Valneva SE

France / Biotechnology
Euronext Paris
Bloomberg: VLA FP
ISIN: FR0004056851

Update

RATING	**BUY**
PRICE TARGET	**€ 8.90**
Return Potential	63.0%
Risk Rating	High

SHARE PRICE WEAKNESS IS BUYING OPPORTUNITY

Both Q2/23 revenues and adjusted EBITDA were above our and consensus forecasts and management has reiterated full-year product revenue guidance of €130-€150m which implies that the previous pre-pandemic high of €129.5m (2019) will be beaten. The share price has fallen below €6.00 on fears that interest rates will remain elevated for longer than the market had previously hoped. Valneva's VLA1553 will be the first chikungunya vaccine to launch (estimated value of the chikungunya vaccine market: USD500m by 2032), if, as we expect, it receives FDA approval by the end of November. VLA1553's data (time to onset of immunity, duration of antibody resistance) compares favourably with that of the closest competing chikungunya vaccine candidate, Bavarian Nordic's CHIKV VLP, which is not scheduled to launch until 2025. We think the approval of VLA1553 will trigger a rally in the stock, which will gather pace in early 2024 as the market begins to focus on the prospects for an eventual decline in interest rates. We maintain our Buy recommendation and price target of €8.90.

Product revenue beat probably based on covid-19, third party vaccine sales
Q2/23 product revenues climbed 119.9% to €37.6m. (€17.1m) driven by continued recovery in demand for travel vaccines. Product revenues were 22.5% above the analysts' consensus estimate (supplied by the company ahead of the results). We did not receive a consensus estimate for the individual products, but based on our own forecasts we think that the product revenue beat stemmed mainly from COVID-19 vaccine revenue and third party revenues. Valneva had flagged in the presentation of its FY/22 results that sales of its COVID-19 vaccine, VLA2001, would be "marginal" this year. After zero VLA2001 revenue in Q1/23, the figure of €5.7m in Q2/23 was higher than we expected.

(p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2020	2021	2022	2023E	2024E	2025E
Revenue (€ m)	110.32	348.09	361.30	148.33	230.17	329.17
Y-o-y growth	-12.6%	215.5%	3.8%	-58.9%	55.2%	43.0%
EBIT (€ m)	-55.12	-61.39	-113.44	6.73	-43.73	12.89
EBIT margin	n.a.	n.a.	n.a.	4.5%	n.a.	3.9%
Net income (€ m)	-64.39	-73.43	-143.28	-8.22	-52.65	7.14
EPS (diluted) (€)	-0.71	-0.75	-1.24	-0.06	-0.38	0.05
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	118.27	-16.27	-274.67	-131.36	-69.02	2.62
Net gearing	-127.8%	-136.0%	-62.4%	2.5%	71.0%	94.1%
Liquid assets (€ m)	204.44	346.69	289.43	157.56	78.71	42.01

RISKS

Risks include, but are not limited to development, partnering, regulatory, competition and retention of key personnel.

COMPANY PROFILE

Valneva is a specialty vaccine company which develops and commercialises prophylactic vaccines for infectious diseases with significant unmet medical need. Valneva has successfully commercialised two vaccines and has successfully advanced several vaccine candidates into and through the clinic, including candidates against Lyme disease, the chikungunya virus and COVID-19. Valneva is incorporated in France and had over 700 employees at end June 2023.

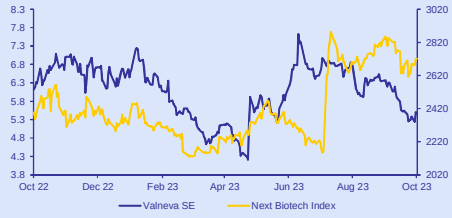
MARKET DATA

As of 11 Oct 2023

Closing Price	€ 5.46
Shares outstanding	138.35m
Market Capitalisation	€ 755.37m
52-week Range	€ 4.21 / 7.62
Avg. Volume (12 Months)	342,879

