Pharming Group NV

Netherlands / Biotechnology
Primary exchange: Euronext Amsterdam / Secondary exchange: Frankfurt
Bloomberg: PHARM NA
ISIN: NL0010391025

Q2/20 results

RATING	**BUY**
PRICE TARGET	**€ 1.80**
Return Potential	77.5%
Risk Rating	High

SALES TO REBOUND IN H2, BUT STRONG TAKEDA NUMBERS A CONCERN

Pharming's Q2 results showed an 8% y-o-y decline in revenue to €39.3m (Q2/19: €42.7m) while EBIT came in at €12.9m (Q2/19: €12.4m). Q2/20 revenue was 20.3% below the Q1/20 level of €49.3m. The Q2/20 numbers were well below our and consensus expectations which were influenced by the strong Q1 performance. Management attributes the weak sequential peformance to "an unusually high sales level towards the end of Q1/20, which is believed to have included some pre-filling of prescriptions in response to the emerging COVID-19 pandemic". During the conference call following the release of the results, management also stated that Q2/20 revenues were affected by inventory reductions at part of the specialty pharmacist customer base. Reduced opportunities for face-to-face marketing were an additional hindrance to business development. However, we note that Q2/20 results from leading competitor Takeda's hereditary angioedema (HAE) franchise showed revenue increases of 23% y-o-y and 8% sequentially. This growth was driven by Takeda's flagship HAE product, Takhzyro, which posted y-o-y and sequential growth figures of 64% and 21% respectively. Ruconest is very effective in reducing symptoms of HAE attacks and continues to generate sales as a treatment for breakthrough attacks suffered by Takhzyro patients. However strong Q2/20 and H1/20 results from the Takeda HAE franchise are a concern. We have lowered our price target from €2.10 to €1.80 reflect both reductions to our forecasts and uncertainty as to the impact of Takhzyro's future growth trajectory on Pharming. We maintain our Buy recommendation.

Q2/20 pretax up vs. Q1/20 due to lower financing costs While Q2/20 EBIT was 34% below the Q1/20 figure, pretax climbed 8% due to lower financing costs following the convertible bond refinancing in January 2020 and the absence of exit fees and expenses of €3.7m in connection with the repayment in full of the Orbimed loan which burdened the Q1/20 figures. (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2016	2017	2018	2019	2020E	2021E
Revenue (€ m)	15.87	89.62	135.13	169.02	184.59	203.39
Y-o-y growth	46.6%	464.6%	50.8%	25.1%	9.2%	10.2%
EBIT (€ m)	-11.54	21.91	37.99	60.91	70.40	73.01
EBIT margin	-72.7%	24.4%	28.1%	36.0%	38.1%	35.9%
Net income (€ m)	-17.54	-76.25	24.99	36.20	50.88	51.81
EPS (diluted) (€)	-0.04	-0.16	0.04	0.05	0.07	0.08
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-67.48	32.17	36.61	40.38	42.20	44.12
Net gearing	131.5%	142.0%	-13.2%	-15.9%	-24.0%	-28.9%
Liquid assets (€ m)	31.89	58.66	80.31	66.30	166.14	189.25

RISKS

The main risks to our price target include slower sales growth for Ruconest in the EU and the US than we currently model.

COMPANY PROFILE

Pharming develops and produces therapeutic proteins through a bioreactor recombinant technology platform. Lead drug Ruconest received EMA approval in 2010 and FDA approval in July 2014.

MARKET DATA

	As of 03 Aug 2020
Closing Price	€ 1.01
Shares outstanding	637.70m
Market Capitalisation	€ 646.63m
52-week Range	€ 0.78 / 1.62
Avg. Volume (12 Months)	12,669,795

Multiples	2019	2020E	2021E
P/E	20.4	14.7	14.5
EV/Sales	4.0	3.7	3.3
EV/EBIT	11.1	9.6	9.3
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW

COMPANY DATA

	As of 30 Jun 2020
Liquid Assets	€ 152.78m
Current Assets	€ 195.39m
Intangible Assets	€ 77.22m
Total Assets	€ 317.11m
Current Liabilities	€ 43.89m
Shareholders' Equity	€ 127.57m

SHAREHOLDERS

Goldman Sachs Group Inc.	3.0%
Polar Capital Partners Ltd.	2.9%
FMR LLC	2.9%
Deutsche Bank	2.7%
Free float and other	88.4%

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Figure 1: Q2/20 results versus consensus and our forecasts

