

Expedeon AG

Germany / Biotech

Xetra

Bloomberg: EXN GR

ISIN: DE000A1RFM03

Q1/19 results

RATING**PRICE TARGET**

Return Potential

Risk Rating

BUY**€ 2.20**

143.9%

High

Q1/19 SLIGHTLY WEAK, ADJ. EBITDA GUIDANCE >€2M FOR 2019

Expedeon published Q1/19 results which were slightly weaker than anticipated. Group revenues grew 49% y/y to €3.5m, but fell short of our forecast (FBe: €3.9m; Q1/18: €2.3m). EBITDA adjusted for non-cash items came in at €462k, but below our projection of €530m (Q1/18: €7k). Net income was €-464k (FBe: €-380k; Q1/18: €-3.7m). Based on the results, we prefer to take a more cautious stance and have lowered our full year financial forecasts. The company is guiding towards a double digit sales increase and adjusted EBITDA >€2m for 2019. Our new 2019 adj. EBITDA projection of €2.1m (previously €2.4m) is at the lower end of the guidance. Our DCF valuation model yields a new price target of €2.20 (previously €2.55) for Expedeon's shares. We reiterate our Buy rating.

Development pipeline led by the core technologies "LightningLink" and "Capture" harbour attractive sales potential

Since August 2018, Expedeon has closed several commercial agreements for the use of its core technologies in the development of diagnostic and immunoassay applications. Management estimates that the ca. 24 currently active programmes could generate up to €30m in sales by 2022. This is good news. However, the company is highly dependent on its development partners which makes timing and speed of sales uptake difficult to predict. For the time being, we prefer to stay conservative and leave this substantial sales volume as upside.

Q1/19 sales and gross profit slightly weaker than anticipated Q1/19 sales increased by 49% y/y to €3.5m (FBe: €3.9m; Q1/18: €2.3m) driven by organic growth as well as by the acquisition of TGR Biosciences which took place in May 2018. The company reported a gross profit of €2.6m, somewhat below our €2.8m forecast (Q1/18: €1.6m). The gross margin however rose to 76.2% and was stronger than our estimate of 72.3% (Q1/18: 71.2%). The margin benefited from economies of scale as well as from the consolidation of the acquired company TGR, which has a slightly higher margin product portfolio.

p.t.o.

FINANCIAL HISTORY & PROJECTIONS

	2016	2017	2018	2019E	2020E	2021E
Revenue (€m)	1.79	7.80	13.13	16.02	19.22	23.06
Y-o-y growth	222.3%	335.8%	68.4%	22.0%	20.0%	20.0%
EBIT (€m)	-4.02	-4.49	-0.59	-0.80	0.96	2.91
EBIT margin	-224.7%	-57.6%	-4.5%	-5.0%	5.0%	12.6%
Net income (€m)	-4.39	-3.70	-0.30	-1.51	0.18	1.90
EPS (diluted) (€)	-0.18	-0.12	0.00	-0.01	0.00	0.03
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-3.89	-5.01	-1.21	-0.01	0.04	2.00
Net gearing	-3.5%	9.6%	9.5%	7.3%	7.2%	2.7%
Liquid assets (€m)	3.80	1.95	6.24	7.44	7.48	9.48

RISKS

Risks include, but are not limited to intellectual property and patent challenges, shareholder dilution, competition and retaining management risks.

COMPANY PROFILE

Expedeon develops, manufactures and commercializes tools and reagents (kits) for use in research of biopharmaceutical, diagnostic and academic institutions. The company's patent protected technologies offer superior features compared to solutions existing in the market. The company has production facilities in the US, UK, Spain and Australia, as well as an own distribution network in the US, UK, Germany, Singapore and Australia.