Multiples	2022	2023E	2024E
P/E	n.a.	n.a.	n.a.
EV/Sales	1.9	4.5	2.9
EV/EBIT	n.a.	99.5	n.a.
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA

As of 30 Jun 2023

Liquid Assets	€ 204.41m
Current Assets	€ 341.48m
Intangible Assets	€ 27.13m
Total Assets	€ 542.57m
Current Liabilities	€ 241.04m
Shareholders' Equity	€ 190.71m

SHAREHOLDERS

Groupe Grimaud La Corbière	9.5%
CDC	8.6%
Deep Track Capital	6.6%
Pfizer Inc.	6.9%
Free Float and other	68.5%

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Figure 1: Q2/23 results versus our forecasts

€m	Q2/23A	Q1/23A	Q2/23 consensus	Q2/23A vs. Q2/23 consensus	Q2/23 FBe	Q2/23A vs. Q2/23 Fbe	Q2/22A	Q2/23A vs Q2/22A
Product revenues	**37.6**	**32.1**	**30.7**	**22.5%**	**22.0**	**70.9%**	**17.1**	**119.9%**
of which:								
Ixiaro	12.9	17.4	n.a.	n.a.	8.0	61.3%	8.1	59.6%
Dukoral	6.9	10.2	n.a.	n.a.	6.0	15.0%	3.3	111.3%
Third party	12.0	4.5	n.a.	n.a.	8.0	50.0%	5.9	103.3%
COVID-19	5.7	0.0	n.a.	n.a.	0.0	n.a.	0.0	n.a.
Other revenues	2.7	1.4	n.a.	n.a.	2.5	8.0%	54.3	-95.0%
Total revenues	**40.2**	**33.5**	**34.5**	**16.5%**	**24.5**	**64.1%**	**71.4**	**-43.7%**
R&D expenses	11.9	14.1	21.0	-43.3%	22.0	-45.9%	31.2	-61.9%
SG&A expenses	24.0	18.9	19.6	22.4%	21.2	13.2%	16.0	50.0%
Adjusted EBITDA	**-16.0**	**-12.3**	**-20.3**	**-21.2%**	**-26.6**	**n.a.**	**-122.7**	**n.a.**

Source: Valneva, First Berlin Equity Research estimates

Private sales of Dukoral, Ixiaro on track to equal/exceed record 2019 level Sales of travel vaccines are subject to seasonal fluctuations. Typically, sales of Ixiaro to the travel vaccine market are evenly spread throughout the year with the exception of the third quarter which is weaker. Dukoral sales are usually strongest during the first and fourth quarters of the year because vaccinees tend to visit tropical countries during the northern winter. The decline in Ixiaro sales between Q1/23 and Q2/23 was unusually large compared to sales patterns during 2016-2019 i.e. before the pandemic. A manufacturing batch failure, which we discuss later, may have played a role, but during the analysts' conference call, management stated that there had only been minor shortages relative to demand. As we show in figures 3 and 4, for FY/23 we expect private market sales of both Ixiaro and Dukoral to be above the pre-pandemic highs of 2019 despite the soft Q2/23 Ixiaro sales figure.

Figure 2: Product sales 2018-2022 and 2023E

€m	2018	2019	2020	2021	2022	2023E
Product sales	**103.5**	**129.5**	**65.9**	**63.0**	**114.8**	**138.3**
of which:						
Ixiaro	69.6	94.1	48.5	45.1	41.3	59.4
of which:						
Private	40.6	46.1	13.8	7.1	28.8	50.0
US Department of Defense	29.0	48.0	34.7	38.0	12.5	9.4
Dukoral	30.4	31.5	13.3	2.4	17.3	33.1
Chikungunya	0.0	0.0	0.0	0.0	0.0	3.6
VLA2001	0.0	0.0	0.0	0.0	29.6	5.7
Third party products	3.5	3.9	4.2	15.4	26.5	36.5

