Beginning cash balance	47 053	32 837	10 226	41 010	86 681	38 467	702 298	665 429
Ending cash balance	**32 837**	**10 226**	**41 010**	**86 681**	**38 467**	**702 298**	**665 429**	**385 493**

Source: Västra Hamnen Corporate Finance

Income Statement - Quarterly Data

TSEK	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024e	Q2 2024e
Net revenues	0	0	0	0	0	0	0	0
Other revenues	142	24	43	21	51	50	94	0
Total revenues	**142**	**24**	**43**	**21**	**51**	**50**	**94**	**0**
Cost of goods sold	0	0	0	0	0	0	0	0
Research and development cost	-8 660	-11 065	-5 410	-12 237	-4 922	-7 731	-7 259	-9 154
Sales expenses	-1 303	-1 722	-1 749	-1 692	-1 633	-1 798	-2 076	-1 718
Sales expenses	0	0	0	0	0	0	0	0
Other operating income	0	0	0	0	0	0	0	0
Other operating expenses	-58	-142	-25	-87	-55	-40	-25	0
EBITDA	**-9 879**	**-12 905**	**-7 141**	**-13 995**	**-6 559**	**-9 519**	**-9 266**	**-10 872**
Amortisation & depreciation	-3	-3	-3	-12	-13	-12	-12	-9
EBIT	**-9 882**	**-12 908**	**-7 144**	**-14 007**	**-6 572**	**-9 531**	**-9 278**	**-10 881**
Financials, net	-19	-109	-29	58	-33	80	-35	-123
EBT	**-9 901**	**-13 017**	**-7 173**	**-13 949**	**-6 605**	**-9 451**	**-9 313**	**-11 004**
Taxes	0	0	0	0	0	0	0	0
Net profit	**-9 901**	**-13 017**	**-7 173**	**-13 949**	**-6 605**	**-9 451**	**-9 313**	**-11 004**
Earnings per share (SEK)	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Y-o-Y Growth (%)								
Net revenues	na	na	na	na	na	na	na	na
EBITDA	na	na	na	na	na	na	na	na
EBIT	na	na	na	na	na	na	na	na
Net profit	na	na	na	na	na	na	na	na
Of revenues (%)								
EBITDA margin	neg	neg	neg	neg	neg	neg	neg	neg
EBIT margin	neg	neg	neg	neg	neg	neg	neg	neg
EBT margin	neg	neg	neg	neg	neg	neg	neg	neg
Profit margin	neg	neg	neg	neg	neg	neg	neg	neg
Personnel costs	neg	neg	neg	neg	neg	neg	neg	neg
Total OPEX	neg	neg	neg	neg	neg	neg	neg	neg
Profitability (%)								
ROE	-332.9%	-46.4%	-34.4%	-201.4%	-47.0%	-206.7%	196.4%	-17.2%
ROIC	neg	neg	neg	neg	neg	neg	neg	neg

Source: Västra Hamnen Corporate Finance

Balance Sheet - Quarterly Data

TSEK	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024e	Q2 2024e
Accounts receivables	0	0	22	0	0	0	0	0
Prepaid costs & accrued income	258	243	238	527	213	374	369	376
Inventories	0	0	0	0	0	0	0	0
Tax claims	0	0	0	0	0	0	0	0
Other short-term receivables	816	1 422	1 197	1 124	812	1 313	1 461	1 490
Cash and cash equivalents	9 482	32 837	26 765	12 364	17 551	10 226	1 473	64 453
Total current assets	**10 556**	**34 502**	**28 222**	**14 015**	**18 576**	**11 913**	**3 303**	**66 319**
Shares in subsidiaries	0	0	0	0	0	0	0	0
Tangible assets	52	49	46	222	209	197	184	189
Finacial assets	1 940	0	0	0	0	0	0	0
Intangible assets	0	0	0	0	0	0	0	0
Total fixed assets	**1 992**	**49**	**46**	**222**	**209**	**197**	**184**	**189**
Total assets	**12 548**	**34 551**	**28 268**	**14 237**	**18 785**	**12 110**	**3 487**	**66 508**
Accounts payable	1 650	944	2 308	2 609	1 712	4 100	5 514	5 624
Short term tax liabilities	81	496	469	485	516	515	245	250
Short term debt	1 940	0	0	0	0	0	0	0
Other short term liabilities	2 469	228	146	147	162	230	116	164
Accrued cost & prepaid income	1 868	3 175	2 810	2 410	681	932	593	1 154
Total current liabilities	**8 008**	**4 843**	**5 733**	**5 651**	**3 071**	**5 777**	**6 467**	**7 192**
Long term liabilities	**1 566**	**1 661**	**1 661**	**1 661**	**1 661**	**1 761**	**1 761**	**1 761**
Total equity	**2 974**	**28 046**	**20 874**	**6 925**	**14 053**	**4 572**	**-4 741**	**57 555**
Total equity and liabilities	**12 548**	**34 550**	**28 268**	**14 237**	**18 785**	**12 110**	**3 487**	**66 508**

Source: Västra Hamnen Corporate Finance

Cash flow statement

TSEK	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024e	Q2 2024e
Operating activities	-8 953	-10 557	-7 176	-13 961	-6 962	-9 463	-9 301	-10 995
Changes in w orking capital	597	4 041	1 098	-276	-1 954	2 044	548	688
Investing activities	0	0	0	-188	0	0	0	-14
Financing activities	127	36 244	0	0	13 733	100	0	73 300
Cash flow for the period	**-8 229**	**29 728**	**-6 078**	**-14 425**	**4 817**	**-7 319**	**-8 753**	**62 980**
Beginning cash balance	18 783	9 482	32 843	26 765	12 364	17 551	10 226	1 473
Ending cash balance	**9 482**	**32 837**	**26 765**	**12 364**	**17 551**	**10 226**	**1 473**	**64 453**

Source: Västra Hamnen Corporate Finance

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