

“Balanced” EBIT expected in FY 2023

Intershop reported Q4 numbers and preliminary full year numbers that were in-line with the lowered forecast for FY 2022. For the coming year, Intershop expects a balanced EBIT. Regarding the cloud product, it expects both incoming cloud orders and net new ARR to increase by more than 10%. Due to the slightly more modest short-and midterm outlook plus the higher share count due to the partial conversion of the convertible bond, we lower our fair value to EUR 3.90 from EUR 4.00, the recommendation remains “buy”.

Q4 in-line

Intershop reported Q4 numbers and preliminary full year numbers that were in-line with the lowered forecast for FY 2022 given in September regarding revenues (“at prior year’s level”) and EBIT (“negative in the lower digit million EUR range”) but slightly below our earnings estimates, mainly because of (1) write-downs on receivables from customers whose business was affected by the war in Ukraine and (2) provisions for doubtful accounts in the Service business. On top of that, Intershop saw a weak licence business in Q4, which is intended to a large extent by Intershop as existing on-premise customers should progressively be transferred to the cloud product.

Intershop has become a bit more cautious

For the coming year, Intershop became a bit more cautious regarding the cloud business and expects both incoming cloud orders and net new ARR to increase by more than 10%, which implies a somewhat decreasing order dynamic for the cloud business. For the group, Intershop expects an increase of over 10% in revenues and a “balanced” operating result (EBIT) after the issues of the Service segment will be fully resolved in Q2.

New price target EUR 3.90

Due to the slightly more modest short-and midterm outlook plus the higher share count due to the partial conversion of the convertible bond, we lower our fair value to EUR 3.90 from EUR 4.00. All in, we still see a significant upside of more than 30% for the shares, and our recommendation remains “buy”. The critical underlying assumption remains that Intershop’s cloud business will be a long-term success story, of course.

EURm	2021	2022	2023e	2024e	2025e
Revenues	36	37	41	45	49
EBITDA	4	0	4	7	8
EBIT	1	(3)	0	3	4
EPS	0.06	(0.25)	(0.03)	0.17	0.27
EPS adj	0.06	(0.25)	(0.03)	0.17	0.27
DPS	-	-	-	-	-
EV/EBITDA	10.9	78.4	8.8	5.1	3.7
EV/EBIT	37.0	-	-	12.1	7.4
P/E adj	71.5	-	-	16.9	10.7
P/B	3.29	2.65	2.98	2.53	2.05
ROE (%)	4.7	-	-	16.2	21.1
Div yield (%)	-	-	-	-	-
Net debt	(9)	(5)	(6)	(8)	(11)

Source: Pareto Securities

Target price (EUR)	3.9	▲	BUY
Share price (EUR)	2.9	—	HOLD
		▼	SELL

Forecast changes

%	2023e	2024e	2025e
Revenues	(2)	(2)	NM
EBITDA	4	(7)	NM
EBIT adj	(60)	(18)	NM
EPS reported	NM	(9)	NM
EPS adj	NM	(9)	NM

Source: Pareto Securities

Ticker	ISHG.DE, ISH2 GY
Sector	Software & Services
Shares fully diluted (m)	14.6
Market cap (EURm)	43
Net debt (EURm)	-6
Minority interests (EURm)	0
Enterprise value 23e (EURm)	37
Free float (%)	0

Performance



Source: FactSet

Pareto Securities AS has been paid by the issuer to produce this research report. This material is considered by Pareto Securities to qualify as an acceptable minor non-monetary benefit according to the EU MIFID 2 directive.

Analysts

Knud Hinkel
+49 69 58997 419, knud.hinkel@paretosec.com

Q4 wrap up

Q4 numbers

		Actual		
Intershop		Q4 2021	Q4 2022	yoy (%)
Revenues	EURm	9.4	9.2	-2
of which: Licenses	"	1.1	0.1	(94)
of which: Maintenance	"	1.9	1.9	(3)
of which: Cloud / Subscription	"	3.0	3.9	30
of which: Services	"	3.4	3.5	1
Gross profit	"	4.9	3.5	-29
margin	%	52.0%	37.5%	-1450 BP
EBIT	EURm	0.2	(1.8)	nm
margin	%	1.6%	-19.7%	-2126 BP
Other cloud-related KPI				
Incoming cloud orders	EURm	6.9	7.2	4
ARR from cloud	"	12.2	15.4	27
New ARR	"	1.1	0.9	(19)
Net new ARR	"	0.8	0.3	(61)
Implied churn	"	0.3	0.6	95