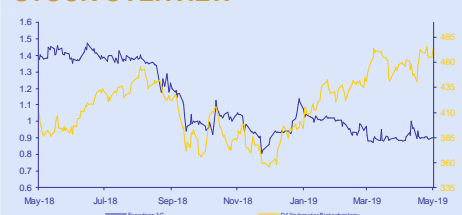
MARKET DATA

As of 28 May 2019

Closing Price	€ 0.90
Shares outstanding	51.56m
Market Capitalisation	€ 46.51m
52-week Range	€ 0.81 / 1.48
Avg. Volume (12 Months)	43,528

Multiples	2018	2019E	2020E
P/E	n.a.	n.a.	272.6
EV/Sales	3.9	3.2	2.7
EV/EBIT	n.a.	n.a.	53.5
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA

As of 31 Mar 2019

Liquid Assets	€ 5.64m
Current Assets	€ 11.98m
Intangible Assets	€ 50.03m
Total Assets	€ 64.37m
Current Liabilities	€ 7.01m
Shareholders' Equity	€ 46.50m

SHAREHOLDERS

Deutsche Balaton	6.2%
Fernandez Trust	5.1%
Dr. Lanckriet	3.1%
Free Float	85.6%



EBITDA and adjusted EBITDA also below our estimates Expedeon reported EBITDA of €396k, which was short of our estimate of €430k (Q1/18: €49k). EBITDA adjusted for non-cash items (i.e. employee option compensation expenses of €66k) amounted to €462k (FBe: €530k; Q1/18: €77k). Reported EBIT of €-280k (FBe: €-200k; Q1/18: €-376k) was also lower than expected. Net income for the period came in at €-464k (FBe: €-380k; Q1/18: €-322k). Earnings per share were €-0.01 (FBe: €-0.01; Q1/18: €0.01). We give an overview of the main P&L positions in figure 1.

Figure 1: Reported Q1/19 figures vs. FB estimates

All figures in EUR '000	Q1/19	Q1/19E	Delta	Q1/18	
Revenues	3,451	3,900	-12%	2,309	49%
Gross profit	2,629	2,820	-7%	1,644	60%
margin	76.2%	72.3%		71.2%	
EBITDA	396	430	-8%	49	708%
margin	11.5%	11.0%		2.1%	
EBITDA adjusted*	462	530	-13%	77	500%
margin	13.4%	13.6%		3.3%	
EBIT	-280	-200	n.a.	-376	n.a.
Net income / loss	-464	-380	n.a.	-322	n.a.

Source: First Berlin Equity Research, Expedeon AG

Revising forecasts following Q1/19 results In light of the sales and cost performance achieved in Q1/19, we have reduced our financial forecasts. The net effect of these changes is lower sales, operating result and net income in FY/19E - FY/21E. We have summarised the main changes in figure 2 below.

Figure 2: Changes to our forecasts (KPIs)

All figures in EUR '000	2019E			2020E			2021E		
	Old	New	% change	Old	New	% change	Old	New	% change
Revenues	18,109	16,016	-11.6%	22,093	19,219	-13.0%	26,954	23,063	-14.4%
EBITDA	2,063	1,838	-10.9%	3,537	3,151	-10.9%	5,927	4,916	-17.1%
margin	11.4%	11.5%		16.0%	16.4%		22.0%	21.3%	
EBITDA adjusted*	2,613	2,103	-19.5%	4,037	3,416	-15.4%	6,192	5,181	-16.3%
EBIT	-654	-805	-	1,107	960	-13.3%	3,582	2,909	-18.8%
Net income / loss	-1,268	-1,514	-	263	183	-30.3%	2,451	1,901	-22.4%
EPS (in EUR, dil.)	-0.02	-0.01	-	0.00	0.00	-	0.04	0.03	-

* Profitability figures adjusted for other non-cash expenses related to employee share option compensation

Source: First Berlin Equity Research estimates

Company guidance 2019 Expedeon is guiding towards double digit sales growth and adjusted EBITDA higher than €2.0m in 2019. After fine tuning our estimates, we now project sales of €16.0m (+22% y/y) and adj. EBITDA of €2.1m.

Q1/19 balance sheet – solid cash position The company reported a cash position of €5.8m (FY/18:€6.2m). Inventories increased to €2.3m (FY/18: €2.0m), while receivables went down to €2.4m (FY/18: €2.6m). Goodwill and other intangible assets increased to €50.0m from (FY/18: € 49.5m). Financial liabilities (ST+LT) rose to €10.8m (FY/18: €10.6m) and reflect the company's increased efforts to access debt financing as an alternative to dilutive equity financing. The company raised debt of €2.0m in May 2018 and GBP5.0m in August 2018. Equity also grew to €47.2m (FY/18: €46.5m), corresponding to a high equity ratio of 73% (FY/18: 73%).

