# **Deutsche Biotech Innovativ AG**

Germany / Pharmaceutical/Biotechnology Düsseldorf Bloomberg: VUA GR ISIN: DE000A0Z25L1

Update

RATING	BUY
PRICE TARGET	€43.60
Return Potential	55.7%
Risk Rating	High

### ADRECIZUMAB PHASE 1A/1B RESULTS DUE LATER IN Q3

DBI is currently proceeding with phase Ia and phase Ib trials of its lead drug candidate for the treatment of sepsis, Adrecizumab. The worldwide incidence of severe sepsis is higher than either cancer or heart attack with mortality rates of over 30%. However, there are currently no drugs approved for its treatment, despite the investment by Big Pharma in recent decades of USD19bn in development of therapies for the condition. Adrecizumab's action as an inhibitor of the vasodilatory peptide hormone, adrenomedullin, produced very promising preclinical results. The results of both the phase la and lb trials are due later this guarter. We believe that Adrecizumab, which accounts for 92% of our enterprise valuation of DBI has annual peak sales potential of over €3bn per annum as first mover in a new class of sepsis therapy (adrenomedullin modulators). Our estimates of the future value of DBI's participations on a 100% basis are unchanged on our notes of September and December 2015. However, we have revised our price target up from €39.50 to €43.60 for two reasons. The first of these relates to the passage of six months since our last update and hence the shorter period of time until forecast exit timepoints (which are unchanged). The second relates to the reduced level of dilution at Oncoprevent and AngioBiomed due to the likely receipt of grant and debt funding. We maintain our Buy recommendation.

Adrecizumab phase 1a/1b trial began in May DBI's 28.9%-owned subsidiary, AdrenoMed, began the phase Ia trial of the group's lead-drug candidate, Adrecizumab, in May. Phase Ia will investigate the safety and tolerability of Adrecizumab in healthy patients. The phase Ib trial will then examine the safety of the drug in patients with systemic inflammation. As we wrote in our initiating coverage note of 8 September 2015, AdrenoMed had originally planned to have the phase Ia and Ib trials carried out near Dijon by a French CRO. Earlier this year AdrenoMed decided to transfer the study to the Radboud University Medical Center at Nijmegen in the Netherlands. (p.t.o.)

#### **FINANCIAL HISTORY & PROJECTIONS**

	2013	2014	2015	2016E	2017E	2018E
Revenue (€m)	0.00	0.10	0.20	0.21	0.23	0.26
Y-o-y growth	n.a.	n.a.	97.2%	6.5%	11.0%	11.0%
EBIT (€m)	-0.08	-0.14	-0.59	-0.23	-0.24	6.78
EBIT margin	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Net income (€m)	-0.09	-0.15	-0.60	-0.23	-0.24	5.90
EPS (diluted) (€)	-0.11	-0.17	-0.67	-0.24	-0.25	6.25
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-0.13	-0.07	-0.87	-0.95	-0.24	7.05
Net gearing	-12.5%	-33.9%	-49.8%	-12.4%	-2.1%	-89.8%
Liquid assets (€m)	0.14	0.48	1.52	0.28	0.04	7.09

#### RISKS

The company's drug candidates are at an early development stage. Preclinical trial results have been promising but there is no guarantee that clinical results will be good enough to attract the desired trade buyers.

#### **COMPANY PROFILE**

Deutsche Biotech Innovativ AG ("DBI") is a biotechnology company that utilizes innovative blood biomarkers to investigate and clinically develop unique therapies for severe disease without appropriate solutions, such as sepsis and cancer.

MARKET DA	TA	As of 1	9 Jul 2016			
<b>Closing Price</b>			€ 28.00			
Shares outstan	Shares outstanding					
Market Capitali	sation	ŧ	€ 26.42m			
52-week Range	e	€ 5.25 / 44.00				
Avg. Volume (1	2 Months)		055			
	0045					
Multiples	2015	2016E	2017E			
P/E	n.m.	n.m.	n.m.			
EV/Sales	127.3	119.5	107.7			
EV/EBIT	n.m.	n.m.	n.m.			
Div. Yield	0.0%	0.0%	0.0%			

