

**Equity Research** 

# Lipum

Sector: Biotech

# Q4 2024: Boosted by positive clinical results

Redeye provides a research update following the Q4 report published by Lipum earlier today. While the company reported OPEX above our expectation following preparations ahead of the upcoming phase II trials, the focus is undoubtedly on the recent positive phase I topline results. We are encouraged to learn that the candidate demonstrated a robust safety and tolerability profile, predictable pharmacokinetics and successful suppression of the target protein (BSSL). Accordingly, we increase our valuation of Lipum to a base case of SEK24 (15).

### Summary of the Q4 report

In the last quarter of 2024, Lipum reported an operating profit (loss) of SEK-25.6m (-9.6), while free cash flow for the period amounted to SEK6.2m (-7.3). Lipum reported an OPEX at SEK-26.1m (-9.5). While we expected an increase in cash burn following intensified phase II trial preparations, this was above our estimates. Furthermore, the company reported a cash position at quarter-end of SEK6.6m (10.2). As this does not include the SEK10m loan received in January, we estimate that Lipum has sufficient funds to finance operations over Q2 2025.

### Positive phase I study results

Lipum has achieved a major milestone with positive top-line results from its phase I trial with SOL-116. The study confirmed strong safety and tolerability, with no serious adverse events, and demonstrated favorable pharmacokinetics supporting a oncemonthly dosing regimen. Exploratory findings showed successful suppression of bile salt-stimulated lipase (BSSL), the target protein, in both healthy volunteers and RA patients, suggesting potential for a new, more targeted approach to treating inflammatory diseases. Furthermore, SOL-116 exhibited low immunogenicity, with only one transient anti-drug antibody response, reinforcing its potential for long-term use. With these promising results, our belief in SOL-116 is bolstered and we see continued clinical development as justified.

### Increased base case of SEK24 per share

We base our valuation of Lipum on a DCF model of its current pipeline. We increase our fair value range with a revised base case of SEK24 (15) per share, and respective bull and bear cases of SEK40 (25) and SEK6 (3). As the company achieved positive phase I top-line results, we increase the LoA for SOL-116 to more accurately reflect the candidate's likelihood of reaching the market.

Key Financials (SEKm)	2023	2024	2025	2026	2027
Net Sales	0	0	0	0	161
Revenue growth	-100%	N/A	N/A	N/A	N/A
EBITDA	-37	-56	-52	-64	125
EBIT	-37	-56	-52	-64	125
EBIT Margin (%)	N/A	N/A	N/A	N/A	78%
Net Income	-37	-56	-52	-64	125

#### **FAIR VALUE RANGE**

BEAR	BASE	BULL
6 (3)	24 (15)	40 (25)

### **LIPUM VERSUS OMXS30 LTM**



### **REDEYE RATING**



#### **KEY STATS**

Ticker	LIPUM
Market	First North
Share Price (SEK)	18.5
Market Cap (SEKm)	390
Net Debt (SEKm)	5
Free Float (%)	38
Avg. daily volume	110k

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## Investment Case

### Case: Potential to satisfy market need

Lipum has its sight set for the multibillion-dollar rheumatoid arthritis (RA) market with the aim of providing a new first-in-class treatment to a population in need of a paradigm shift. RA continues to be one of the largest pharmaceutical markets globally, yet, despite the vast number of approved drugs, the medical need remains high as no drug has been able to achieve diseasefree remission. The demand for cost-effective and safe treatments is glaring as current standard of care entail multiple side-effects and lack efficacy in a significant part of the patient population.

However, we believe that Lipum's lead candidate, SOL-116, has the potential to eradicate this discrepancy and offer a resolution-based therapy. The candidate has a unique mechanism of action (MOA), targeting the previously-overlooked BSSL protein, suggested to play a central role in inflammation and inflammatory response. Should SOL-116 prove a good safety profile and repeat signs of its efficacy shown in preclinical studies, in the ongoing and upcoming clinical trials, we believe that it is well-positioned to attract interest from the public and catch the eye of large industry players.

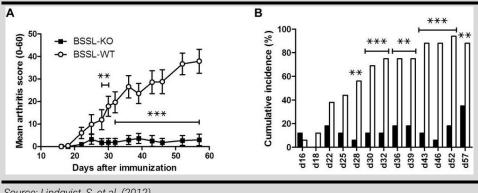
### Evidence: Establishing a platform to broaden pipeline

Lipum is simultaneously establishing a platform of preclinical data on the therapeutic effect of SOL-116 in several other diseases and targets of interest. This could potentially lead to the discovery of further possible indications where the candidate could be developed as a novel treatment. The list of viable chronic inflammatory diseases and proinflammatory conditions can be made very long given the candidate's believed potential in both autoimmune and autoinflammatory illness. The company continually evaluates the indications and carries out selections for in-depth preclinical studies based on medical need, market potential and conditions for validating SOL-116 through suitable models.

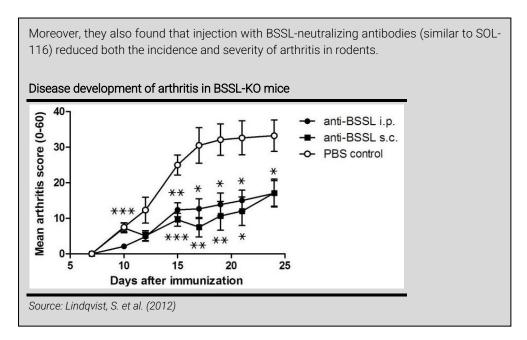
### Supportive analysis: Promising preclinical evidence

Preclinical studies performed by founders Prof. Olle Hernell, prof. Lennart Lundberg and prof. Susanne Lindqvist demonstrated strong support of BSSL being a key player in the inflammatory process and disease development of arthritis. The researchers used a Collagen-induced arthritis (CIA) model in rodents - a commonly used experimental model to reproduce the pathogenic features of human RA - to compare the response in BSSL wild type (BSSL-WT) mice with BSSL-deficient 'knock-out' (BSSL-KO) mice. In two consecutive trials, they found that BSSL-KO mice were significantly protected from developing arthritis, suggesting a direct correlation between BSSL levels and disease development.

### Disease development of arthritis in BSSL-KO mice



Source: Lindqvist, S. et al. (2012)



### Challenge I: Unproven target

SOL-116 targets the BSSL protein, which is an unproven target in previous biopharmaceuticals. While showing great promise in preclinical models, there is no guarantee that the enzyme is an effective target in humans as well. However, the fact that SOL-116 is developed as a monoclonal antibody, as are the current biological disease-modifying antirheumatic drugs (TNFα-inhibitors), could prove to be an advantage when it comes to clinical implementation in patients.

### Challenge II: Highly competitive market

The market for RA is one of the world's most competitive markets within the pharmaceutical industry – with many drugs approved, or under development, and an established treatment protocol. Should SOL-116 fail to show substantial safety or efficacy benefits over today's established treatments, it may struggle to gain meaningful market share even if it receives marketing authorization.

### Valuation: Long-term value potential

Our updated base case fair valuation amounts to SEK24 per share, suggesting an upside from today's share price levels. Further, our bull and bear cases equal SEK40 and SEK6 per share, respectively. We foresee an exciting 2025 and beyond for Lipum as the first clinical phase I trials with the lead candidate SOL-116 has now been concluded. We believe that the share could continue its positive momentum ahead. Primarily, we judge that regulatory progress and the initiation of the upcoming phase IIa trial, and in-depth preclinical data on further indications could induce positive share price re-ratings.

## **Counter Points**

### Early-stage development

The company is in its early-stage development with lead candidate SOL-116, currently in phase I studies. There are always significant risks associated with developing drug candidates, and SOL-116 is no exception. While the candidate offers a unique and promising MOA, failure to show a clinically meaningful effect or robust safety profile in clinical trials would be major setbacks.

