

HAEMATO AG

Germany / Pharma
 Frankfurt
 Bloomberg: HAE GR
 ISIN: DE0006190705

Annual results
 2019

RATING
BUY

PRICE TARGET
€ 4.80

Return Potential 121.2%
 Risk Rating High

Q4 SALES PICK-UP ROUNDS OFF TRANSITION YEAR

Full year reporting reflected the operational optimisation measures undertaken last year to comply with safety regulations plus an overhauled portfolio to drive future growth and profitability. 2019 revenue and earnings were close to our targets. The company experienced solid Q/Q sales upticks the trailing two quarters (Q4/19: +12%; Q1/20: +9%), and we expect an expanded product roster, which now includes narcotics, to pave the way for a return to annualised growth. We expect 2020 sales to expand 16% Y/Y. Our rating remains Buy with a €4.8 price target.

HAEMATO set to join forces with M1 Kliniken The lifestyle and beauty specialist, M1, announced that it will acquire the 48% HAEMATO stake currently held by MPH Health Care. M1 wants to leverage HAEMATO's extensive European sourcing and distribution infrastructure and expertise to capitalise on growing opportunities in its product business. This will allow M1 to focus on its core beauty clinic business. HAEMATO in turn gains access to M1's well developed brand and social media presence providing synergies for its evolving product portfolio. We believe the product and logistics combination makes sense for both companies. M1 will consolidate HAE revenues as of H2/20, but HAEMATO will continue to operate independently under its own brand.

What else has changed? HAEMATO now holds the required legal permissions to import and distribute pain-relief narcotics. This is a major milestone given the strict security requirements involved in siloing and distributing narcotics. Initial revenue streams are wholesale-driven for now, while applications for parallel import are being processed. We will update on this as the applications progress. The upgraded bunker at the Schönefeld production facility will also come in handy for the planned rollout of medical marijuana products. This has been gated by an acutely undersupplied German market. But new distributors are . . . (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2016	2017	2018	2019	2020E	2021E
Revenue (€m)	275.61	289.86	274.12	197.84	229.56	262.89
Y/Y growth	20.0%	5.2%	-5.4%	-27.8%	16.0%	8.5%
EBIT (€m)	13.44	9.42	8.50	-0.02	5.48	7.32
EBIT margin	4.9%	3.2%	3.1%	0.0%	2.4%	2.8%
Net income (€m)	11.04	6.98	6.28	-1.17	3.77	5.04
EPS (diluted) (€)	0.53	0.32	0.27	-0.05	0.16	0.22
DPS (€)	0.30	0.30	0.10	0.00	0.15	0.25
FCF (€m)	12.80	-2.91	6.77	-3.46	11.18	1.91
Net gearing	15.9%	17.4%	19.7%	34.2%	19.2%	22.0%
Liquid assets (€m)	16.87	15.71	8.49	4.86	6.10	4.71

RISKS

Regulatory changes in healthcare systems, spending cuts in healthcare systems, homogenization of pharmaceutical prices within the European Union.

COMPANY PROFILE

HAEMATO AG is a supplier of specialty pharmaceuticals focused on growth markets in the indication groups of oncology, HIV / AIDS and other chronic diseases. The company boasts a broad customer base of over 4,800 pharmacies and eleven wholesalers in Germany, while over 1,300 pharmacies and another five wholesalers in Austria also source from HAEMATO.

