

Pushing ahead

Artificial Solutions reported a strong Q1'23 with SaaS ARR growing 134% y/y and 20% q/q, entirely in-line with our forecast. The company is on track to meet its SEK 200m ARR target in '25 should it print similar growth in upcoming reports, which we factor in. After minor estimate changes (nominal), we reiterate our Buy rating and 12mth TP of SEK 2.3. We recently initiated coverage of Artificial Solutions (13 April '23) – [LINK](#).

Growing fast, according to plan

Net sales amounted to SEK 13.6m (+34% y/y and +5% q/q), fully aligned with our forecast. The report highlight was, in our opinion, the SaaS ARR, which amounted to SEK 30.2m (+134% y/y and +20% q/q). This was underpinned by solid growth in API Calls, which amounted to 18.9m in March '23, or 280m annualized (+250% y/y and +37% q/q). The company's recently announced financial targets include reaching SEK 200m in ARR during 2025 (ARR, SaaS plus non-SaaS, was SEK 57m in Q1'23). This is attainable should Artificial Solutions continue to print similar growth rates in upcoming reports. Regarding profitability, EBITDA adj/EBIT amounted to negative SEK 18m/24m, more or less as expected. The gross margin surprised on the downside, 56% compared to PAsE at 70%, due to an adjusted commission structure for its salespeople. This puts some pressure on short-term margins according to mgmt. but should yield long-term results, as the company is aligning the entire organization to support its growth journey.

Pushing ahead in 2023

Considering the global AI frenzy on the back of OpenAI/ChatGPT headlines, we assess that Artificial Solutions is in a good spot to expand its operations. The company has just launched OpenQuestion, a best-in-class voice solution that optimizes call routing in contact centers. In light of this, the company expects to make a commercial push this year. Previously, the strategy was primarily to grow with its installed base and win only a couple of new contracts annually.

Reiterated rating and TP

On the back of the report, we only make minor nominal estimate changes, and expect the company to reach all its financial targets in '24 and '25. We forecast EBITDA/EBIT of SEK 4m/-14m in '25 (previously SEK 10m/-8m). The company currently trades at '23e/'25e EV/S of 5.5x/2.7x, which is in line with Nordic enterprise SaaS peers at the end of the forecast period. We argue the company should trade at a premium, should it reach its financial targets, and reiterate our Buy rating and 12mth TP of SEK 2.3, corresponding to '25E EV/S of 3.4x.

SEKm	2021	2022	2023e	2024e	2025e
Revenues	39	46	64	99	167
EBITDA	(58)	(76)	(81)	(61)	4
EBIT adj	(68)	(89)	(94)	(78)	(14)
EBIT margin adj	-	-	-	-	-
EPS	(12.20)	(12.98)	(0.85)	(0.91)	(0.32)
EPS adj	(11.72)	(12.95)	(0.82)	(0.91)	(0.32)
DPS	-	-	-	-	-
EV/EBITDA	-	-	-	-	-
EV/EBIT adj	-	-	-	-	-
P/E adj	-	-	-	-	-
P/B	-	-	-	-	-
ROE (%)	-	-	-	-	-
Div yield (%)	-	-	-	-	-
Net debt	126	246	234	321	335

Source: Pareto Securities

Target price (SEK)	2.3	▲	BUY
Share price (SEK)	1.1	—	HOLD
		▼	SELL

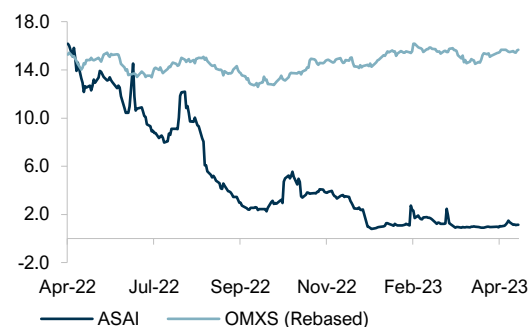
Forecast changes

%	2023e	2024e	2025e
Revenues	6	(0)	(2)
EBITDA	(13)	(25)	(60)
EBIT adj	(12)	(22)	(81)
EPS reported	8	(16)	(21)
EPS adj	11	(16)	(21)

Source: Pareto Securities

Ticker	ASAIN.ST, ASAI SS
Sector	Software & Services
Shares fully diluted (m)	102.4
Market cap (SEKm)	116
Net debt (SEKm)	234
Minority interests (SEKm)	0
Enterprise value 23e (SEKm)	350
Free float (%)	85

Performance



Source: FactSet

Analysts

Forbes Goldman
+46 8 402 5278, forbes.goldman@paretosec.com

Key financials 2021-25E (SEKm)