Source: Company, Pareto Securities

Full year numbers

		Actual		
Intershop		2021	2022	yoy (%)
Revenues	EURm	36.0	36.8	2
of which: Licenses	"	2.3	1.8	(20)
of which: Maintenance	"	7.6	7.7	2
of which: Cloud / Subscription	"	11.1	14.2	28
of which: Services	"	15.1	13.1	(13)
Gross profit	"	17.4	15.7	-10
margin	%	48.3%	42.7%	-566 BP
EBIT	EURm	1.3	(2.9)	nm
margin	%	3.6%	-7.9%	nm
Other cloud-related KPI				
Incoming cloud orders	EURm	18.3	25.9	42
ARR from cloud	"	12.2	15.4	27
New ARR	"	3.1	3.9	26
Net new ARR	"	2.8	3.2	12
Implied churn	"	0.3	0.7	170

Source: Company, Pareto Securities

Intershop reported Q4 numbers and preliminary full year numbers that were in-line with the lowered forecast for FY 2022 given in September regarding revenues ("at prior year's level") and EBIT ("negative in the lower digit million EUR range") but slightly below our earnings estimates, mainly because of (1) write-downs on receivables from customers whose business was affected by the war in Ukraine and (2) provisions for doubtful accounts in the Service business, which was clearly Intershop's weak spot in 2022, as discussed in several notes during the year. In total, these one-off amounted to EUR 0.7m, so underlying EBIT was around minus EUR 2.2m. On top of that, Intershop saw a weak licence business in Q4, which is intended to a large extent by Intershop as existing customers should progressively be transferred to the cloud product.

The gross profit margin was down to 38% in Q4, which compares with 44% for the first nine months. The services segment earned EUR 1.6m gross margin in 2022 which was better than anticipated by us, but clearly below the EUR 5.1m in 2021.

The guidance for the cloud business for 2022, i.e., a 20% increase of incoming cloud orders and a 10% increase of net new ARR, was met. While most KPIs of the cloud business saw decent progress over the entire FY2022, Q4 numbers remained slightly below our expectations as new ARR slowed down and churn was up. Also, for the coming year, Intershop guided a bit more cautiously, and expects both incoming cloud orders and net new ARR to increase by more than 10%, which implies a somewhat decreasing order dynamic for the cloud business. For the group, Intershop expects an increase of over 10% in revenues and a balanced operating result (EBIT), which is fully in-line with our expectations.

Free cash flow was negative at minus EUR 2.2m in 2022. Cash was at EUR 10.5m at the end of the year, while debt amounted to 4.7m. So, Intershop's financial situation is still comfortable. Moreover, Intershop saw a small equity inflow as a part of the outstanding convertible bond was converted. In total, ~400k new shares were issued at the agreed strike price of EUR 2.19 (~3% of outstanding shares).

Last but not least, Intershop exhibited an impressive list of new customers, among them well-known names such Danaher, Reisswolf, Alko and Lekkerland with revenues in the hundreds of millions.

The full consolidated financial statements will be published in mid-March 2023.

Estimates update

Our updated scenario for the cloud business

Cloud business (EURm)	2020	2021	2022	2023e	2024e	2025e	2026e
Order Entry	15.8	18.3	25.9	28.5	31.3	36.0	43.2
% yoy	21%	16%	42%	10%	10%	15%	20%
New ARR	2.6	3.1	3.9	4.7	5.1	5.7	6.7
% yoy	0%	20%	26%	19%	10%	12%	17%
Average contract length (years)	6.1	5.3	5.7	5.7	5.7	5.7	5.7
% yoy	21%	-13%	9%	0%	0%	0%	0%
Churn	0.3	0.3	0.7	0.8	1.0	1.2	1.4
% yoy	-67%	-11%	170%	8%	25%	22%	19%
Net new ARR	2.3	2.8	3.2	3.9	4.2	4.6	5.3
% yoy	36%	23%	12%	22%	7%	10%	16%
ARR	9.3	12.2	15.4	19.3	23.5	28.0	33.3
% yoy	38%	31%	27%	25%	22%	19%	19%
Cloud revenues	7.3	11.1	14.2	18.1	22.3	26.8	32.1
% yoy	14%	52%	28%	27%	23%	21%	20%