MARKET DATA

As of 12 Jun 2020

Closing Price	€ 2.17
Shares outstanding	22.87m
Market Capitalisation	€ 49.63m
52-week Range	€ 1.50 / 4.94
Avg. Volume (12 Months)	18,543

Multiples	2019	2020E	2021E
P/E	n.a.	13.2	9.8
EV/Sales	0.4	0.3	0.3
EV/EBIT	n.a.	14.1	10.6
Div. Yield	0.0%	6.9%	11.5%

STOCK OVERVIEW



COMPANY DATA

As of 31 Dec 2019

Liquid Assets	€ 4.90m
Current Assets	€ 72.77m
Intangible Assets	€ 38.45m
Total Assets	€ 128.57m
Current Liabilities	€ 55.53m
Shareholders' Equity	€ 72.22m

SHAREHOLDERS

MPH Health Care AG	48.0%
Free Float	52.0%



. . . set to come online in the near-term, which should help clear up some of the supply bottlenecks. Demand for medical cannabis is booming, and a secure source would be a coup for the company. Meanwhile, the company has expanded its overall portfolio to around 600 offerings following a flurry of Q1 activity that resulted in 38 new approvals. The larger suite of products should help management adapt quicker to shifts within the market.

No tangible covid-19 effects on operations We believe sales have remained steady during the pandemic crisis: Meds are vital to society and able to cross European borders despite tighter controls. HAEMATO has also implemented strict distancing practices at its Schönefeld facility to ensure worker safety and fluid operations. Measures include division of the workforce into two shifts.

BREAKING DOWN 2019 RESULTS

Full year results were close to our forecasts, thanks to the 12% Q/Q uptick in Q4 sales to €56m. H2/19 revenue saw a 10% sequential uptick after the first six months (H1/19: -35% Y/Y) had been burdened by a confluence of regulatory and market headwinds. Parallel import stakeholders undertook a number of measures to bolster supply chain security (see note of 9 September 2019), which hampered distribution.

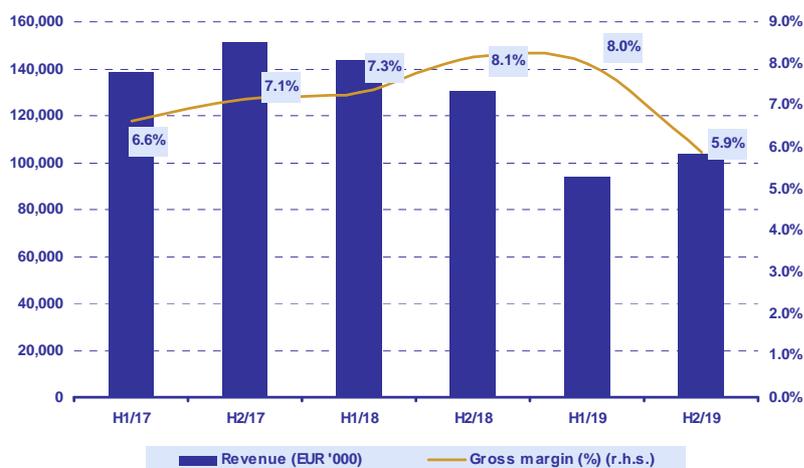
Table 1: Full year results vs FBe and prior year

All figures in EUR '000	2019	2019E	variance	2018	variance	H2/19	H2/18	variance
Revenue	197,834	199,614	-0.9%	274,121	-27.8%	103,826	130,376	-20.4%
Gross profit	13,599	15,848	-14.2%	21,127	-35.6%	6,093	10,618	-42.6%
Margin	6.9%	7.9%	-	7.7%	-	5.9%	8.1%	-
EBIT	-18	184	-	8,503	-	-731	2,018	-
Margin	0.0%	0.1%	-	3.1%	-	-0.7%	1.5%	-
Net Income	-1,173	-1,134	-	6,276	-	927	1,220	-24.0%
Margin	-0.6%	-0.6%	-	2.3%	-	0.9%	0.9%	-

Source: First Berlin Equity Research; HAEMATO

Gross profit slumped 36% on an annualised basis, while the gross margin (GM) retreated 210 basis points to 5.9% in H2. GM volatility has at times been the rub on HAEMATO's financial performance and remains highly dependant on the sales mix and shifts in market demand. A passel of high margin products adopted last year should help smooth GM volatility.

