

# Pharming Group NV

Netherlands / Biotechnology

Primary exchange: Euronext Amsterdam /

Secondary exchange: Frankfurt

Bloomberg: PHARM NA

ISIN: NL0010391025

Update

**RATING****PRICE TARGET**

Return Potential

Risk Rating

**BUY****€1.20**

445.5%

High

## STILL EXTREMELY CHEAP VALUATION

The acquisition of the North American Ruconest commercialisation rights means that Pharming will receive 100% of revenues generated by the product in North America compared with 30% before the deal. We now expect Pharming to reach profitability in 2017 - three years earlier than the company previously budgeted. Earlier this month, Pharming reported that the annualised Ruconest sales run rate in North America had reached USD40m based on average October and November sales. This compares with a figure of USD35m for Q3/16. Given the clear current growth momentum in the US, we have raised our sales forecasts for 2017 and 2018 by 12.1% and 6.1% respectively. However, the likelihood of higher dilution than we modelled ahead of the structuring of the capital raise causes us to lower our price target to €1.20 (previously €1.40). We maintain our Buy recommendation.

**Capital raise completed** Pharming has completed a capital raise of €104m (€94m after financing fees and legal costs) consisting of a rights issue, a new debt facility, redeemable convertible bonds and amortising redeemable convertible bonds. Around €57m of the net proceeds will be used to pay the USD60m upfront component of the transaction to acquire the North American rights to Ruconest from Valeant. A further €15.6m of the proceeds of the capital raise will be used to pay down debt taken on in 2015 from Silicon Valley Bank. Silicon Valley Bank meanwhile participated in the new debt facility. The remaining proceeds will be used to strengthen commercialisation efforts in North America as well as the countries in Western Europe and the Middle East in which Pharming is marketing Ruconest directly.

**Strengthening marketing in US** All the dedicated Ruconest sales force who previously worked for Valeant - a total of 11 people - have joined the Pharming sales force in the US. We expect Pharming to double the size of the US sales force in a stepwise fashion and to hire several medical liaison personnel. (p.t.o.)

### FINANCIAL HISTORY & PROJECTIONS

	2013	2014	2015	2016E	2017E	2018E
Revenue (€m)	6.84	21.19	10.83	12.86	51.10	69.30
Y-o-y growth	-35.5%	209.6%	-48.9%	18.8%	297.2%	35.6%
EBIT (€m)	-6.91	2.88	-12.83	-12.23	10.44	15.65
EBIT margin	-101.0%	13.6%	-118.5%	-95.1%	20.4%	22.6%
Net income (€m)	-15.06	-5.77	-9.96	-14.27	5.05	11.34
EPS (diluted) (€)	-0.07	-0.02	-0.02	-0.03	0.01	0.02
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-8.05	-3.23	-17.32	-77.86	0.42	8.89
Net gearing	-302.8%	-109.9%	-67.0%	722.9%	110.0%	47.6%
Liquid assets (€m)	16.97	34.19	31.64	33.94	26.25	11.51

### 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 from the milk of genetically modified rabbits. Pharming and Chinese SIPI signed a collaboration agreement in 2013, which will accelerate the addition of new projects to the firm's R&D pipeline. Lead drug Ruconest received EMA approval in 2010 and FDA approval in July 2014.

### MARKET DATA

As of 20 Dec 2016

Closing Price	€ 0.22
Shares outstanding	455.59m
Market Capitalisation	€ 100.23m
52-week Range	€ 0.17 / 0.31
Avg. Volume (12 Months)	2,322,136

Multiples	2015	2016E	2017E
P/E	n.a.	n.a.	19.8
EV/Sales	14.9	12.5	3.2
EV/EBIT	n.a.	n.a.	15.4
Div. Yield	0.0%	0.0%	0.0%

### STOCK OVERVIEW



### COMPANY DATA

As of 30 Sep 2016

Liquid Assets	€ 16.76m
Current Assets	€ 41.02m
Intangible Assets	€ 0.69m
Total Assets	€ 48.86m
Current Liabilities	€ 18.29m
Shareholders' Equity	€ 14.98m

### SHAREHOLDERS

Kingdon Capital Management LLC	3.1%
Free Float	96.9%



The company has also undertaken to support additional marketing activities, including patient advocacy programmes and the provision of significant unconditional support for the HAEA (the US hereditary angioedema patients' association) and other hereditary angioedema (HAE) centres of excellence in the US.

