

Research Report (Update)

SYGNIS AG



"Marketing activities of SensiPhi[®] started after delays, break-even forecasted for 2016"

Target price: € 4.60

Rating: BUY

IMPORTANT NOTE:

Please take note of the disclaimer/risk warning, as well as the disclosure of potential conflicts of interest as required by section 34b of the Securities Trading Act (WpHG) on page 13

Completion: 22/08/2014 First Publication: 25/08/2014



SYGNIS AG*4;5

BUY

Price Target: € 4.60

current price 2.60 21/8/2014 / ETR / 17:30

currency: EUR

Key date:

ISIN: DE000A1RFM03 WKN: A1RFM0 Ticker symbol: LIO1 Number of shares³: 10.728 Marketcap³: 27.89 EnterpriseValue³: 27.76 ³ in m / in EUR m Freefloat: 19.0 %

Transparency Level: Prime Standard Market Segment: Regulierter Markt Accounting Standard: IFRS

Financial year-end: 12/31

Designated Sponsor: EQUINET

Analyst:

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Felix Gode gode@gbc-ag.de

* catalogue of potential conflicts of interests on page 14 Company profile

Sector: Biotechnology

Focus: development and commercialisation of

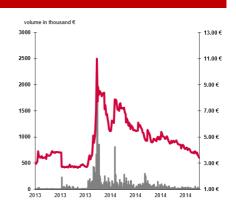
DNA-technologies

Employees: 19 (30/06/2014)

Founded in: 1997

Headquarter: Heidelberg

Executive Board: Pilar de la Huerta



SYGNIS AG, headquartered in Heidelberg and Madrid, is a life sciences company listed on the Prime Standard of the German Stock Exchange. According to the new business strategy outlined in 2012, the company focuses on the development and commercialisation of novel molecular biology technologies, for example in the area of DNA amplification and sequencing. In July 2012, the company closed an exclusive global licensing agreement with Qiagen for the commercialisation of the lead product "SensiPhi" (formerly known as QualiPhi), an improved polymerase for DNA amplification. The product portfolio further includes new tools for next-generation sequencing (NGS) technologies, such as QualiPhi mutants and PrimPol, both close to market launch. Part of the patents connected to the fourth technology, DoubleSwitch, have been licensed as well, which can be used for measuring protein-protein interactions.

P&L in EURm \ Due Date	31/12/2013	31/12/2014e	31/12/2015e	31/12/2016e
Revenue	0.48	0.64	2.62	6.23
EBITDA	-3.40	2.46	-0.57	2.94
EBIT	-4.28	-2.73	-0.85	2.65
Net profit	-3.20	-2.80	-0.80	2.16

Figures in EUR				
Net profit per share	-0.30	-0.26	-0.07	0.20
Dividende per share	0.00	0.00	0.00	0.00

Ratios				
EV/Revenue	57.84	43.45	10.58	4.45
EV/EBITDA	neg.	neg.	neg.	9.44
EV/EBIT	neg.	neg.	neg.	10.48
P/E	neg.	neg.	neg.	12.93
P/B	4.68			

Financial Schedule:

11/11/2014: Financial Report Q3

ast research published by GBC:	
te: publication / price target in € / rating	
07/2014: RG / 6.00 / BUY	
05/2014: RS / 6.00 / BUY	
/04/2014: RS / 6.00 / BUY	
11/2013: RS / 4.35 / BUY	
10/2013: RS / 4.35 / BUY	

^{**} the research reports can be found on our website www.gbc-ag.de or can be requested at GBC AG, Halderstr. 27, D86150 Augsburg