### Dependent on partners and investors

Lipum being a pre-revenue biotech company in the research and development phase indicates that the company is far from receiving any recurring cash streams. Instead, the company will heavily rely on capital markets to finance its operations for the coming years. With the general risk appetite on the market having been suppressed during the past years, raising capital is a tougher task for the majority of biotech companies. Investors should be aware of this when considering early-stage biotech companies. There is a risk that the company may be squeezed for cash to finance its clinical studies and operations in the future, which could lead to heavily dilutive and rebated rights issues. Further, we judge that Lipum will heavily depend on finding and cooperating with a licensing partner in the future for the late-stage development of SOL-116, and ultimately, to bring it to the market.

### One-trick pony characteristics

The company could be seen as a one-trick pony given the high dependency on lead candidate SOL-116. There is certainly a significant risk allocated to the ongoing clinical trials, if the treatment fails to show a good safety profile (and clinically relevant efficacy indicators) in RA patients, the pipeline will have almost no residual value. However, the company's dual development strategy with a parallel track devoted to establishing a platform of several other potential target indications reduces some of the risk.

# **Key Catalysts**

### SOL-116 phase I complete data

Complete data from the ongoing first clinical study of SOL-116 will be a major milestone for the company, an analysis of the results is expected in Q4 2024.

Timeframe: 3-6 months
Impact: Moderate to major

### Preclinical data on further indications

Lipum is establishing a platform of preclinical data on the therapeutic effect of SOL-116 in several other diseases and targets. This could potentially lead to the discovery of further possible indications for the candidate.

Time frame: 6-18 months Impact: Moderate

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# Q4 2024 - Review

# Financials Q4 2024

- Net Sales for Q4 were SEK0m (0m).
- OPEX was SEK-26.1m (-9.5m), significantly above our estimate of SEK-9.8m in absolute terms. However, this was mainly due to one-off payments and adjustments.

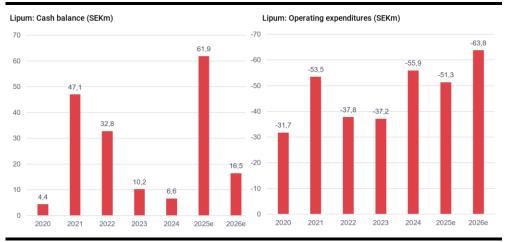
Lipum: Q4 Financial estimates (SEKm)

Lipum: Actual vs. Estimates (SEKm)				
SEKm	Q4 23	Q4 24a	Q4 24e	Diff (%)
Net sales	0,0	0,0	0,0	N/A
Sales growth Y/Y	N/A	N/A	N/A	N/A
OPEX	-9,5	-26,1	-9,8	165%
EBITDA	-9,6	-25,6	-9,8	160%
EBITDA margin (%)	N/A	N/A	N/A	N/A
EBIT	-9,6	-25,6	-9,8	161%
EBIT margin (%)	N/A	N/A	N/A	N/A
Free cash flow	-7,3	-6,2	0,4	-1813%
Cash & Equivalents	10,2	6,6	13,2	-50%

Source: Company data, Redeye Research

- Free cash flow was SEK-6.2m (-7.3m), following the receival of 50% of the SEK20m loan agreement with Flerie Invest.
- Cash position at the end of Q4 was SEK6.6m (10.2m), accordingly.

### Cash Balance and Operating Expenditures, 2020-2026e, risk-adjusted (SEKm)



Source: Redeye Research, Lipum

With the company now having initiated the phase II study preparations, we expected quarterly OPEX to increase somewhat. However, Lipum reported an OPEX above our expectations, partly due to an adjustment from the previous interim financial statements regarding its receivables. Accordingly, the company reported an end-of-the-period cash position of SEK6.6m (10.2m). Although seeming quite low, this does only include 50% of the SEK20m loan agreement with Flerie Invest. As such, the company received an additional SEK10m in January as well. Accordingly, we anticipate the company to have a financial runway extending over Q2 2025.

However, we anticipate that the company may perform another capital raise in the coming months.

Lipum: Financial forecasts, 2022-2026e, risk-adjusted (SEKm)

Lipum: Financial Forecasts (SE	Lipum: Financial Forecasts (SEKm)								
SEKm	2022	2023	2024	2025e	2026e				
Net income	0,0	0,0	0,0	0,0	0,0				
Other income	0,5	0,0	0,0	0,0	0,0				
Revenue	0,5	0,0	0,0	0,0	0,0				
Other external costs	-31,6	-30,3	-47,5	-42,0	-54,0				
Personnel costs	-6,2	-6,9	-8,4	-9,3	-9,8				
Other operating expenses	-0,6	-0,2	-0,2	-0,4	-0,6				
Depreciation and amortization	0,0	0,0	0,0	0,0	0,0				
Operating expenses	-38,4	-37,4	-56,1	-51,7	-64,4				
EBITDA	-37,9	-37,4	-56,1	-51,7	-64,4				
EBIT	-37,9	-37,4	-56,1	-51,7	-64,4				
Free cash flow	-14,2	-22,6	-3,6	55,3	-45,4				

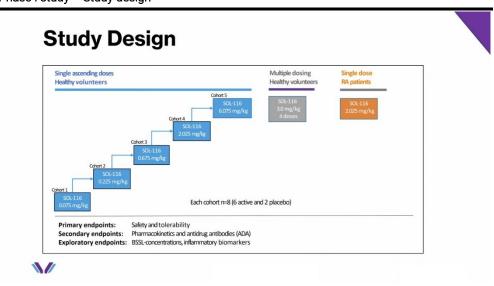
Source: Company data, Redeye Research

### Clinical status and recent events

## Positive phase I top-line results

Yesterday, Lipum reached a major milestone as it announced positive top-line results from its phase I clinical trial evaluating SOL-116, a novel drug candidate, for rheumatoid arthritis (RA). The study, conducted in the Netherlands, was a randomized, double-blind, placebo-controlled First-In-Human (FIH) trial designed to assess the safety, tolerability, and pharmacokinetics (PK) of SOL-116. The trial was structured into three parts: a single ascending dose (SAD) study with 40 healthy volunteers divided into five dose groups, a multiple-dose (MD) cohort consisting of eight healthy volunteers, and a single-dose administration in eight rheumatoid arthritis (RA) patients.

Phase I study - Study design



A total of 56 subjects participated in the study, with 42 receiving SOL-116 and 14 receiving a placebo. The participants ranged in age from 20 to 69 years, and 41% were women. All RA patients met the 2010 ACR/EULAR classification criteria for RA and had mild disease. They had been stable on methotrexate treatment for at least 12 weeks before the study and remained on it throughout the trial.

#### Phase I study - Baseline characteristics

## **Baseline Characteristics**

	SAD (Part 1)		RA (F	RA (Part 2)		art 3)
	Placebo (n=10)	SOL-116 (n=30)	Placebo (n=2)	SOL-116 (n=6)	Placebo (n=2)	SOL-116 (n=6)
Age (years), median (range)	58.0 (25-65)	50.0 (20-64)	63.5 (63-64)	61.5 (39-69)	57.5 (57-58)	58.0 (53-62)
Age (years), mean (SD)	52.0 (14.3)	44.8 (15.1)	63.5 (0.7)	58.2 (11.5)	57.5 (0.7)	58.2 (3.7)
Sex, n (%) -Women -Men	3 (30) 7 (70)	12 (40) 18 (60)	1 (50) 1 (50)	3 (50) 3 (50)	0 (0) 2 (100)	4 (67) 2 (33)
Race, n (%) -White -Asian -Other (Black, Hawaiian/Pacific)	7 (70) 2 (20) 1 (10)	26 (86) 2 (7) 2 (7)	2 (100) 0 (0) 0 (0)	5 (83) 0 (0) 1 (17)	1 (50) 1 (50) 0 (0)	5 (83) 1 (17) 0 (0)
BMI (kg/m²), mean (SD)	24.9 (2.4)	24.0 (2.8)	29.8 (1.7)	27.7 (4.6)	27.6 (0.2)	25.3 (0.9)

All participants completed the study except for one placebo subject in the multiple-dose group discontinued due to a CRO decision related to an SAE

All 56 participants were included in all analysis



Source: Lipum

The study's primary objective was to evaluate the safety and tolerability of both single and multiple subcutaneous (SC) doses of SOL-116 in healthy volunteers and RA patients. Secondary objectives focused on characterizing the drug's PK profile and assessing its immunogenicity. Additionally, an exploratory endpoint examined the ability of SOL-116 to suppress bile saltstimulated lipase (BSSL) in the bloodstream, as this is the target protein for the treatment and is believed to contribute to inflammation in RA and other inflammatory diseases.