**Annualised US sales run rate has reached USD40m** The completion of the transaction will mean that Pharming will receive 100% of revenues generated in North America by Ruconest compared with 30% before the deal. The US market for treatment of acute HAE attacks is currently worth around USD850m annually. Earlier this month, Pharming reported that the annualised Ruconest sales run rate in North America had reached USD40m based on average October and November sales. This compares with USD35m for Q3/16.

**Full phase II prophylaxis results presented** In mid-November full results of the phase II study of Ruconest in prophylaxis of HAE were presented at the Annual Scientific Meeting of the American College of Allergy, Asthma and Immunology in San Francisco. On a per protocol basis, 57% of patients on a once weekly regimen of Ruconest experienced a reduction of over 50% in attack frequency while the figure for twice weekly dosing came in at 97%. Pharming is currently in discussions with the FDA on further steps towards approval of Ruconest for prophylaxis of HAE. We expect a phase III study to begin before the end of this year. Results are likely to be available in 2017 and first revenues before the end of this decade are realistic. The US market for prophylaxis of HAE is expected to be worth USD800m in 2017 (up from USD500m in 2014).

**Buy recommendation maintained but price target reduced to €1.20 (previously: €1.40)**

The transaction to acquire the North American commercialisation rights to Ruconest proved to be both more complex and potentially more dilutive than we anticipated at the time of our previous study on 28 October. In our note of 28 October, we assumed proceeds of €75m split 60:40 between straight equity and straight debt with the equity component giving rise to 205m new shares. The transaction as executed generated net proceeds of €94m and comprised straight equity, debt, a redeemable convertible bond and an amortising redeemable convertible bond - all four instruments with warrants attached. Shares already issued and potentially arising from the transaction could approach the 333.2m which would take nominal share capital to the current authorised limit of €8m. We remain convinced of the positive outlook for Pharming, and indeed have raised our 2017 and 2018 sales forecasts (see figure 1) by 12.1% and 6.1% respectively to reflect Ruconest's strong sales momentum in the US. However, the likelihood of higher dilution than we modelled ahead of the structuring of the capital raise (see figure 2) causes us to lower our price target to €1.20 (previously €1.40). We maintain our Buy recommendation.

**Figure1: Changes to our forecasts**

All figures in €m	2016E			2017E			2018E		
	Old	New	Delta	Old	New	Delta	Old	New	Delta
Sales	12.86	12.86	0.0%	45.60	51.10	12.1%	65.30	69.30	6.1%
EBIT	-12.23	-12.23	-	5.76	10.44	81.2%	12.26	15.66	27.7%
margin	-95.1%	neg.	-	12.6%	20.4%	-	18.8%	22.6%	-
Net income	-13.25	-14.27	-	3.17	5.05	59.3%	9.02	11.34	25.7%
margin	-103.0%	-110.9%	-	7.0%	9.9%	-	13.8%	16.4%	-
EPS (in €)	-0.03	-0.03	-	0.01	0.01	42.3%	0.02	0.02	12.3%

\* Total sales including other operating income such as milestone payments

Source: First Berlin Equity Research

**Figure 2: Pipeline valuation**

Compound	Project <sup>1)</sup>	Present Value	Patient Pop	Treatment Cost	Market Size	Market Share	Peak Sales	PACME Margin <sup>2)</sup>	Discount Factor	Patent Life <sup>3)</sup>	Time to Market
Ruconest (EU)	HAE-AA	€114.9M	4K	€90,909	€318M	20%	€79M	61%	0%	15	-
Ruconest (US)	HAE-AA	€1,221.4M	5K	€136,364	€727M	25%	€378M	86%	10%	12	-
Ruconest (EU)	HAE-PR	€48.8M	1K	€272,727	€250M	20%	€62M	61%	5%	6	3 Years
Ruconest (US)	HAE-PR	€479.9M	2K	€409,091	€636M	25%	€401M	86%	15%	7	3 Years
<b>PACME PV</b>		<b>€1,865.0M</b>			<b>€1,932M</b>		<b>€920M</b>				
<b>Costs PV<sup>4)</sup></b>		<b>€992.2M</b>									
<b>NPV</b>		<b>€872.8M</b>									
Milestones PV		-€26.9M									
Net Cash (pro-forma)		-€13.4M									
Fair Value		€832.5M									
Share Count (fully diluted)		713,494K									
<b>Fair value per share</b>		<b>€1.17</b>									