PROFIT & LOSS	2021	2022	2023E	2024E	2025E	Q1'22	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23E	Q3'23E	Q4'23E
Net sales	39	46	64	99	167	10	10	12	13	14	16	17	18
Total other operating income	17	19	16	18	18	3	3	3	10	4	4	4	4
Total operating income	56	65	81	116	184	13	13	15	23	18	20	21	22
COGS	(12)	(16)	(25)	(26)	(22)	(3)	(3)	(5)	(5)	(6)	(6)	(6)	(6)
Gross profit	27	30	39	73	144	7	7	7	8	8	9	10	12
Gross margin	70%	65%	61%	74%	87%	74%	67%	58%	64%	56%	59%	62%	66%
Personnel costs	(71)	(85)	(107)	(117)	(117)	(19)	(22)	(21)	(23)	(25)	(27)	(27)	(27)
Other external costs	(30)	(40)	(30)	(35)	(41)	(10)	(11)	(9)	(10)	(7)	(7)	(8)	(8)
Other operating expenses	(2)	-	-	-	-	-	-	-	-	-	-	-	-
OPEX	(102)	(125)	(137)	(152)	(158)	(29)	(33)	(30)	(33)	(32)	(35)	(35)	(35)
Non-recurring costs(-)/income(+)	(3)	(0)	(3)	-	-	(1)	(1)	(0)	1	(3)	-	-	-
OPEX adj.	(100)	(125)	(134)	(152)	(158)	(28)	(32)	(30)	(34)	(30)	(35)	(35)	(35)
EBITDA adj.	(55)	(76)	(78)	(61)	4	(18)	(22)	(20)	(16)	(18)	(21)	(20)	(19)
EBITDA adj. margin	-99%	-117%	-97%	-52%	2%	-137%	-167%	-133%	-68%	-103%	-107%	-96%	-85%
EBITDA	(58)	(76)	(81)	(61)	4	(18)	(23)	(20)	(14)	(21)	(21)	(20)	(19)
EBITDA margin	-104%	-118%	-101%	-52%	2%	-141%	-172%	-135%	-62%	-118%	-107%	-96%	-85%
D&A	(13)	(13)	(16)	(17)	(18)	(4)	(3)	(3)	(3)	(4)	(4)	(4)	(4)
EBIT	(71)	(89)	(97)	(78)	(14)	(22)	(26)	(23)	(17)	(24)	(25)	(24)	(23)
EBIT margin	-127%	-137%	-120%	-67%	-8%	-169%	-196%	-153%	-75%	-139%	-128%	-115%	-103%
Net interest	1	4	23	(16)	(18)	(4)	11	1	(5)	30	(2)	(2)	(2)
Profit before taxes	(70)	(85)	(74)	(94)	(32)	(26)	(16)	(22)	(22)	5	(28)	(26)	(25)
Taxes	-	(0)	-	-	(1)	-	-	-	(0)	-	-	-	-
Net profit	(70)	(85)	(74)	(94)	(32)	(26)	(16)	(22)	(22)	5	(28)	(26)	(25)
Net profit margin	-125%	-132%	-92%	-80%	-18%	-196%	-116%	-144%	-97%	31%	-140%	-127%	-114%
EPS reported	(12.2)	(13.0)	(0.8)	(0.9)	(0.3)	(3.9)	(2.4)	(3.3)	(3.4)	0.1	(0.3)	(0.3)	(0.2)
Net sales by segment													
Licenses & support	20	23	26	31	37	6	6	6	6	6	7	7	7
Usage	10	17	35	63	122	3	4	5	6	7	8	9	10
Other	9	5	3	5	8	1	1	2	1	0	1	1	1
Net sales	39	46	64	99	167	10	10	12	13	14	16	17	18
Recurring revenues	30	41	61	94	159	9	9	11	12	13	15	16	17
ARR forecast													
ARR	-	50	73	122	200	34	39	45	50	57	61	66	73
Non-SaaS ARR	-	24	20	10	-	21	19	22	24	27	25	22	20
SaaS ARR	9	25	53	112	200	13	20	24	25	30	36	44	53
Monthly SaaS API Calls (m)	3	14	36	83	167	5	9	11	14	19	23	29	36
Annualized SaaS API Call run-rate (m)	35	166	428	1,000	2,005	65	112	137	166	227	280	347	428
SaaS ARR per API Call (SEK)	0.27	0.15	0.12	0.11	0.10	0.20	0.18	0.17	0.15	0.13	0.13	0.13	0.12