Q1/19 cash flow Net operating cash flow came in at €-339k (Q1/18: €-377k). Cash flow from investment activities declined slightly to €-175k (Q1/18: €-321k). Financing cash flow declined to €-260k in Q1/19 from €3.8m in Q1/18. Expedeon conducted a capital increase in Q1/18 to finance the TGR acquisition.



CORE TECHNOLOGIES SUCH AS “LIGHTNINGLINK” AND “CAPTURE” OFFER SIGNIFICANT ADDITIONAL MID TERM SALES POTENTIAL

Several commercial agreements involving the company’s core technologies for diagnostic and immunoassay applications closed since August 2018 In September, the company announced two agreements to supply its proprietary colloidal gold technology for diagnostic applications. The first deal was closed with the South Korean company PaxgenBio for the incorporation of this technology in highly sensitive multiplex diagnostic kits. The second deal involved the Malaysian subsidiary of Revongen Corporation, which intends to use Expedeon’s technology in its diagnostic lateral flow assays (LFA). In October, Expedeon also signed a supply and licensing agreement for its CaptSure immunoassay technology as well as its Lightning-Link antibody labelling technology with the US life science company Quanterix Corporation. In January 2019, the company closed a supply and license agreement for its Lightning-Link rapid biotin technology with the UK life science company Cell Guidance Systems. The partner will use Expedeon’s technology for the development and production of TRIFic (Time Resolved Immunofluorescence Exosome Detection Assay) detection immunoassays.

The recently closed deals reaffirm the attractiveness of Expedeon’s core technologies for innovative diagnostic and “multi-omics” research approaches Expedeon’s core technologies such as “LightningLink” and “Captsure” offer unique characteristics which facilitate emerging “multi-omics” approaches. The advent of multi-omics approaches enabled scientists to analyse multiple datasets (e.g. DNA-genomics, mRNA-transcriptomics and proteins-proteomics) from one single sample at a high throughput. Multi-omics approaches are now often incorporated into the everyday methodology of biological researchers, since they allow greater understanding of the flow of information that underlies diseases (e.g. a current key application field is cancer). Expedeon’s core technologies offer solutions for innovative high-throughput multi-omics research approaches such as oligo barcoding, isotope barcoding and multiplex, for therapeutic approaches such as gene therapy, as well as for diagnostic purposes.

Company’s core technologies powered by cooperation deals have the potential to boost company’s mid-term product sales by up to €30m by 2022 On 15 May, in the course of a presentation at the Equity Forum Spring Conference in Frankfurt, Expedeon’s management gave an estimation of the additional sales potential emerging from the company’s development pipeline and collaborations. Based on 24 active programmes, management estimates incremental sales potential of €30m by 2022. As a reference, management mentioned that key players such as 10X Genomics or Nanostring with similar products in the oligo barcoding or Fluidigm in the isotope barcoding segments are generating substantial revenues. We give an overview of Expedeon’s pipeline sales potential in figure 3.

Figure 3: Development pipeline indicative incremental sales potential by 2022

GROWTH OPPORTUNITY	NUMBER OF ACTIVE PROGRAMMES	SALES POTENTIAL IN €MILLION
Gene therapy	2	€10
Oligo barcoding	7	€5
Isotope barcoding	3	€5
Multiplex	3	€3
Diagnostic supplies	9	€7
TOTAL	24	€30

Source: First Berlin Equity Research, Expedeon AG



We view the incremental sales potential as upside to our forecasts Expedeon's products developed with the core technologies will be used in the assays and kits developed by its cooperation partners. As a result, the company is highly dependent on the partners for sales uptake. Considering that the timing and speed of sales uptake from the products developed with the core technologies is uncertain, we prefer to stay conservative and leave this as upside. We will closely monitor company's quarterly reporting and may revisit our forecasts once first sales start to materialise.

FY/18 RESULTS CLOSE TO OUR EXPECTATIONS – POSITIVE EBITDA GUIDANCE MET

FY/18 sales slightly weaker than anticipated Expedeon FY/18 results were roughly in line with our estimates. Group revenues came in slightly below our expectation, growing by 68% y/y to €13.1m (FBe: €13.4m; FY/17: €7.8m).