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) Remaining patent life after the point of approval

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

\*) Combined PV of R&D projects DGF and AMI due to lower priority of the two projects

Source: First Berlin Equity Research

**Figure 3: Changes to our pipeline valuation model**

	Old	New	Delta
<b>PACME PV</b>	<b>€1,858.4M</b>	<b>€1,865.0M</b>	<b>0.4%</b>
<b>Costs PV</b>	<b>€994.5M</b>	<b>€992.2M</b>	<b>-0.2%</b>
<b>NPV</b>	<b>€864.3M</b>	<b>€872.8M</b>	<b>1.0%</b>
<b>Milestones PV</b>	<b>-€26.9M</b>	<b>-€26.9M</b>	<b>0.0%</b>
<b>Net Cash</b>	<b>€59.8M</b>	<b>-€13.4M</b>	<b>-122.4%</b>
<b>Fair Value</b>	<b>€897.2M</b>	<b>€832.5M</b>	<b>-7.2%</b>
<b>Share Count</b>	<b>647,246K</b>	<b>713,494K</b>	<b>10.2%</b>
<b>Fair value per share</b>	<b>€1.39</b>	<b>€1.17</b>	<b>-15.8%</b>

Source: First Berlin Equity Research



## INCOME STATEMENT

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
<b>Revenues</b>	<b>6,844</b>	<b>21,186</b>	<b>10,828</b>	<b>12,864</b>	<b>51,100</b>	<b>69,300</b>
Costs of sales	-1,112	-3,427	-4,800	-4,334	-7,665	-10,395
<b>Gross profit</b>	<b>5,732</b>	<b>17,759</b>	<b>6,028</b>	<b>8,530</b>	<b>43,435</b>	<b>58,905</b>
Other income	106	105	147	275	0	0
Research and development	-10,232	-11,663	-14,180	-15,529	-22,500	-29,000
General and administrative	-2,518	-3,324	-3,744	-4,299	-7,000	-8,500
Marketing and sales	0	0	-1,085	-1,208	-3,500	-5,750
<b>Operating income (EBIT)</b>	<b>-6,912</b>	<b>2,877</b>	<b>-12,834</b>	<b>-12,231</b>	<b>10,435</b>	<b>15,655</b>
Net financial income	-8,148	-8,644	2,877	-2,034	-5,385	-4,319
<b>Pre-tax income (EBT)</b>	<b>-15,060</b>	<b>-5,767</b>	<b>-9,957</b>	<b>-14,265</b>	<b>5,050</b>	<b>11,336</b>
Income taxes	0	0	0	0	0	0
Minority interests	0	0	0	0	0	0
<b>Net income / loss</b>	<b>-15,060</b>	<b>-5,767</b>	<b>-9,957</b>	<b>-14,265</b>	<b>5,050</b>	<b>11,336</b>
<b>Diluted EPS</b>	<b>-0.07</b>	<b>-0.02</b>	<b>-0.02</b>	<b>-0.03</b>	<b>0.01</b>	<b>0.02</b>
<b>EBITDA</b>	<b>-5,992</b>	<b>3,915</b>	<b>-11,871</b>	<b>-11,663</b>	<b>11,663</b>	<b>16,886</b>
<b>Ratios</b>						
Gross margin on revenues	83.8%	83.8%	55.7%	66.3%	85.0%	85.0%
EBITDA margin on revenues	n.m.	18.5%	n.m.	n.m.	22.8%	24.4%
EBIT margin on revenues	n.m.	13.6%	n.m.	n.m.	20.4%	22.6%
Net margin on revenues	n.m.	n.m.	n.m.	n.m.	9.9%	16.4%
<b>Expenses as % of revenues</b>						
Cost of sales	16.2%	16.2%	44.3%	33.7%	15.0%	15.0%
Research and development	149.5%	55.1%	131.0%	120.7%	44.0%	41.8%
General and administrative	36.8%	15.7%	34.6%	33.4%	13.7%	12.3%
Marketing and sales	n.m.	n.m.	10.0%	9.4%	6.8%	8.3%
<b>Y-Y Growth</b>						
Revenues	-35.5%	209.6%	-48.9%	18.8%	297.2%	35.6%
Operating income	n.m.	n.m.	n.m.	n.m.	n.m.	50.0%
Net income/ loss	n.m.	n.m.	n.m.	n.m.	n.m.	124.5%