Source: Pareto Securities

In our view, Intershop should be able to meet its guidance regarding cloud order entry and Net New ARR (+10% each) in 2023. For 2024, we cautiously assume only 10% cloud order growth, too, in order to account for the insecure macroeconomic outlook. From 2025 onwards, we expect order entry to pick up again and expect 15% in 2025 and 20% p.a. for 2026.

In the light of the increased churn in 2022 (5.8% of ARR at the end of 2021), we also expect slightly higher churn rates of 5% of ARR for the coming years, in line with Intershop's budget.

We believe that the Service segment will deliver an improving gross profit in 2023 but we cautiously assume that it will take two years to fully restore the gross margin at around 33% of sales. Otherwise, we left our estimates largely untouched.

As a result, we believe that Intershop will be back in the black in 2023, but still below the levels witnessed in 2021. This is because Intershop estimates that it will take until Q2 / 2023 until the problems of the Service segment will be fully resolved. On the other hand, we remain optimistic on the longer-term outlook for the cloud business at the backdrop of the constantly strong order entry in 2022 and before.

P&L

Profit & Loss	2020	2021	2022	2023e	2024e	2025e	2026e
Revenue	33.6	36.0	36.8	40.6	44.7	49.3	54.6
% yoy	6.2%	7.1%	2.2%	10.3%	10.2%	10.2%	10.8%
Gross Profit	15.7	17.7	15.7	20.1	24.4	27.6	30.8
% of sales	46.6%	49.2%	42.7%	49.5%	54.6%	56.1%	56.5%
R&D	3.8	5.7	6.9	7.2	7.6	7.9	8.3
% of sales	11.2%	15.8%	18.6%	17.7%	16.9%	16.1%	15.3%
EBITDA	4.5	4.4	0.4	4.2	6.8	8.4	9.9
% of sales	13.2%	12.3%	1.1%	10.3%	15.2%	17.0%	18.1%
EBIT	1.0	1.3	-2.9	0.2	2.9	4.3	5.4
% of sales	3.0%	3.6%	-7.9%	0.5%	6.4%	8.6%	9.9%
Pretax Profit	0.9	0.9	-3.4	-0.4	2.4	3.8	4.9
% of sales	2.6%	2.5%	-9.3%	-0.9%	5.4%	7.7%	9.1%
Net Profit	0.8	0.8	-3.6	-0.4	2.5	4.0	5.2
% of sales	2.4%	2.2%	-9.7%	-0.9%	5.6%	8.1%	9.5%
EPS (EUR)	0.06	0.06	-0.25	-0.03	0.17	0.27	0.36
% yoy	-111.8%	0.0%	-547.3%	-89.7%	-764.7%	57.6%	30.3%
DPS (EUR)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Payout ratio	0%	0%	0%	0%	0%	0%	0%

Source: Pareto Securities

The changes to our estimates can be found in the table below. The percentage changes might look huge, but this is mainly because the earnings numbers are close to zero, so every small absolute change has a big impact on percentage changes.

Estimate changes

Intershop		2023e			2024e			2025e		
		Old	New	Chg.	Old	New	Chg.	Old	New	Chg.
Revenues	EURm	41.0	40.6	-1%	45.5	44.7	-2%	50.4	49.3	-2%
EBIT	"	0.3	0.2	-41%	3.5	2.9	-19%	4.6	4.3	-8%
Net result	"	-0.4	-0.4	nm	3.1	2.5	-18%	4.2	4.0	-5%
EPS	EUR	-0.03	-0.03	nm	0.22	0.17	-20%	0.30	0.27	-8%

Source: Pareto Securities

For Q1, we expect still a slightly negative result, as it will take until Q2 to fully resolve the issues in the Service segment.