Source: Company data, Pareto Securities

PROFIT & LOSS (fiscal year) (SEKm)	2018	2019	2020	2021	2022	2023e	2024e	2025e
Revenues	45	49	54	39	46	64	99	167
Growth Revenues	+chg	9.4%	9.4%	(27.8%)	18.0%	40.2%	53.9%	68.8%
EBITDA	(95)	(135)	(86)	(58)	(76)	(81)	(61)	4
Depreciation & amortisation	(24)	(12)	(12)	(13)	(13)	(16)	(17)	(18)
EBIT	(119)	(146)	(98)	(71)	(89)	(97)	(78)	(14)
EBIT adjusted	(119)	(146)	(98)	(68)	(89)	(94)	(78)	(14)
Net interest	(27)	(36)	(57)	1	4	23	(16)	(18)
Other financial items	-	-	-	-	-	-	-	-
Profit before taxes	(146)	(182)	(154)	(70)	(85)	(74)	(94)	(32)
Taxes	-	-	(0)	-	(0)	-	-	(1)
Minority interest	-	-	-	-	-	-	-	-
Net profit	(146)	(182)	(154)	(70)	(85)	(74)	(94)	(32)
EPS reported	(14.32)	(9.33)	(33.07)	(12.20)	(12.98)	(0.85)	(0.91)	(0.32)
EPS adjusted	(14.32)	(9.33)	(33.07)	(11.72)	(12.95)	(0.82)	(0.91)	(0.32)
Growth EPS adjusted		+chg	-chg	+chg	-chg	+chg	-chg	+chg
DPS	-	-	-	-	-	-	-	-
BALANCE SHEET (SEKm)	2018	2019	2020	2021	2022	2023e	2024e	2025e
Tangible non current assets	-	-	1	1	1	1	2	3
Other non-current assets	-	-	33	30	34	35	35	36
Other current assets	-	-	23	26	36	22	27	33
Cash & equivalents	-	-	20	112	18	13	11	8
Total assets	-	-	77	168	89	71	75	80
Total equity	-	-	(173)	(119)	(234)	(238)	(331)	(364)
Interest-bearing non-current debt	-	-	116	238	264	247	257	268
Interest-bearing current debt	-	-	70	-	-	-	75	75
Other Debt	-	-	64	50	59	61	74	101
Total liabilities & equity	-	-	77	168	89	71	75	80
CASH FLOW (SEKm)	2018	2019	2020	2021	2022	2023e	2024e	2025e
Cash earnings	(110)	(129)	(109)	(96)	(82)	(60)	(66)	(4)
Change in working capital	(12)	(15)	33	(23)	4	3	8	20
Cash flow from investments	(13)	(14)	(10)	(15)	(15)	(17)	(19)	(19)
Cash flow from financing	177	116	102	225	(1)	77	75	-
Net cash flow	42	(42)	16	92	(94)	3	(2)	(4)
VALUATION (SEKm)	2018	2019	2020	2021	2022	2023e	2024e	2025e
Share price (SEK end)	80.9	21.7	40.9	21.5	0.79	1.13	1.13	1.13
Number of shares end period	14	25	4	7	7	102	102	102
Net interest bearing debt	-	-	166	126	246	234	321	335
Enterprise value	1,149	536	349	267	251	350	437	451
EV/Sales	25.6	10.9	6.5	6.9	5.5	5.5	4.4	2.7
EV/EBITDA	-	-	-	-	-	-	-	-
EV/EBIT	-	-	-	-	-	-	-	-
EV/EBIT adjusted	-	-	-	-	-	-	-	-
P/E reported	-	-	-	-	-	-	-	-
P/E adjusted	-	-	-	-	-	-	-	-
P/B	-	-	-	-	-	-	-	-
FINANCIAL ANALYSIS	2018	2019	2020	2021	2022	2023e	2024e	2025e
ROE adjusted (%)	-	-	-	-	-	-	-	-
Dividend yield (%)	-	-	-	-	-	-	-	-
EBITDA margin (%)	-	-	-	-	-	-	-	2.4
EBIT margin (%)	-	-	-	-	-	-	-	-
EBIT margin adj(%)	-	-	-	-	-	-	-	-
NIBD/EBITDA	-	-	(1.94)	(2.16)	(3.22)	(2.89)	(5.29)	82.26

PROFIT & LOSS (fiscal year) (SEKm)	1Q'22	2Q'22	3Q'22	4Q'22	1Q'23e	2Q'23e	3Q'23e	4Q'23e
Revenues	10	10	12	13	14	16	17	18
EBITDA	(18)	(23)	(20)	(14)	(21)	(21)	(20)	(19)
Depreciation & amortisation	(4)	(3)	(3)	(3)	(4)	(4)	(4)	(4)
EBIT	(22)	(26)	(23)	(17)	(24)	(25)	(24)	(23)
Net interest	(4)	11	1	(5)	30	(2)	(2)	(2)
Other financial items	-	-	-	-	-	-	-	-
Profit before taxes	(26)	(16)	(22)	(22)	5	(28)	(26)	(25)
Taxes	-	-	-	(0)	-	-	-	-
Minority interest	-	-	-	-	-	-	-	-
Net profit	(26)	(16)	(22)	(22)	5	(28)	(26)	(25)
EPS reported	(3.92)	(2.36)	(3.29)	(3.41)	0.13	(0.27)	(0.26)	(0.25)
EPS adjusted	(3.84)	(2.25)	(3.24)	(3.61)	0.19	(0.27)	(0.26)	(0.25)
DPS	-	-	-	-	-	-	-	-
BALANCE SHEET (SEKm)	1Q'22	2Q'22	3Q'22	4Q'22	1Q'23e	2Q'23e	3Q'23e	4Q'23e
Tangible non current assets	1	1	1	1	1	1	1	1
Other non-current assets	30	31	32	34	34	34	34	35
Other current assets	21	24	24	36	19	20	21	22
Cash & equivalents	84	64	39	18	83	58	35	13
Total assets	136	120	96	89	137	114	92	71
Total equity	(148)	(179)	(210)	(234)	(158)	(186)	(212)	(238)
Interest-bearing non-current debt	242	249	257	264	240	242	245	247
Interest-bearing current debt	-	-	-	-	-	-	-	-
Other Debt	42	50	48	59	55	57	59	61
Total liabilities & equity	136	120	96	89	137	114	92	71
CASH FLOW (SEKm)	1Q'22	2Q'22	3Q'22	4Q'22	1Q'23e	2Q'23e	3Q'23e	4Q'23e
Cash earnings	(23)	(20)	(19)	(19)	(15)	(21)	(20)	(19)
Change in working capital	(2)	3	(2)	5	7	1	1	1
Cash flow from investments	(3)	(3)	(3)	(5)	(4)	(4)	(4)	(4)
Cash flow from financing	-	-	-	(1)	77	-	-	-
Net cash flow	(28)	(21)	(25)	(21)	65	(25)	(23)	(22)
VALUATION (SEKm)	1Q'22	2Q'22	3Q'22	4Q'22	1Q'23e	2Q'23e	3Q'23e	4Q'23e
Share price (SEK end)	15.3	10.1	2.43	0.79	0.90	1.13	1.13	1.13
Number of shares end period	7	7	7	7	102	102	102	102
Net interest bearing debt	157	185	218	246	157	184	210	234
P/E reported	-	-	-	-	-	-	-	-
P/E adjusted	-	-	-	-	-	-	-	-
P/B	-	-	-	-	-	-	-	-
FINANCIAL ANALYSIS	1Q'22	2Q'22	3Q'22	4Q'22	1Q'23e	2Q'23e	3Q'23e	4Q'23e
Dividend yield (%)	-	-	-	-	-	-	-	-
EBITDA margin (%)	-	-	-	-	-	-	-	-
EBIT margin (%)	-	-	-	-	-	-	-	-
NIBD/EBITDA	(1.80)	(2.12)	(2.29)	(2.65)	(2.57)	(2.63)	(2.61)	(2.42)
EBITDA/Net interest	-	-	11.21	20.53	2.05	3.13	3.72	3.48

