

**REDEYE** 



# **Artificial Solutions**

Sector: Software

## Strong Key Metrics

### Solid development for order intake and backlog

Solid development for the two main metrics, order intake and order backlog, which grew by 65% and 101%, respectively, was the main highlights in the quarter. As these metrics provides a projection for future revenues the numbers supports our high growth estimates. Also, during the quarter, three new customers were signed (one of the key metrics besides order intake and order backlog). Overall, a report that demonstrates execution and development in line with AS strategy. However, AS had worked to secure additional funding (cash amounted to SEK 15.6 million at the end of Q3'19) in advance of the earnings announcement but this will require some additional time to close (i.e. a timing issue). Concerns over the financial position should explain the share price decline ( $\sim$ 30%) following the report – we expect funding to be secured in the very near-term (and erase current uncertainty). Following the report we make some short-term adjustments, new base case valuation is SEK 28.0 (earlier 30.0) per share, fair value range remains unchanged at 4.0 – 59.0 SEK.

### Usage revenues; 21 (12) % of net sales

Even as the shift to a partner-led model had a dilutive effect on top-line, net sales increased 33% to SEK 12.8 (9.6) million (estimates: 15.0). The two key forward-looking metrics, order intake and order backlog, amounted to SEK 6.1 (3.7) million and SEK 46.9 (23.3) million respectively, continuing its positive momentum from last quarter. Besides supporting future growth, the order backlog will improve profitability as the nature of revenues in the backlog focus on high margin revenues (licenses and usage). A sharp increase in usage revenues (most profitable revenue stream) of 145% (SEK 2.7 million) and increased revenues delivered through partners (43% vs 38%) grew gross margin to 62 (52)% (estimates: 58). Operating expenses (personnel costs & other external costs) increased to SEK -37.7 (-27.6) million (estimates: -35.2). Overall the cost base contained no surprises and is anticipated to show modest increases going forward.

### Forward EV/Sales multiple of 4.7x

AS currently trades at a forward EV/Sales multiple around 4.7x. We see good scope for a revaluation if the company performs as we forecast and gain more visibility with investors. Customer acquisition and higher growth will be the key catalysts over the coming year.

KEY FINANCIALS (SEKm)	2017	2018	2019E	2020E	2021E	2022E
Net sales	48	45	54	76	109	159
EBITDA	-65	-95	-114	-81	-53	-6
EBIT	-91	-119	-148	-94	-67	-21
EPS (adj.)	neg.	neg.	neg.	neg.	neg.	neg.
EV/Sales	n/a	n/a	6.6	4.7	3.3	2.3
EV/EBITDA	n/a	n/a	neg.	neg.	neg.	neg.
EV/EBIT	n/a	n/a	neg.	neg.	neg.	neg.
P/E	n/a	n/a	neg.	neg.	neg.	neg.

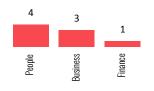
### **FAIR VALUE RANGE**

BEAR	BASE	BULL
4.0	28.0	59.0

### **ASAI.st VERSUS OMXS30**



#### **REDEYE RATING**



### **KEY STATS**

Ticker	ASAI.st
Market	First North
Share Price (SEK)	10.5
Market Cap (MSEK)	259
Net Debt 19E (MSEK)	99
Free Float	56 %

### **ANALYSTS**

ANALISIS	
Havan Hanna	
havan.hanna@redeye.se	
Viktor Westman	
viktor.westman@redeye.se	

# Artificial Solutions: Q3'19

Net sales were up 33% y/y, but 15% below our forecasts and the operating loss came in 11% higher than estimates, supported by a stronger than expected gross margin at 62%. We reiterate that the shift to a partner-led model will have a dilutive effect on net sales throughout 2019. Sales via partners have two properties: i) revenue streams from partners are delayed before AS recognises them, and ii) a dilutive effect on top-line (service revenue accrue mainly to partners).