€m	Q2 20A	Consensus	% Δ	Q2 20 FBe	% Δ	Q2 19A	% Δ
Sales	39.3	50.9	-22.7%	50.0	-21.4%	42.7	-8.0%
EBIT	12.9	18.2	-29.1%	17.4	-25.9%	12.4	4.0%
margin (%)	32.8%	35.8%	-	34.8%	-	29.0%	-

Source: First Berlin Equity Research estimates, Pharming Group NV, Bloomberg

Recruitment to trials of Ruconest with acute kidney injury and covid-19 patients to start soon Besides the impact on current revenues, the pandemic has also delayed recruitment to the phase I/II trial of Ruconest in pre-eclampsia patients and the phase II trial of Ruconest in acute kidney injury patients. However, recruitment to the acute kidney injury trial is expected to start soon. In April Pharming reported encouraging results of a trial of Ruconest with five covid-19 patients under a compassionate use programme at the University Hospital Basel, Switzerland. None of these patients responded to standard treatments including hydroxychloroquine and lopinavir/ritonavir, but four of the five recovered within 48 hours following treatment with Ruconest. The fifth patient recovered following oxygen treatment. Recruitment of up to 150 patients to a multinational clinical trial at research centres in Switzerland, the US and Latin America initiated by the University Hospital Basel is due to begin imminently.

Recruitment to phase III Leniolisib trial has resumed SARS-CoV-2 interrupted recruitment to the phase III Leniolisib trial. However, recruitment has now resumed. Results are expected in early 2021 and the planned launch date is mid-2022.

Capacity expansion in preparation for potential approval of larger indications During the first quarter a second transgenic rabbit farm came on line following EMA and FDA approval. This new facility is expected to double Pharming's Ruconest capacity once it becomes fully operational by the end of this year. Meanwhile work has been initiated on a third farm and planning of a fourth farm is underway. If Pharming gains approval for new larger indications such as acute kidney injury, pre-eclampsia and Pompe Disease, demands placed on its production platform may outstrip current capacity several fold. Against this background the company is redeveloping rhC1INH from cattle as a source of manufacturing material. The first milk from cattle is expected to be available in 2022. Pharming has also started work on a new downstream processing plant (purification, virus inactivation/removal, concentration, formulation) which will double the capacity currently available to it. The new plant will enable the company to perfect the manufacturing process in-house before the anticipated launch of new indications.

Near term newsflow on configuration of clinical development of Pompe Disease Therapy likely Pharming's management is currently consulting with the FDA with regard to the configuration of the clinical development of the company's drug candidate for Pompe Disease. Pharming's current expectation is that a phase Ib/II trial will begin in early 2022 after submission of an Investigational New Drug Application to the FDA in late 2021.

Strong results from the Takeda HAE franchise are a concern Prefilling of prescriptions towards the end of Q1/20 and inventory reductions at a part of the specialty pharmacist customer base suggest that topline growth will rebound in the second half of the year. In the Q2/20 report management states that H1/20 performance (revenue + 13.7% y-o-y) is more representative of underlying performance. However, we also note that revenues of the Takeda HAE franchise were up 44% y-o-y during H1/20 driven by Takhzyro (+80% y-o-y).

Figure 2. Recent Takeda HAE franchise results

USDm	FY/18	Q1/19	Q2/19	H1/19	Q3/19	Q4 19	FY/19	Q1/20	Q2/20	H1/20
Firazyr	773	58	82	140	59	69	268	92	75	167
Takhzyro	62	88	132	220	151	167	538	179	216	395
q-on-q Δ (%)	n.a.	n.a.	49.7%	n.a.	14.5%	10.9%	n.a.	6.9%	20.5%	n.a
y-on-y Δ (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	773.2%	103.2%	63.6%	79.5%
of which US:	n.a.	84	125	209	142	155	506	161	196	357
q-on-q Δ (%)	n.a.	n.a.	47.6%	n.a.	13.7%	9.8%	n.a.	3.3%	22.2%	n.a
y-on-y Δ (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	90.2%	57.5%	70.7%
Kalbitor	71	11	10	21	12	10	43	9	10	19
Cinryze	445	28	66	95	43	63	201	50	55	104
Total	1,351	185	290	475	264	310	1,050	329	356	686
q-on-q Δ (%)	n.a.	-36.3%	56.6%	n.a.	-8.8%	17.2%	n.a.	6.3%	8.1%	n.a
y-on-y Δ (%)	n.a.	n.a.	n.a.	n.a.	-19.6%	6.6%	-22.3%	77.9%	22.8%	44.2%