EXECUTIVE SUMMARY

- With revenues of €0.16m (€0.32m in 2013), SYGNIS AG had lower revenue in the first half of 2014. The main product, SensiPhi[®], was launched on the market in the first quarter of 2014, but the worldwide licence partner, Qiagen, has delayed in launching marketing activities. Furthermore, the licence agreements concerning other products of the SYGNIS range have not progressed as projected. Even though a patent agreement was made concerning the DoubleSwitch technology with the German company SYSTASY Bioscience GmbH in the first half of 2014, the resulting revenue has also been lower according to the expectations.
- Due to the low sales volume, the operating profit (EBIT) was negative with
 €-1.53m. On the positive side, there were cost savings measures implemented
 resulting in the reduction of overall expenses from €2.36m (first half of 2013) to
 €1.69m (first half of 2014).
- The revenue level required to reach operative break-even is approx. €3.4m based on the present cost structure of the company. In the 2014 business year, however, reaching break-even is not expected based on the expected sales revenue of €0.71m. The same applies for the coming business year in 2015 with a predicted sales volume of €2.62m and an EBIT in the amount of €-0.85m. This is due to the delayed growth curve of the completely new technology based on the SYGNIS enzyme SensiPhi[®]. The lower expected sales revenue is based on the assumption that there will be no significant front-up-fees incurred connected to licensing new products in the current business year.
- In the 2016 business year, however, SYGNIS AG could reach a significant positive EBIT of €2.65m and thus reach break-even based on the expected sales volume of €6.23m. Besides the expected increase of revenue of Qiagen kits containing the SensiPhi[®] enzyme, the expected market launch of PrimPol by the company is a decisive criterion. Marketing by the company primarily yields higher revenues, because all sales proceeds are included in the revenue. There are no significant investments required in this respect, because PrimPol can be produced using the existing laboratory facilities and the enzyme is completely developed. Resellers shall be involved in case of an OEM business to reach broader marketing channels.
- Based on increased revenue and lean organisational structures, the operating
 profit is expected to show markedly stronger growth as compared to sales. The
 profit is based on our long-term expected high EBIT margin of 65.0%.
- Using a DCF model, we calculated a fair value per share of €4.60 (earlier: €6.00). Based on the current lower share price, we confirm our BUY rating.



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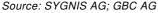
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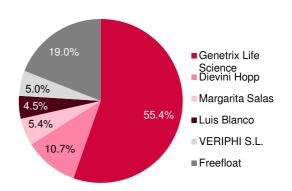


COMPANY

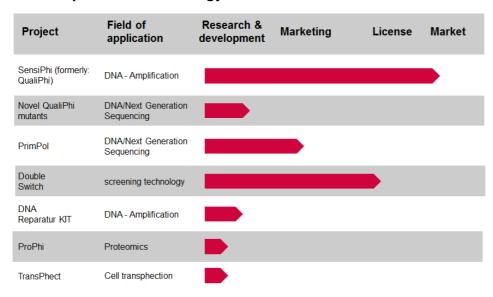
Shareholder structure

Shareholder	in %
Genetrix Life Sciences A.B.	55.4
Dievini Hopp Bio Tech Holding GmbH & Co. KG	10.7
Margarita Salas	5.4
Luis Blanco	4.5
VERIPHI S.L.	5.0
Freefloat	19.0





Product portfolio and strategy



Source: SYGNIS AG; GBC AG

As a producer of biotechnology products with focus on polymerases (enzymes for preparing and analysing genetic information), SYGNIS AG has presently seven products at various stages of development. A quick time-to-market is an important criterion for projects in this field. Extensive clinical approvals are not required for licensing and marketing in this field in contrast to the clinical development of drugs.

SensiPhi[®], the main product of the company, has already had its market launch in February 2014. An important component thereof is the outlicensing to Qiagen, one of the world's leading companies in sample and assay technologies. SensiPhi[®] is the base component of two amplification kits, REPLI-g WTA Single Cell Kit and REPLI-g Cell WGA & WTA Kit. These are presently marketed worldwide based on a licence agreement made in 2012. The SensiPhi[®] enzyme is an improved version of the phi-29-DNA-polymerase, and according to the company, it has improved properties as compared to polymerases presently available on the market. The SensiPhi[®] enzyme is a proprietary development of the company facilitating DNA replication using a low initial quantity, in less time and with higher efficiency.

Using the modular **DoubleSwitch** technology developed by SYGNIS AG, which can be used for the identification of protein-protein interactions, the company has a second outlicensed product. Certain patents of this technology have been licensed to the Ger-



man company SYSTASY Bioscience GmbH in April 2014, and low amounts of front-uppayments have already been made in this context. Remaining proprietary rights connected to the DoubleSwitch technology can be further marketed quickly to pharmaceutical and biotechnology companies.

Besides SensiPhi[®], the company portfolio includes two other projects involving **PrimPol** and **Novel QualiPhi[®] mutants** (mutants of QualiPhi[®], adapted specifically to the requirements of NGS) in the area of NGS (Next Generation Sequencing).