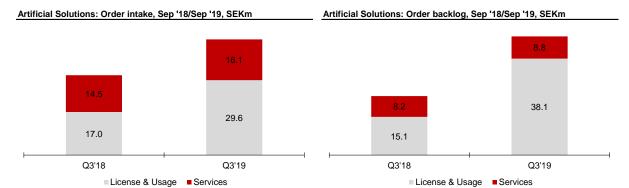
Artificial Solutions: Actuals and estimates, Q3'19

SEKm	Q3'18	Q3'19e	Q3'19a	Diff. (abs.)
Net sales	9.6	15.0	12.8	-15%
Capitalised costs	2.1	2.8	2.6	-7%
Other income	0.0	0.0	0.0	
Total income	11.7	17.8	15.4	-13%
Total OPEX	-32.2	-41.5	-42.6	3%
Total OPEX adj.	-32.2	-41.5	-42.3	2%
EBITDA	-20.5	-23.7	-27.2	15%
EBITDA adj.	-20.5	-23.7	-26.9	14%
D&A	-5.1	-3.1	-2.6	-16%
EBIT	-25.6	-26.8	-29.8	11%
EBIT adj.	-25.6	-26.8	-29.5	10%
Order intake	3.7	n.a	6.1	
Order backlog	23.3	n.a	46.9	
Net sales growth	n.a	56%	33%	
Order intake growth	n.a	n.a	65%	
Order backlog growth	n.a	n.a	101%	
Gross margin	52%	58%	62%	
EBITDA margin	neg	neg	neg	
EBIT margin	neg	neg	neg	

Source: Redeye Reserach, Artificial Solutions

## Order intake and order backlog

The forward-looking metrics, order intake and order backlog\* continued its positive momentum. As of September 2019 order intake and order backlog amounted to SEK 45.7 (31.5) million and SEK 46.9 (23.3) million, respectively.



Source: Redeye Research, Artificial Solutions

Source: Redeye Research, Artificial Solutions

Besides supporting future growth, both order intake and order backlog continued its shift to a more profitable revenue mix (in line with AS strategy), see figure below.

Artificial Solutions: Order intake and backlog, end of quarter

	U,	•	
(SEKm)	Q3'18	Q3'19	change
License & Usage	17.0	29.6	74.1%
% of total	54%	65%	
Services	14.5	16.1	10.7%
% of total	46%	35%	
Total order intake	31.5	45.7	44.9%

(SEKm)	Q3'18	Q3'19	change
License & Usage	15.1	38.1	152.3%
% of total	65%	81%	
Services	8.2	8.8	7.3%
% of total	35%	19%	
Total order backlog	23.3	46.9	101.3%

Source: Redeye Research, Artificial Solutions

31% of total order backlog is expected to be delivered in 2021 and beyond. Important to note here is that as some customers will buy usage and services "as used", the future revenues from existing customers may be beyond that included in backlog at any stage.

## Other Q3'19 highlights

- AS communicates that existing customers have increased the usage element of their
  orders. This is an important metric to follow (usage revenues) as it is the most profitable
  revenue stream and steams from an increased use/roll-out of the Teneo platform.
- Three new customers were added, giving a total of ten new customers during the last six months. New customers are the primary metric to follow besides order intake and backlog. AS has around 50-55 customers.
- Teneo Developers (an environment in which customers can learn and trial the Teneo technology guided senior experts), launched in March, has shortened sales cycle (one of the main bottlenecks for AS and its big customers). One customer has skipped the typical pilot phase and made instant deployment and AS closed another customer as a direct result of Teneo Developers. Teneo Developers should act as an extended customer acquisition tool going forward and further increase AS reach.

### Two new product resources

AS has recently launched two exciting resources; <u>Teneo Connectors</u> and new <u>language enhancements</u>. Teneo Connectors is a library of pre-built connectors to easily integrate backend systems and processes such as RPA (robotic process automation) into the conversational AI interface. This allow chatbots to deliver more intelligent responses based on the back-end actions, requests and processes it has executed. Connectors is a very interesting launch as integration with other systems is something that customers are looking for as a mean to leverage existing technologies. The language enhancements will ensure that Teneo continues to effortlessly understand even the most complex of sentences in any language.

# Financial projections

This section presents our estimate changes and detailed estimates.

## Estimate changes

The table below summarises our estimate changes for '19e-'21e following the report.