### **STOCK OVERVIEW**



COMPANY DATA	As of 31 Dec 2015
Liquid Assets	€ 1.52m
Current Assets	€ 1.60m
Intangible Assets	€ 0.00m
Total Assets	€ 2.92m
Current Liabilities	€ 0.39m
Shareholders' Equity	€ 2.46m
SHAREHOLDERS	
Dr Andreas Bergmann	32.2%
Dr Metod Miklus	32.2%
Dr Bernd Wegener	32.2%
Free Float	3.4%

The study was transferred because of the expertise at the Dutch site in setting up trials with patients suffering from systemic inflammation. The phase Ia/Ib study will be followed directly by the phase IIa/IIb study in 20 to 30 clinical centres across Europe.

We expect Adrecizumab development to proceed as planned before share issue DBI's autumn 2015 share issue raised only €1.6m of a planned €20m. However, after the share issue group management pledged to continue the development of the pipeline - using their own funds if necessary. DBI's three largest shareholders, Dr Andreas Bergmann, Dr Metod Miklus and Dr Bernd Wegener contributed €1m of the €1.6m raised by the share issue. All three men were involved in the foundation of the diagnostics company, B.R.A.H.M.S. AG, in 1994 through a management buyout from Henning Berlin/Marion Merrell Dow. This business was later sold to Thermo Fisher Scientific in 2009 for ca. €330m. Ahead of the share issue, AdrenoMed was budgeted to spend €2.2m in both 2016 and 2017 (see figure 1). Given that management has stated that AdrenoMed has the highest priority among its holdings and that the phase la/lb and phase Ila/llb trials will proceed according to schedule, we believe that the original budget remains in place. In March, DBI transferred €0.75m of the issue proceeds to AdrenoMed through a capital increase. The capital increase raised DBI's stake in AdrenoMed from 26.04% to 28.9%. We expect AdrenoMed to raise the balance of the money required to fund budgeted spending for 2016 and 2017 from a further capital increase following the release of the phase la/lb results. The final results of the phase II study are expected by the end of 2018. Following completion of phase I and II trials, DBI envisages selling AdrenoMed to a large pharmaceutical company which would then finance phase III. After a 1-2 year approval period, market introduction would then follow in 2022/23.

Compony	2015	20	16	20	)17	20	18	2019	Sum
Company	H2	H1	H2	H1	H2	H1	H2	H1	Sum
DBI	70	220	260	220	260	220	260	220	1,730
AdrenoMed		1,080	1,110	470	1,710	2,000	1,860	470	8,700
Oncoprevent	30	230	440	650	1,230	470	550	840	4,440
AngioBiomed	420	590	580	670					2,260
My Life Diagnostics	50	70	60	70	65	70	70	45	500
Financing costs	1,200								1,200
Strategic reserve	150	150	150	150	150	150	150	120	1,170
Sum	1,920	2,340	2,600	2,230	3,415	2,910	2,890	1,695	20,000
Cumulated	1,920	4,260	6,860	9,090	12,505	15,415	18,305	20,000	

Figure 1: Capital requirement/allocation as projected ahead of the October/November share issue

Source: DBI Deutsche Biotech Innovativ AG

**Oncoprevent has received approval for €800k in grants and loans** Oncoprevent is currently conducting preclinical trials with the breast cancer prevention therapy, DB1RA. The phase I trial is scheduled to begin in Q1 2018. Oncoprevent was originally budgeted to spend €0.7m in 2016 and €1.9m in 2017. The cash position at the beginning of 2016 was €250k but the company has received final approval for a grant and a loan - each of €400k. Drawdown of these funds is conditional on the raise of a further €0.1m in equity. Provided that sufficient financing is forthcoming, DBI plans a phase II trial which is expected to continue into 2022. DBI then envisages selling the product to a buyer who would finance phase III.

Management expects approval of €600k grant for AngioBiomed AngioBiomed has developed a full adrenomedullin antagonist, AB2302, to inhibit the growth of tumours. AB2302 is partnered with a large pharmaceutical company and will likely be co-marketed with an existing therapy. AngioBiomed's original budget was €1.2m for 2016 and €0.7m for 2017. €100k of the October/November issue proceeds were invested in AngioBiomed. The company's application for a €600k grant has been positively received. Payout of the funds is conditional on final approval and the injection of a further €500k in equity capital. Management tell us that further financing of AngioBiomed will proceed in increments based on the achievement of milestones but that the long term plan for the company remains in place. AngioBiomed and its partner are currently conducting preclinical trials with AB2302.