Disclaimer and legal disclosures

Origin of the publication or report

This publication or report originates from Pareto Securities AS, reg. no. 956 632 374 (Norway), Pareto Securities AS, Frankfurt branch, reg. no. DE 320 965 513 / HR B 109177 (Germany) or Pareto Securities AB, reg. no. 556206-8956 (Sweden) (together the Group Companies or the "Pareto Securities Group") acting through their common unit Pareto Securities Research. The Group Companies are supervised by the Financial Supervisory Authority of their respective home countries.

Content of the publication or report

This publication or report has been prepared solely by Pareto Securities Research.

Opinions or suggestions from Pareto Securities Research may deviate from recommendations or opinions presented by other departments or companies in the Pareto Securities Group. The reason may typically be the result of differing time horizons, methodologies, contexts or other factors.

Sponsored research

Please note that if this report is labelled as "sponsored research" on the front page, Pareto Securities has entered into an agreement with the company about the preparation of research reports and receives compensation from the company for this service. Sponsored research is prepared by the Research Department of Pareto Securities without any instruction rights by the company. Sponsored research is however commissioned for and paid by the company and such material is considered by Pareto Securities to qualify as an acceptable minor non-monetary benefit according to the EU MiFID II Directive.

Basis and methods for assessment

Opinions and price targets are based on one or more methods of valuation, for instance cash flow analysis, use of multiples, behavioral technical analyses of underlying market movements in combination with considerations of the market situation and the time horizon. Key assumptions of forecasts, price targets and projections in research cited or reproduced appear in the research material from the named sources. The date of publication appears from the research material cited or reproduced. Opinions and estimates may be updated in subsequent versions of the publication or report, provided that the relevant company/issuer is treated anew in such later versions of the publication or report.

Pareto Securities Research may provide credit research with more specific price targets based on different valuation methods, including the analysis of key credit ratios and other factors describing the securities creditworthiness, peer group analysis of securities with similar creditworthiness and different DCF-valuations. All descriptions of loan agreement structures and loan agreement features are obtained from sources which Pareto Securities Research believes to be reliable, but Pareto Securities Research does not represent or warrant their accuracy. Be aware that investors should go through the specific complete loan agreement before investing in any bonds and not base an investment decision based solely on information contained in this publication or report.

Pareto Securities Research has no fixed schedule for updating publications or reports.

Unless otherwise stated on the first page, the publication or report has not been reviewed by the issuer before dissemination. In instances where all or part of a report is presented to the issuer prior to publication, the purpose is to ensure that facts are correct.

Validity of the publication or report

All opinions and estimates in this publication or report are, regardless of source, given in good faith and may only be valid as of the stated date of this publication or report and are subject to change without notice.

No individual investment or tax advice

The publication or report is intended only to provide general and preliminary information to investors and shall not be construed as the basis for any investment decision. This publication or report has been prepared by Pareto Securities Research as general information for private use of investors to whom the publication or report has been distributed, but it is not intended as a personal recommendation of particular financial instruments or strategies and thus it does not provide individually tailored investment advice, and does not take into account the individual investor's particular financial situation, existing holdings or liabilities, investment knowledge and experience, investment objective and horizon or risk profile and preferences. The investor must particularly ensure the suitability of an investment as regards his/her financial and fiscal situation and investment objectives. The investor bears the risk of losses in connection with an investment.

Before acting on any information in this publication or report, we recommend consulting your financial advisor.

The information contained in this publication or report does not constitute advice on the tax consequences of making any particular investment decision. Each investor shall make his/her own appraisal of the tax and other financial merits of his/her investment.

Sources

This publication or report may be based on or contain information, such as opinions, recommendations, estimates, price targets and valuations which emanate from Pareto Securities Research' analysts or representatives, publicly available information, information from other units or companies in the Group Companies, or other named sources.

To the extent this publication or report is based on or contains information emanating from other sources ("Other Sources") than Pareto Securities Research ("External Information"), Pareto Securities Research has deemed the Other Sources to be reliable but neither the companies in the Pareto Securities Group, others associated or affiliated with said companies nor any other person, guarantee the accuracy, adequacy or completeness of the External Information.