### Phase I study - Primary objective

# **Primary Objective**

Safety and tolerability profile

	SAD (Part 1)		RA (Part 2)		MD (Part 3)	
	Placebo (n=10)	SOL-116 (n=30)	Placebo (n=2)	SOL-116 (n=6)	Placebo (n=2)	SOL-116 (n=6)
Subjects with a TEAE, n (%)	6 (60)	20 (67)	2 (100)	6 (100)	2 (100)	5 (83)
Subjects with a TESAE, n (%)	0	0	0	0	1 (50)*	0
Number of TEAEs, n	8	36	4	28	3	24
Subjects with related TEAE, n (%)	2 (20)	7 (23)	1 (50)	4 (67)	1 (50)	3 (50)

No TESAEs occurred with SOL-116. TEAEs were similar between active and

Most TEAEs in SOL-116 subjects were mild, with only two moderate cases.

Common TEAEs included injection site reactions (14), headache (10), and back pain (6) for SOL-116, while placebo subjects reported back pain (2) and fatigue (2).

All participants successfully completed the study, except for one placebo subject in the multiple-dose group, who was discontinued due to a CRO decision related to an SAE.

\*One TESAE occurred in a placebo subject (non st-segment elevation myocardial infarction); reported as unlikely related

TEAE (Ireatment-Emergent Adverse Event) - Any new or worsening side effect that occurs after a patient starts receiving a treatment in a clinical trial.

TESAE (Ireatment-Emergent Serious Adverse Event) - A serious event that emerges after treatment begins and may require hospitalization, be life-threatening, cause long-term disability. These events may or may not be caused by the drug but are monitored to assess safety.

Top-line data from the study confirmed that SOL-116 has a strong safety and tolerability profile, with no serious adverse events reported across multiple dosing regimens. The PK analysis revealed a half-life of approximately 20 days, with a median time to reach peak concentration (Tmax) between 5.1 and 7.2 days, supporting a once-monthly dosing schedule. This extended dosing interval is a major advantage for long-term RA management, improving patient adherence and convenience. The drug exhibited predictable, dose-proportional systemic exposure across different doses, and PK profiles remained consistent between healthy subjects and RA patients, reinforcing its stability across populations

Phase I study - Secondary objective (immunogenicity)

# **Secondary Objective**

**Immunogenicity** 

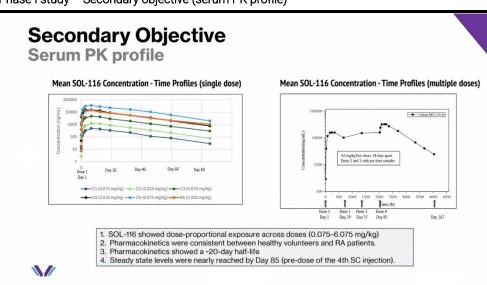
- Anti-drug antibodies (ADA) were detected in only one of 336 post-dose samples from 56 subjects. This occurred in an RA patient treated with SOL-116 on Day 49, but the subject tested negative at the next timepoint (Day 90).
- No ADAs were detected in the multiple-dose (MD) cohort, who received four doses of SOL-116 (3.0 mg/kg 28 days apart), or placebo.



Source: Lipum

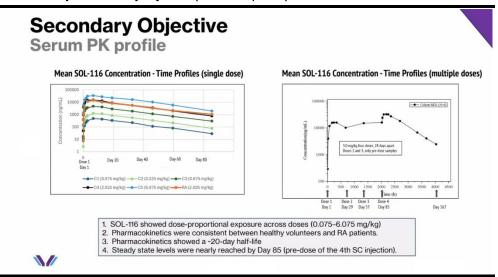
Safety assessments further reinforced SOL-116's potential, with no significant adverse effects observed. Treatment-emergent adverse events (TEAEs) were comparable between the SOL-116 and placebo groups, with most classified as mild and only two reported as moderate. No clinically relevant abnormalities were found in laboratory tests, electrocardiograms, or physical examinations. Additionally, immunogenicity results were highly encouraging, as anti-drug antibodies (ADA) were detected in only one of 336 post-dose samples, and this response was transient. This low immunogenicity is a crucial advantage, as strong immune responses to biologic drugs can reduce their long-term efficacy.

Phase I study - Secondary objective (serum PK profile)



A key exploratory finding was the successful suppression of BSSL in both healthy volunteers and RA patients. In healthy subjects, a single dose eliminated BSSL from circulation between Day 4 and Day 90, while multiple doses extended this effect up to nearly six months. In RA patients, half of whom had detectable BSSL levels at baseline, the drug effectively suppressed BSSL from Day 22 to Day 90, with only one outlier. This suppression is crucial because BSSL is implicated in the inflammatory processes of RA, and its inhibition could lead to a more targeted approach to treatment.

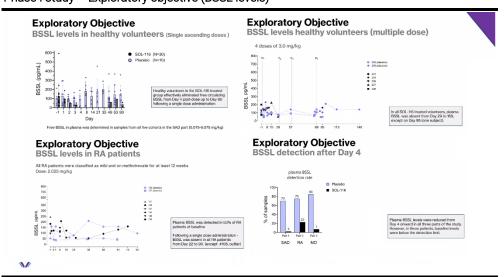
Phase I study - Secondary objective (serum PK profile)



Source: Lipum

With these promising results, Lipum is now preparing for the next stage of clinical development. A full analysis, including inflammatory biomarker assessments, is expected by the end of March 2025 and will provide further insights into SOL-116's therapeutic potential. In parallel, the company has ongoing discussions with regulatory authorities and stakeholders which will shape the design of a proof-of-concept (PoC) phase II trial, which will further assess SOL-116's efficacy in RA patients. These findings establish a strong foundation for continued development, positioning SOL-116 as a highly promising candidate in the treatment of RA and other inflammatory diseases.

### Phase I study - Exploratory objective (BSSL levels)



We are truly encouraged by the results and believe that they justify continued development of SOL-116. We view this as a major milestone that brings the candidate closer to becoming a breakthrough treatment for inflammatory diseases. Accordingly, we choose to increase our probability of success (PoS) for the phase I development of SOL-116 to 100% (80%). In turn, this increases our overall estimated likelihood of approval (LoA) to 19% (15%). We believe that this is now a more accurate representation of the candidate's possibilities of reaching the market.

Probability of Success & Likelihood of Approval – SOL-116 vs Autoimmune treatments

	Ph I - PH II	Ph II - PH III	Ph III - NDA	NDA - Approval	LoA overall
Autoimmune	60%	32%	66%	93%	11%
SOL-116 (Old)	80%	32%	66%	93%	15%
SOL-116 (New)	100%	32%	66%	93%	19%

Source: Redeye Research

### Upcoming phase II study

The phase II study is expected to commence in the H1 2026. Work to establish an optimal study design is in progress, and discussions with CROs regarding its implementation are underway. The production of the drug set to be used in the study, which was initiated in April 2024 together with its partner NorthX Biologics, is on schedule and has so far progressed as expected. The final clinical protocol will be completed after the phase I study is completely finalized and reviewed. The tentative structure involves a double-blinded, placebo-controlled study in two parts: phase IIa, which will focus on identifying and selecting the appropriate dosage for later-stage development, and phase IIb, aimed at demonstrating efficacy or Proof-of-Concept (PoC). Evaluation and endpoints for these studies are expected to follow standardized criteria used in comparable clinical RA-treatment studies at this phase of development.