## BALANCE SHEET

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
<b>Assets</b>						
<b>Current assets, total</b>	<b>24,599</b>	<b>49,143</b>	<b>51,092</b>	<b>59,022</b>	<b>60,488</b>	<b>53,784</b>
Cash and cash equivalents	16,968	34,185	31,643	33,937	26,251	11,511
Receivables	860	1,554	3,220	5,789	12,775	17,325
Inventories	4,763	13,404	16,229	19,296	21,462	24,948
Other current assets	2,008	0	0	0	0	0
<b>Non-current assets, total</b>	<b>6,809</b>	<b>6,575</b>	<b>6,585</b>	<b>61,143</b>	<b>63,091</b>	<b>63,871</b>
Property, plant & equipment	6,228	5,598	5,661	6,175	8,176	9,009
Goodwill & other intangibles	405	777	724	54,768	54,715	54,662
Other assets	176	200	200	200	200	200
<b>Total assets</b>	<b>31,408</b>	<b>55,718</b>	<b>57,677</b>	<b>120,165</b>	<b>123,579</b>	<b>117,655</b>
<b>Shareholders' equity &amp; debt</b>						
<b>Current liabilities, total</b>	<b>12,925</b>	<b>14,873</b>	<b>13,475</b>	<b>9,751</b>	<b>30,846</b>	<b>21,117</b>
Short term debt	0	0	3,047	0	0	0
Coinvertible bonds	0	0	0	0	14,063	0
Deferred license fee income	2,200	2,200	2,207	2,207	2,207	2,207
Derivative financial liabilities	4,147	4,266	953	953	953	953
Trade and other payables	5,812	7,781	7,005	5,789	12,775	17,325
Finance lease liabilities	766	626	263	803	849	632
<b>Longterm liabilities, total</b>	<b>13,473</b>	<b>11,002</b>	<b>20,363</b>	<b>101,729</b>	<b>56,499</b>	<b>43,342</b>
Long term debt	0	0	11,757	37,737	37,737	22,642
Convertible bonds	0	0	0	57,500	12,500	12,500
Deferred license fee income	12,222	10,022	7,808	5,622	5,110	6,930
Finance lease liabilities	1,207	965	798	870	1,153	1,270
Other liabilities	44	15	0	0	0	0
<b>Minority interests</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Shareholders equity</b>	<b>5,010</b>	<b>29,843</b>	<b>23,839</b>	<b>8,684</b>	<b>36,234</b>	<b>53,195</b>
<b>Total consolidated equity and debt</b>	<b>31,408</b>	<b>55,718</b>	<b>57,677</b>	<b>120,165</b>	<b>123,579</b>	<b>117,655</b>
<b>Ratios</b>						
Current ratio (x)	1.90	3.30	3.79	6.05	1.96	2.55
Quick ratio (x)	1.53	2.40	2.59	4.07	1.27	1.37
Net gearing	-302.8%	-109.9%	-67.0%	722.9%	110.0%	47.6%
Book value per share (€)	0.01	0.07	0.06	0.02	0.08	0.12
Net cash	-15,171	-32,794	-15,978	62,773	39,849	25,334
Return on equity (ROE)	n.m.	-33.1%	-37.1%	-87.7%	22.5%	25.4%