Ratings

Equity ratings:

"Buy"	Pareto Securities Research expects this financial instrument's total return to exceed 10% over the next 12 months
"Hold"	Pareto Securities Research expects this financial instrument's total return to be between -10% and 10% over the next 12 months
"Sell"	Pareto Securities Research expects this financial instrument's total return to be negative by more than 10% over the next 12 months

Analysts Certification

The research analyst(s) whose name(s) appear on research reports prepared by Pareto Securities Research certify that: (i) all of the views expressed in the research report accurately reflect their personal views about the subject security or issuer, and (ii) no part of the research analysts' compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analysts in research reports that are prepared by Pareto Securities Research.

The research analysts whose names appears on research reports prepared by Pareto Securities Research received compensation that is based upon various factors including Pareto Securities' total revenues, a portion of which are generated by Pareto Securities' investment banking activities.

Limitation of liability

Pareto Securities Group or other associated and affiliated companies assume no liability as regards to any investment, divestment or retention decision taken by the investor on the basis of this publication or report. In no event will entities of the Pareto Securities Group or other associated and affiliated companies be liable for direct, indirect or incidental, special or consequential damages resulting from the information in this publication or report.

Neither the information nor any opinion which may be expressed herein constitutes a solicitation by Pareto Securities Research of purchase or sale of any securities nor does it constitute a solicitation to any person in any jurisdiction where solicitation would be unlawful. All information contained in this research report has been compiled from sources believed to be reliable. However, no representation or warranty, express or implied, is made with respect to the completeness or accuracy of its contents, and it is not to be relied upon as authoritative.

Risk information

The risk of investing in certain financial instruments, including those mentioned in this document, is generally high, as their market value is exposed to a lot of different factors such as the operational and financial conditions of the relevant company, growth prospects, change in interest rates, the economic and political environment, foreign exchange rates, shifts in market sentiments etc. Where an investment or security is denominated in a different currency to the investor's currency of reference, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment to the investor. Past performance is not a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. When investing in individual shares, the investor may lose all or part of the investments.

Conflicts of interest

Companies in the Pareto Securities Group, affiliates or staff of companies in the Pareto Securities Group, may perform services for, solicit business from, make a market in, hold long or short positions in, or otherwise be interested in the investments (including derivatives) of any company mentioned in the publication or report. In addition Pareto Securities Group, or affiliates, may from time to time have a broking, advisory or other relationship with a company which is the subject of or referred to in the relevant Research, including acting as that company's official or sponsoring broker and providing investment banking or other financial services. It is the policy of Pareto to seek to act as corporate adviser or broker to some of the companies which are covered by Pareto Securities Research. Accordingly companies covered in any Research may be the subject of marketing initiatives by the Investment Banking Department.

To limit possible conflicts of interest and counter the abuse of inside knowledge, the analysts of Pareto Securities Research are subject to internal rules on sound ethical conduct, the management of inside information, handling of unpublished research material, contact with other units of the Group Companies and personal account dealing. The internal rules have been prepared in accordance with applicable legislation and relevant industry standards. The object of the internal rules is for example to ensure that no analyst will abuse or cause others to abuse confidential information. It is the policy of Pareto Securities Research that no link exists between revenues from capital markets activities and individual analyst remuneration. The Group Companies are members of national stockbrokers' associations in each of the countries in which the Group Companies have their head offices. Internal rules have been developed in accordance with recommendations issued by the stockbrokers associations. This material has been prepared following the Pareto Securities Conflict of Interest Policy.

The guidelines in the policy include rules and measures aimed at achieving a sufficient degree of independence between various departments, business areas and sub-business areas within the Pareto Securities Group in order to, as far as possible, avoid conflicts of interest from arising between such departments, business areas and sub-business areas as well as their customers. One purpose of such measures is to restrict the flow of information between certain business areas and sub-business areas within the Pareto Securities Group, where conflicts of interest may arise and to safeguard the impartialness of the employees. For example, the Investment Banking departments and certain other departments included in the Pareto Securities Group are surrounded by arrangements, so-called Chinese Walls, to restrict the flows of sensitive information from such departments. The internal guidelines also include, without limitation, rules aimed at securing the impartialness of, e.g., analysts working in the Pareto Securities Research departments, restrictions with regard to the remuneration paid to such analysts, requirements with respect to the independence of analysts from other departments within the Pareto Securities Group rules concerning contacts with covered companies and rules concerning personal account trading carried out by analysts.

Distribution restriction

The securities referred to in this publication or report may not be eligible for sale in some jurisdictions and persons into whose possession this document comes should inform themselves about and observe any such restrictions. This publication or report is not intended for and must not be distributed to private customers in the US, or retail clients in the United Kingdom, as defined by the Financial Conduct Authority (FCA).

This research is only intended for and may only be distributed to institutional investors in the United States and U.S. entities seeking more information about any of the issuers or securities discussed in this report should contact Pareto Securities Inc. at 150 East 52nd Street, New York, NY 10022, Tel. 212 829 4200.