Source: Valneva, First Berlin Equity Research estimates

Figure 3: Ixiaro, Dukoral vaccine sales 2023E

	Q1 23A	Q2 23A	Q3 23E	Q4 23E	FY 23E
Ixiaro	17.4	12.9	8.0	21.1	59.4
of which:					
Private	17.1	12.9	8.0	12.0	50.0
US Department of Defense	0.3	0.0	0.0	9.1	9.4
Dukoral	10.2	6.9	6.0	10.0	33.1

Source: Valneva, First Berlin Equity Research estimates

New one-year US Department of Defense contract worth a minimum of USD32m The pandemic also reduced demand for Ixiaro from the US Department of Defense (DoD). In August 2022, Valneva announced that due to the impact of the pandemic on its operations, the DoD had decided not to exercise the second option year of the three year contact signed in 2020. This explains why business with the DoD was well below the level of previous years in 2022 and looks like being so again in 2023. On 25 September Valneva announced a new one-year contract with the DoD. Under this contract the DoD will buy a minimum of USD32m of Ixiaro and has the possibility to purchase additional doses.

Q2/23 third party revenue jump above our expectations Management pointed out in the Q1/23 report that third party products sold under the distribution agreement with Bavarian Nordic were subject to supply constraints during the first three months of the year but the jump in revenue from €4.5m in Q1/23 to €12.0m in Q2/23 was higher than we had anticipated.

Other revenue returned to a more normal level Other revenue came in €2.7m (Q2/22: €54.2m). The prior year figure included €89.4m released from the refund liability as a result of the settlement with the UK government. This was partially offset by €36.1m of negative revenue resulting from an increase in the refund liability linked to the amendment to the collaboration and license agreement with Pfizer regarding the Lyme disease vaccine candidate, VLA15.

EBITDA loss narrower than expected due to lower R&D spend The Q2/23 adjusted EBITDA loss of €-16m was narrower than both the consensus and our forecast. This was mainly a function of reduced R&D expenditure due to lower spending on VLA2001. However, at the same time, Valneva pointed out that R&D expenditure on its Zika vaccine candidate, VLA1601, has increased as the company works towards a reinitiation of clinical development.

Ixiaro/Dukoral margins hit by batch write-off/lower share of indirect sales Gross margins for both Ixiaro and Dukoral were adversely affected in Q2/23 by an increase in indirect sales on markets where Valneva sells through distributors and Ixiaro profitabilty was additionally hit by costs caused by a batch write-off. Indirect sales accounted for 35% of sales in Q2/23 compared with 28% in Q1/23.

Batch write-off is a rare occurrence/indirect sales share likely to decrease The batch write-off stemmed from the resumption of manufacturing of Ixiaro after a pandemic-related hiatus. The batch write-off is unlikely to soon recur in the same magnitude as in Q2/23. Meanwhile, management has indicated that the share of indirect sales in the non-military business is likely to decline in coming quarters. For the vaccine business as a whole, this trend is likely to be reinforced by rising DoD sales, which are direct.

VLA1553 approval before end November still on the cards On 14 August Valneva announced that the FDA had revised the Prescription Drug User Fee Act (PDUFA) action date for VLA1553, Valneva's chikungunya virus vaccine candidate, from the end of August to the end of November. The FDA put back the PDUFA date to allow sufficient time to align and agree on the phase 4 programme (post-approval trials conducted to determine long-term safety and effectiveness) necessary under the accelerated approval pathway. The FDA did not request additional data for the approval process. During the analysts' conference call CEO Lingelbach amplified statements in the mid-August press release on why phase 4 alignment has pushed back the PDUFA date: "this is not an easy endeavour for both parties, because this phase 4 alignment and the design of the phase 4 activities are likely to set future standards for outbreak disease indications under FDA accelerated approval pathways. Nothing exists today in this regard, and therefore, we are breaking new ground here."

In the 14 August press release CMO Jaramillo stated that "we believe it may be possible to obtain an approval before the new PDUFA date". The rigours of phase 4 alignment notwithstanding, we believe Mr Jaramillo's statement still holds.