Q1 preview

Intershop		Actual	Pareto	
		Q1 2022	Q1 2023e	yoy (%)
Revenues	EURm	9.2	10.0	8
of which: Licenses	"	0.8	0.7	-10
of which: Maintenance	"	2.1	1.8	-11
of which: Cloud / Subscription	"	3.1	4.1	32
of which: Services	"	3.2	3.3	2
Gross profit	"	4.5	4.3	-5
margin	%	49.0%	43.0%	-595 BP
EBIT	EURm	0.0	(0.4)	nm
margin	%	0.3%	nm	nm
Other cloud-related KPI				
Incoming cloud orders	EURm	8.7	9.2	5
ARR from cloud	"	13.0	16.0	23
New ARR	"	0.7	0.8	11
Net new ARR	"	0.8	0.6	-27
Implied churn	"	(0.1)	0.2	-275

Source: Pareto Securities

Valuation update

DCF

EUR m	2023e	2024e	Phase I 2025e	2026e	2027e	2028e	2029e	Phase II 2030e	2031e	2032e	Phase III
Revenues	40.6	44.7	49.3	54.6	60.9	67.2	73.1	78.4	82.9	86.5	
growth rate	10.3%	10.2%	10.2%	10.8%	11.7%	10.2%	8.8%	7.3%	5.8%	4.3%	
EBIT	0.2	2.9	4.3	5.4	6.9	7.5	8.2	8.8	9.3	9.7	
EBIT margin	0.5%	6.4%	8.6%	9.9%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	
Tax	(0.1)	(0.9)	(1.3)	(1.7)	(2.2)	(2.4)	(2.6)	(2.8)	(2.9)	(3.1)	
Tax rate	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	
Depr. & Amort.	2.5	2.3	2.3	2.4	2.6	3.1	3.4	3.7	4.0	4.2	
% of sales	6.1%	5.0%	4.6%	4.4%	4.3%	4.6%	4.7%	4.8%	4.8%	4.9%	
Capex	(2.1)	(2.3)	(2.5)	(2.8)	(3.1)	(3.4)	(3.7)	(4.0)	(4.2)	(4.4)	
% of sales	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	
Change in NWC	(0.3)	(0.4)	(0.4)	(0.5)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.4)	
% of sales	0.8%	0.8%	0.8%	0.8%	0.9%	0.8%	0.7%	0.7%	0.6%	0.5%	
Free Cash Flow	0.2	1.6	2.3	2.8	3.6	4.3	4.8	5.3	5.7	6.0	92.7
growth rate		nm	44%	25%	27%	17%	13%	10%	8%	6%	3%
Present Value FCF	0.2	1.3	1.7	2.0	2.3	2.5	2.6	2.6	2.5	2.4	37.8

PV Phase I	7.6	Risk free rate	3.5%	Targ. equity ratio	100%
PV Phase II	12.6	Premium Equity	5.0%	Beta	1.2
PV Phase III	37.8	Premium Debt	0.5%	WACC	9.5%

Enterprise value	58.0	Sensitivity	Growth in phase III				
- Net Debt (Cash)	(5.3)		1.9%	2.4%	2.9%	3.4%	3.9%
- Leasing Liabilities	9.5	8.6%	4.21	4.44	4.73	5.06	5.47
- Minorities & Peripherals	0.0	9.0%	3.87	4.07	4.30	4.58	4.90
- Short call position	1.3	WACC	9.5%	3.58	3.75	3.94	4.17
+ Tax loss carryforwards (NPV)	5.0	10.0%	3.33	3.47	3.63	3.82	4.04
		10.5%	3.10	3.22	3.36	3.52	3.70

Equity value	57.6
Number of shares	14.6
Value per share (€)	3.90
Current Price (€)	2.88
Upside	35%





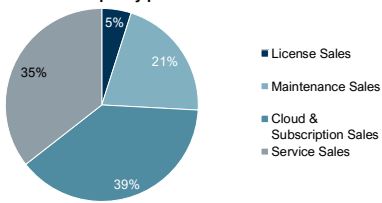
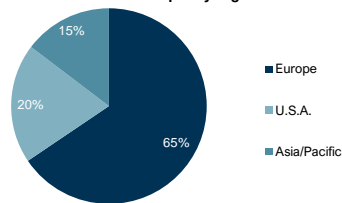
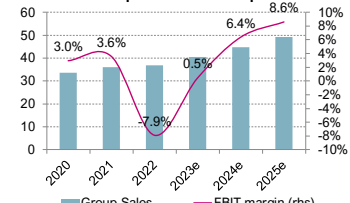
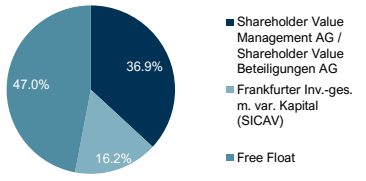
Source: Pareto Securities