The gross margin came in at 72.6%, slightly stronger than projected The company reported a gross profit of €9.5m, just below our €97m forecast (FY/17: €4.9m). The gross margin however rose to 72.6% and was marginally stronger than our estimate of 72.5% (FY/17: 63.0%).

The company's FY/18 positive EBITDA was met Expedeon achieved a milestone by becoming EBITDA profitable in FY/18. The company reported EBITDA of €1.8m, which was well above our estimate of €0.4m (FY/17: €-2.9m). The main reason for the higher than expected EBITDA was other operating income of €1.2m (FBe: €-20k; FY/17: €4k), chiefly related to a non-cash revaluation of the earn out associated with the TGR acquisition. The weak performance of Expedeon's share price during 2018 led to a reduction in the accounting fair value of the earn-out to be settled in shares. This translated to a non-cash gain of €1.0m. However, EBITDA adjusted for this non-cash gain as well as for employee option compensation expenses of €265k amounted to €1.0m and was in line with our forecast of €1.0m. Reported EBIT of €-0.6m (FBe: €-2.0m; FY/17: €-2.3m) was also better than expected, due mainly to the high other operating income. The company thus reported better than expected financial income of €82k (FB: €-503k). This figure included a non-cash net gain from revaluation of financial assets amounting to €424k (primarily related to the convertible bond of €2m placed by the company in May 2018) and net interest expenses of €342k. Net income for the period came in at €-0.3m (FBe: €2.5m; FY/17: €-3.7m). We give an overview of the main P&L positions in figure 4 below.

Figure 4: Reported FY/18 figures vs. FB estimates

All figures in EUR '000	FY/18	FY/18E	Delta	FY/17**	Delta
Revenues	13,128	13,414	-2%	7,797	68%
Gross profit	9,537	9,725	-2%	4,916	94%
margin	72.6%	72.5%		63.0%	
EBITDA	1,761	402	338%	-2,895	n.a.
margin	13.4%	3.0%		-37.1%	
EBITDA adjusted*	984	1,002	-2%	-2,130	n.a.
margin	7.5%	7.5%		-27.3%	
EBIT	-585	-1,991	n.a.	-4,493	n.a.
Net income / loss	-301	-2,534	n.a.	-3,695	n.a.
EPS (in EUR, dil.)	-0.01	-0.05		-0.09	n.a.

* Profitability figures adjusted for other non-cash as well as acquisition-related expenses

**FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities

Source: First Berlin Equity Research, Expedeon AG



VALUATION MODEL

Buy rating reiterated at lower price target A slight positive effect from rolling forward our DCF model is more than cancelled out by the negative impact of a reduction in our financial forecasts. Our DCF model now yields a price target of €2.20 (previously €2.55), but we maintain our Buy recommendation.

Figure 5: DCF Model

All figures in EUR '000	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Net sales	16,016	19,219	23,063	27,676	33,211	39,853	47,824	56,911
NOPLAT	-805	935	2,625	4,465	6,919	9,469	11,885	13,803
+ depreciation & amortisation	2,643	2,191	2,007	1,827	1,827	1,993	2,200	2,276
Net operating cash flow	1,838	3,126	4,631	6,292	8,746	11,462	14,085	16,079
- total investments (CAPEX and WC)	-2,038	-2,596	-2,175	-2,178	-2,395	-2,536	-2,890	-2,774
Capital expenditures	-1,345	-1,345	-1,384	-1,356	-1,594	-1,475	-1,769	-2,106
Working capital	-693	-1,251	-792	-822	-801	-1,061	-1,121	-668
Free cash flows (FCF)	-200	530	2,456	4,114	6,350	8,926	11,195	13,305
PV of FCF's	-189	457	1,930	2,948	4,149	5,318	6,081	6,589

All figures in EUR '000	
PV of FCFs in explicit period	51,402
PV of FCFs in terminal period	75,482
Enterprise value (EV)	126,884
+ Net cash / - net debt	-4,409
+ Investments / minority interests	0
Shareholder value	122,475
Diluted number of shares	55,584
Fair value per share in EUR	2.20