Source: Takeda

Figure 2 above shows recent results for the various drugs which make up the Takeda HAE franchise. Takeda's flagship HAE product, Takhzyro, was launched in Q3/18. In 2019 it added €477m of sales to €538m but this was outweighed by sales losses of €778m from the other products in the portfolio including Firazyr (whose US patent expired at mid-year). However, sales from non-Takhzyro products climbed 14% y-o-y in H1/20 while Takhzyro sales jumped 80% resulting in overall H1/20 sales growth of 44%. During Takeda's conference call management stated that inventory changes had no material impact on the Takhzyro numbers. On the one hand Pharming benefits from this growth as Ruconest is often used to treat breakthrough attacks suffered by patients taking Takhzyro. On the other hand the impact of strong Takhzyro growth on Ruconest sales is a concern. In addition, the weakening US dollar is also likely to act as a drag on Pharming's revenue growth in H2/20. The USDEUR pair averaged 0.908 during H1/20 but is currently trading at around 0.849 i.e. ca. 6.0% below both the H2/19 and H1/20 levels. During H1/20 US dollar denominated revenues accounted for over 95% of the total.

Buy recommendation maintained but price target reduced from €2.10 to €1.80 The changes in our forecasts entail reductions in our 2020 and 2021 revenue growth projections from 21.8% to 9.2% and 11.9% to 10.2%. Our 2020 EBIT forecast falls less than revenue because we have revised up our gross margin forecast to reflect a stronger Q2/20 gross margin figure than we had previously modelled (88.6% vs. 86.0%). We have lowered our price target from €2.10 to €1.80 to reflect both reductions to our forecasts and increasing uncertainty as to the impact of Takhzyro's growth trajectory on Ruconest. We maintain our Buy recommendation.

Figure 3: Changes to our forecasts

	2020E			2021E		
All figures in €m	Old	New	Delta	Old	New	Delta
Sales	205.79	184.59	-10.3%	230.32	203.39	-11.7%
EBIT	73.94	70.40	-4.8%	80.57	73.01	-9.4%
margin	*35.9%*	*38.1%*	-	*35.0%*	*35.9%*	-
Net income	55.82	50.88	-8.9%	59.77	51.81	-13.3%
margin	*27.1%*	*27.6%*	-	*26.0%*	*25.5%*	-
EPS in € (fully diluted)	0.09	0.07	-8.9%	0.09	0.08	-13.3%

Source: First Berlin Equity Research estimates

Figure 4: Valuation model

Compound	Project[1)]	Present Value	Patient Pop	Treatment Cost	Market Size	Market Share	Peak Sales	Gross margin	Discount Factor	Patent Life[2)]	Time to Market
Ruconest (EU)	HAE-AA	€34.4M	4K	€ 43,478	€174M	15%	€12M	62%	12%	16	-
Ruconest (US)	HAE-AA	€1,345.6M	4K	€ 225,330	€901M	20%	€321M	88%	12%	12	-
Ruconest (EU)	HAE-PR	€5.2M	1K	€ 86,957	€87M	10%	€10M	62%	12%	4	5 years
Ruconest (US)	HAE-PR	€299.4M	2K	€ 463,768	€723M	15%	€152M	88%	12%	5	4 years
rhαGLU (EU+US)	Pompe	€511.9M	3K	€ 260,870	€826M	30%	€684M	85%	12%	18	4 years
PV of gross profits		€2,196.5M			€2,712M		€1,178M				
Costs PV		€1,035.2M									
PV after costs		€1,161.3M									
Contingent consideration		€18.3M									
Net cash (pro-forma)		€47.1M									
Fair Value		€1,190.1M									
Share Count (fully diluted, PV)		676,564K									
Fair value per share		**€ 1.76**									

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

2) Remaining patent life in years after point of approval

Source: First Berlin Equity Research estimates

Figure 5: Changes to our valuation model

	Old	New	Delta
PV of gross profits	**€2,455.1M**	**€2,196.5M**	**-10.5%**
Costs PV	€1,048.7M	€1,035.2M	-1.3%
PV after costs	**€1,406.4M**	**€1,161.3M**	**-17.4%**
Contingent consideration	€18.3M	€18.3M	0.0%
Proforma net cash	€128.9M	€47.1M	-63.5%
Fair Value	€1,517.0M	€1,190.1M	-21.6%
Share Count (fully diluted, PV)	722,506K	676,564K	-6.4%
Fair value per share	**€ 2.10**	**€ 1.76**	**-16.2%**