Due to the slightly more modest short-and midterm outlook plus the higher share count due to the partial conversion of the convertible bond, we lower our fair value to EUR 3.90 from EUR 4.00. This is partially compensated by the fact that the value of the short call has decreased because of the lower share price, the lower number of calls and because of the diminishing time value of the option. As a reminder, Intershop has issued a convertible bond, which gave the buyer the right to buy 1.42m Intershop shares (now 1.0m) at a strike price of EUR 2.19 per share. This option, which expires in July 2025, is worth around EUR 1.3, according to our calculations. Thus, we deduct EUR 2.0m (1.0m x EUR 1.30) from the fair value.

All in, we still see a significant upside of more than 30% for the shares, and our recommendation remains “buy”. The critical underlying assumption remains that Intershop’s cloud business will be a long-term success story, of course.

At a glance

At a glance

Business units	Licenses	Maintenance	Cloud / Subscription	Services
				
Products & services	Intershop Commerce Suite builds the core of the product offering. The commerce platform can be employed "ready-to-use" or on a modular basis according to customers' needs. Intershop's solutions contain commerce management, product information management, experience management as well as omni-channel order management. Deployment modes are either on-premise, per private cloud or as CaaS (Commerce-as-a-Service). Services include strategic digital consulting, project management, complete or partly operation of the commerce business (Full Service Commerce), as well as training and support.			
Customers	Globally, more than 300 customers, which are mainly active in the manufacturing, retail / wholesale, automotive, and energy industries. Top 25 customers account for c. 66% of revenue.			
Market share & positioning	In its relevant market segment, Intershop accounts for c. 5% of market share, while in the total e-commerce software market Intershop solutions are implemented in less than 2% of all online shops. Intershop is an engineering-driven company, with a focus on a strong performance and a reliable system, thus a quality-oriented company.			
Drivers	Increasing internet penetration (+) Underlying growth in e-commerce business and associated shift from brick-and-mortar retail to e-commerce / omni-channel commerce (+) Changing B2B buyer demographics towards a more digital native buyer group (+) Amazon move into B2B e-commerce business (substitution via marketplaces and strong independent online shops) (-)			
Main competitors	Main competitors: Hybris (by SAP), WebSphere Commerce (by IBM), Oracle NetSuiteCommerce (B2B solution by Oracle), Oracle Commerce Platform (by Oracle), CloudCraze (B2B solution recently acquired by salesforce.com), Salesforce Commerce (formerly Demandware, B2C solution by salesforce.com), Magento Commerce (recently acquired by Adobe) Non-listed competitors: Insite Software (B2B solution), OROCommerce (B2B solution), Shopware (strong German presence), OXID eSales (strong German presence)			
Strategy, guidance & consensus	<p>Strategy: (I) "Cloud first" (II) B2B Focus, tilted towards SMB via CaaS offering (III) Extending technological functionalities and sales channels via Microsoft partnership (IV) Strengthening marketing capabilities</p> <p>Guidance Revenue 10.0% EBIT balanced</p> <p>Pareto Revenue yoy 10.3% EBIT EUR 0.2m EBIT margin 0.5%</p> <p>Consensus 5Y sales CAGR 0.4% Org. growth y/y 4.7%</p>			
2022	Sales (EURm) 36.8 y/y 2.2%	EBITDA 0.4 Margin 1.1%	EBIT (EURm) -2.9 Margin -7.9%	5Y sales CAGR 0.4% Org. growth y/y 4.7%
Sales & EBIT split	<p>Sales split by product / service</p>  <p>■ License Sales ■ Maintenance Sales ■ Cloud & Subscription Sales ■ Service Sales</p> <p>Sales split by region</p>  <p>■ Europe ■ U.S.A. ■ Asia/Pacific</p> <p>Group financial development</p>  <p>■ Group Sales — EBIT margin (rhs)</p>			
Management & shareholder structure	<p>Markus Klahn Chief Executive Officer (since 2021)</p> <ul style="list-style-type: none"> • With Intershop since 2018, first as Chief Sales Officer • >20 years experience in the software industry • Responsibilities: Corporate Strategy • Prior to joining Intershop, Mr Klahn was active in the ERP and SaaS business after having been on the management board of proALPHA Consulting AG. <p>Petra Stappenbeck Chief Financial Officer (since 2023)</p> <ul style="list-style-type: none"> • Graduated in business administration • With Intershop since 2012 • More than 30 years of experience in finance and controlling • Prior to joining Intershop, Mrs Stappenbeck held leading management positions at Jenoptik AG and Hochtief AG. <p>Shareholder structure</p>  <p>■ Shareholder Value Management AG / Shareholder Value Beteiligungen AG ■ Frankfurter Inv.-ges. m. var. Kapital (SICAV) ■ Free Float</p>			
# of employees FY 2022	288			