Lipum - Planned timeline



Source: Lipum, Redeye Research

### Funding granted by Eurostars

At the end of last year, Lipum announced that the company, in collaboration with the Norwegian company Age Labs AS, has received a grant from Eurostars to finance a 2-year joint project aimed at advancing rheumatoid arthritis (RA) treatment. Eurostars is a European funding program under the Horizon Europe framework, specifically targeting small to medium-sized enterprises (SMEs) working on innovative R&D projects. The grant will cover 50% of the project's total budget of approximately EUR1.9m, enabling the companies to advance their work in the diagnosis and precision treatment of RA using Lipum's drug candidate, SOL-116.

#### Eurostars - Logo



Source: CERN EU

The goal of the project is to develop a diagnostic technique, or companion diagnostic, that can identify biological markers in patients and predict their response to the treatment. In the short term, this could optimize patient selection in Lipum's future clinical trials with SOL-116. In the long term, this could also pave the way for more individualized and effective treatment once SOL-116 reaches the market.

Age Labs is a company specializing in epigenetics, which brings advanced expertise to the project. The company focuses on analyzing immune cells and using predictive algorithms to identify biomarkers that can help diagnose diseases early and assess risk. Feasibility studies on Lipum's target molecule, BSSL, have already shown promising results, suggesting that the project has a strong foundation to build upon.

### Age Labs - Logo



Source: Age Labs

We are excited about the grant and the opportunities this project presents for SOL-116. The integration of companion diagnostics has the potential to streamline clinical trials, enhance SOL-116's likelihood of success, and expedite its path to market approval. Moreover, the continued receipt of grants reflects the strong promise and potential of SOL-116 as a breakthrough treatment.

## Valuation

## **Valuation Summary**

In our valuation of Lipum, we estimate the sales potential in its main candidate, SOL-116, and assign an associated likelihood of reaching market approval. We then incorporate this into a risk-adjusted discounted cash flow (DCF) valuation model, which provides us with our Base Case. We use a weighted average cost of capital (WACC) of 15.5%, based on both qualitative and quantitative aspects of the company using our Redeye Company Quality model.

Lipum - Valuation

Program	Indication	Stage	Launch	Peak sales (\$m)	Probability (LoA)	Value, r-adj (SEKm)
SOL-116	RA	Phase II	2031	646	19%	619
				Tech Value (SEKm)		619
				Est. net cash		13,3
				Shared costs		-109,8
				<b>Equity Value</b>		523
				Shares outstanding	(2024)	21,2
				Est. Capital raised from	om issue (2025)	66,5
				Est. Increase in shar	es from issue	3,7
CC: 15.5%				Base case		24

Source: Redeye Research

## Summary of changes to our valuation

- We include the positive phase I top-line results and increase our LoA for SOL-116 to 19% (15%).
- We adjust our future share issue expectations following a favourable share price development.
- We revise our estimated WACC to 15.5% (16%) following an update of our Redeye Rating model, which determines the discount rate applied to each specific stock.

# Bear Case 6 (3) SEK

We factor in disappointing results from the upcoming SOL-116 phase II trials and see limited prospects in the rheumatism indications. The company's cash position and the candidate's potential in other chronic inflammatory indications constitutes the company's remaining value.

# Base Case 24 (15) SEK

The DCF model above represents our Base Case scenario.

### Bull Case 40 (25) SEK

We factor in positive results from the upcoming phase IIa study for SOL-116 that strongly support further development of the candidate. Consequently, Lipum finds a partner and commits on a licensing agreement for the late-stage development and commercialization of the candidate in RA.

<sup>\*</sup> Numbers may not add up due to rounding.

## Sensitivity Analysis

Our valuation of Lipum is highly affected by the WACC that we attribute to the company. WACC plays an essential part in calculating the discounted cash flow and reflects the uncertainties related to the company and the market. We illustrate the impact of applying changes to the WACC on our fair value range (Base Case, Bull Case, and Bear Case) valuation in a sensitivity analysis below.

Lipum: Sensitivity Analysis

Sensitivity ar	nalysis: WAC	С				
		13,5%	14,5%	15,5%	16,5%	17,5%
	Bull	47,5	43,4	40	36,1	32,8
Value (SEK/share)	Base	28,8	26,3	24	21,9	19,9
	Bear	6,6	6,1	6	5,0	4,6

Source: Redeye Research

### Peer Valuation

To provide additional insight into the current valuation of similar biotech companies, we include a peer group analysis. The valuation of listed biotech companies in clinical development varies considerably, depending on project validation, potential, financial position, risk, etc. However, we base our relative valuation on the enterprise value (EV) (market cap minus net cash) of what we consider to be comparable drug development companies. Below we present a sample of Nordic peers.

Lipum: Peer Valuation

Peer Group Valuation								
(SEKm)	Market Cap	Cash*	EV	No. Projects	Dev. Stage			
Company								
SynAct	849	39	811	2	Phase II			
Active Biotech	112	27	85	3	Phase II			
Coegin Pharma	59	10	49	2	Phase II			
Alzecure	163	39	124	3	Phase I			
Kancera	126	47	80	2	Phase II			
Cinclus Pharma	750	567	183	1	Phase III			
Alzinova	276	28	249	1	Phase II			
Average	334	108	226	2	Phase II			
Median	163	39	125	2	Phase II			
Lipum	390	13	377	1	Phase II			

Source: Redeye Research

Our peer valuation has no impact on our fair value range. It is instead a snapshot of comparable companies. However, based on the companies listed in the table, Lipum's valuation is currently slightly above its peers. The average market cap (SEK334m) is below the current market cap of Lipum (SEK390m). Furthermore, it is worth noticing that the peer median number of projects in the pipeline is two and the median current development stage (for lead candidate) is phase II, while Lipum currently only has one project entering phase II development.

<sup>\*</sup>Based on the latest reports and Redeye estimates.

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# General summary

### Company description

Lipum AB is a research and development-stage biopharmaceutical company specialized in the discovery and development of a novel treatment for chronic inflammatory diseases. The company was originally founded based on a discovery made by scientists at Umeå University. Co-founder and Board member Prof. Olle Hernell and his team discovered that a protein now known as bile salt-stimulated lipase (BSSL) is present in human white blood cells and plays an important role in inflammation. This novel and unexpected finding led to the development of Lipum's lead candidate drug SOL-116. The candidate is a fully humanized monoclonal antibody currently in development to become a safe and efficacious alternative to current therapy in, primarily, rheumatoid arthritis (RA). The treatment has a new and unique mechanism of action, operating through the blockage of the previously overlooked target molecule of the immune system.

Lipum was founded in 2010 in Umeå, Sweden, where it has its current headquarters. Since April 2021, the company has been listed on Nasdaq First North Growth Market (LIPUM).

# Medical Need and Project Description

# SOL-116: A BSSL-targeting Antibody

### **Background**

The theoretical and academical origin of SOL-116 stems from extensive research at the unit for pediatrics at Umeå University, conducted by Professor Olle Hernell, Associate Professor Susanne Lindqvist and Professor Lennart Lundberg, who would later become founders of Lipum. Their research on fat-splitting enzyme in breast milk led to the discovery of the enzyme Bile Salt-Stimulated Lipase (BSSL) and its significance for the breastfed baby's digestion of breast milk fat.

However, It turned out that BSSL is not only found in breast milk but also in the blood. When the researchers searched for the source of the protein's presence in the bloodstream, it was possible to note greatly elevated levels of BSSL in inflamed organs. Most prominently, there was on average a ten-fold increase of BSSL in the liver of patients with fatty liver, which is an inflammatory condition, in comparison to other subjects. Namely, these findings gave birth to the idea of BSSL potentially being an attractive drug target to control inflammation.

Inflammation is, in fact, a natural part of the body's healing processes. However, chronic inflammation occurs when the body is unable to heal the acute inflammation. Instead, it lingers and leaves the body in a constant inflammatory state. This is a significant problem in patients with both autoimmune and autoinflammatory diseases.<sup>1</sup>

While the drug candidate is considered to have the potential to treat several chronic inflammatory diseases, Lipum has chosen rheumatism in adults (rheumatoid arthritis) as its current main target indication for SOL-116. The disease is characterized by a great unmet medical need and a large market.

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<sup>&</sup>lt;sup>1</sup> It also occurs in, for example, cancer, obesity, and diabetes.