Source: First Berlin Equity Research estimates

INCOME STATEMENT

All figures in EUR '000	2016A	2017A	2018A	2019A	2020E	2021E
Revenues	**15,873**	**89,620**	**135,130**	**169,022**	**184,593**	**203,392**
Costs of sales	-4,683	-12,445	-22,180	-21,355	-20,418	-24,407
Gross profit	**11,190**	**77,175**	**112,950**	**147,667**	**164,175**	**178,985**
Other income	335	790	684	435	875	400
Research and development	-15,388	-18,657	-28,882	-32,940	-32,991	-38,238
General and administrative	-4,642	-5,974	-12,221	-14,341	-17,917	-19,322
Marketing and sales	-3,035	-31,422	-34,539	-39,914	-43,741	-48,814
Operating income (EBIT)	**-11,540**	**21,912**	**37,992**	**60,907**	**70,401**	**73,011**
Net financial result	-5,996	-107,601	-37,135	-14,228	-3,939	-3,926
Pre-tax income (EBT)	**-17,536**	**-85,689**	**857**	**46,679**	**66,462**	**69,085**
Income taxes	0	9,442	24,136	-10,484	-15,582	-17,271
Minority interests	0	0	0	0	0	0
Net income / loss	**-17,536**	**-76,247**	**24,993**	**36,195**	**50,880**	**51,814**
Diluted EPS	**-0.04**	**-0.16**	**0.04**	**0.05**	**0.07**	**0.08**
EBITDA	**-10,784**	**25,327**	**40,342**	**64,757**	**74,251**	**76,861**
Ratios						
Gross margin on revenues	70.5%	86.1%	83.6%	87.4%	88.9%	88.0%
EBITDA margin on revenues	n.m.	28.3%	29.9%	38.3%	40.2%	37.8%
EBIT margin on revenues	n.m.	24.4%	28.1%	36.0%	38.1%	35.9%
Net margin on revenues	n.m.	n.m.	18.5%	21.4%	27.6%	25.5%
Expenses as % of revenues						
Cost of sales	29.5%	13.9%	16.4%	12.6%	11.1%	12.0%
Research and development	96.9%	20.8%	21.4%	19.5%	17.9%	18.8%
General and administrative	29.2%	6.7%	9.0%	8.5%	9.7%	9.5%
Marketing and sales	19.1%	35.1%	25.6%	23.6%	23.7%	24.0%
Y-Y Growth						
Revenues	46.6%	464.6%	50.8%	25.1%	9.2%	10.2%
Operating income	n.m.	n.m.	73.4%	60.3%	15.6%	3.7%
Net income/ loss	n.m.	n.m.	n.m.	44.8%	40.6%	1.8%

BALANCE SHEET

All figures in EUR '000	2016A	2017A	2018A	2019A	2020E	2021E
Assets						
Current assets, total	**62,190**	**88,251**	**115,440**	**107,573**	**211,215**	**238,918**
Cash and cash equivalents	31,889	58,657	80,311	66,299	166,139	189,251
Receivables	12,360	11,260	17,814	26,807	29,277	32,258
Inventories	17,941	18,334	17,315	14,467	15,800	17,409
Other current assets	0	0	0	0	0	0
Non-current assets, total	**64,593**	**77,939**	**99,129**	**131,349**	**144,645**	**157,732**
Property, plant & equipment	6,043	8,234	8,402	8,553	16,244	30,509
Right of use assets	0	0	0	5,979	5,538	5,695
Long term prepayments	1,622	2,296	2,006	0	0	0
Deferred tax assets	0	9,442	35,082	30,933	30,933	30,933
Investments accounted for using the equity method	0	0	0	5,307	6,103	7,019
Goodwill & other intangibles	56,680	56,631	52,435	78,309	83,559	81,309
Restricted cash	248	1,336	1,204	2,268	2,268	2,268
Total assets	**126,783**	**166,190**	**214,569**	**238,922**	**355,860**	**396,650**
Shareholders' equity & debt						
Current liabilities, total	**51,378**	**60,743**	**82,599**	**110,456**	**51,024**	**56,057**
Debt	26,136	22,398	35,235	45,590	0	0
Contract liabilities	943	804	800	0	0	0
Derivative financial liabilities	9,982	10,080	228	268	268	268
Trade and other payables	14,054	27,198	28,589	44,817	48,946	53,930
Finance lease liabilities	263	263	263	1,946	1,810	1,858
Other financial liabilities	0	0	17,484	17,835	0	0
Longterm liabilities, total	**47,938**	**89,337**	**70,219**	**23,787**	**148,482**	**131,510**
Debt	40,395	59,161	37,267	0	125,000	125,000
Deferred tax liabilities	0	0	87	2,343	2,343	2,343
Contract liabilities	2,270	1,467	667	0	0	0
Finance lease liabilities	599	390	164	4,363	4,058	4,167
Other financial liabilities	4,674	28,319	32,034	17,081	17,081	0
Minority interests	**0**	**0**	**0**	**0**	**0**	**0**
Shareholders' equity	**27,467**	**16,110**	**61,751**	**104,679**	**156,355**	**209,084**
Total consolidated equity and debt	**126,783**	**166,190**	**214,569**	**238,922**	**355,860**	**396,650**
Ratios						
Current ratio (x)	1.21	1.45	1.40	0.97	4.14	4.26
Quick ratio (x)	0.86	1.15	1.19	0.84	3.83	3.95
Net gearing	128.4%	137.9%	-13.9%	-15.9%	-24.0%	-28.9%
Book value per share (€)	0.06	0.03	0.10	0.17	0.25	0.33
Net debt	35,256	22,219	-8,586	-16,668	-37,539	-60,494
Return on equity (ROE)	-68.4%	n.a.	64.2%	43.5%	39.0%	28.4%