		Terminal growth rate							
		1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	
WACC	Cost of equity	6.7%	3.38	3.62	3.90	4.26	4.71	5.31	6.12
	Pre-tax cost of debt	7.7%	2.76	2.91	3.09	3.30	3.56	3.89	4.30
	Tax rate	8.7%	2.30	2.40	2.52	2.66	2.83	3.02	3.26
	After-tax cost of debt	9.7%	1.95	2.03	2.11	2.20	2.31	2.44	2.59
	Share of equity capital	10.7%	1.68	1.73	1.79	1.86	1.94	2.02	2.12
	Share of debt capital	11.7%	1.46	1.50	1.54	1.59	1.65	1.71	1.78
	WACC	12.7%	1.28	1.31	1.34	1.38	1.42	1.47	1.51

*Please note our model runs through 2030 and we have only shown the abbreviated version for formatting purposes



INCOME STATEMENT

All figures in EUR '000	2016	2017*	2018	2019E	2020E	2021E
Revenues	1,789	7,797	13,128	16,016	19,219	23,063
Cost of goods sold	-1,026	-2,881	-3,591	-4,324	-5,093	-5,973
Gross profit	763	4,916	9,537	11,692	14,126	17,090
Marketing & sales expenses	-895	-1,870	-2,809	-3,043	-3,402	-4,059
Administration expenses	-2,771	-6,749	-7,482	-8,232	-8,264	-8,303
Research & development	-1,219	-794	-1,043	-1,201	-1,480	-1,799
Other operating income (expenses)	102	4	1,212	-20	-20	-20
EBITDA	-3,208	-2,895	1,761	1,838	3,151	4,916
Operating income (EBIT)	-4,020	-4,493	-585	-805	960	2,909
Net financial result	-128	-163	82	-724	-752	-724
Pre-tax income (EBT)	-4,148	-4,656	-503	-1,529	208	2,185
Tax result	-240	961	202	15	-25	-284
Net income / loss	-4,388	-3,695	-301	-1,514	183	1,901
Other comprehensive income (currency related)	376	-1,468	239	0	0	0
Total comprehensive income	-4,012	-5,163	-62	-1,514	183	1,901
Diluted EPS (in €)	-0.18	-0.12	0.00	-0.01	0.00	0.03
One-off expenses**	-764	-765				
Other non-cash income/expenses***			777	-265	-265	-265
Adjusted EBITDA stripping out other non-cash or one-off expenses	-2,444	-2,130	984	2,103	3,416	5,181
Adjusted EBIT stripping out other non-cash or one-off expenses**	-3,256	-3,728	-1,362	-540	1,225	3,174
*FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities						
**In 2016 and 2017 Sygnis incurred one-off integration and restructuring expenses related to the acquisitions of C.B.S. Scientific, Expedeon and Innova Biosciences						
***Based on other non-cash expenses seen in FY/18 related to employee share option compensation, we have projected other non-cash expenses for the period 2019E-2021E						
Ratios						
Gross margin	42.6%	63.0%	72.5%	73.0%	73.5%	74.1%
EBITDA margin on revenues	n.m.	n.m.	13.4%	11.5%	16.4%	21.3%
EBITDA adj. margin on revenues	n.m.	n.m.	7.5%	13.1%	17.8%	22.5%
EBIT margin on revenues	n.m.	n.m.	n.m.	-5.0%	5.0%	12.6%
EBIT adj. margin on revenues	n.m.	n.m.	n.m.	n.m.	6.4%	13.8%
Net margin on revenues	n.m.	n.m.	n.m.	-9.5%	1.0%	8.2%
Tax rate	-5.8%	20.6%	40.2%	1.0%	12.0%	13.0%
Expenses as % of revenues						
Marketing & sales expenses	50.0%	24.0%	21.4%	19.0%	17.7%	17.6%
Administration expenses	154.9%	86.6%	57.0%	51.4%	43.0%	36.0%
Research & development	68.1%	10.2%	7.9%	7.5%	7.7%	7.8%
Y-Y Growth						
Revenues	222.3%	335.8%	68.4%	22.0%	20.0%	20.0%
Operating income (EBIT)	n.m.	n.m.	n.m.	n.m.	n.m.	203.0%
Net income/ loss	n.m.	n.m.	n.m.	n.m.	n.m.	936.5%