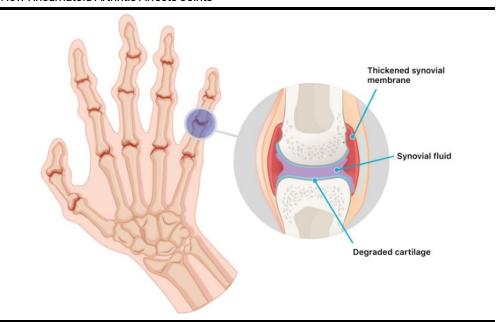
### Disease Overview: Rheumatoid Arthritis

Rheumatoid arthritis (RA) is a chronic inflammatory disease that causes pain, swelling and stiffness in the joints. The condition most commonly affects the hands, feet and wrists of patients suffering from the disease and leads to reduced quality of life and increased mortality.

#### Typical symptoms include:

- Persistent joint stiffness, pain and swelling
- Symmetrical symptoms affecting multiple joints bilaterally
- Severe deformation of joints
- Loss of muscle strength around inflammation
- General feelings of being ill and tired

### How Rheumatoid Arthritis Affects Joints

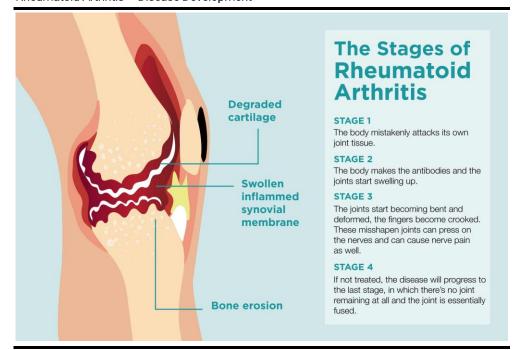


Source: Drugwatch

RA is an autoimmune disease, meaning that the immune system, which normally guards against germs like bacteria and viruses, mistakenly attacks the patient's own body. Normally, the immune system can tell the difference between foreign cells and the body's own cells. However, in autoimmune diseases, the immune system mistakes parts of the body as foreign and releases proteins called autoantibodies that attack healthy cells. In RA specifically, the immune system attacks the lining of the membranes that surround the joints (synovium tissue), leading to inflammation. Over time, the cartilage and bone within the joint are destroyed and the joints lose shape and alignment.

Furthermore, RA is a systemic disease, which means that it can affect the whole body. It can attack organs, such as the heart, the lungs, or other tissues like muscles, cartilage, and ligaments. The damage caused by the disease can be severe and, in some instances, lead to permanent disability. A study by Holmqvist, M.E. et al. (2010) found that the risk of heart attack for people with RA was 60 percent higher just one year after being diagnosed with RA. However, it was also found that therapies used to treat RA, by suppressing inflammation, may also reduce the risk of developing heart diseases.

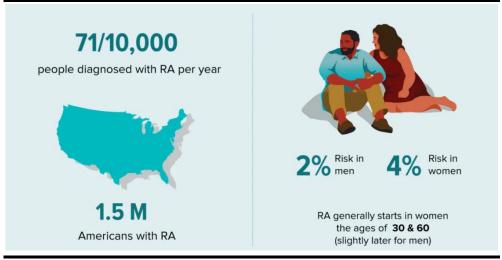
### Rheumatoid Arthritis - Disease Development



Source: CreakyJoints

According to Healthline, 71 out of every 100,000 people are on average diagnosed with RA annually. This equates to approximately 235,000 new cases in the US and more than 530,000 in Europe each year. In total, 1.5 million Americans and 3.5 million Europeans are estimated to have RA today.

### Rheumatoid Arthritis - Epidemiology



Source: Healthline

The risk of developing RA is genetically connected. Women are about two to three times more likely to get RA than men and people with close relatives who have suffered from RA are at an increased risk of developing the disease. Research suggests that those born with specific genes called human leukocyte antigen (HLA) class II genotypes are more likely to develop RA. In addition, having these genes can also make the experienced symptoms worse. Further, in people who are obese or who smoke, the risk for RA is also greatly increased.

# **Current Treatment Paradigm of RA**

### 1st line Treatment - Synthetic DMARDs

There is currently no cure for RA. Early diagnosis and appropriate treatment enables some people with the condition to relieve parts of the symptoms. Today, methotrexate (MTX), a conventional synthetic disease-modifying anti-rheumatic drug (csDMARDs), is used as first-line treatment for most RA patients. MTX is an immune-system suppressant that reduces joint inflammation and slows the course of the disease. It has a relatively fast response and is considered to have decent efficacy and safety profile. Furthermore, it is convenient to administer and comes with a relatively low price tag. However, roughly 60 percent of patients have an inadequate response to MTX monotherapy and have to move on to more costly biologics and/or corticosteroids.

#### **Current Treatments for Rheumatic Disorders**



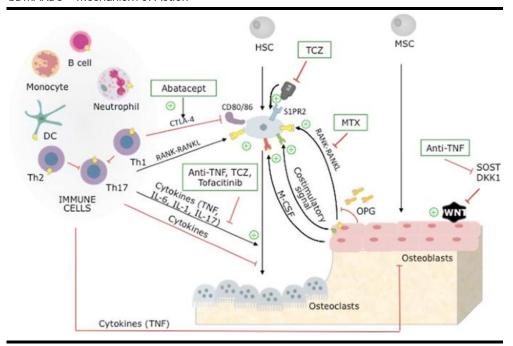
Source: Redeye Research, Healthline

#### 2nd Line Treatment - Biologic DMARDs

Biological disease-modifying antirheumatic drugs (bDMARDs) are typically second-in-line treatments, used either as an alternative or an addition to MTX monotherapy. Biologics are produced through biological processes in living cells, or from biological material, and are usually large and complex molecules whose properties differ significantly from small synthetic drugs. Biologics are most commonly monoclonal antibodies (mAb), which are characterized by an ability to, very specifically, bind to a target molecule in the body and thereby canceling or slowing down an unwanted disease process. SOL-116 places in this treatment category, being developed as an alternative biological drug to current standard bDMARDs.

Tumor necrosis factor (TNF) alpha inhibitors, typically monoclonal antibodies, are the most established class of bDMARDs – with the blockbuster drugs AbbVie's Humira (adalimumab), Pfizer's Enbrel (etanercept), and Merck's Remicade (infliximab) as the most established choices in the key markets. While costly, TNF- $\alpha$  inhibitors have shown high efficiency in combination with DMARDs and have positive long-term safety data, putting them in a strong standing that may be difficult to shake. In the coming years, however, biosimilars are expected to take a larger share of this category following patent expires.

### bDMARDs - Mechanism of Action



Source: S. Carvalho Barreira & J. Eurico Fonseca (2016).

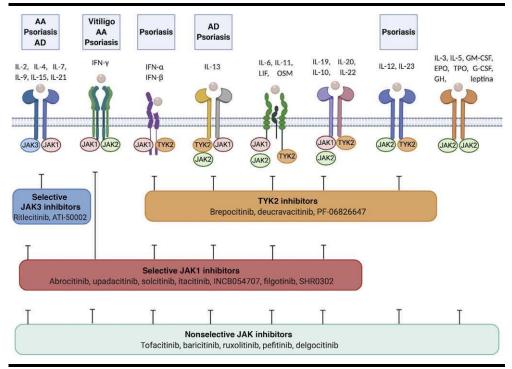
Moreover, a significant proportion of RA patients do not respond to TNF- $\alpha$  inhibitors or respond only temporarily. These can be classified into two groups of patients: those who are primary non-responders and those who initially respond but then exhibit secondary loss of response. Primary non-responders may or may not show some initial response, but never reach their treatment target with anti-TNFs. If these patients do not respond to one anti-TNF therapy, they are not likely to respond to other TNF- $\alpha$  inhibitors. Avoiding anti-TNF therapy could prevent disease progression and improve quality of life for primary non-responders, suggesting that they should switch to an alternative MOA therapy (K, Johnson. et al., 2019). Accordingly, we believe that there is a great unmet need for alternative biological treatment for non-responders. SOL-116 could potentially fill this gap in the market due to its unique MOA, differentiating it from currently marketed biologics.