Source: Company, Pareto Securities

PROFIT & LOSS (fiscal year) (EURm)	2018	2019	2020	2021	2022	2023e	2024e	2025e
Revenues	31	32	34	36	37	41	45	49
EBITDA	(4)	(2)	4	4	0	4	7	8
Depreciation & amortisation	(2)	(4)	(3)	(3)	(3)	(4)	(4)	(4)
EBIT	(6)	(6)	1	1	(3)	0	3	4
Net interest	(0)	(0)	(0)	(0)	(1)	(1)	(0)	(0)
Other financial items	-	-	-	-	-	-	-	-
Profit before taxes	(6)	(7)	1	1	(3)	(0)	2	4
Taxes	(1)	(0)	(0)	(0)	(0)	(0)	0	0
Minority interest	-	-	-	-	-	-	-	-
Net profit	(7)	(7)	1	1	(4)	(0)	3	4
EPS reported	(0.20)	(0.48)	0.06	0.06	(0.25)	(0.03)	0.17	0.27
EPS adjusted	(0.19)	(0.44)	0.06	0.06	(0.25)	(0.03)	0.17	0.27
DPS	-	-	-	-	-	-	-	-
BALANCE SHEET (EURm)								
Tangible non current assets	1	1	1	1	1	0	0	0
Other non-current assets	10	12	12	21	24	24	24	24
Other current assets	5	7	5	6	6	6	7	7
Cash & equivalents	7	8	12	12	10	10	12	16
Total assets	23	28	29	40	41	41	44	48
Total equity	14	16	17	17	14	14	17	21
Interest-bearing non-current debt	2	0	3	3	5	4	4	4
Interest-bearing current debt	2	1	-	-	1	1	-	-
Other Debt	6	10	10	19	22	22	23	23
Total liabilities & equity	23	28	29	40	41	41	44	48
CASH FLOW (EURm)								
Cash earnings	(5)	(0)	3	6	(1)	2	5	6
Change in working capital	1	(1)	1	(1)	0	(0)	(0)	(0)
Cash flow from investments	(3)	(3)	(2)	(2)	(3)	(2)	(2)	(3)
Cash flow from financing	5	6	1	(3)	2	-	-	-
Net cash flow	(2)	0	4	0	(2)	(0)	2	3
VALUATION (EURm)								
Share price (EUR end)	3.94	3.00	3.14	4.03	2.58	2.92	2.92	2.92
Number of shares end period	35	14	14	14	14	15	15	15
Net interest bearing debt	(4)	(6)	(9)	(9)	(5)	(6)	(8)	(11)
Enterprise value	133	36	36	48	31	37	35	31
EV/Sales	4.3	1.2	1.1	1.3	0.9	0.9	0.8	0.6
EV/EBITDA	-	-	8.1	10.9	78.4	8.8	5.1	3.7
EV/EBIT	-	-	36.0	37.0	-	-	12.1	7.4
P/E reported	-	-	55.7	71.5	-	-	16.9	10.7
P/E adjusted	-	-	55.7	71.5	-	-	16.9	10.7
P/B	10.1	2.7	2.7	3.3	2.6	3.0	2.5	2.0
FINANCIAL ANALYSIS								
ROE adjusted (%)	-	-	5.0	4.7	-	-	16.2	21.1
Dividend yield (%)	-	-	-	-	-	-	-	-
EBITDA margin (%)	-	-	13.2	12.3	1.1	10.3	15.2	17.0
EBIT margin (%)	-	-	3.0	3.6	-	0.5	6.4	8.6
NIBD/EBITDA	1.13	2.64	(1.93)	(2.06)	(13.18)	(1.39)	(1.16)	(1.35)
EBITDA/Net interest	-	-	35.60	11.49	0.79	7.53	14.73	18.24