Figure 1: Revenue and gross margin developments



Source: First Berlin Equity Research; HAEMATO

Operational structure stable Personnel and other operating expenses were slightly lower than in the previous year mainly due to a dip in the latter. The headcount averaged 166 in 2019 (2018: 194). Other operating income declined to €1.5m (2018: €3.7m). The line item contained revaluation gains on financial assets (€1.9m) in 2018. However, these non-cash gains are now recognised as part of the financial result and amounted to €-0.8m in 2019.

Operating income was close to break-even (€-19k) and our target (FBe: €184k), although it retreated sharply Y/Y on the weaker topline and gross margin performances. The bottom line amounted to €-1.2m and matched FBe of €-1.1m.

Table 2: Financial highlights

All figures in EUR '000	2019	2018	variance
Cash	2,100	5,588	-62.4%
Short-term financial assets	2,761	2,889	-4.4%
Financial debt (short- and long-term)	28,897	22,680	27.4%
Net debt	24,036	14,202	69.2%
Total assets	128,567	116,505	10.4%
Shareholders' equity	72,219	75,676	-4.6%
Equity ratio	56%	65%	-

Source: First Berlin Equity Research; HAEMATO

Temporary increase in working capital Total assets climbed to €129m (2018: €117m), stemming mainly from the inventory build-up in Q4. The stockpiled warehouse paid off during the lockdown helping offset some supply bottlenecks. Inventory levels have since dipped south of €40m (YE19: €55m).

Net debt totalled €24m at year end, and the company exited 2019 with €4.8m in cash and cash equivalents. Management are in late-stage talks with the company's house bank to renew the long-term credit facility. We expect this to be secured in the coming months. The equity ratio decreased to 56% from the combined effects of the higher asset base and net loss.

**Table 3: Cash flow KPIs**

All figures in EUR '000	2019	2018	variance
Net operating cash flow	-2,763	558	-
Cash flow from investing	-701	6,208	-
Cash flow from financing	49	-11,613	-
Net cash flows	-3,415	-4,847	-
Free cash flow (FCF)	-3,464	6,766	-

Source: First Berlin Equity Research, HAEMATO

Lower net income and WC consumption weigh down cash flows Net operating cash flow totalled €-2.8m for the year compared to €0.6m in 2018. The reversal stems chiefly from the aforementioned higher working capital consumption. Cash flow from investing totalled €-0.7m. Last year, HAEMATO realised a €7.0m gain on the disposal of financial assets. FCF totalled €-3.4m (2017: €6.8m).

Pick-up in sales is encouraging and returns HAEMATO to growth path After reporting a 25% annualised increase in Q1 revenue to €60.6m, management guide for an uptick in sales of over 10% this year implying a topline of at least €217m. Assuming momentum seen the last two quarters continues throughout the year, this looks attainable. We note that a coronavirus outbreak at the production and logistics facility would jeopardise all financial targets. But the company has been operating under strict safety protocols since the lockdown including dividing the workforce into two shifts. We are therefore confident a major interruption in production can be avoided.

**Table 4: Updates to FBe and price target**

	old	new	revision	upside	dividend yield	total return
Price target (€)	4.8	4.8	0.0%	121.2%	6.9%	128.1%
All figures in € '000	2020E			2021E		
	old	new	revision	old	new	revision
Revenue	229,556	229,556	0.0%	247,986	262,890	6.0%
EBIT	6,467	5,482	-15.2%	7,888	7,324	-7.2%
Margin (%)	2.8%	2.4%	-	3.2%	2.8%	-
Net income	4,492	3,769	-16.1%	5,377	5,039	-6.3%
EPS diluted (€)	0.20	0.16	-16.1%	0.24	0.22	-6.3%

Source: First Berlin Equity Research estimates

Recalibrated forecasts We leave our 2020 topline estimate unchanged but have bumped up our revenue target for next year on expectations that the broader portfolio, which now includes pain management narcotics, will boost volumes. The revenue upside is offset by a reduction in our gross margin assumption. Gross margin volatility has at times been the rub with HAEMATO earnings. We have therefore dialled the GM down to 7.5% (old: 8.0%). Our valuation also factors in a higher YE19 net debt figure.