The **PrimPol** enzyme is of special interest with improved properties for the replication of damaged or conserved DNA material. The company claims that leading companies offering NGS technologies have already showed significant interest; and licensing can therefore be expected in the near future. Furthermore, the company can self market PrimPol. Self marketing would be relatively easy because the enzyme could be produced using the existing laboratory facilities without significant investments required. SYGNIS AG claims to hold negotiations with several partners to make OEM agreements on amplification products based on PrimPol.

According to the company strategy on the continuous development and marketing of new products, development activities of a **DNA repair kit** have been launched. The goal is the regeneration of damaged DNA material for analysis. After completing this project, it could be marketed for example together with the Sygnis products already presented.

According to the company, development is focused in this business year on the PrimPol kit and other products already initiated. With the development of the **ProPhi** and **TransPhect** products already started, SYGNIS AG targets the related fields of proteomics (decryption and categorisation of proteins in the organism) and transfection (introducing foreign DNA into a host cell).



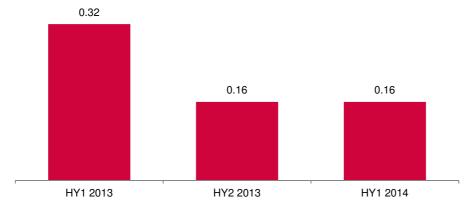
Business development HY1 2014

in million €	HY1 2013	Δ in %	HY1 2014
Revenue	0.32	-49.8%	0.16
EBITDA	-1.87	+26.2%	-1.38
EBIT	-2.04	+25.3%	-1.53
Net profit	-2.04	+22.4%	-1.58
EPS in €	-0.22	+31.7%	-0.15

Source: SYGNIS AG; GBC AG

SYGNIS AG still depends on the sales activities of the licence partner Qiagen which is demonstrated by the rdevelopment of the first six months of FY 2014. The revenue in the amount of €0.16m (€0.32m in the previous year) remains below our expectations and it is primarily due to the delay in marketing of the main product SensiPhi[®] with its worldwide licence granted to Qiagen. Furthermore, the licence agreements concerning other products of the SYGNIS pipeline have not progressed as projected. A patent agreement was made in the first half year concerning the DoubleSwitch technology with the German company SYSTASY Bioscience GmbH, the resulting revenue-impact was, however, still low according to the expectations.

Revenue development on a half-year-basis (in million €)



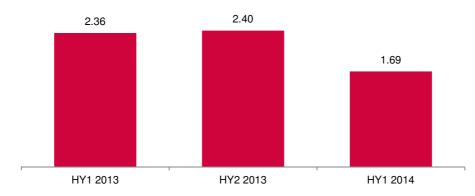
Source: SYGNIS AG; GBC AG

The majority of revenues-contribution results from marketing Caco-2 licence rights in the USA similar to the second half of 2013. SYGNIS furthermore generated front-up-fees on patent assignments of DoubleSwitch, and the first low licence revenue from the marketing of SensiPhi[®]. The revenues of the same period of the previous year (first half of 2013) include non-recurring patent fees based on a different licence agreement made with Qiagen in the amount of €0.15m, which explains the higher revenue.

Given the low revenue, the company still shows a negative EBIT in the first half of 2014 with an EBIT in the amount of €-1.53m (previous year: €-2.04m), however, this has been significantly improved in comparison to the previous year. This trend is primarily due to the cost saving measures implemented in the 2013 business year, mainly in the field of personnel expenses. Personnel expenses have been decreased significantly from €1.2m (first half of 2013) to €0.7m (first half of 2014) and this resulted in the decrease of total expenses from €2.36m (first half of 2013) to €1.69m (first half of 2014). Further savings are not expected in our view, and therefore the present cost level can be deemed as a basis for future business performance. The company guidance supports this view, and consequently similar operative expenses are expected for the second half of 2014.



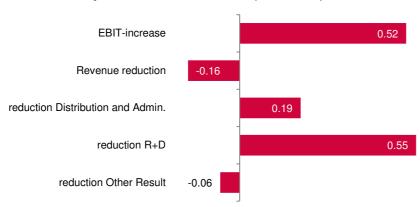
Development of operational costs on a half-year-basis (in million €)



Source: SYGNIS AG; GBC AG

Most of personnel cost savings were made in the area of research. Current SYGNIS projects require a significantly lower development time, which has a positive effect on the R&D area concerning costs. The following difference analysis underlines the importance of the reduction of R&D expenses by 0.55m as compared to the previous year:

Difference analysis HY1 2014 vs. HY1 2013 (in million €)