Artificial Solutions: Estimate changes, '19e-'21e

SEKm	2019e	2020e	2021e
Net sales (new)	54.0	75.9	109.3
Net sales (old)	57.2	80.7	116.2
change	-6%	-6%	-6%
EBITDA (new)	-114.4	-81.1	-52.7
EBITDA (old)	-111.5	-76.3	-45.8
change	-3%	-6%	-15%
EBIT (new)	-148.3	-94.1	-66.7
EBIT (old)	-145.9	-89.3	-59.8
change	-2%	-5%	-11%

Source: Redeye Reserach, Artificial Solutions

## **Detailed estimates**

Artificial Solutions: Profit and loss, at base case, '18-'22e

SEKm	2018	Q1'19	Q2'19	Q3'19	Q4'19e	2019e	2020e	2021e	2022e
Net sales	44.9	12.6	12.6	12.8	16.0	54.0	75.9	109.3	158.5
Capitalised costs	12.2	2.3	2.6	2.6	2.6	10.1	12.0	13.0	16.0
Other income	5.3	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
Total income	62.4	14.9	15.2	15.4	18.6	64.1	88.9	123.3	175.5
Other external costs	-51.5	-17.7	-16.7	-13.4	-15.0	-62.8	-49.0	-51.5	-54.0
Personnel costs	-105.9	-29.0	-28.5	-29.0	-29.0	-115.5	-121.0	-124.6	-127.1
Other operating costs	-0.1	0.0	0.0	-0.2	0.0	-0.2	-0.2	-0.2	-0.2
EBITDA	-95.1	-31.8	-30.0	-27.0	-25.4	-114.4	-81.1	-52.7	-5.6
D&A	-23.7	-25.1	-3.1	-2.6	-3.1	-33.9	-13.0	-13.9	-15.0
EBIT	-118.8	-56.9	-33.1	-29.8	-28.5	-148.3	-94.1	-66.7	-20.6
Net financials	-27.3	-2.4	-10.2	-12.2	-7.5	-32.3	-16.0	-12.0	-10.0
EBT	-146.1	-59.3	-43.3	-42.0	-36.0	-180.6	-110.1	-78.7	-30.6
Tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Income	-146.1	-59.3	-43.3	-42.0	-36.0	-180.6	-110.1	-78.7	-30.6

Source: Redeye Research, Artificial Solutions

### **Investment Case**

- Offers an attractive exposure to the conversational AI market
- Validated by mayor customers
- Revenue scalability
- Our DCF analysis indicates a value range of SEK 4.0 59.0, with a base case of SEK 28.0 per share.

As one of the leading vendors of conversational AI technology, Artificial Solutions is well-positioned for significant growth. Its underlying market is set to grow at around 40% a year over the next several years, while the company should harness the benefits of its 2013 transformation into a software-based provider, its revised go-to-market strategy and the scaling of its initial deployments in this period too.

### Major customers/partners

AS's blue-chip customers such as AT&T, Shell and Vodafone and its partner network of leading system integrators (including Accenture, Deloitte and KPMG) validate its technology. But now it must meet the key challenge of acquiring further customers from its target group of large global enterprises, whose sales cycles are usually long and complicated. We view its crucial shift to a partner-led model as ensuring scalability and efficiency and note that partners' share of revenue has already increased from 9% in 2016 to 32% in 2018.

### **Revenue Scalability**

Two of AS's three revenue streams - licenses and usage fees - provide high gross margins ( $\sim$ 90%) and recurring revenues. The company's high operating leverage should translate into significant profitability if it succeeds in growing with its market while controlling customer churn and acquisition costs.

### Tough start

Since AS's reverse takeover in March 2019, the share has fallen for no fundamental reason by some 70%. We see good scope for a continued revaluation if the company performs as we forecast and gains more visibility with investors.

### **Valuation**

Our valuation assumes around SEK 100m in new equity this year with ~13% dilution (precise numbers depending on the share price at the time of the issue). The number of shares in our valuation amounts to 28.56 million. The numbers presented in the 'Financial projections" chapter make up our estimates for the forecast period '19-'22 in base case.

We derive our fair value from a fundamental DCF analysis applied across three scenarios - base case (most likely), bear case (pessimistic) and bull case (optimistic).

### Bear Case 4.0 SEK

- CAGR sales '18-'22: 37%
- CAGR sales '22-'28: 20%
- Terminal growth rate: 2%
- Sales '28e: SEK 370m
- Avg. EBIT margin ('22-'28): 10%
   Terminal EBIT margin: 14%
- WACC: 12%

In our bear case scenario, we see our bear points materialize. It mainly boils down to competition and technology risks, where we assume that Teneo will not sustain its competitiveness over the medium and long-term.