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%
Pareto Bank	14,702,827	21.05%
Selvaag Bolig	4,671,772	4.98%
Sparebank 1 Nord-Norge	5,011,402	4.99%
Sparebank 1 SMN	2,800,974	2.16%
Sparebank 1 SR-Bank	2,406,375	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	2.13%
Sparebanken Vest	7,801,295	7.27%
NEXT Biometrics	700,000	0.76%
SpareBank 1 Sør-Øst-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
Aker ASA	500	2,288
Aker BP	0	10,968
Aker Horizons	0	170,767
Aker Solutions	0	1,388
AMSC ASA	0	3,600
Aprila Bank ASA	0	22,675
ArcticZymes Technologies	0	1,434
Atlantic Sapphire	0	7,500
AURELIUSEquity Opportunities	0	500
Austevoll Seafood	0	3,548
Awilco 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	98,336
BW Offshore	0	4,900
Cloudberry Clean Energy	0	100,000
DNB	0	33,577
DNO	0	71,391
Edda Wind	0	5,000
Elkem	0	44,876
Elmer a Group ASA	0	21,305
Embracer Group	0	8,600
Equinor	0	1,616
Europis	0	18,103
Flex LNG	0	535
Frontline	0	10,500
Gaming Innovation Group	0	25,000

Company	Analyst holdings*	Total holdings
Gjensidige Forsikring	519	1,960
Grieg Seafood	0	13,491
Hafnia Ltd.	0	110,220
Huddly	0	1,038,823
HydrogenPro	0	34,922
International Petroleum Corp	0	5,511
Kahoot	0	36,577
Kambi Group plc	0	430
Kinnvik AB	0	315
Kitron	0	2,314
Komplett ASA	0	20,000
Komplett Bank	0	153,800
Kongsberg Gruppen	0	500
Lea bank	0	16,355
Leroy Seafood Group	0	38,951
Media and Games Invest	0	5,000
Meltwater	0	24,000
Mowi	0	2,742
Multitude	0	2,443
NEXT Biometrics	0	700,000
NorAm Drilling	0	6,883
NORBIT ASA	0	3,706
Nordic Semiconductor	0	12,133
Norsk Hydro	0	80,711
Norske Skog	0	83,449
Northern Drilling Ltd.	0	238,550
Odjell Drilling	0	2,081
Okeanis Eco Tankers	0	290
Orkla	0	8,526
Panoro Energy	0	12,733
Pareto Bank	0	732,481
PetroTal	0	74,000
Pexip Holding	0	507,095
Protector Forsikring	0	7,300
Pyram Innovations	0	100
Quantafuel	0	23,665
REC Silicon	0	32,490
Salmor	0	3,724
Sandnes Sparebank	0	2,500
Scatec	0	30,129
Seadrill Ltd	0	10,300
SignUp Software	0	1,264
Sparebank 1 Nord-Norge	725	5,725
Sparebank 1 SMN	0	10,171
Sparebank 1 SR-Bank	0	8,545
SpareBank 1 Østlandet	11,100	11,100
Sparebanken Møre	0	1,080
Sparebanken Sør	0	15,840
Sparebanken Vest	0	2,994
Stolt-Nielsen	0	3,800
Storbrand	100	3,110
Storytel	0	5,390
Subsea7	0	28,470
Telenor	0	3,004
TGS	0	10,830
TORM	0	2,500
Transocean	0	10,000
Valaris	0	3,000
Vestas Wind Systems	0	1,235
Vow	0	3,281
Vår Energi	0	92,943
Webstep	0	2,000
Yara	0	16,014
Zaptec	0	2,400
AAC Clyde Space	0	52,700

This overview is updated monthly (last updated 15.02.2023).