Last year was largely a transitional period for the company as it optimised its portfolio and upgraded its facilities to comply with stricter regulations. Bolstered by a more efficient production infrastructure, a deeper roster of meds, and new inroads into medical marijuana, we expect the company to extend the good operational momentum seen in the trailing six month results. Our rating is Buy with an unchanged €4.8 price target.



VALUATION MODEL

In EUR '000	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Sales	229,556	262,890	294,436	323,880	346,551	367,345	385,712	401,140
NOPLAT	4,167	5,566	7,516	8,449	9,657	10,644	11,492	12,083
(+) depreciation & amortisation	1,194	1,104	1,237	1,360	1,352	1,368	1,437	1,494
Net operating cash flow	5,360	6,670	8,752	9,809	11,008	12,012	12,929	13,577
(-) Total investments (CAPEX and WC)	4,319	-5,037	-6,592	-2,235	-3,206	-1,766	-3,206	-553
(-) Capital expenditures	-872	-999	-1,119	-1,231	-1,317	-1,396	-1,466	-1,524
(-) Working capital	5,191	-4,038	-5,473	-1,004	-1,890	-370	-1,740	971
Free cash flows (FCF)	9,679	1,634	2,160	7,574	7,802	10,246	9,724	13,024
PV of FCF's	9,229	1,426	1,726	5,540	5,224	6,280	5,456	6,690

In EUR '000		Terminal EBIT margin							
		3.2%	3.7%	4.2%	4.7%	5.2%	5.7%	6.2%	
PV of FCFs in explicit period	59,152	6.2%	5.99	7.06	8.13	9.20	10.27	11.34	12.41
(+) PV of FCFs in terminal period	75,448	7.2%	4.81	5.61	6.41	7.21	8.01	8.81	9.61
Enterprise value (EV)	134,600	8.2%	3.97	4.59	5.21	5.82	6.44	7.06	7.68
(+) Net cash / (-) net debt	-24,696	9.2%	3.34	3.83	4.32	4.81	5.29	5.78	6.27
(+) Investments / minority interests	0	10.2%	2.85	3.24	3.64	4.03	4.42	4.81	5.21
Shareholder value	109,904	11.2%	2.46	2.78	3.10	3.42	3.74	4.06	4.38
Fair value per share (€)	4.80	12.2%	2.13	2.40	2.66	2.93	3.19	3.45	3.72

		Terminal growth rate							
		0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	
Cost of equity	13.5%	6.2%	7.38	7.88	8.48	9.20	10.09	11.22	12.70
Pre-tax cost of debt	5.3%	7.2%	6.03	6.36	6.75	7.21	7.76	8.42	9.23
Tax rate	24.0%	8.2%	5.01	5.25	5.52	5.82	6.18	6.60	7.10
After-tax cost of debt	4.0%	9.2%	4.23	4.40	4.59	4.81	5.05	5.33	5.66
Share of equity capital	55.0%	10.2%	3.61	3.73	3.87	4.03	4.20	4.40	4.63
Share of debt capital	45.0%	11.2%	3.10	3.20	3.30	3.42	3.55	3.69	3.85
WACC	9.2%	12.2%	2.68	2.76	2.84	2.93	3.02	3.13	3.25