Pareto Securities Inc. is a broker-dealer registered with the U.S. Securities and Exchange Commission and is a member of FINRA & SIPC. U.S. To the extent required by applicable U.S. laws and regulations, Pareto Securities Inc. accepts responsibility for the contents of this publication. Investment products provided by or through Pareto Securities Inc. or Pareto Securities Research are not FDIC insured, may lose value and are not guaranteed by Pareto Securities Inc. or Pareto Securities Research. Investing in non-U.S. securities may entail certain risks. This document does not constitute or form part of any offer for sale or subscription, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The securities of non-U.S. issuers may not be registered with or subject to SEC reporting and other requirements. The information available about non-U.S. companies may be limited, and non-U.S. companies are generally not subject to the same uniform auditing and reporting standards as U.S. companies. Market rules, conventions and practices may differ from U.S. markets, adding to transaction costs or causing delays in the purchase or sale of securities. Securities of some non-U.S. companies may not be as liquid as securities of comparable U.S. companies. Fluctuations in the values of national currencies, as well as the potential for governmental restrictions on currency movements, can significantly erode principal and investment returns.

Pareto Securities Research may have material conflicts of interest related to the production or distribution of this research report which, with regard to Pareto Securities Research, are disclosed herein.

Distribution in Singapore

Pareto Securities Pte Ltd holds a Capital Markets Services License is an exempt financial advisor under Financial Advisers Act, Chapter 110 ("FAA") of Singapore and a subsidiary of Pareto Securities AS.

This report is directed solely to persons who qualify as "accredited investors", "expert investors" and "institutional investors" as defined in section 4A(1) Securities and Futures Act, Chapter 289 ("SFA") of Singapore. This report is intended for general circulation amongst such investors and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. You should seek advice from a financial adviser regarding the suitability of any product referred to in this report, taking into account your specific financial objectives, financial situation or particular needs before making a commitment to purchase any such product. Please contact Pareto Securities Pte Ltd, 16 Collyer Quay, # 27-02 Income at Raffles, Singapore 049318, at +65 6408 9800 in matters arising from, or in connection with this report.

Additional provisions on Recommendations distributed in the Canada

Canadian recipients of this research report are advised that this research report is not, and under no circumstances is it to be construed as an offer to sell or a solicitation of or an offer to buy any securities that may be described herein. This research report is not, and under no circumstances is it to be construed as, a prospectus, offering memorandum, advertisement or a public offering in Canada of such securities. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this research report or the merits of any securities described or discussed herein and any representation to the contrary is an offence. Any securities described or discussed within this research report may only be distributed in Canada in accordance with applicable provincial and territorial securities laws. Any offer or sale in Canada of the securities described or discussed herein will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that Pareto Securities AS, its affiliates and its authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.

Distribution in United Kingdom

This publication is issued for the benefit of persons who qualify as eligible counterparties or professional clients and should be made available only to such persons and is exempt from the restriction on financial promotion in s21 of the Financial Services and Markets Act 2000 in reliance on provision in the FPO.

Copyright

This publication or report may not be mechanically duplicated, photocopied or otherwise reproduced, in full or in part, under applicable copyright laws. Any infringement of Pareto Securities Research's copyright can be pursued legally whereby the infringer will be held liable for any and all losses and expenses incurred by the infringement.

Appendix A

Disclosure requirements in accordance with Commission Delegated Regulation (EU) 2016/958 and the FINRA Rule 2241

The below list shows companies where Pareto Securities AS - together with affiliated companies and/or persons – owns a net long position of the shares exceeding 0,5 % of the total issued share capital in any company where a recommendation has been produced or distributed by Pareto Securities AS.

Companies	No. of shares	Holdings in %
Bonheur	239,220	0.56%
Huddly	1,188,823	0.56%
Pareto Bank	14,732,232	21.09%
Pexip Holding	747,095	0.72%
Sparebank 1 Nord-Norge	5,013,452	4.99%
Sparebank 1 SMN	2,800,224	2.16%
Sparebank 1 SR-Bank	2,407,375	0.94%
SpareBank 1 Østfold Akerhus	1,237,140	9.99%
SpareBank 1 Østlandet	5,772,206	5.44%
Sparebanken Møre	566,833	1.15%
Sparebanken Sør	333,149	0.80%
Sparebanken Vest	7,981,712	7.28%
NEXT Biometrics	700,000	0.76%
SpareBank 1 Sørøst-Norge	2,746,539	4.35%

Pareto Securities AS may hold financial instruments in companies where a recommendation has been produced or distributed by Pareto Securities AS in connection with rendering investment services, including Market Making.

Please find below an overview of material interests in shares held by employees in Pareto Securities AS, in companies where a recommendation has been produced or distributed by Pareto Securities AS. "By material interest" means holdings exceeding a value of NOK 50 000.

Company	Analyst holdings*	Total holdings
Adevinta	0	950
Aker ASA	500	2,288
Aker BP	0	15,875
Aker Horizons	0	212,397
Aker Solutions	0	1,388
AMSC ASA	0	3,600
Aprilia Bank ASA	0	22,675
AURELIUS Equity Opportunities	0	500
Austevoll Seafood	0	3,548
Avilco LNG	0	30,000
Belships	0	40,000
Biolinvent	0	15,000
Bonheur	0	30,350
Borregaard ASA	0	518
Bouvet	0	980
BW Energy	0	98,381
BW Offshore	0	4,900
Cool Company	0	5,000
Crayon	0	610
DNB	0	33,084
DNO	0	71,391
Edda Wind	0	5,000
Egetis Therapeutics	0	6,855
Elkem	0	19,520
Elmera Group ASA	0	37,305
Embracer Group	0	8,600
Equinor	0	3,012
Essity	0	168
Europris	0	17,745
Flex LNG	0	895