As a result, the shift towards more profitable revenue types do not occur and the operating leverage is not realized.

These factors will contribute to AS lowering ambition and become a company with limited growth possibilities (i.e. a consultancy company with minor software sales). Lowered ambition will result in minor investments, employment, and marketing – leading to stable margins.

### Base Case 28.0 SEK

Key Assumptions ('22-'28):

- CAGR sales: 32%
- Terminal growth rate: 2%
- Sales '28e: SEK 806m
- Avg. EBIT margin: 21%
- Terminal EBIT margin: 34%
- WACC: 12%

As the market develops, AS is well positioned to benefit from its superior offering. As a result, our base case sees it growing with the market thanks to the competitive product and its revised go-to-market strategy.

The company's high operating leverage will translate into significant profitability as we assume a low customer churn and favorable customer acquisition costs.

In base case, we anticipate positive cash flow from 2023, a pessimistic view relative to AS own targets of positive cash flow from 2020.

### Bull Case 59.0 SFK

- CAGR sales '18-'22: 46%
- CAGR sales '22-'28: 43%
- Terminal growth rate: 2%
- Sales '28e: SEK 1 470m
- Avg. EBIT margin ('22-'28): 26%
- Terminal EBIT margin: 37%
- WACC: 12%

Our bull case factors in higher growth, driven by more customer wins and wider deployments at each customer (i.e. higher ACV).

Greater success will let AS to leverage its conversational data even further with a healthy rate of product innovation steaming from it – which ensures its competitiveness over a longer period.

It's operating leverage and lower churn assumptions (driven by greater stickiness from wider deployments) allows for greater margins, explaining our long-term profitability assumptions.

In base case we anticipate positive cash flow from 2022, still a pessimistic view relative to AS own targets of positive cash flow from 2020.

## Catalysts

#### Growth

Customer acquisition and accelerated growth will be the most important catalysts for the share over the next year

## **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

No changes.

### People: 4

Artificial Solutions has a highly experienced senior management team and holds a strong position in terms of technological know-how and products. The challenges ahead relate to good execution and management (go-to-market approach, customer acquisition, partner strategy etc.). Our assessment is that the team is well-equipped to capitalize on these opportunities. In addition to the CEO's experience from companies undergoing expansion, the majority of the team has been at AS for eight years or more. We consider the management team and the developers to be fundamental to the company, which also represents a risk (dependency on key personnel). We would like the board and management team to have more skin in the game, to confirm their confidence in the company's future and to align their interests with other shareholders'. As of now, their combined holding amounts to  $\sim$ 4.9%.

#### Business: 3

AS is active in a market that is exhibiting particularly rapid growth. The overall global intelligent virtual assistants market is set to grow  $\sim$ 40% a year until 2023, according to Tractica, making it clearly a favorable market to be part of. Two of AS's three revenue streams - licenses and usage fees - provide high gross margins ( $\sim$ 90%) and recurring revenues. The company's high operating leverage should translate into significant profitability if it succeeds in growing with its market while controlling customer churn and acquisition costs.

### Financials: 1

Even though AS secured SEK66m in a targeted share issue (on the 20th of June) the funds will only suffice for the short-term. We anticipate that the company will need to raise additional capital this year for its ongoing operations. Its balance sheet is strained with negative equity and considerable debt (SEK ~194 million as of Q3'19, majority due in 2020). See page 61-63 in the company description document for more detailed information. AS has never before been able to reach profitability. In our estimates (base case), AS will reach profitability during 2023, at that point, the rating would start to gradually increase.