*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	2017	2018	2019	2020E	2021E	2022E
Revenues	289,862	274,121	197,835	229,556	262,890	294,436
Cost of goods sold	-269,778	-252,994	-184,236	-212,339	-243,173	-272,354
Gross profit	20,084	21,127	13,599	17,217	19,717	22,083
Personnel expenses	-6,209	-6,322	-6,308	-6,428	-6,556	-6,681
Other OpEx	-8,948	-8,520	-6,854	-6,887	-7,624	-7,361
Other income	6,476	3,675	1,460	2,774	2,892	3,085
EBITDA	11,270	9,959	1,897	6,676	8,428	11,126
Depreciation & amortisation	-1,854	-1,456	-1,915	-1,194	-1,104	-1,237
Operating income (EBIT)	9,416	8,503	-18	5,482	7,324	9,889
Net financial result	-1,958	-1,059	-764	-1,100	-923	-1,058
Other financial result	631	320	-406	0	0	0
Pre-tax income (EBT)	8,089	7,764	-1,188	4,382	6,402	8,831
Income taxes	-1,106	-1,488	15	-613	-1,363	-1,920
Minority interests	0	0	0	0	0	0
Net income / loss	6,983	6,276	-1,173	3,769	5,039	6,911
Diluted EPS (in €)	0.32	0.27	-0.05	0.16	0.22	0.30
Ratios						
Gross margin	6.9%	7.7%	6.9%	7.5%	7.5%	7.5%
EBIT margin on revenues	3.2%	3.1%	0.0%	2.4%	2.8%	3.4%
EBITDA margin on revenues	3.9%	3.6%	1.0%	2.9%	3.2%	3.8%
Net margin on revenues	2.4%	2.3%	-0.6%	1.6%	1.9%	2.3%
Tax rate	13.7%	19.2%	1.3%	14.0%	21.3%	21.7%
Expenses as % of revenues						
Personnel expenses	2.1%	2.3%	3.2%	2.8%	2.5%	2.3%
Other OpEx	3.1%	3.1%	3.5%	3.0%	2.9%	2.5%
Depreciation & amortisation	0.6%	0.5%	1.0%	0.5%	0.4%	0.4%
Y-Y Growth						
Revenues	5.2%	-5.4%	-27.8%	16.0%	14.5%	12.0%
Operating income	-29.9%	-9.7%	n.m.	n.m.	33.6%	35.0%
Net income/ loss	-36.7%	-10.1%	n.m.	n.m.	33.7%	37.2%



BALANCE SHEET

	2017	2018	2019	2020E	2021E	2022E
Assets						
Current assets, total	67,350	60,684	72,768	57,668	61,768	69,284
Cash and equivalents	6,470	5,599	2,100	3,284	1,838	2,449
ST financial assets and securities	9,236	2,889	2,761	2,816	2,873	2,930
Trade receivables	8,320	7,320	10,944	11,321	12,964	14,520
Inventories	43,114	44,377	55,441	39,559	43,305	48,501
Other ST assets	210	499	1,522	689	789	883
Non-current assets, total	54,678	55,832	55,798	56,391	57,256	58,166
Property, plant & equipment	1,106	1,046	2,166	2,188	2,215	2,244
Goodwill & other intangibles	38,941	38,677	38,250	37,906	37,775	37,627
Financial assets	14,496	15,973	15,247	16,162	17,132	18,159
Deferred taxes	135	136	135	135	135	135
Total assets	122,028	116,516	128,566	114,060	119,024	127,450
Shareholders' equity & debt						
Current liabilities, total	31,569	25,483	55,530	22,113	24,419	26,602
Trade payables	7,522	8,469	19,622	9,308	10,660	11,939
ST debt	7,821	7,680	28,897	5,000	5,000	5,000
Provisions	7,249	361	1,357	1,377	1,398	1,419
Other ST financial liabilities	1,229	684	661	689	789	883
Other current liabilities	7,748	8,290	4,993	5,739	6,572	7,361
Long-term liabilities, total	19,531	15,357	818	15,959	17,009	22,057
Long-term debt	19,000	15,000	0	15,000	16,000	21,000
LT provisions	13	26	52	52	52	52
Deferred tax liabilities	518	332	203	344	394	442
Other non-current liabilities	0	0	563	563	563	563
Shareholders' equity	70,928	75,676	72,219	75,987	77,596	78,791
Total consolidated equity and debt	122,028	116,516	128,566	114,060	119,024	127,450
Ratios						
Current ratio (x)	2.1	2.4	1.3	2.6	2.5	2.6
Quick ratio (x)	0.8	0.6	0.3	0.8	0.8	0.8
Equity ratio	58%	65%	56%	67%	65%	62%
Net debt	12,344	14,875	24,696	14,589	17,078	21,504
Net debt / EBITDA (x)	1.1	1.5	13.0	2.2	2.0	1.9
Net gearing	17%	20%	34%	19%	22%	27%
Return on equity (ROE)	9.8%	8.3%	-1.6%	5.0%	6.5%	8.8%
Capital employed (CE)	49,375	48,367	52,595	47,082	51,015	56,370
Return on capital employed (ROCE)	19%	18%	0%	12%	14%	18%