VLA1553 data compares well with that of Bavarian Nordic's CHIKV VLP The main competitor in the chikungunya vaccine space to Valneva's VLA1553 is Bavarian Nordic's CHIV VLP. The launch of VLA1553 is likely before the end of this year whereas the launch of CHIKV VLP is scheduled for 2025. Clinical trial results released by both companies include immunogenicity data extending out six months. In December 2022 Valneva also released 12 months immunogenicity data for VLA1553. Valneva expects to release 24 month data for VLA1553 before the end of this year. All data are from phase 3 trial participants with the exception of the day 15 data for VLA1553 which derive from 31 low-dose and 30 medium-dose patients in a phase 1 trial (the medium dose was used in the phase 3 trial). The phase 3 trial of VLA1553 did not generate day 15 data. Because Valneva's day 15 data is from the phase 1 trial, it will not be included on the vaccine's initial label. This is significant because speed of onset is important on the travellers' vaccine market. We expect Valneva to generate further day 15 results, which will be eligible for inclusion on the label, in one or more phase 4 trials, but this data may not be available for 2-3 years. Figure 5 indicates that the main advantage of VLA1553 over CHIK VLP is maintenance of a consistently high level of neutralising antibodies beyond one month and also in the 65 and above age group. Both Valneva and Bavarian Nordic have based the clinical trials of their chikungunya vaccine candidates on a single vaccine shot. However, extrapolation of the data presented so far by Bavarian Nordic suggests that CHIKV VLP may require a booster for periods over two years, particularly for the 65 and older age group.

Figure 4: Valneva/Bavarian Nordic chikungunya candidate phase 3 data compared

	Valneva		Bavarian Nordic	
	18-64 years	≥ 65 years	12-64 years	≥ 65 years
Neutralising antibodies day 15*	100.0%	n.a.	97.0%	82.0%
Neutralising antibodies day 22	n.a.	n.a.	98.0%	87.0%
Neutralising antibodies day 29	98.6%	100.0%	n.a.	n.a.
Neutralising antibodies after 6 months	96.3%	96.3%	86.0%	n.a.
Neutralising antibodies after 12 months	99.0%	99.0%	n.a.	n.a.

*data from phase 1 trial which studied 120 healthy volunteers, 18-45 years of age

Source: Valneva, Bavarian Nordic

Enrolment of first of two VLA15 phase 3 cohorts completed As announced in February 2023, Pfizer had to discontinue approximately half of the total participants recruited for the phase 3 trial of Valneva's Lyme Disease vaccine candidate, VLA15, following violations of Good Clinical Practice (GCP) at certain trial sites in the U.S. run by a third-party trial site operator. The phase 3 trial was originally scheduled to run through the 2023 and 2024 tick seasons. The discontinuation of participants meant that the trial had to be extended into the 2025 tick season. Valneva has designated participants in the 2023 and 2024 tick seasons as cohort 1 and participants in the 2024 and 2025 tick seasons as cohort 2. Enrolment of cohort 1 has been completed while enrolment for primary immunisation of cohort 2 began in Q2/23.

Re-initiation of clinical development of Zika vaccine candidate Valneva has decided to re-initiate clinical development of its Zika virus disease vaccine candidate, VLA1601, with further programme evaluation to be conducted subject to data, medical need and market prospects. This decision to reinitiate clinical development of VLA1601 is based on the persistence of Zika transmission in several countries as well as VLA1601's compliance, by virtue of it being based on an inactivated whole virus platform, with the World Health Organisation's Target Product Profile. The WHO has ruled out certain other technologies for a vaccine that will target vaccination of women in childbearing age and/or pregnant women in an outbreak situation.

Zika virus is a cause of microcephaly and Guillain-Barré syndrome Zika virus disease is the first and only flaviviral disease (the genus includes West Nile virus, dengue virus, tick-borne encephalitis virus, yellow fever virus, Zika virus and several other viruses which may cause eencephalitis) to have been declared a public health emergency because of devastating birth defects following maternal infection. According to the WHO, there is scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.