Company	Analyst holdings*	Total holdings
Frontline	0	8,000
Gaming Innovation Group	0	25,000
Gjensidige Forsikring	519	1,960
Grieg Seafood	0	13,491
Hafnia Ltd.	0	126,220
Huddly	0	1,188,823
HydrogenPro	0	34,922
International Petroleum Corp	0	5,511
Kahoot	0	36,118
Kambi Group plc	0	430
Kinnevik AB	0	315
Kitron	0	2,314
Komplett ASA	0	21,754
Komplett Bank	0	153,800
Kongsberg Gruppen	0	500
Lasbank	0	16,355
Lerøy Seafood Group	0	38,951
Media and Games Invest	0	5,000
Meltwater	0	24,000
Mowi	0	5,242
Multitude	0	2,443
NEXT Biometrics	0	700,000
NorAm Drilling	0	6,883
NORBIT ASA	0	1,706
Nordic Semiconductor	0	12,305
Noreco	0	1,000
Norsk Hydro	0	80,711
Norske Skog	0	90,449
Odjell Drilling	0	2,081
Okeanis Eco Tankers	0	5,016
Orkla	0	8,526
Panoro Energy	0	14,733
Pareto Bank	0	761,886
PetroTal	0	74,000
Pexip Holding	0	747,095
Protector Forsikring	0	7,300
Pyrum Innovations	0	100
Quantafuel	0	23,665
REC Silicon	0	32,539
Salmor	0	3,724
Sandnes Sparebank	0	2,500
Scatec	0	20,129
Seadrill Ltd	0	10,300
SignUp Software	0	1,264
Solstad Offshore	0	117,500
Sparebank 1 Nord-Norge	725	7,775
Sparebank 1 SMN	0	9,421
Sparebank 1 SR-Bank	0	9,545
SpareBank 1 Østlandet	1,100	11,100
Sparebanken Møre	0	1,080
Sparebanken Sør	0	15,840
Sparebanken Vest	0	2,294
Stolt-Nielsen	0	3,800
Storbrand	100	3,110
Storlytel	0	5,390
Subsea 7	0	21,470
Teekay Tankers	0	208
Telenor	0	3,004
TGS	0	10,830
Transocean	0	10,000
Valaris	0	3,100
Vestas Wind Systems	0	1,235
Vår Energi	0	117,479
Webstep	0	2,000
With. Wilhelmsen Holding	0	229
Yara	0	16,089
Zaptec	0	16,200
AAC Clyde Space	0	52,700

This overview is updated monthly (last updated 18.04.2023).

*Analyst holdings refer to positions held by the Pareto Securities AS analyst covering the company.

Appendix B

Disclosure requirements in accordance with Article 6(1)(c)(iii) of Commission Delegated Regulation (EU) 2016/958

Overview over issuers of financial instruments where Pareto Securities AS have prepared or distributed investment recommendation, where Pareto Securities AS have been lead manager/co-lead manager or have rendered publicly known not immaterial investment banking services over the previous 12 months:

Add Energy	Waste Plastic Upcycling
Akerhus Energi Varmer AS	Wattif EV
Alva Industries AS	wheel.me
American Shipping Company	ØrnSoftwar e
Archer	
B2Holding AS	
Bekke og Strøm AS, SV Vattenkraft AB	
Benchmark Holdings	
Biolinvent	
Bluewater Holding	
Borr Drilling	
Broege Petroleum and Gas	
BW LPG	
Cadeler	
CCS Finansiering AS	
CERAFILTEC	
Cloudberry Clean Energy	
COOL Company	
DNO	
Dolphin Drilling	
Edda Wind	
EdR Certified Origin Physical Gold Plc	
Eidesvik Offshore	
Endur ASA	
Ferretberia Corporation S.L.U.	
First Camp Group	
Fishbase Group AS	
Foatal	
Hafnia Ltd.	
Hospitality Invest	
House of Control	
HydrogenPro	
Idavang AS	
Island Green Power Ltd	
Kezzler AS	
KMC Properties	
Komplett Bank	
Kraft Bank	
Kron AS	
Kruse Smith	
Kvitbjørn Energi AS	
Magnora	
Maha Energy	
Memmo Family	
Mime Petroleum	
Multitude SE	
Mutar es SE & Co. KGaA	
Nor Am Drilling	
Nordic Unmanned	
Noreco	
Norlandia Health & Care Group	
Norse Atlantic	
Norske Skog	
Northern Ocean	
Okeas AS	
Pandion Energy	
PGS	
PHM Group Holding Holding	
Polight ASA	
Proximar Seafood	
Pryme	
PulPac AB	
Qred Holding	
Salmon Evolution	
Scala Eiendom	
Schletter International B.V	
Seacrest Petroleum	
Shamaran Petroleum	
Skandia GreenPower	
Standard Supply AS	
Tasik Toba Subsea AS	
Tise AS	
Treasurer ASA	
Vantage Drilling International	
Vestby Logistikk Holding	
Viking Venture 27 AS	
Viking Venture 28 AS	
Waldorf Production Ltd.	

This overview is updated monthly (this overview is for the period 01.04.2022 – 31.03.2023).