CASH FLOW STATEMENT

All figures in EUR '000	2017	2018	2019	2020E	2021E	2022E
Net income	6,983	6,276	-1,173	3,769	5,039	6,911
Depreciation and amortisation	1,854	1,456	1,915	1,194	1,104	1,237
Change to LT accruals	1,031	0	1,023	20	21	21
Change in financial asset valuations	-3,559	-1,943	726	-970	-1,026	-1,085
Asset disposals	-811	-546	0	0	0	0
Income from participations	-631	-320	-320	-200	-200	-200
Tax result	-636	1,485	-19	613	1,363	1,920
Net interest expense	1,958	1,059	745	1,100	923	1,058
Operating cash flow	6,189	7,467	2,897	5,526	7,223	9,861
Change in inventory	-5,221	525	-11,064	15,882	-3,746	-5,197
Change in trade rec & other assets	-5,627	1,064	-3,704	457	-1,744	-1,650
Change in payable & other liabilities	-3,111	-7,468	10,054	-9,399	2,335	2,210
Tax paid	-582	-1,031	-946	-613	-1,363	-1,920
Net operating cash flow	-8,352	557	-2,763	11,852	2,706	3,304
CapEx	4,805	-1,134	-1,029	-872	-999	-1,119
Income from investments	631	7,326	320	200	200	200
Interest income	2	16	8	0	0	0
Cash flow from investing	5,438	6,208	-701	-672	-799	-919
Free cash flow (FCF)	-2,914	6,765	-3,465	11,180	1,907	2,385
Equity inflow, net	7,447	5,198	0	0	0	0
Debt inflow, net	701	-5,165	3,583	-8,897	1,000	5,000
Financing expenses paid	-1,959	-1,075	-714	-1,100	-923	-1,058
Dividend paid to shareholders	-6,594	-6,594	-2,285	0	-3,430	-5,717
Other adjustments	0	0	-536	0	0	0
Cash flow from financing	-406	-7,636	48	-9,997	-3,353	-1,774
Net cash flows	-3,320	-871	-3,499	1,183	-1,446	611
Cash, start of the year	9,790	6,470	5,599	2,100	3,284	1,838
Cash, end of the year	6,470	5,599	2,100	3,284	1,838	2,449
EBITDA/share (in €)	0.52	0.44	0.08	0.29	0.37	0.49

Imprint / Disclaimer

First Berlin Equity Research

First Berlin Equity Research GmbH ist ein von der BaFin betreffend die Einhaltung der Pflichten des §85 Abs. 1 S. 1 WpHG, des Art. 20 Abs. 1 Marktmissbrauchsverordnung (MAR) und der Markets Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Durchführungsverordnung und der Markets in Financial Instruments Regulations (MiFIR) beaufsichtigtes Unternehmen.

First Berlin Equity Research GmbH is one of the companies monitored by BaFin with regard to its compliance with the requirements of Section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) Market Abuse Regulation (MAR) and Markets in Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Commission Delegated Regulation and Markets in Financial Instruments Regulations (MiFIR).