BALANCE SHEET

All figures in EUR '000	2016	2017*	2018	2019E	2020E	2021E
Assets						
Current assets, total	6,330	5,807	12,369	13,550	14,469	17,357
Cash and cash equivalents	3,795	1,954	6,238	7,439	7,481	9,479
Receivables	771	1,472	2,627	2,808	3,370	3,918
Inventories	1,092	1,234	1,966	1,765	2,079	2,422
Other current assets	672	1,147	1,538	1,538	1,538	1,538
Non-current assets, total	31,712	43,725	51,489	50,192	49,347	48,724
Property, plant & equipment	957	2,050	1,999	1,903	1,826	1,942
Goodwill	23,829	30,408	33,906	33,906	33,906	33,906
Intangible assets	6,926	11,267	15,584	14,383	13,614	12,876
Other assets	0	0	0	0	0	0
Total assets	38,042	49,532	63,858	63,743	63,815	66,081
Shareholders' equity & debt						
Current liabilities, total	3,198	5,142	7,759	6,534	6,158	6,257
Short-term debt	421	1,766	3,171	2,021	2,021	2,021
Accounts payable	656	849	1,498	1,422	1,046	1,146
Other current liabilities	2,121	2,527	3,090	3,090	3,091	3,091
Long-term liabilities, total	3,437	5,324	9,597	11,162	11,427	11,692
Long-term debt	2,285	3,947	7,476	8,776	8,776	8,776
Other liabilities and provisions	1,152	1,377	2,121	2,386	2,651	2,916
Shareholders' equity	31,407	39,066	46,502	46,047	46,231	48,132
Total consolidated equity and debt	38,042	49,532	63,858	63,743	63,815	66,081
<i>*FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities</i>						
Ratios						
Current ratio (x)	2.0	1.1	1.6	2.1	2.3	2.8
Quick ratio (x)	1.6	0.9	1.3	1.8	2.0	2.4
Net debt/(net cash)	-1,089	3,759	4,409	3,358	3,316	1,318
Net gearing	-3.5%	9.6%	9.5%	7.3%	7.2%	2.7%
Book value per share (in €)	1.43	0.94	0.91	0.43	0.84	0.88
Return on equity (ROE)	-14.0%	-9.5%	-0.6%	-3.3%	0.4%	3.9%



CASH FLOW STATEMENT

All figures in EUR '000	2016	2017*	2018	2019E	2020E	2021E
Net income	-4,388	-3,695	-301	-1,514	183	1,901
Depreciation and amortisation	812	1,598	2,345	2,643	2,191	2,007
Changes in working capital	-653	-1,184	-322	-56	-1,251	-791
Other adjustments	1,129	435	-1,630	265	265	265
Operating cash flow	-3,100	-2,846	92	1,338	1,388	3,382
Interest expense	-115	-38	-250	0	0	0
Net operating cash flow	-3,215	-2,884	-158	1,338	1,388	3,382
CapEx	-673	-2,123	-1,051	-1,345	-1,345	-1,384
Free cash flow	-3,888	-5,007	-1,209	-7	43	1,998
Other investments and disposals	-1,129	-7,194	-5,656	0	0	0
Cash flow from investing	-1,802	-9,317	-6,707	-1,345	-1,345	-1,384
Debt financing, net	129	1,095	6,465	150	0	0
Equity financing, net	4,115	9,330	4,722	1,059	0	0
Cash flow from financing	4,244	10,425	11,187	1,209	0	0
Exchange differences	11	-65	-39	0	0	0
Net cash flow	-762	-1,841	4,283	1,202	43	1,998
Cash, start of the year	4,557	3,795	1,954	6,237	7,439	7,481
Cash, end of the year	3,795	1,954	6,237	7,439	7,481	9,479
EBITDA/share (in €)	-0.15	-0.07	0.03	0.02	0.06	0.09

*FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities

Y-Y Growth

Operating cash flow	n.m.	n.m.	n.m.	1359.7%	3.7%	143.6%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	4590.1%
EBITDA/share	n.m.	n.m.	n.m.	-50.4%	235.6%	56.0%

FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	13 August 2018	€1.43	BUY	€2.65
...	↓	↓	↓	↓
2	5 December 2018	€1.00	BUY	€2.55
3	Today	€0.90	BUY	€2.20

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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.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

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Legally required information regarding

- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

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