INCOME STATEMENT	2017	2018	2019E	2020E	2021E
Net sales	48	45	54	76	109
Total operating costs	-113	-140	-168	-157	-16:
EBITDA	-65	-95	-114	-81	-50
Depreciation	-1	-1	-1	-1	-
Amortization	-24	-23	-33	-13	-10
Impairment charges	0	0	0	0	(
EBIT	-91	-119	-148	-94	-6
Share in profits	0	0	0	0	(
Net financial items	-14	-27	-32	-16	-13
Exchange rate dif.	0	0	0	0	(
Pre-tax profit	-105	-146	-181	-110	-79
Tax	0	0	0	0	(
Net earnings	-105	-146	-181	-110	-79
BALANCE SHEET	2017	2018	2019E	2020E	2021
Assets Current assets					
	4	47	124	30	
Cash in banks	4	47 6	124	9	12
Receivables	0	0	0	0	14
Inventories					
Other current assets	10	17	17	17	1
Current assets	18	70	148	57	35
Fixed assets		0	0		
Tangible assets	2	2	2	2	
Associated comp.	0	0	0	0	(
Investments	5	6	6	6	(
Goodwill	7	0	0	0	(
Cap. exp. for dev.	0	0	0	0	(
O intangible rights	30	29	28	28	2
O non-current assets	0	0	0	0	(
Total fixed assets	45	37	36	35	35
Deferred tax assets	0	0	0	0	(
Total (assets)	63	107	183	92	69
Liabilities					
Current liabilities					
Short-term debt	75	94	143	153	178
Accounts payable	36	47	49	52	54
O current liabilities	0	0	0	0	8
Current liabilities	112	141	192	205	24
Long-term debt	24	52	80	85	100
O long-term liabilities	0	0	0	0	(
Convertibles	0	0	0	0	(
Total Liabilities	136	193	271	290	340
Deferred tax liab	0	0	0	0	(
Provisions	0	0	0	0	(
Shareholders' equity	-73	-86	-88	-198	-27
Minority interest (BS)	0	0	0	0	
Minority & equity	-73	-86	-88	-198	-27
Total liab & SE	63	107	183	92	69
FREE CASH FLOW	2017	2018	2019E	2020E	20211
Net sales	48	45	<b>2013</b> L	76	109
Total operating costs	-113	-140	-168	-157	-16:
Depreciations total	-113	-140	-34	-137	-10.
EBIT	-20	-119	-148	-94	-6
Taxes on EBIT	-91	-119	-148	-94	o- )
NOPLAT	-91	-119	-148	-94	-6
Depreciation	-91	-119	-148	-94	-o 1
Depreciation Gross cash flow		-95	-114	-81	-5:
Change in WC	-65	-95 1	-114		
	23	-16		12	1.
Gross CAPEX Free cash flow	-70 -113	-109	-33 -146	-13 -93	-14 -59
CAPITAL STRUCTURE	2017	2018	2019E	2020E	2021
Equity ratio	-115%	-81%	-48%	-216%	-390%
Debt/equity ratio	-137%	-169%	-253%	-120%	-1039
Net debt	95	99	99	208	27
Capital employed	22	13	11	10	
Capital turnover rate	0.8	0.4	0.3	0.8	1.0
GROWTH	2017	2018	2019E	2020E	2021
Sales growth	39% 0%	-6%	20%	41%	44%
EPS growth (adj)		-44%	-38%	-39%	-29%