Source: SYGNIS AG; GBC AG



Balance sheet and financial position as of 30/06/2014

in million €	30/06/2013	31/12/2013	30/06/2014
Shareholder's capital	4.31	5.95	5.43
Equity ratio (in %)	47.6%	52.6%	54.1%
Operating assets	2.58	1.82	1.95
Working capital	-1.72	-1.94	-1.20
Net Debt	2.49	-0.13	1.26

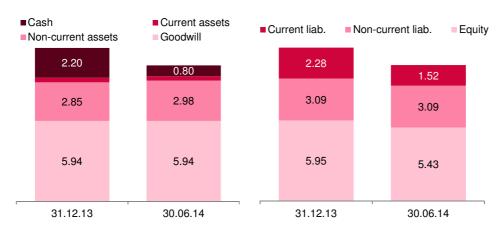
Source: SYGNIS AG; GBC AG

SYGNIS AG has not generated significant profit on licence fees or front-up fees in the first half of the year, and therefore the liquidity and the range of financial resources remain a decisive issue. The still missing inflow from product marketing resulted in a negative free cash flow in this context in the amount of €-2.24m (previous year: €-1.56m). The use of the SEDA equity agreement in the amount of €1.05m contained the reduction of liquidity: the amount of liquid assets has reduced, however, from €2.20m (31/12/2013) to €0.80m (30/06/2014). According to company expectations, these financial resources are sufficient until the end of the present business year 2014.

Based on the capital increase within the SEDA agreement, the net equity only suffered a marginal decrease in the first half of 2014 down to €5.43m (31/12/2013: €5.95m) as compared to the net result of the same period (€-1.58m). In the balance sheet total this corresponds to a solid equity ratio of 54.1% (31/12/2013: 52.6%).

Assets (in million €)

Liabilities (in million €)



Source: SYGNIS AG; GBC AG

Moreover, current liabilities were also reduced to €1.52m (31/12/2013: €2.28m) primarily affecting positions of a working capital nature. The resulting increase of working capital is also shown by the operating cash flow, which was under the net result for the period.

in million €	HY1 2013	HY12014
Cashflow from operating activities	-1.53	-1.98
Cashflow from investing activities	-0.03	-0.26
Cashflow from financing activities	1.32	0.84

Source: SYGNIS AG; GBC AG



Forecasts and model assumptions

P&L (in million €)	FY 14e (new)	FY 14e (old)	FY 15e (new)	FY 15e (old)	FY 16e (new)	FY 16e (old)
Revenue	0.64	2.52	2.62	3.91	6.23	8.22
EBITDA	-2.46	-1.05	-0.57	0.18	2.94	4.30
EBIT	-2.73	-1.17	-0.85	0.03	2.65	4.15
Net profit	-2.80	-0.93	-0.06	-0.04	2.70	3.43

Source: GBC AG

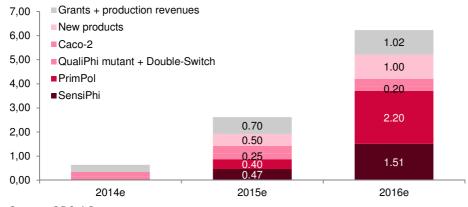
Revenue Forecasts

The sales volume was below expectations in the first six months of 2014, which was primarily due to the delay in marketing SensiPhi® by the licence partner Qiagen. Furthermore, the KIT based on the SensiPhi® enzyme and offered by Qiagen is a completely new technology, which must undergo a specific cycle. Therefore the expensive kits (REPLI-g WTA Single Cell Kit and REPLI-g Cell WGA & WTA Kit) are presently ordered primarily by clients who want to test the properties of the new technology first. A time-delayed growth curve in the revenue of SensiPhi® is expected accordingly. The NGS market is still of high potential, however. Qiagen has confirmed SYGNIS AG that the market has a strong interest in SensiPhi®.

The sales volume of the second half of 2014 will probably be marked by the further marketing of SensiPhi[®], we expect the first significant impulse on revenues in the following business year in 2015. We have reduced our revenue forecast from the previous €2.52m (see the research study of 16/04/2014) to €0.64m accordingly. The adjustment agrees with the present company guidance expecting a sales volume in the range of €0.5m to €0.7m.

The lower expected revenue forecast is based on the expected self-marketing of Prim-Pol, which could be implemented in our view in the following business year in 2015. SYGNIS AG does not primarily focus on licensing this technology under exclusivity conditions any longer, and no so-called front-up-fees shall be generated in this respect. These missing advance payments could be offset as a result of self-marketing PrimPol.