Valneva has already successfully completed a phase 1 trial of a Zika vaccine candidate… Valneva reported positive interim results of a phase 1 study evaluating VLA1601 in November 2018. VLA1601 met the study's primary endpoint showing a favourable safety profile in all doses and schedules tested. VLA1601 was also immunogenic in all treatment groups and induced both dose- and schedule-dependent neutralising antibodies against the Zika virus. Seroconversion rates reached up to 85.7% on Day 35 (Interim Analysis of Data up to Day 56). The incidence of Zika significantly declined after its peak in 2016 due to high population level immunity in affected countries. In 2018 Valneva chose to prioritize the Lyme disease and chikungunya programmes as these represented a greater health crisis. However, Zika virus transmission persists in several countries in the Americas and in other endemic regions. According to WHO, a total of 89 countries and territories have reported evidence of mosquito transmitted Zika virus infection to date but no vaccine is yet available for the prevention of Zika virus infection.

…a new phase 1 trial with an updated formulation of the vaccine is now planned Valneva now plans to carry out a new phase 1 study of VLA1601 with an updated formulation of the vaccine based on the enhanced platform used for VLA2001. As CEO Thomas Lingelbach outlined during the analysts' call following the H1/23 results, whether VLA1601 will be developed beyond the new phase 1 trial depends on three factors. These are (1) whether Valneva will be able to make VLA1601 a best-in-class vaccine; (2) the vaccine's potential in the travellers' market and (3) whether there is a possibility to enter into a partnership which could improve profitability along the lines of the CEPI (Coalition for Endemic Preparedness) partnership for the chikungunya vaccine candidate, VLA1553.

Figure 5: Changes to our forecasts

	2023E			2024E			2025E		
All figures in EUR '000	Old	New	% Δ	Old	New	% Δ	Old	New	% Δ
Product revenues	**139,100**	**138,327**	**-0.6%**	**213,825**	**221,006**	**3.4%**	**310,854**	**319,730**	**2.9%**
of which:									
Ixiaro	67,127	59,391	-11.5%	76,364	78,455	2.7%	79,091	82,674	4.5%
Dukoral	33,200	33,100	-0.3%	36,520	36,410	-0.3%	38,346	38,231	-0.3%
VLA2001	0	5,700	n.a.	0	0	-	0	0	-
Chikungunya	7,273	3,636	-50.0%	68,182	68,182	0.0%	159,347	159,347	0.0%
Third party revenues	31,500	36,500	15.9%	32,760	37,960	15.9%	34,070	39,478	15.9%
Other revenue	8,900	10,000	12.4%	9,167	9,167	0.0%	9,442	9,442	0.0%
Total revenues	**148,000**	**148,327**	**0.2%**	**222,992**	**230,173**	**3.2%**	**320,296**	**329,172**	**2.8%**
Gross profit	69,887	52,793	-24.5%	124,880	127,759	2.3%	195,309	199,233	2.0%
margin (%)	*47.2%*	*35.6%*	-	*56.0%*	*55.5%*	-	*61.0%*	*60.5%*	-
Sales & marketing	-43,547	-46,560	-	-55,905	-57,485	-	-68,388	-70,341	-
General & administrative	-39,000	-39,000	-	-40,000	-40,000	-	-42,000	-42,000	-
Research & development	-80,000	-71,000	-	-80,000	-80,000	-	-80,000	-80,000	-
Other income	101,526	110,500	8.8%	6,000	6,000	0.0%	6,000	6,000	0.0%
EBIT	***8,865***	***6,733***	**-24.0%**	***-45,026***	***-43,726***	**-**	***10,921***	***12,892***	**18.0%**
margin (%)	*6.0%*	*4.5%*	-	*-20.2%*	*-19.0%*	-	*3.4%*	*3.9%*	-
Net financial result	-14,952	-14,952	-	-8,927	-8,927	-	-4,959	-4,959	-
EBT	**-6,087**	**-8,219**	**n.a.**	**-53,952**	**-52,653**	**n.a.**	**5,962**	**7,933**	**33.1%**
Tax	0	0	-	0	0	-	-596	-793	-
Net income	**-6,087**	**-8,219**	**n.a.**	**-53,952**	**-52,653**	**n.a.**	**5,366**	**7,140**	**33.1%**
EPS (in EUR)	-0.04	-0.06	n.a.	-0.39	-0.38	n.a.	0.04	0.05	33.1%
Adjusted EBITDA	**27,173**	**25,041**	**-7.8%**	**-26,243**	**-24,944**	**n.a.**	**30,188**	**32,159**	**6.5%**