DCF VALUATION WACC (%)	12.0 %	NPV FCF (2018-20			79
WAGG (70)	12.0 70	NPV FCF (2016-20	JZOJ		820
		Net debt (19e)			-99
		Fair value estimate	WGEN		800
Assumptions 2017-2023 (%)		rair value estilliate	MSEK		800
Average sales growth	40.9 %	Fair value e. per sh	are, SEK		28.0
EBIT margin	-59.8 %	Share price, SEK			10.5
PROFITABILITY	2017	2018	2019E	2020E	2021
ROE	0%		0%	0%	0%
ROCE	-679%	-275%	-186%	-126%	-333%
ROIC	0%	-532%	-1159%	-890%	-687%
EBITDA margin	-137%	-212%	-212%	-107%	-48%
EBIT margin	-191%	-265%	-275%	-124%	-61%
Net margin	-221%	-325%	-334%	-145%	-72%
DATA PER SHARE	2017	2018	2019E	2020E	2021E
EPS	neg.	neg.	neg.	neg.	neg.
EPS adj	neg.	neg.	neg.	neg.	neg.
Dividend	0.00	0.00	0.00	0.00	0.00
Net debt	16.56	6.98	3.45	7.28	9.54
Total shares	5.76	14.22	28.56	28.56	28.56
VALUATION	2017		2019E	2020E	2021
EV	n/a		358.0	358.0	358.0
P/E	n/a		neg.	neg.	neg
P/E diluted P/Sales	n/a n/a		neg. 4.8	neg. 3.4	neg 2.4
EV/Sales	n/a		6.6	4.7	3.3
EV/EBITDA	n/a				
EV/EBIT	n/a		neg. neg.	neg. neg.	neg neg
P/BV	n/a		neg.	neg.	neg
SHARE PERFORMANCE		GROV	/TH/YEAR		16/18E
1 month	-2	3.0 % Net sale	•		6.4 %
3 month	-5	5.9 % Operatir	ıg profit adj		27.7 %
12 month		n/a EPS, jus	l		-41.2 %
Since start of the year		n/a Equity			9.8 %
SHAREHOLDER STRUCTURE	%		CAPITAL		VOTES
Scope			43.8 %		43.8 %
AFA Försäkring			5.9 %		5.9 %
SIX SIS AG			4.9 %		4.9 %
UBS Switzerland AG			4.8 %		4.8 %
SEB-Stiftelsen			4.2 %		4.2 %
Lgt Bank LTD			3.3 %		3.3 %
JP Morgan Bank Luxembourg S.A.			2.8 %		2.8 %
C WorldWide Asset Management			2.8 %		2.8 %
Peter Lindell Andrew Walton-Green			2.7 % 2.7 %		2.7 % 2.7 %
SHARE INFORMATION					
Reuters code					ASAI.st
List					First North
Share price					10.4
Total shares, million					24.7
Market Cap, MSEK					259.5
MANAGEMENT & BOARD					
CEO					awrence Flynn
CFO					Chris Bushnel
IR Ohailianna					Chris Bushnel
Chairman					Åsa Hedin
FINANCIAL INFORMATION					
ANALYSTS Havan Hanna havan.hanna@redeye.se				Mäster Samuels	Redeye AB gatan 42, 10tr 57 Stockholm

viktor.westman@redeye.se

## Redeye Rating and Background Definitions

### **Company Quality**

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

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

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

The overall score for each category is then used to generate the size of the bar in the Company Quality graphic.

### People

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

The People rating is based on quantitative scores in seven categories: Passion, Execution, Capital Allocation, Communication, Compensation, Ownership, and Board.

#### **Business**

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

The Business rating is based on quantitative scores grouped into five sub-categories: Business Scalability, Market Structure, Value Proposition, Economic Moat, and Operational Risks.

### **Financials**

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

The Financial rating is based on quantitative scores that are grouped into five separate categories: Earnings Power, Profit Margin, Growth Rate, Financial Health, and Earnings Quality.

## Redeye Equity Research team

Management

Björn Fahlén

bjorn.fahlen@redeye.se

Håkan Östling

hakan.ostling@redeye.se

**Technology Team** 

Jonas Amnesten

jonas.amnesten@redeye.se

Henrik Alveskog

henrik.alveskog@redeye.se

Dennis Berggren

dennis.berggren@redeye.se

Havan Hanna

havan.hanna@redeye.se

Kristoffer Lindström

kristoffer.lindstrom@redeye.se

Fredrik Nilsson

fredrik.nilsson@redeye.se

Tomas Otterbeck

tomas. otterbeck @ redeye.se

Eddie Palmgren

eddie.palmgren@redeye.se

Oskar Vilhelmsson

oskar.vilhelmsson@redeye.se

Viktor Westman

viktor.westman@redeye.se

Linus Sigurdsson (Trainee)

linus.sigurdsson@redeye.se

Editorial

Jim Andersson

jim.andersson@redeye.se

Eddie Palmgren

eddie.palmgren@redeye.se

Mark Sjöstedt

mark.sjostedt@redeye.se

Johan Kårestedt (Trainee)

johan.karestedt@redeye.se

Life Science Team

Anders Hedlund

anders.hedlund@redeye.se

Arvid Necander

arvid.necander@redeye.se

Erik Nordström

erik.nordstrom@redeye.se

Klas Palin

klas.palin@redeye.se

Jakob Svensson

jakob.svensson@redeye.se

Ludvig Svensson

ludvig.svensson@redeye.se

Oskar Bergman

oskar.bergman@redeye.se

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Rating	People	Business	Financials
5p	11	10	2
3p - 4p	82	64	28
0p - 2p	10	29	73
Company N	103	103	103

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Havan Hanna owns shares in the company: No

Viktor Westman owns shares in the company: No

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