Revenue breakdown by product (in million €)



Source: GBC AG

The revenues of self-marketing of PrimPol are to be considered as net revenues, compared to the revenue on licensed technologies involving licence fees only (generally 8.0 to 10.0% of the revenue). The shift of the revenue mix to the PrimPol technology with the



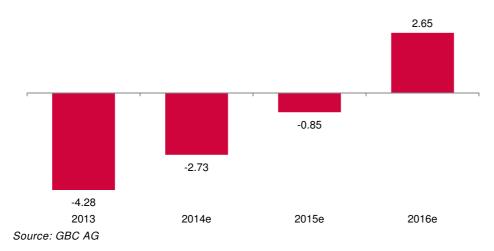
simultaneous reduction of expected revenue of SensiPhi[®] were recognized in our revenue forecast.

Earnings forecasts

SYGNIS AG has implemented cost optimisation measures throughout the last period resulting in a break-even amount (at the EBIT level) at a revenue of approx. €3.4m. There is no further need for optimisation in this respect. In view of self marketing of PrimPol, we expect a further increase of variable costs of sales, even though we expect this to be rather low. The enzyme can be produced and end products manufactured for research (PrimPol kit) with the existing laboratory facilities without significant investments required. Based on the projected partnership with resellers, SYGNIS AG could benefit from the sales channels and still maintain a rigorous cost discipline. According to company statements, they are already negotiating with partners to make OEM agreements on amplification products based on PrimPol.

Under the given circumstances and reduced revenue expectations, the EBIT is expected to remain negative in the 2014 and 2015 business years. With the expected revenue in the amount of €6.23m, EBIT break-even on the business year with a forecasted EBIT in the amount of €2.65m could be reached in the 2016 business year. With an increasing sales volume, the company will benefit from the effects of economies of scale, and a long-term EBIT margin in the amount of 65.0% can be realistically expected.

Expected EBIT-Development (in million €)



According to company business plans, the present liquidity covers the period up to the end of the 2014 business year. This is consistent with our forecasts, projecting an outflow of liquidity in the amount of €1.0m by 31/12/2014. Based on the above, the use of the SEDA agreement or implementation of further corporate action is a possible scenario. Furthermore, the company can resort to government subsidy programmes or other company funds to cover possible financing shortfalls.



VALUATION

Model assumptions

We valued SYGNIS AG using a three-phase DCF model. Starting from the real-life estimates for the years 2014 to 2016 in phase 1, the second phase from 2017 to 2021 forecasts the effect of value drivers. We hereby expect revenue to increase by 15.0%. We took as our target an EBITDA margin of 65.0%. The tax rate applied in phase 2 was 27.0%. For the third phase beyond the forecast horizon, a residual value was calculated using a perpetual annuity formula. For the final value we assume a growth rate of 3.0%.

Calculation of cost of capital

The weighted average cost of capital (WACC) for SYGNIS AG is calculated on the basis of cost of equity and cost of debt. In order to determine the internal cost of capital, the fair market premium, the company beta and the risk-free interest rate need to be established.

The interest rate for 10-year German government bonds is taken as the risk-free interest rate. This is currently 2.00%.

We used a equity risk premium of 5.50% as a suitable expectation of equity premium. This is supported by historical analyses of stock market yields. The market premium reflects the percentage of the expected excess return of the stock market over the low-risk government bonds.

Using the GBC estimation method there is currently a beta of 1.76.

Applying the chosen premises, the costs of equity are calculated at 11.70% (beta multiplied with equity risk premium plus 10-year interest rate). As we assume a long-term weighting of equity of 85%, the weighted average cost of capital (WACC) is 10.74%.

Valuation result

Discounting future cash flows was carried out using the entity approach. We calculated the relevant capital cost (WACC) at 10.74%. The resulting fair value per share at the end of financial year 2014 corresponds to a target price of €4.60.