Appendix C

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11 (4)

Distribution of recommendations

Recommendation	% distribution
Buy	73%
Hold	23%
Sell	4%

Distribution of recommendations (transactions*)

Recommendation	% distribution
Buy	88%
Hold	12%
Sell	0%

* Companies under coverage with which Pareto Securities Group has on-going or completed public services in the previous 12 months

This overview is updated monthly (last updated 14.04.2023).

Appendix D

This section applies to research reports prepared by Pareto Securities AB.

Disclosure of positions in financial instruments

The beneficial holding of the Pareto Group is 1 % or more of the total share capital of the following companies included in Pareto Securities AB's research coverage universe: None

The Pareto Group has material holdings of other financial instruments than shares issued by the following companies included in Pareto Securities AB's research coverage universe: None

Disclosure of assignments and mandates

Overview over issuers of financial instruments where Pareto Securities AB has prepared or distributed investment recommendation, where Pareto Securities AB has been lead manager or co-lead manager or has rendered publicly known not immaterial investment banking services over the previous twelve months:

ADDVise Group AB	Cinis Fertilizer AB	NGE x Minerals Ltd
Adtraction Group AB	Egetis Therapeutics AB	Renewcell AB
Artificial Solutions International AB	Hanza AB	Sedana Medical
Azelio AB	Hexicon AB	SignUp Software AB
Biovica International AB	Linkfire AI/S	Xbrane Biopharma AB
Boule Diagnostics AB	Mentice AB	VEF AB
Cibus Nordic Real Estate AB	Media & Games Invest plc	Vicore Pharma Holding AB

Members of the Pareto Group provide market making or other liquidity providing services to the following companies included in Pareto Securities AB's research coverage universe:

Implantica	Mentice AB	Signup Software
Linkfire	Modelon AB	VEF
Media & Games Invest plc.	Sedana Medical	

Members of the Pareto Group have entered into agreements concerning the inclusion of the company in question in Pareto Securities AB's research coverage universe with the following companies: None

Member of the Pareto Group is providing Business Management services to the following companies:

Aarhus Residentials	Fleming Properties AB	Logistri Fastighets AB
Backaheden Fastighets AB	Hallsell Property Invest AB	Mälarsäen AB
Bonäsudden Holding AB (publ)	Halmälätten Fastighets AB (publ)	One Publicus Fastighets AB
Borglunda Fastighets AB	Korsängens Fastighets AB (publ)	Origa Care AB (publ)
Bosjö Fastigheter AB	Krona Public Real Estate AB	Preservium Property AB

Members of the Pareto Group have entered into agreements concerning the inclusion of the company in question in Pareto Securities AB's research coverage universe with the following companies: None

This overview is updated monthly (last updated 16.04.2023).

Appendix E

Disclosure requirements in accordance with Article 6(1)(c)(i) of Commission Delegated Regulation (EU) 2016/958

Designated Sponsor

Pareto Securities acts as a designated sponsor for the following companies, including the provision of bid and ask offers. Therefore, we regularly possess shares of the company in our proprietary trading books. Pareto Securities receives a commission from the company for the provision of the designated sponsor services.

2G Energy AG	INTERSHOP Communications AG	Progress-Werk Oberkirch AG
adpepper media international N.V.	IVU Traffic AG	Pryme B.V.
Biotest AG	Kontron AG	PSI AG
Biotest AG Pf.d.	Leifheit AG	Pyrum Innovations AG
Cor estate Capital Holding S.A.	Logwin AG	Salmones Camanchaca S.A.
Daldrup & Söhne AG	manz AG	Seven Principles AG
DEMIRE AG	MAX Automation SE	SHOP APOTHEKE EUROPE N.V.
DF Deutsche Fortfalt AG	Merkur Privatbank AG	SMT Scharf AG
epigenomics AG	Meta Wolf AG	Surteco AG
Foris AG	MPLP SE	Szyzgy AG
GERRY WEBER International AG	MPC Container Ships ASA	TTL Beteiligungs- und Grundbesitz AG
Gesco AG	Muehlhahn AG	Uzin Utz SE
GFT Technologies SE	Mutar es SE & Co. KGaA	VERIANOSSE
Gigaset AG	OVH Holding AG	Viscom AG
Heidelber g Pharma AG	Pr oCredit Holding AG	WPU - Waste Plastic Upcycling AS

Appendix F

Disclosure requirements in accordance with Article 6(1)(c)(iv) of Commission Delegated Regulation (EU) 2016/958

Sponsored Research

Pareto Securities has entered into an agreement with these companies about the preparation of research reports and – in return - receives compensation.

2G Energy AG	GERRY WEBER International AG	MPLP SE
BayWa AG	Gesco AG	Mutar es SE & Co. KGaA
BB Biotech AG	GFT Technologies SE	Mynaric AG
Biotest AG	Gigaset AG	OHB SE
Biotest AG Pf.d.	Heidelber g Pharma AG	Pr oCredit Holding AG
Ciq Digital AG	Hypoport SE	Progress-Werk Oberkirch AG
Daldrup & Söhne AG	INTERSHOP Communications AG	PSI AG
Dellignit	Kontron AG	Sieglried Holding AG
Der maphar m Holding SE	Leifheit AG	SMT Scharf AG
Enapter AG	Logwin AG	Surteco AG
epigenomics AG	MAX Automation SE	Szyzgy AG
Expres2on Biotech Holding AB	Mer kur Privatbank AG	Viscom AG

This overview is updated monthly (last updated 16.04.2023).