### 3rd Line Treatment - Targeted Synthetic DMARDs (JAK-inhibitors)

Janus kinase (JAK) Inhibitors are a relatively new group of drugs for the treatment of chronic inflammatory diseases and are a part of the targeted synthetic disease-modifying antirheumatic drugs (tsDMARDs). Since certain proinflammatory cytokines use the JAK-pathway for signal transduction, it has become an increasingly popular therapeutic target in diseases where selective modulation of the immune system can be useful. JAK-inhibitors work by inhibiting the kinase activity of JAKs, effectively blocking certain cytokine receptor signaling dependent on specific JAK-pathways.

The treatment is today used in either second- or, most commonly, third-line therapy as an alternative to patients not responding to csDMARDs or bDMARDs. The most prominent currently marketed JAK-inhibitors are Pfizer's Xeljanz (tofacitinib), which was the first FDA approved treatment in the drug class in 2012, Eli Lilly's Olumiant (baricitinib) and AbbVie's Rinvoq (upadacitinib). First-generation JAK-inhibitors, such as Xeljanz and Olumiant, are generally poorly selective and inhibit various JAKs, whereas the second-generation inhibitors, such as Rinvoq, are more selective and predominantly block a single member of the JAK family, thus inhibiting a narrower range of cytokines.

### Selectivity of Different Types of JAK-inhibitors



Source: C. Garcia-Melando, X. Cubiró & L. Puig (2021).

After the launches, however, it has been shown that JAK-inhibitors are associated with significant side effects that endanger patient safety. This ultimately caused the FDA to update its safety warnings for the entire drug class in September 2021. The revision was mainly based on a review of a large clinical post-approval study that showed an increased risk of serious heart-related events such as heart attack or stroke, cancer, blood clots, and death with Xeljanz and Xeljanz XR. Notably, the FDA decided that the labels for all JAK-inhibitors should be updated with so-called "black box warnings" to alert doctors and patients to its potential side effects. Olumiant and Rinvoq have not been studied in similar trials, however, since they share mechanisms of action with Xeljanz, FDA considers that these medicines may have similar risks as seen in the Xeljanz safety trial.

As a result, nearly half (49 percent) of rheumatologists have reduced their prescriptions for Xeljanz in the past three months, according to Spherix Global Insight's first quarter report for 2022. We believe that this is a trend that is likely to continue as an increasing number of patients and rheumatologists refrain from using JAK-inhibitors following the safety concerns. Consequently, this will further induce the unmet medical need and create a vacancy to be filled by potential future treatments, such as SOL-116.

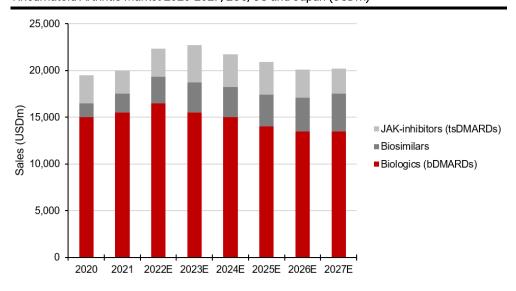
### The Market for RA Treatment

RA is one of the world's highest valued drug indication. According to Datamonitor, The RA market in the US, Japan and EU5 was worth about USD 20bn in 2021. Yet development in the RA treatment market has been relatively stagnant in recent years, with only minor changes in the prescribing habits of doctors and a lack of market launches. However, one of the key drivers for the market over the last decade has been the introduction of biologics (bDMARDs). While biologics are second-in-line, they account for the majority of total revenue due to their premium pricing. Among them, Enbrel and Humira are estimated to maintain almost half of the market value alone.

Over recent years, JAK-inhibitors have gained traction in the medical community due to their convenient oral dose formulation. Appetite among payers to reimburse JAK-inhibitors has been quite low, however, as their safety profile has been highly questioned and they are generally more expensive than the widely used TNF- $\alpha$  inhibitors. Consequently, JAK-inhibitors are primarily used for patients who have failed with biologics.

As a whole, the RA market is not expected to showcase any significant growth over the coming years. Historically, growth has primarily been attributed to annual price increases and rising disease prevalence due to an ageing population. However, the increasing introductions of biosimilars (generics for biological drugs) is expected to put downward pressure on prices, which could lead to attrition in the of sales biologics. Accordingly, biosimilars are estimated to grab increasing market shares over the next few years as annual revenue from biologics faces a stagnation in the coming period.

### Rheumatoid Arthritis Market 2020-2027, EU5, US and Japan (USDm)

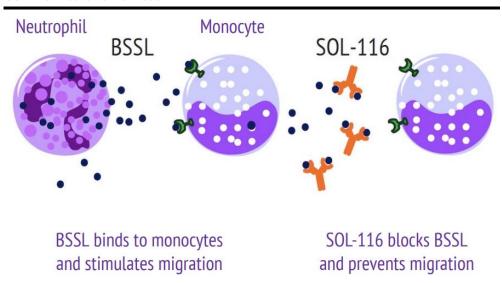


Source: Datamonitor, Redeye Research

### SOL-116: Scientific Evidence and Mechanism of action

The significance of the BSSL protein in inflammation has been verified in four different and well-established animal models for arthritis. The work has further led to an explanatory model of the mechanism of action where an important step is that BSSL is secreted from a type of white blood cells (granulocytes) and bind to another (monocytes), which in turn are active in inflammation. It is proposed that BSSL can bind to the CXC motif chemokine receptor type 4 (CXCR4) and thus triggers the signaling pathway leading to migration and recruitment of inflammatory cells to the site of acute inflammation. While this initially may play a positive roll, when the inflammation is no longer controlled and becomes "chronic", BSSL is likely to sustain the inflammatory response and hence become a negative factor. As a result of this, BSSL has emerged as a highly interesting target for the treatment of inflammatory disease. The idea of being able to prevent and restrain these diseases by blocking the protein is the foundation of the anti-BSSL antibody.

SOL-116: Mechanism of Action

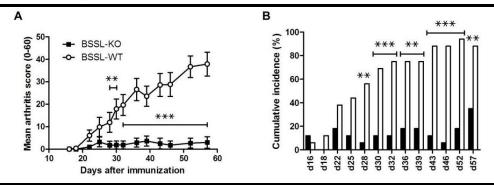


Source: Lipum

### **Preclinical Evidence**

Preclinical studies performed by founders prof. Olle Hernell, prof. Lennart Lundberg and assoc. prof. Susanne Lindqvist demonstrated strong support of BSSL being a key player in the inflammatory process and disease development of arthritis. The researchers used a Collagen-induced arthritis (CIA) model in rodents – a commonly used experimental model to reproduce the pathogenic features of human RA – to compare the response in BSSL wild type (BSSL-WT) mice with conventional BSSL 'knock-out' (BSSL-KO) mice. In two consecutive trials, they found that BSSL-KO mice were significantly protected from developing arthritis, suggesting a direct correlation between BSSL levels and disease development.

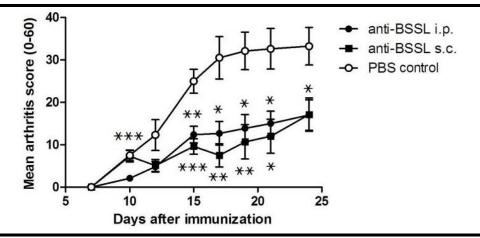
### Disease development of arthritis in BSSL-KO mice



Source: Lindqvist, S. et al. (2012)

Moreover, they also found that injection with rabbit polyclonal anti-BSSL antibodies reduced both the incidence and severity of arthritis in rodents. In one of the trials, thirty male DA rats (age 8–10 weeks) were randomized into three groups (n=10 per group) for treatment. The rats were given a single injection of pristane, known to induce arthritis within two weeks. BSSL-neutralizing antibodies (5 mg/kg) were then given through either intraperitoneal- or subcutaneous injection on days 5, 10, and 15 after pristane immunization, and the effect was compared to a placebo control. Blinded clinical scoring confirmed that treatment with anti-BSSL antibody significantly reduced disease severity as compared to PBS control. Treated animals also showed a marked decrease in the number of inflammatory cells present in the joint synovium and less cartilage destruction.