## CASH FLOW STATEMENT

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
<b>EBIT</b>	<b>-6,912</b>	<b>2,877</b>	<b>-12,834</b>	<b>-12,231</b>	<b>10,435</b>	<b>15,655</b>
Depreciation and amortization	920	1,038	963	568	1,228	1,231
<b>EBITDA</b>	<b>-5,992</b>	<b>3,915</b>	<b>-11,871</b>	<b>-11,663</b>	<b>11,663</b>	<b>16,886</b>
Other adjustments	-2,301	-6,488	-4,551	-11,072	-8,063	-5,985
<b>Operating cash flow</b>	<b>-8,293</b>	<b>-2,573</b>	<b>-16,422</b>	<b>-22,736</b>	<b>3,600</b>	<b>10,902</b>
CAPEX	241	-654	-898	-55,125	-3,177	-2,011
<b>Free cash flow</b>	<b>-8,052</b>	<b>-3,227</b>	<b>-17,320</b>	<b>-77,861</b>	<b>424</b>	<b>8,890</b>
<b>Debt financing, net</b>	<b>16,023</b>	<b>-682</b>	<b>15,524</b>	<b>81,045</b>	<b>-30,609</b>	<b>-29,256</b>
<b>Equity financing, net</b>	<b>12,178</b>	<b>19,375</b>	<b>483</b>	<b>8,810</b>	<b>22,500</b>	<b>5,625</b>
Other changes in cash	-5,454	-1,249	-1,229	-9,700	0	0
<b>Net cash flows</b>	<b>14,695</b>	<b>14,217</b>	<b>-2,542</b>	<b>2,294</b>	<b>-7,686</b>	<b>-14,741</b>
Cash, start of the year	5,273	19,968	34,185	31,643	33,937	26,251
<b>Cash, end of the year</b>	<b>19,968</b>	<b>34,185</b>	<b>31,643</b>	<b>33,937</b>	<b>26,251</b>	<b>11,511</b>
<b>EBITDA/share</b>	<b>-0.03</b>	<b>0.01</b>	<b>-0.03</b>	<b>-0.03</b>	<b>0.03</b>	<b>0.04</b>
<b>Y-Y Growth</b>						
Operating cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	202.8%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	1998.6%
EBITDA/share	n.m.	n.m.	n.m.	n.m.	n.m.	44.8%

### FIRST BERLIN 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...31	↓	↓	↓	↓
32	30 August 2016	€0.22	Buy	€1.00
33	7 October 2016	€0.22	Buy	€1.40
34	28 October 2016	€0.22	Buy	€1.40
35	Today	€0.22	Buy	€1.20

**Authored by: Simon Scholes, Analyst**

**Company responsible for preparation:**

**First Berlin Equity Research GmbH**

Mohrenstraße 34  
10117 Berlin

Tel. +49 (0)30 - 80 93 96 94 Fax +49 (0)30 - 80 93 96 87

info@firstberlin.com

www.firstberlin.com

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

**Copyright© 2016 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 34B OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO 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 THE GERMAN ORDINANCE ON THE ANALYSIS OF FINANCIAL INSTRUMENTS [FINANV]

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular the German Securities Trading Act [WpHG], Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and the German Ordinance on the Analysis of Financial Instruments [FinAnV] 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 Section 34b Paragraph 1 of the German Securities Trading Act [WpHG] and Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) financial analyses may only be passed on or publicly distributed if circumstances or relations which may cause conflicts of interest among the authors, the legal entities responsible for such preparation or companies associated with them are disclosed along with the financial analysis.

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.

#### 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:

**STRONG BUY:** An expected favourable price trend of more than 50% combined with sizeable confidence in the quality and forecast security of management.

**BUY:** An expected favourable price trend of more than 25% percent.

**ADD:** An expected favourable price trend of between 0% and 25%.

**REDUCE:** An expected negative price trend of between 0% and -15%.

**SELL:** An expected negative price trend of more than -15%.

#### 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.

#### 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: <http://firstberlin.com/disclaimer-english-link/>

**SUPERVISORY AUTHORITY:** Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Lurgiallee 12, 60439 Frankfurt

### 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, Canada and/or the United Kingdom (Great Britain).**