These are scheduled to continue until 2017. DBI plans to sell AngioBiomed to a Big Pharma company after preclinical proof of concept. We have pencilled in proceeds of €8.3m from the sale for late 2018.

**DBI is no longer financing UTI product** DBI originally planned to inject €130k into its 25%-owned subsidiary, My Life Diagnostics (MLDx), in 2016 to finance development of its urinary tract infection (UTI) diagnostic product. Management tell us they still expect DBI to benefit from MLDx' role as a "think tank" but that further financing of the UTI diagnostic product will be carried out by third parties.

**2015 results; forecasts for 2016 and beyond** 2015 group revenues of  $\in$ 197k (2014:  $\in$ 100k) stemmed from services performed for the participations and also for Sphingotec GmbH, a company founded in 2002 by DBI's Chief Science Officer, Dr Andreas Bergmann. Revenues increased by 97% over the prior year because in 2014 some of the participations were not in existence for the full 12 months. The increase in personnel costs was attributable to the appointment of additional personnel in 2014 and the expansion of the corporate finance department in November 2015. Costs in connection with the autumn capital raise accounted for 80% of other operating costs of  $\in$ 583k. Management is guiding towards a net loss of around  $\notin$ 220k for the current year. Our net loss forecast of  $\notin$ 230k is very close to this figure. We expect revenues of  $\notin$ 210k, personnel costs of  $\in$ 190k, other operating costs of  $\notin$ 240k and depreciation of  $\notin$ 10k. The changes to ourforecasts for 2016, 2017 and 2018 shown in figure 2 below are mainly a function of upwards revisions in our projections for other operating costs. Our 2018 EBIT forecast rises because reduced dilution of DBI's stake in AngioBiomed following the expected receipt of the  $\notin$ 600k grant implies higher proceeds and profits when this business is exited.

#### Figure 2: changes to our forecasts

		2016E			2017E			2018E	
EURm	Old	New	Δ	Old	New	Δ	Old	New	Δ
Sales	0.26	0.21	-19.2%	0.28	0.23	-16.8%	0.29	0.26	-10.8%
EBIT	0.00	-0.23	-	0.01	-0.24	-	6.62	6.78	2.4%
margin	neg.	neg.	-	neg.	neg.	-	neg.	2618.7%	-
Net income	0.00	-0.23	-	0.01	-0.24	-	5.76	5.90	2.3%
margin	neg.	neg.	-	neg.	neg.	-	neg.	2278.4%	-
EPS (in EUR)	0.00	-0.24	-	0.01	-0.25	-	5.76	6.25	8.5%

Source: DBI; First Berlin Equity Research estimates

In the annual report management state that they are looking to raise additional funds both at the parent company and at the participation level. However, in the light of the poor reception for the DBI share issue, we continue to assume that future financing will take place exclusively at the level of the individual participations. Figure 3 shows the planned changes in DBI's stakes in the participations had the October/November share issue been implemented in full and the proceeds allocated as shown in figure 1. In our current valuation we assume that the participations will raise the same amounts that they were originally projected to receive before the share issue. We further assume that the capital raises in the participations take place at the valuations implied by figures 1 and 3. For AngioBiomed, we assume a pre-money valuation of €1m. Figure 3 also shows dilution of DBI's existing stakes in the participations on the assumption that all future capital raises are made at the participation level. The changes to column "C" in figure 3 in comparison with our most recent study of 21 December 2015 relate to the assumed receipt of grants by Oncoprevent and Angiobiomed. These lower the requirement for outside funding and hence reduce the dilution of DBI's stakes.