Source: First Berlin Equity Research

Buy recommendation maintained at unchanged price target of €8.90 Figure 5 above shows changes to our forecasts. The biggest change to our 2023 forecast is a reduction in R&D expense following a much lower than expected figure for this item in Q2/23. We have raised our 2024 and 2025 forecasts for Ixiaro slightly following the announcement of the renewed DoD contract and have also increased our projection for third party vaccine sales in the light of the strong Q2/23 showing. We maintain our Buy recommendation and price target of €8.90.

Figure 6: Valuation model

Compound	Project[1)]	Present Value	Market Size 2030	Market Share 2030	Sales 2030	PACME Margin[2)]	Discount Factor	Time to Market
Ixiaro	Japanese Encephalitis	€411.1M	€108.5M	90.0%	€97.7M	40%	9.5%	-
Dukoral	Cholera & ETEC	€156.2M	€177.3M	25.0%	€44.3M	30%	9.5%	-
VLA15	Lyme Disease	€752.0M	€909.1M	70.0%	€636.4M	18%	9.5%	4 Years
VLA 1553	Chikungunya virus	€705.3M	€463.0M	58.9%	€272.7M	45%	9.5%	1 Year
EB66 cell line	Technology Platform	€11.9M			€19.7M	15%	9.5%	-
PACME PV		€2,036.5M						
Costs PV[3)]		€1,121.0M						
NPV		€915.4M						
PV grants, collabs., 3rd party distrib.		€260.7M						
Net cash		€55.2M						
Fair Value		€1,231.3M						
Proforma share count (fully diluted)		138,347K						
Price Target		**€8.90**						

1) A project typically refers to a specific indication or, where necessary or relevant, a combination between indication and geographic market

2) PACME (Profit After Costs and Marketing Expenses) reflects the company's profit share on future revenues. This share may be derived in the form of royalties (outsourced marketing/manufacturing) or operating EBITDA margin (in-house model), or some mix of both (depending on the specific parameters of partnership agreements)

3) Includes company-level R&D, G&A, Financing Costs and CapEx; COGS and S&M are factored into the PACME margin for each project