Anschrift:

First Berlin Equity Research GmbH
Mohrenstr. 34
10117 Berlin
Germany

Vertreten durch den Geschäftsführer: Martin Bailey

Telefon: +49 (0) 30-80 93 9 680

Fax: +49 (0) 30-80 93 9 687

E-Mail: info@firstberlin.com

Amtsgericht Berlin Charlottenburg HR B 103329 B

UST-Id.: 251601797

Ggf. Inhaltlich Verantwortlicher gem. § 6 MDSStV

First Berlin Equity Research GmbH

Authored by: Ellis Acklin, Senior Analyst

All publications of the last 12 months were authored by Ellis Acklin.

Company responsible for preparation: First Berlin Equity Research GmbH, Mohrenstraße 34, 10117 Berlin

The production of this recommendation was completed on 15 June 2020 at 12:44

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

Copyright© 2020 First Berlin Equity Research GmbH No part of this financial analysis may be copied, photocopied, duplicated or distributed in any form or media whatsoever without prior written permission from First Berlin Equity Research GmbH. First Berlin Equity Research GmbH shall be identified as the source in the case of quotations. Further information is available on request.

INFORMATION PURSUANT TO SECTION 85 (1) SENTENCE 1 OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO ART. 20 (1) OF REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO ART. 37 OF COMMISSION DELEGATED REGULATION (EU) NO 2017/565 (MiFID) II.

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and art. 37 of Commission Delegated Regulation (EU) no. 2017/565 (MiFID II) into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with art. 37 (1) of Commission Delegated Regulation (EU) no. 2017/565 (MiFID) II and art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) investment firms which produce, or arrange for the production of, investment research that is intended or likely to be subsequently disseminated to clients of the firm or to the public, under their own responsibility or that of a member of their group, shall ensure the implementation of all the measures set out in Article 34 (3) of Regulation (EU) 2017/565 in relation to the financial analysts involved in the production of the investment research and other relevant persons whose responsibilities or business interests may conflict with the interests of the persons to whom the investment research is disseminated. In accordance with art. 34 (3) of Regulation (EU) 2017/565 the procedures and measures referred to in paragraph 2 (b) shall be designed to ensure that relevant persons engaged in different business activities involving a conflict of interests carry on those activities at a level of independence appropriate to the size and activities of the investment firm and of the group to which it belongs, and to the risk of damage to the interests of clients.

First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest (further information and data may be provided on request):

- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the

financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

If despite these measures one or more of the aforementioned conflicts of interest cannot be avoided on the part of the author or First Berlin, then reference shall be made to such conflict of interest.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG], DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 MAY 2014 ON MARKETS IN FINANCIAL INSTRUMENTS AND AMENDING DIRECTIVE 2002/92/EC AND DIRECTIVE 2011/61/EU, ACCOMPANIED BY THE MARKETS IN FINANCIAL INSTRUMENTS REGULATION (MIFIR, REG. EU NO. 600/2014).

First Berlin notes that it has concluded a contract with the issuer to prepare financial analyses and is paid for that by the issuer. First Berlin makes the financial analysis simultaneously available for all interested security financial services companies. First Berlin thus believes that it fulfils the requirements of section 64 WpHG for minor non-monetary benefits.

PRICE TARGET DATES

Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.

ASSET VALUATION SYSTEM

First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

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.

RISK ASSESSMENT

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	27 August 2013	€3.00	Buy	€5.70
20	13 September 2018	€5.36	Buy	€7.60
21	17 May 2019	€4.99	Add	€5.80
22	9 September 2019	€3.11	Buy	€4.80
23	Today	€2.17	Buy	€4.80

INVESTMENT HORIZON

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.

UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

Legally required information regarding

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

can be accessed through the following internet link: <https://firstberlin.com/disclaimer-english-link/>

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main

EXCLUSION OF LIABILITY (DISCLAIMER)**RELIABILITY OF INFORMATION AND SOURCES OF INFORMATION**

The information contained in this study is based on sources considered by the author to be reliable. Comprehensive verification of the accuracy and completeness of information and the reliability of sources of information has neither been carried out by the author nor by First Berlin. As a result no warranty of any kind whatsoever shall be assumed for the accuracy and completeness of information and the reliability of sources of information, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the accuracy and completeness of information and the reliability of sources of information.