CASH FLOW STATEMENT

All figures in EUR '000	2016A	2017A	2018A	2019A	2020E	2021E
EBIT	**-11,540**	**21,912**	**37,992**	**60,907**	**70,401**	**73,011**
Depreciation and amortization	756	3,415	6,559	5,177	3,850	3,850
EBITDA	**-10,784**	**25,327**	**44,551**	**66,084**	**74,251**	**76,861**
Changes in working capital	642	11,099	-4,144	8,938	326	394
Interest received, taxes paid	5	3	-1,399	-2,273	-15,582	-17,271
Other	133	1,784	1,368	352	0	0
Operating cash flow	**-10,004**	**38,213**	**40,376**	**73,101**	**58,995**	**59,984**
CAPEX	-57,474	-6,045	-3,769	-32,717	-16,791	-15,865
Free cash flow	**-67,478**	**32,168**	**36,607**	**40,384**	**42,204**	**44,119**
Debt financing, net	**61,722**	**1,723**	**-15,137**	**-31,144**	**79,410**	**0**
Equity financing, net	**8,825**	**6,833**	**10,496**	**2,778**	**0**	**0**
Payment on contingent consideration	0	0	0	-17,634	-17,835	-17,081
Bond redemptions	0	-3,934	-2,257	0	0	0
Interest on loans	-3,220	-7,877	-11,063	-8,680	-3,939	-3,926
Financing cash flow	**67,327**	**-3,255**	**-17,961**	**-54,680**	**57,636**	**-21,007**
Net cash flows	**-151**	**28,913**	**18,646**	**-14,296**	**99,840**	**23,112**
Exchange rate effects	445	-1,057	2,876	1,348	0	0
Cash, start of the year	**31,843**	**32,137**	**59,993**	**81,515**	**68,567**	**168,407**
Cash, end of the year	**32,137**	**59,993**	**81,515**	**68,567**	**168,407**	**191,519**
EBITDA/share	**-0.03**	**0.05**	**0.07**	**0.11**	**0.12**	**0.12**
Y-Y Growth						
Operating cash flow	n.m.	n.m.	5.7%	81.1%	-19.3%	1.7%
Free cash flow	n.m.	n.m.	13.8%	10.3%	4.5%	4.5%
EBITDA/share	n.m.	n.m.	45.2%	45.0%	10.5%	3.0%

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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.

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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	10 November 2009	€0.52	Buy	€0.70
2...44	↓	↓	↓	↓
45	21 May 2019	€0.79	Buy	€1.80
46	29 July 2019	€0.94	Buy	€1.90
47	29 October 2019	€1.25	Buy	€1.90
48	16 January 2020	€1.48	Buy	€2.00
49	9 March 2020	€1.11	Buy	€2.00
50	23 April 2020	€1.34	Buy	€2.00
51	19 May 2020	€1.34	Buy	€2.10
52	Today	€1.01	Buy	€1.80

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.

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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**

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

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