#### Figure 3: DBI stakes in participations and free float

	А	В	C Old	C New
AdrenoMed	26.0%	50.0%	21.8%	21.8%
Oncoprevent	25.0%	95.0%	7.6%	8.6%
AngioBiomed	100.0%	100.0%	33.7%	41.4%
MyLife Diagnostics	50.0%	75.0%	37.5%	n.a.
DBI Free float	1.5%	38.9%	3.4%	3.4%

Source: DBI/First Berlin estimates

**Future value of the participations on 100% basis unchanged** We continue to base our valuation of DBI's individual participations on exit multiples paid for similar assets at a similar stage of development. Our estimates of the future value of DBI's participations (see figure 4) on a 100% basis are unchanged on our notes of September and December 2015.

Figure 4:	Valuation	of DBI's	participations
-----------	-----------	----------	----------------

€m	AdrenoMed	Oncoprevent	AngioBiomed	Parent Company	Total
Assumed exit date	12/31/2019	6/30/2022	6/30/2018		
No. years to sale	3.4	5.9	1.9		
Future value (100%)	461.1	42.3	20.0		523.3
Estimated future stakes (%)	21.8%	8.6%	41.4%		
Future value (DBI's est. future stake)	100.6	3.6	8.3		112.5
Present value of DBI's est. future stake	42.7	0.8	4.9		48.4
Less investment by DBI	42.2	0.8	4.9		47.8
Present value tax	5.4	0.1	0.9		6.4
Book value	1.1	0.2	1.2		2.5
After tax enterprise value	36.6	0.7	3.9	-1.2	39.9
Net cash position					1.2
Value per share in €					43.6
(0.944m shares currently outstanding)					

Source: DBI; First Berlin Equity Research estimates

Buy recommendation maintained with a price target of €43.60 (previously €39.50) Figure 5 shows changes in our valuation since our last study in December. There are two reasons for the revisions in the present value figures for each participation shown in figure 5. The first of these relates to the reduced period until forecast exit and the second relates to the reduced level of dilution at Oncoprevent and AngioBiomed already referred to above. For the first time we have also taken parent company costs into account in our valuation. We raise our price target from €39.50 to €43.60 and retain our Buy recommendation.

#### Figure 5: Changes to our sum of the parts model

€m	New	Old	Δ
AdrenoMed	36.6	31.7	15.2%
Oncoprevent	0.7	0.5	26.2%
AngioBiomed	3.9	2.5	56.9%
MyLife Diagnostics	n.a.	1.2	n.a.
PV parent co. costs	-1.2	0.0	
Total enterprise value	40.0	36.0	11.1%
Net cash	1.2	1.3	
Equity value	41.2	37.3	10.5%
No shares (m)	0.944	0.944	
Value per share in €	43.6	39.5	1 <b>0.5%</b>

Source: First Berlin Equity Research estimates

### **INCOME STATEMENT**

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
Sales	0	100	197	210	233	259
Other operating income	85	4	1	0	0	0
Wages and salaries	-10	-77	-160	-155	-171	-190
Social security and pension payments	-3	-20	-37	-35	-39	-44
Depreciation and amortisation	0	0	-12	-10	-15	-20
Other operating expenses	-153	-149	-584	-240	-245	-250
Profit on disposal of AngioBiomed	0	0	0	0	0	7,021
Operating income (EBIT)	-81	-142	-594	-230	-238	6,776
Net financial result	-2	0	-4	0	0	0
Pre-tax income (EBT)	-83	-142	-598	-230	-238	6,776
Taxes	-2	-3	0	0	0	-881
Net income / loss	-85	-145	-598	-230	-238	5,895
Diluted EPS	-0.11	-0.17	-0.67	-0.24	-0.25	6.25
EBITDA	-81	-142	-582	-220	-223	6,796
Ratios						
EBIT-margin	n.m.	-142.5%	-301.0%	-109.5%	-102.0%	2618.7%
EBITDA margin	n.m.	-142.0%	-294.9%	-104.8%	-95.6%	2626.5%
Net Margin	n.m.	-145.5%	-303.2%	-109.5%	-102.0%	2278.4%
Expenses as % of Revenues						
Wages and salaries	n.m.	-77.0%	-80.9%	-73.6%	-73.6%	-73.6%
Social security and pension payments	n.m.	-20.0%	-18.6%	-16.9%	-16.9%	-16.9%
Other operating expenses	n.m.	-149.0%	-296.1%	-114.3%	-105.1%	-96.6%
Y-Y Growth						
Revenues	n.m.	n.m.	97.2%	6.5%	11.0%	11.0%
Operating income	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Net income/ loss	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.