RELIABILITY OF ESTIMATES AND FORECASTS

The author of the financial analysis made estimates and forecasts to the best of the author's knowledge. These estimates and forecasts reflect the author's personal opinion and judgement. The premises for estimates and forecasts as well as the author's perspective on such premises are subject to constant change. Expectations with regard to the future performance of a financial instrument are the result of a measurement at a single point in time and may change at any time. The result of a financial analysis always describes only one possible future development – the one that is most probable from the perspective of the author – of a number of possible future developments.

Any and all market values or target prices indicated for the company analysed in this financial analysis may not be achieved due to various risk factors, including but not limited to market volatility, sector volatility, the actions of the analysed company, economic climate, failure to achieve earnings and/or sales forecasts, unavailability of complete and precise information and/or a subsequently occurring event which affects the underlying assumptions of the author and/or other sources on which the author relies in this document. Past performance is not an indicator of future results; past values cannot be carried over into the future.

Consequently, no warranty of any kind whatsoever shall be assumed for the accuracy of estimates and forecasts, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the correctness of estimates and forecasts.

INFORMATION PURPOSES, NO RECOMMENDATION, SOLICITATION, NO OFFER FOR THE PURCHASE OF SECURITIES

The present financial analysis serves information purposes. It is intended to support institutional investors in making their own investment decisions; however in no way provide the investor with investment advice. Neither the author, nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be considered to be acting as an investment advisor or portfolio manager vis-à-vis an investor. Each investor must form his own independent opinion with regard to the suitability of an investment in view of his own investment objectives, experience, tax situation, financial position and other circumstances.

The financial analysis does not represent a recommendation or solicitation and is not an offer for the purchase of the security specified in this financial analysis. Consequently, neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall as a result be liable for losses incurred through direct or indirect employment or use of any kind whatsoever of information or statements arising out of this financial analysis.

A decision concerning an investment in securities should take place on the basis of independent investment analyses and procedures as well as other studies including, but not limited to, information memoranda, sales or issuing prospectuses and not on the basis of this document.

NO ESTABLISHMENT OF CONTRACTUAL OBLIGATIONS

By taking note of this financial analysis the recipient neither becomes a customer of First Berlin, nor does First Berlin incur any contractual, quasi-contractual or pre-contractual obligations and/or responsibilities toward the recipient. In particular no information contract shall be established between First Berlin and the recipient of this information.

NO OBLIGATION TO UPDATE

First Berlin, the author and/or the person responsible for passing on or distributing the financial analysis shall not be obliged to update the financial analysis. Investors must keep themselves informed about the current course of business and any changes in the current course of business of the analysed company.

DUPLICATION

Dispatch or duplication of this document is not permitted without the prior written consent of First Berlin.

SEVERABILITY

Should any provision of this disclaimer prove to be illegal, invalid or unenforceable under the respectively applicable law, then such provision shall be treated as if it were not an integral component of this disclaimer; in no way shall it affect the legality, validity or enforceability of the remaining provisions.

APPLICABLE LAW, PLACE OF JURISDICTION

The preparation of this financial analysis shall be subject to the law obtaining in the Federal Republic of Germany. The place of jurisdiction for any disputes shall be Berlin (Germany).

NOTICE OF DISCLAIMER

By taking note of this financial analysis the recipient confirms the binding nature of the above explanations.

By using this document or relying on it in any manner whatsoever the recipient accepts the above restrictions as binding for the recipient.

QUALIFIED INSTITUTIONAL INVESTORS

First Berlin financial analyses are intended exclusively for qualified institutional investors.

This report is not intended for distribution in the USA and/or Canada.