Source: First Berlin Equity Research estimates

INCOME STATEMENT

All figures in EUR '000	2020	2021	2022	2023E	2024E	2025E
Product sales	65,938	62,984	114,797	138,327	221,006	319,730
Other income	44,383	285,101	246,506	10,000	9,167	9,442
Total revenues	**110,321**	**348,086**	**361,303**	**148,327**	**230,173**	**329,172**
Cost of materials/goods sold	-54,302	-187,920	-324,441	-95,534	-102,414	-129,939
Gross Profit	**56,019**	**160,166**	**36,862**	**52,793**	**127,759**	**199,233**
Sales & marketing	-18,264	-23,643	-23,509	-46,560	-57,485	-70,341
General & administrative	-27,539	-47,606	-34,073	-39,000	-40,000	-42,000
Research & development	-84,454	-173,283	-104,922	-71,000	-80,000	-80,000
Other operating items, net	19,117	22,976	12,199	110,500	6,000	6,000
Operating income (EBIT)	**-55,120**	**-61,390**	**-113,443**	**6,733**	**-43,726**	**12,892**
Net financial result	-10,222	-16,715	-18,794	-14,952	-8,927	-4,959
Foreign exchange gains/(loss)	173	8,130	-12,587	0	0	0
Associates	-133	-5	9	0	0	0
Pre-tax income (EBT)	**-65,302**	**-69,979**	**-144,815**	**-8,219**	**-52,653**	**7,933**
Income taxes	909	-3,446	1,536	0	0	-793
Net income / loss	**-64,393**	**-73,425**	**-143,279**	**-8,219**	**-52,653**	**7,140**
EPS	**-0.71**	**-0.75**	**-1.24**	**-0.06**	**-0.38**	**0.05**
Adjusted EBITDA	**-45,200**	**-47,100**	**-69,200**	**25,041**	**-24,944**	**32,159**
Ratios as % of total revenues						
Gross margin	50.8%	46.0%	10.2%	35.6%	55.5%	60.5%
EBITDA margin	-41.0%	-13.5%	-19.2%	16.9%	-10.8%	9.8%
EBIT margin	-50.0%	-17.6%	-31.4%	4.5%	-19.0%	3.9%
Net margin	n.a.	n.a.	n.a.	n.a.	n.a.	2.2%
Expenses as % of total revenues						
Sales & marketing	-16.6%	-6.8%	-6.5%	-31.4%	-25.0%	-21.4%
General & administrative	-25.0%	-13.7%	-9.4%	-26.3%	-17.4%	-12.8%
Research & development	-76.6%	-49.8%	-29.0%	-47.9%	-34.8%	-24.3%
Y-Y Growth						
Product sales	-49.1%	-4.5%	82.3%	20.5%	59.8%	44.7%
Total revenues	-12.6%	215.5%	3.8%	-58.9%	55.2%	43.0%
Operating income (EBIT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net income / loss	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

BALANCE SHEET

All figures in EUR '000	2020	2021	2022	2023E	2024E	2025E
Assets						
Current Assets, Total	**308,427**	**585,832**	**424,659**	**254,391**	**233,418**	**259,427**
Cash and cash equivalents	204,435	346,686	289,430	157,562	78,714	42,011
Receivables	19,232	44,013	23,912	34,582	55,252	73,538
Inventories	26,933	124,098	35,104	34,582	55,252	79,932
Other current assets	57,827	71,035	76,213	27,665	44,201	63,946
Non-Current Assets, Total	**140,737**	**231,520**	**196,685**	**217,955**	**262,468**	**314,915**
Property, plant & equipment	34,778	125,545	112,435	119,855	127,342	134,910
Right of use assets	43,374	48,285	41,603	50,130	80,094	115,872
Intangibles	35,409	32,700	28,711	25,733	22,874	20,129
Equity-accounted investees	2,130	2,126	0	0	0	0
Other assets	19,476	19,282	8,299	16,599	26,521	38,368
Deferred tax assets	5,570	3,582	5,637	5,637	5,637	5,637
Total Assets	**449,164**	**817,352**	**621,344**	**472,346**	**495,886**	**574,342**
Shareholders' Equity & Debt						
Current Liabilities, Total	**175,870**	**368,979**	**277,392**	**148,795**	**243,859**	**326,623**
Short-term debt	6,988	7,107	11,580	21,351	50,842	47,385
Accounts payable	36,212	68,119	41,491	34,582	55,252	79,932
Other current liabilities and provisions	13,010	53,658	36,780	34,582	55,252	79,932
Current finance lease liabilities	2,696	3,135	25,411	30,620	48,921	70,774
Tax and employee-related liabilities	13,164	17,249	15,738	20,749	33,151	47,959
Current tax liability	0	83	532	277	442	639
Contract liabilities and refund liabilities	103,800	219,628	145,860	6,635	0	0
Longterm Liabilities, Total	**195,872**	**277,792**	**124,155**	**111,952**	**93,060**	**81,593**
Long term debt	46,375	50,726	87,227	76,951	37,630	1,766
Non-current finance lease liabilities	49,392	53,687	28,163	33,936	54,219	78,439
Other liabilities	2,900	8,378	1,436	393	558	755
Contract liabilities and refund liabilities	97,205	163,711	6,635	0	0	0
Shareholders Equity	**77,422**	**170,581**	**219,797**	**211,599**	**158,967**	**166,126**
Total Consolidated Equity and Debt	**449,164**	**817,352**	**621,344**	**472,346**	**495,886**	**574,342**
Ratios						
Current ratio (x)	1.75	1.59	1.53	1.71	0.96	0.79
Quick ratio (x)	1.60	1.25	1.40	1.48	0.73	0.55
Net gearing	-127.8%	-136.0%	-62.4%	2.5%	71.0%	94.1%
Book value per share (€)	0.85	1.88	2.42	2.33	1.75	1.83
Equity ratio	17.2%	20.9%	35.4%	44.8%	32.1%	28.9%