### Disease development of arthritis in BSSL-KO mice



Source: Lindqvist, S. et al. (2012)

# **Commercialization and Marketing**

## Business strategy and Organization

Lipum focuses on differentiating itself from competitors and staying competitive in the long run through superior functionality and operational excellence. The company intends to, in parallel with the development work to reach its clinical milestones, follow up previous results on other diseases and carry out in-depth studies on further selected indications. The objective is to increase knowledge of the mechanism of action and reach clinical development as quickly as possible in potential indications. This way, Lipum intends to create a unique platform which will be the key driver for continued development and growth.

Given the resources, organizational structure and competence required to run late-stage development, the company has stated that it intends to look for licensing agreements with a pharmaceutical partner in connection with phase II trials. Thus, future potential revenue is primarily expected to come in the form of upfront payments, development- and sales-based milestone payments and royalties on subsequent profits. The company intends to use the strengthened finances from a potential licensing deal to further develop its preclinical platform.

If it proves difficult to establish any fruitful partnership collaboration, Lipum has stated that it may choose to continue the clinical development plan independently. The focus would then primarily be RA.

Furthermore, Lipum puts emphasis on building important competitive advantages in the form of intangible assets. The company has made major investments to take advantage of opportunities for intellectual property protection. Specifically, in 2020, a very comprehensive international PCT patent application was filed concerning SOL-116 and therapeutic antibodies directed against the target molecule BSSL. This patent is expected to extend current protection with an additional 10 years, from ending in year 2030 to 2040. Intangible protection is important, especially for biotech companies, although biological drugs are generally relatively difficult to replicate compared to small chemical entities.

Similar to many other biotech companies alike, Lipum's organizational structure is quite lean without excessive departments or personnel. The company only employs key members of staff and outsources wherever possible.

# Sales Model and Assumptions

Given the tough competition and already-established treatment regime in the field of rheumatism, the commercial success of SOL-116 will be largely dependent on the performance demonstrated in the upcoming clinical trials. Superior safety or efficacy to currently approved biologics (and JAK-inhibitors) would be highly encouraging considering SOL-116's first-in-class Profile. However, should the candidate only manage to demonstrate data in line with/worse than currently approved treatment options, we believe the anticipated late market entry in 2031e will restrict its patient share. Rheumatologists experience and practice with established bDMARDs and tsDMARDs is likely to provide such products with a leg-up on newly-approved drugs.

Furthermore, for now, our sales model of SOL-116 exclusively contains RA as the targeted indication. Should Lipum initiate clinical trials in any other indications in the future, we will evaluate and potentially add these to our sales model in upcoming research updates.

### SOI -116 Sales Model – RA

Our sales projections are based on a quite modest five-percent market penetration of the addressable patient population in the US, EU5 and Japan, owing to the increasing availability of biosimilars. We assume a six-year launch curve before reaching this market penetration, based on a study by Robey & David (2017) which analyses historical averages for prescription drugs. Our estimate for sales erosion from this point relates to patent expiry. SOL-116 is expected to be patent protected until 2040e, following the company's international PCT-application. Considering our estimated market launch in 2031, this would provide nine years of market exclusivity.

The key assumptions in our SOL-116 RA sales model are:

- Market Launch in 2031e
- Peak market penetration of five percent in the key markets
- Annual pricing of USD18,000, USD12,000, and USD10,000 in the US, EU5 and Japan, respectively.
- Royalty rate of 12 percent
- Deal size of USD250m in 2027e
- 15% percent likelihood of reaching the market

Based on these assumptions, we arrive at annual global peak sales of more than **USD600m** for SOL-116 in RA by 2039e.

SOL-116 Sales Model in RA – US, 5EU & Japan (USDm)

		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
<u>US</u> RA prevalence		2 141 606	2 184 438	2 228 127	2 272 689	2 318 143	2 364 506	2 411 796	2 460 032	2 509 233	2 559 417	2 610 606	2 662 818
Moderate/severe RA	75%	1 606 204	1 638 329	1 671 095	1 704 517	1 738 607	1 773 379	1 808 847		1 881 924			1 997 113
Patients on RA treatment 2nd line patients	55% 60%	883 412 530 047	901 081 540 648	919 102 551 461	937 484 562 491	956 234 573 740	975 359 585 215	994 866 596 920	1 014 763 608 858	1 035 058 621 035	1 055 760 633 456	1 076 875 646 125	1 098 412 659 047
Launch curve		0,10	0,25	0,50	0,70	0,90	1,00	1,00	1,00	1,00	0,70	0,40	0,20
Market share Treated patients	5%	1% 2 650	1% 6 758	3% 13 787	4% 19 687	5% 25 818	5% 29 261	5% 29 846	5% 30 443	5% 31 052	4% 22 171	2% 12 922	1% 6 590
Compliance rate	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
List price	18 000	18 000	18 000	18 000	18 000	18 000	18 000	18 000	18000	18000	18000	18000	18000
Tax % Net price	20% 14 400	20% 14 400	20% 14 400	20% 14 400	20% 14 400	20% 14 400	20% 14 400	20% 14 400	20% 14400	20% 14400	20% 14400	20% 14400	20% 14400
•	14 400												
Revenue (\$m) growth		<b>29</b> N/A	<b>73</b> 155%	<b>149</b> 104%	<b>213</b> 43%	<b>279</b> 31%	<b>316</b> 13%	<b>322</b> 2%	<b>329</b> 2%	<b>335</b> 2%	<b>239</b> -29%	140 -42%	<b>71</b> -49%
growth		1471	10070	10470	4070	0170	1070	270	270	270	2070	7270	4070
<u>5EU</u>													
RA prevalence		2 330 431	2 377 039	2 424 580	2 473 071	2 522 533	2 572 984	2 624 443	2 676 932	2 730 471	2 785 080	2 840 782	2 897 597
Moderate/severe RA	75%	1 747 823	1 782 779	1 818 435			1 929 738	1 968 332			2 088 810	2 130 586	
Patients on RA treatment 2nd line patients	55% 60%	961 303 576 782	980 529 588 317	1 000 139 600 084	1 020 142 612 085	1 040 545 624 327	1 061 356 636 813	1 082 583 649 550	1 104 235 662 541	1 126 319 675 792	1 148 846 689 307	1 171 822 703 093	1 195 259 717 155
·													
Launch curve Market share	5%	0,10 1%	0,25 1%	0,50 3%	0,70 4%	0,90 5%	1,00 5%	1,00 5%	1,00 5%	1,00 5%	0,70 4%	0,40 2%	0,20 1%
Treated patients		2 884	7 354	15 002	21 423	28 095	31 841	32 477	33 127	33 790	24 126	14 062	7 172
Compliance rate	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
List price	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12 000	12000	12000	12000	12000	12000
Tax %	20% 9 600	20%	20% 9 600	20% 9 600	20% 9 600	20%	20%	20% 9 600	20%	20%	20%	20% 9600	20% 9600
Net price	9 600	9 600	9 600	9 600	9 600	9 600	9 600	9 600	9600	9600	9600	9600	9600
Revenue (\$m)		<b>21</b> N/A	<b>53</b> 155%	<b>108</b> 104%	<b>154</b> 43%	<b>202</b> 31%	<b>229</b> 13%	<b>234</b> 2%	239 2%	<b>243</b> 2%	<b>174</b> -29%	<b>101</b> -42%	<b>52</b> -49%
growth		IVA	100%	104%	43%	31%	13%	270	270	270	-29%	-4270	-49%
<u>Japan</u>		770.050	700 400	000 000	004 500	0.40.000	057.040	074 070	000 474	040 004	000 507	0.47.000	000 040
RA prevalence		776 950	792 489	808 339	824 506	840 996	857 816	874 972	892 471	910 321	928 527	947 098	966 040
Moderate/severe RA	75%	582 712	594 367	606 254	618 379	630 747	643 362	656 229	669 353	682 741	696 395	710 323	724 530
Patients on RA treatment 2nd line patients	55,0% 60%	320 492 192 295	326 902 196 141	333 440 200 064	340 109 204 065	346 911 208 146	353 849 212 309	360 926 216 556	368 144 220 887	375 507 225 304	383 017 229 810	390 678 234 407	398 491 239 095
·	2270												
Launch curve Market share	5%	0,10 1%	0,25 1%	0,50 3%	0,70 4%	0,90 5%	1,00 5%	1,00 5%	1,00 5%	1,00 5%	0,70 4%	0,40 2%	0,20 1%
Treated patients		961	2 452	5 002	7 142	9 367	10 615	10 828	11 044	11 265	8 043	4 688	2 391
Compliance rate	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
List price	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10000	10000	10000	10000	10000
Tax %	20% 8 000	20% 8 000	20% 8 000	20% 8 000	20% 8 000	20% 8 000	20% 8 000	20% 8 000	20% 8000	20% 8000	20% 8000	20% 8000	20% 8000
Net price	0 000	0 000	0 000	0 000	0 000	0 000	0 000	0 000	0000	0000	0000	0000	0000
Revenue (\$m)		6	15	30	43	56	64	65	66	68	48	28	14
growth		N/A	155%	104%	43%	31%	13%	2%	2%	2%	-29%	-42%	-49%