DCF-Model

SYGNIS AG - Discounted Cashflow (DCF) model scenario

Value driver of the DCF - model after the estimate phase:

consistency - phase	
Revenue growth	15.0%
EBITDA-Margin	65.0%
Depreciation to fixed assets	4.7%
Working Capital to revenue	4.2%

final - phase	
Eternal growth rate	3.0%
Eternal EBITA - margin	63.3%
Effective tax rate in final phase	27.0%

three phases DCF - model:		·		·		·	·		
phase	estimate			consist	ency				final
in €m	FY 14e	FY 15e	FY 16e	FY 17e	FY 18e	FY 19e	FY 20e	FY 21e	value
Revenue	0.64	2.62	6.23	7.16	8.24	9.47	10.88	12.51	
Revenue change	32.5%	310.9%	137.5%	15.0%	15.0%	15.0%	15.0%	15.0%	3.09
Revenue to fixed assets	0.26	0.87	1.95	1.95	1.95	1.95	1.95	1.95	
EBITDA	-2.46	-0.57	2.94	4.66	5.35	6.15	7.07	8.13	
EBITDA-Margin	-385.4%	-21.8%	47.2%	65.0%	65.0%	65.0%	65.0%	65.0%	
EBITA	-2.73	-0.85	2.65	4.51	5.18	5.96	6.85	7.87	
EBITA-Margin	-426.7%	-32.3%	42.5%	62.9%	62.9%	62.9%	62.9%	62.9%	63.39
Taxes on EBITA	0.08	0.13	0.00	-0.68	-1.40	-1.61	-1.85	-2.12	
Taxes to EBITA	2.8%	15.0%	0.0%	15.0%	27.0%	27.0%	27.0%	27.0%	27.09
EBI (NOPLAT)	-2.65	-0.72	2.65	3.83	3.78	4.35	5.00	5.74	
Return on capital	2245.4%	-31.4%	82.8%	110.1%	95.0%	95.0%	95.0%	95.0%	85.8
Working Capital (WC)	-0.20	0.20	0.28	0.30	0.35	0.40	0.46	0.53	
WC to revenue	-31.3%	7.6%	4.5%	4.2%	4.2%	4.2%	4.2%	4.2%	
Investment in WC	-1.74	-0.40	-0.08	-0.02	-0.04	-0.05	-0.06	-0.07	
Operating fixed assets (OAV)	2.50	3.00	3.20	3.68	4.23	4.86	5.59	6.42	
Depreciation on OAV	-0.26	-0.28	-0.29	-0.15	-0.17	-0.20	-0.23	-0.26	
Depreciation to OAV	10.6%	9.2%	9.1%	4.7%	4.7%	4.7%	4.7%	4.7%	
Investment in OAV	-0.94	-0.78	-0.49	-0.63	-0.72	-0.83	-0.96	-1.10	
Capital employed	2.30	3.20	3.48	3.98	4.57	5.26	6.04	6.95	
EBITDA	-2.46	-0.57	2.94	4.66	5.35	6.15	7.07	8.13	
Taxes on EBITA	0.08	0.13	0.00	-0.68	-1.40	-1.61	-1.85	-2.12	
Total investment	-2.68	-1.18	-0.57	-0.65	-0.77	-0.88	-1.01	-1.17	
Investment in OAV	-0.94	-0.78	-0.49	-0.63	-0.72	-0.83	-0.96	-1.10	
Investment in WC	-1.74	-0.40	-0.08	-0.02	-0.04	-0.05	-0.06	-0.07	
Investment in Goodwill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Free cashflows	-5.07	-1.62	2.37	3.33	3.19	3.66	4.21	4.84	74.3

Value operating business (due date)	48.30	55.10
Net present value explicit free Cashflows	11.89	14.79
Net present value of terminal value	36.40	40.31
Net debt	4.50	6.21
Value of equity	43.80	48.89
Minority interests	0.00	0.00
Value of share capital	43.80	48.89
Outstanding shares in m	10.64	10.64
Fair value per share in €	4.12	4.60

capital		WACC 9.7% 10.2% 10.7% 11.2% 11.7%					
сар	83.8%	5.29	4.87	4.51	4.19	3.91	
e o	84.8%	5.35	4.92	4.55	4.23	3.95	
	85.8%	5.40	4.97	4.60	4.27	3.99	
Return	86.8%	5.46	5.02	4.64	4.31	4.03	
Œ	87.8%	5.51	5.07	4.69	4.36	4.06	

Cost of capital:	
Risk free rate	2.0%
Market risk premium	5.5%
Beta	1.76
Cost of equity	11.7%
Target weight	85.0%
Cost of debt	7.0%
Target weight	15.0%
Taxshield	25.0%
WACC	10.7%



ANNEX

Section 1 Disclaimer and exclusion of liability

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