*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
Aker Clean Hydrogen
Aker Offshore Wind
Akershus Energi Varme AS
Alva Industries AS
American Shipping Company
B2Holding AS
Bekk og Strøm AS, SV Vattenkraft AB
Benchmark Holdings
Bioinvent
Bløwater Holding
Borr Drilling
Brooge Petroleum and Gas
BW LPG
Cabonline Group Holding AB
Cadelier
CCS Finansiering AS
CERAFILTEC
Cloudberry Clean Energy
COOL Company
DNO
Dolphin Drilling
EdR Certified Origin Physical Gold Plc
Endur ASA
First Camp Group
Hafnia Ltd.
Hafslund Eco
Hospitality Invest
House of Control
HydrogenPro
Ice Group
Idavang AS
Island Green Power Ltd
KMC Properties
Kraft Bank
Kron AS
Kruse Smith
Kvitbjørn Energi AS
Magnora
Maha Energy
Memmo Family
Mime Petroleum
Multitude SE
NorAm Drilling
Nordic Unmanned
Norco
Norlandia Health & Care Group
Norse Atlantic
Nor ske Skog
Northern Ocean
Okea AS
Pandion Energy
Parato Bank
POS
PHM Group Holding Holding
Polight ASA
Proxima Seafood
Pryme
PulPac AB
Qred Holding
Salmon Evolution
Scala Eiendom
Schletter International B.V.
Shamaran Petroleum
Standard Supply AS
Tierklinik Hofheim GbR
Tise AS
Trønderenergi AS
Vestby Logistikk Holding
Viking Venture 27 AS
Viking Venture 28 AS
Waste Plastic Upcycling
Wattif EV
Ørn Software

This overview is updated monthly (this overview is for the period 01.02.2022 – 31.01.2023).

Appendix C

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

Distribution of recommendations

Recommendation	% distribution
Buy	70%
Hold	25%
Sell	4%

Distribution of recommendations (transactions*)

Recommendation	% distribution
Buy	90%
Hold	10%
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 15.02.2023).

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	Hexicon AB	Sedana Medical
Azelio AB	Linkfire AS	SignUp Software AB
Biovica International AB	Mentice AB	Xbrane Biopharma AB
Boule Diagnostics AB	Media & Games Invest plc	VEFAB
Cibus Nordic Real Estate AB	NGE Minerals Ltd	Vicore Pharma Holding AB
Cinis Fertilizer AB	Renewcell AB	VNV Global AB
Egetis Therapeutics 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	Sedana Medical	VEF
Media & Games Invest plc.		

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)	Halmelätten Fastighets AB (publ)	One Publicus Fastighets AB
Borglands Fastighets AB	Korsängen 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 15.02.2023).

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.
Biotech AG	Kontron AG	PSI AG
Biotech AG Pf.d.	Leifheit AG	Pryum 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 Fortrait AG	Merkur Privatbank AG	SMT Scharf AG
epigenomics AG	Meta Wolf AG	Surteco AG
Foris AG	MPL SE	Szyggy 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 SE & Co. KGaA	VERIANOSSE
Gigaset AG	OVH Holding AG	Viscom AG
Heidelberger Pharma AG	ProCredit 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	Gesco AG	Mutar SE & Co. KGaA
BayWa AG	GFT Technologies SE	Mynaric AG
BB Biotech AG	Gigaset AG	OHB SE
Biotech AG	Heidelberger Pharma AG	ProCredit Holding AG
Biotech AG Pf.d.	Hypoport SE	Progress-Werk Oberkirch AG
Cliv Digital AG	INTERSHOP Communications AG	PSI AG
Daldrup & Söhne AG	Kontron AG	Siegfried Holding AG
Dermapharma Holding SE	Leifheit AG	SMT Scharf AG
Enapter AG	Logwin AG	Surteco AG
epigenomics AG	MAX Automation SE	Szyggy AG
Express2on Biotech Holding AB	Merkur Privatbank AG	Viscom AG
GERRY WEBER International AG	MPL SE	

This overview is updated monthly (last updated 15.02.2023).