Source: Redeye Research

REDEYE Equity Research Lipum 26 February 2025

# Summary Redeye Rating

The rating consists of three valuation keys, each constituting an overall assessment of several factors that are rated on a scale of 0 to 1 points. The maximum score for a valuation key is 5 points.

# Rating changes in the report

### People: 3

We view the company's management and board as competent, and we believe shareholders can be confident in its executive and strategic abilities. Despite being small, the management team is dynamic and experienced.

### Business: 3

Lipum is a biotech company in the research and development stage. Consequently, the company is yet to register any recurring revenue. Instead, the company is highly dependent on capital markets for near-term funding and potential licensing partners for future late-stage development. However, we argue that the future sales potential for SOL-116 is significant as our sales model estimates global annual peak sales of more than USD 600m.

### Financials: 0

The company will be in need of capital and dependent on the capital markets to carry on operations until completion of phase II trials with SOL-116.

	2023	2024	2025e	2026e	DCF Valuation Metrics Initial Period (2023–2030)			Sum FCI	(SEKm) 53
INCOME STATEMENT Revenues	0	0	0	0	Momentum Period (2031–2035)				265
Cost of Revenues	0	0	0	0	Stable Period (2036–)				212
Gross Profit	0	0	0	0	Firm Value				531
Operating Expenses	37	56	52	64	Net Debt (last quarter)				-8
EBITDA	-37	-56	-52	-64	Equity Value				523
Depreciation & Amortization	0	0	0	0	Fair Value per Share				24
EBIT	-37	-56	-52	-64					
Net Financial Items	0	0	0	0		2023	2024	2025e	2026e
EBT	-37	-56	-52	-64	CAPITAL STRUCTURE				
Income Tax Expenses	0	0	0	0	Equity Ratio	0,2	0,1	0,1	0,1
Non-Controlling Interest	0	0	0	0	Debt to equity	1,0	2,2	-1,4	-1,2
Net Income	-37	-56	-52	-64	Net Debt	-8	5	-70	-24
					Capital Employed	6	24	80	35
BALANCE SHEET					Working Capital Turnover	0,0	0,0	0,0	0,0
Assets Current assets									
Cash & Equivalents	10	7	62	16	<b>G R O W T H</b> Revenue Growth	-100%	N/A	N/A	N/A
Inventories	0	0	0	0	Basic EPS Growth	-19%	-34%	-34%	24%
Accounts Receivable	0	1	1	1	Adjusted Basic EPS Growth	-19%	-34%	-34%	24%
Other Current Assets	1	37	39	41	,				
Total Current Assets	12	46	102	59	PRO FIT A BILITY				
					ROE	-1764%	-1461%	<del>-947</del> %	-1132%
Non-current assets					ROCE	-591%	-235%	-65%	-183%
Property, Plant & Equipment, Net	0	0	0	0	ROIC	1245%	-469%	-186%	-222%
Goodwill	0	0	0	0	EBITDA Margin (%)	N/A	N/A	N/A	N/A
Intangible Assets	0	0	0	0	EBIT Margin (%)	N/A	N/A	N/A	N/A
Right-of-Use Assets	0	0	0	0	Net Income Margin (%)	N/A	N/A	N/A	N/A
Shares in Associates	0	0	0	0					
Other Long-Term Assets	0	0	0	0					
Total Non-Current Assets	0	0	0	0	VALUATION				
Total Assets	12	46	102	59	Basic EPS Adjusted Basic EPS	neg	neg	neg	neg
Intal 922612	12	40	102	39	P/E	neg neg	neg neg	neg neg	neg neg
1 * 1 99*					EV/Revenue	N/A	N/A	N/A	N/A
Liabilities Current liabilities					EV/EBITDA	neg	neg	neg	neg
Short-Term Debt	1	10	10	11	EV/EBIT	neg	neg	neg	neg
Short-Term Lease Liabilities	0	0	0	0	P/B	74,8	74,1	99,6	95,8
Accounts Payable	4	8	8	8					
Other Current Liabilities	1	4	4	4					
Total Current Liabilities	6	22	23	23	SHAREHOLDER STRUCTURE		CA	PITAL % V	OTES %
					Flerie Invest			56,8%	56,8%
Non-current liabilities					Crafoordska stiftelsen			6,1%	6,1%
Long-Term Debt	2	2	-18	-18	Susanne Lindqvist			3,5%	3,5%
Long-Term Lease Liabilities	0	0	0	0	Christian von Koenigsegg			3,4%	3,4%
Other Long-Term Liabilities Total Non-current Liabilities	0	0	0	0	Tibia Konsult			2,6%	2,6%
TOTAL MOIT-CUTTERN LIADINITIES	2	2	-18	-18					
Non-Controlling Interest	0	0	0	0	SHARE INFORMATION Reuters code				LIPUM
Shareholder's Equity	2	5	6	6	List			F	irst North
Total Liabilities & Equity	10	29	10	11	Share price			•	18,7
					Total shares, million				21,21244
CASH FLOW									•
NOPAT	-37	-56	-52	-64					
Change in Working Capital	1	-31	-1	-1	MANAGEMENT & BOARD				
Operating Cash Flow	-36	-87	-44	-64	CEO				andborgh
0.015					CFO				Norberg
Capital Expenditures	0	0	0	0	Chairman			Ulf	Björklund
Investment in Intangible Assets	0	0	0	0					
Investing Cash Flow	0	0	0	0					Redeye AB
Financing Cash Flow	14	83	99	19	ANALYSTS Kevin Sule		Mäch	er Samuelsga	
Free Cash Flow	-36	-87	-44	-64	Fredrik Thor		wasi	_	7 Stockholm
		<i>3.</i>		<del>-</del> -					

REDEYE Equity Research Lipum 26 February 2025

# Redeye Rating and Background Definitions

### **Company Quality**

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

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

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

#### **People**

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

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

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

#### **Business**

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

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

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

#### **Financials**

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

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

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

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### Disclaimer

#### Important information

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

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Redeye does not issue any investment recommendations for fundamental analysis. However, Redeye has developed a proprietary analysis and rating model, Redeye Rating, in which each company is analyzed and evaluated. This analysis aims to provide an independent assessment of the company in question, its opportunities, risks, etc. The purpose is to provide an objective and professional set of data for owners and investors to use in their decision-making.

#### Redeye Rating (2025-02-26)

Rating	People	Business	Financials
5p	8	5	2
3p - 4p	149	150	39
0p - 2p	23	25	139
Company N	180	180	180

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#### **CONFLICT OF INTERESTS**

 $\label{eq:company:No-state} \textbf{Kevin Sule owns shares in the company:} \ \textbf{No-state}$ 

Fredrik Thor owns shares in the company :No  $\,$ 

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.