CASH FLOW STATEMENT

All figures in EUR '000	2020	2021	2022	2023E	2024E	2025E
Net income / loss	**-64,393**	**-73,425**	**-143,279**	**-8,219**	**-52,653**	**7,140**
Depreciation and amortization	7,328	11,497	17,880	18,308	18,782	19,267
Impairment	0	0	0	0	0	0
Share-based payments	0	0	0	0	0	0
Tax provision	0	0	0	0	0	0
Adjustments for non-cash transactions	37,941	56,476	44,070	18,308	18,782	19,267
Changes in non-current op. assets/lias.	88,472	59,353	-147,713	0	0	0
Changes in w orking capital	77,740	36,127	1,732	27,158	-5,103	301
Refund liabilities	0	0	0	-145,860	-6,635	0
Other adjustments	0	0	0	0	0	0
Income tax	-2,021	-1,631	-154	0	0	0
Operating cash flow	**137,738**	**76,901**	**-245,344**	**-108,613**	**-45,608**	**26,708**
Property, plant and equipment	-18,936	-92,229	-29,246	-22,000	-22,660	-23,340
Investments in intangibles	-535	-942	-76	-750	-750	-750
Free cash flow	**118,267**	**-16,270**	**-274,666**	**-131,363**	**-69,018**	**2,618**
Acquisitions & disposals, net	24	0	8	0	0	0
Interest received	107	55	260	0	0	0
Investing cash flow	**-19,340**	**-93,116**	**-29,054**	**-22,750**	**-23,410**	**-24,090**
Debt financing, net	28,271	-1,097	37,538	-505	-9,830	-39,321
Equity financing, net	290	166,823	189,837	0	0	0
Payment of lease liabilities	-2,111	-2,805	-3,048	0	0	0
Interest expense	-4,710	-8,417	-9,211	0	0	0
Cash flow from financing	**21,740**	**154,504**	**215,116**	**-505**	**-9,830**	**-39,321**
Forex & other	-142	3,962	2,026	0	0	0
Net cash flows	**139,996**	**142,251**	**-57,256**	**-131,868**	**-78,849**	**-36,703**
Cash and equivs., start of the year	64,439	204,435	346,686	289,430	157,562	78,714
Cash and equivs., end of the year	**204,435**	**346,686**	**289,430**	**157,562**	**78,714**	**42,011**
Adj. EBITDA/share	**-0.50**	**-0.48**	**-0.60**	**0.18**	**-0.18**	**0.23**
Y-Y Growth						
Operating cashflow	2391.2%	-44.2%	n.a.	n.a.	n.a.	n.a.
Free cashflow	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EBITDA/share	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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Category		1	2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy[1]	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

[1] The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

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Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	26 April 2017	€2.52	Buy	€4.00
2...33	↓	↓	↓	↓
34	16 December 2021	€22.36	Add	€23.40
35	27 January 2022	€15.21	Buy	€23.40
36	10 February 2022	€15.03	Buy	€22.10
37	6 July 2022	€11.12	Add	€12.00
38	26 July 2022	€9.75	Buy	€12.50
39	19 August 2022	€9.91	Add	€12.00
40	4 April 2022	€4.86	Buy	€8.90
41	22 May 2023	€5.69	Buy	€8.90
42	Today	€5.46	Buy	€8.90

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