## **BALANCE SHEET**

All figures in EUR '000	2013A	2014A	2015A	2016E	2017E	2018E
Assets						
Current Assets, Total	291	545	1,594	384	159	7,224
Cash and Cash Equivalents	145	481	1,523	279	43	7,095
Receivables	0	13	0	27	30	34
Receivables from affiliated companies	73	39	18	53	58	65
Other Current Assets	73	12	53	25	28	31
Non-Current Assets, Total	984	993	1,316	2,076	2,081	931
Property, Plant & Equipment	0	1	10	40	65	90
Shares in affiliated companies	0	0	150	150	150	150
Participations	984	992	1,155	1,885	1,865	691
Prepaid expenses and deferred charges	0	0	10	11	12	13
Total Assets	1,275	1,538	2,920	2,471	2,252	8,168
Shareholders' Equity & Debt						
Current Liabilities, Total	106	84	388	168	186	207
Short term bank debt	0	0	298	0	0	0
Accounts Payable	46	12	8	25	28	31
Payables to affiliated companies	0	8	0	17	19	21
Shareholder loans	0	0	0	0	0	0
Other current liabilities	60	64	82	126	140	155
Longterm Liabilities, Total	13	36	68	42	47	52
Tax provisions	2	0	0	0	0	0
Other provisions	11	36	68	42	47	52
Shareholders Equity, Total	1,156	1,418	2,460	2,256	2,014	7,904
Share Capital	413	447	944	944	944	944
Share premium account	1,138	1,511	2,655	2,655	2,655	2,655
Profit/(losses) carried forward	-310	-395	-541	-1,138	-1,342	-1,584
Profit/(loss) for the year	-85	-145	-598	-204	-242	5,890
Deferred income and accrued expenses	0	0	4	4	5	5
Total Consolidated Equity and Debt	1,275	1,538	2,920	2,471	2,252	8,168
Ratios						
Current ratio (x)	2.7	6.5	4.1	2.3	0.9	34.9
Quick ratio (x)	2.7	6.5	4.1	2.3	0.9	34.9
Net gearing	-12.5%	-33.9%	-49.8%	-12.4%	-2.1%	-89.8%
Net cash Return on Equity (ROE)	145 -8.1%	481	1,225	279	43	7,095 118.9%
Return on Equity (ROE)	-0.1%	-11.3%	-30.8%	-9.8%	-11.1%	110.9%

### **CASH FLOW STATEMENT**

All figures in EUR '000	2013A	2014A	2015E	2016E	2017E	2018E
Net profit	-85	-145	-598	-230	-238	5,895
Profit on disposal of AngioBiomed	0	0	0	0	0	-7,021
Depreciation and amortization	0	0	12	10	15	20
Change in provisions	3	22	0	0	0	0
Profit on asset sales	-85	0	0	0	0	0
Change in working capital	38	-93	-8	45	6	7
Operating Cashflow	-130	-216	-594	-175	-217	-1,099
CAPEX	0	143	-275	-770	-20	-120
Proceeds on disposal of AngioBiomed	0	0	0	0	0	8,271
Free cashflow	-130	-73	-869	-945	-237	7,052
Debt Financing, net	-205	0	0	0	0	0
Equity Financing, net	300	409	1,620	0	0	0
Other Changes in Cash	0	0	291	-298	0	0
Net Cash Flows	-34	336	1,042	-1,244	-237	7,052
Cash, start of the year	179	145	481	1,523	279	43
Cash, end of the year	145	481	1,523	279	43	7,095
EBITDA/share	-0.10	-0.17	-0.65	-0.23	-0.24	7.20
Y-Y Growth						
Operating Cashflow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Free cashflow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EBITDA/share	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.

#### FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	8 September 2015	€20.00	Buy	€67.90
2	21 December 2015	€27.00	Buy	€39.50
3	Today	€28.00	Buy	€43.60

#### 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] AND 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] 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 p. 2 No. 2 of the German Securities Trading Act [WpHG] 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 sources of reliable. Comprehensive verification or of sitributing 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).