Research Report (Update)

SYGNIS AG

„From technology to production company with TruePrime^{TM}; a capital increase will be used to finance growth“

Target price: €4.05

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: 18/11/2014 **First Publication: 19/11/2014**

GBC AG
Investment Research

SYGNIS AG*4;5

BUY
Price Target: € 4.05

current price 2.64
17/11/2014 / ETR / 17:36
currency: EUR

Key date:

ISIN: DE000A1RFM03
WKN: A1RFM0
Ticker symbol: LIO1
Number of shares³: 10.728
Marketcap³: 28.34
EnterpriseValue³: 28.21
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
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* catalogue of potential conflicts of interests on page 14

Company profile

Sector: Biotechnology

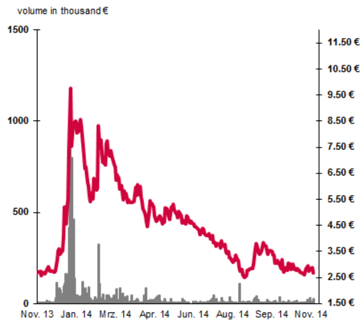
Focus: development and commercialisation of DNA-technologies

Employees: 20 (30/09/2014)

Founded in: 1997

Headquarter: Heidelberg

Executive Board: Pilar de la Huerta



SYGNIS AG, with its registered offices in Heidelberg and Madrid, is a life science company listed on the Prime Standard of Deutsche Börse. In accordance with the business strategy redefined in 2012, the company focuses on the development and marketing of innovative molecular biology technologies, e.g. in the area of DNA amplification (reproduction) and sequencing (reading). For one of the main products SensiPhi (former name: QualiPhi), an improved polymerase for DNA amplification, a license agreement was concluded with Qiagen in July 2012 for global exclusive marketing. In early 2014, Qiagen began marketing the SYGNIS product. The company's range of products is enhanced with PrimPol, a key technology for NGS (Next Generation Sequencing), for which marketing is also about to start. Own marketing of PrimPol is planned as part of the TruePrime™ product line from early 2015 onwards. In addition, the Company is currently in discussions with several potential international companies, in order to sign OEM-agreements and distribution agreements linked to the TruePrime™ product line. The product portfolio is enhanced by other technologies, like a Reverse Transcriptase, which will be developed and marketed as own products as well. SYGNIS has also developed a screening technology (DoubleSwitch) for the analysis of protein-protein interactions. The Company was able to find a first commercial partner for some of the IP rights of DoubleSwitch ending April 2014.

P&L in €m \ Due Date	31/12/2013	31/12/2014e	31/12/2015e	31/12/2016e
Revenue	0.48	0.64	2.06	5.45
EBITDA	-3.40	-.2.46	-1.54	1.56
EBIT	-4.28	-2.73	-1.81	1.27
Net profit	-3.20	-2.80	-1.62	0.98
Figures in €				
Net profit per share	-0.30	-0.21	-0.12	0.07
Dividende per share	0.00	0.00	0.00	0.00
Ratios				
EV/Revenue	58.78	44.15	13.70	5.18
EV/EBITDA	neg.	neg.	neg.	18.13
EV/EBIT	neg.	neg.	neg.	22.29
P/E	neg.	neg.	neg.	28.86
P/B	4.76			

Financial Schedule:

last research published by GBC:
Date: publication / price target in € / rating
01/09/2014: RS / 4.60 / BUY
25/08/2014: RS / 4.60 / BUY
29/07/2014: RG / 6.00 / BUY
19/05/2014: RS / 6.00 / BUY
16/04/2014: RS / 6.00 / 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

- As expected, the turnover level reached in the first nine months of 2014 and amounting to €0.30m (PY: €0.40m) was low due to the still low commercialization revenues. The majority of the revenues was generated in the third quarter of 2014 (€0.14m; PY: €0.08m), which is an indication that the turnover level is tending to increase. However, the marketing of SensiPhi®, which represents the main focus, is still below expectations.

- With virtually unchanged revenues, EBIT increased compared to the previous year to €-2.27m (PY: €-2.83 m). This is primarily attributable to the cost saving measures implemented and concluded in the 2013 financial year (in particular HR area), which meant that the break-even level of revenues has been reduced to approx. €3.5m.

- The liquidity base, combined with the corresponding range, is of fundamental importance for SYGNIS AG in the current phase. In the first nine months, the cash burn was a total of €-2.92m (PY: €-2.26m). Some of the financing requirements could be met via capital increases as part of a SEDA agreement amounting to €1.19m. Nevertheless, liquid assets were reduced as of 30/09/2014 to €0.36m (31/12/2013: €2.20m). The planned capital increase in amounting to up to €4.95m, should substantially increase the liquidity reserve and extend the range until the break-even level is reached. In addition, the capital increase is to primarily be used to finance the product pipeline and the development and production of the SYGNIS kits.

- As well as the further development and expansion of the product range, the company's focus is clearly on the marketing of self-developed technology. SensiPhi® which has already been out-licensed to Qiagen and which constitutes the basis for two amplification kits is just as much a focus as the planned self-marketing activities of PrimPol (product line: TruePrime™). In particular the own marketing of PrimPol is representative of the new marketing strategy of SYGNIS AG. The aim of this is to be less dependent on the marketing partners.

- As a result of an expected increase in revenues, we are anticipating turnover of €2.06m for the 2015 financial year and of €5.45m for 2016. According to our planning, the EBIT break-even should be reached in the 2016 financial year, with a EBIT-forecast of €1.27m. Fundamentally, we thus see SYGNIS AG well positioned with its product portfolio to participate in the high growth rates of the NGS market.

- **Based on the updated DCF model, we have determined a fair value per share of €4.05 (up to now: €4.60). The share price target is based on our adjusted revenue and earnings expectations for the next two years and the unchanged long-term forecast. In addition, we took the capital increase with the increased number of shares (dilution effect) into account, assuming a full placement. With a current share price of €2.64, we are thus renewing the rating BUY.**

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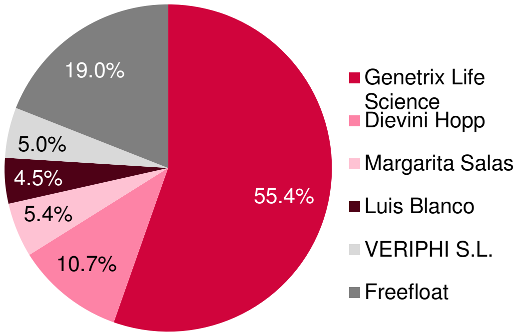
Company

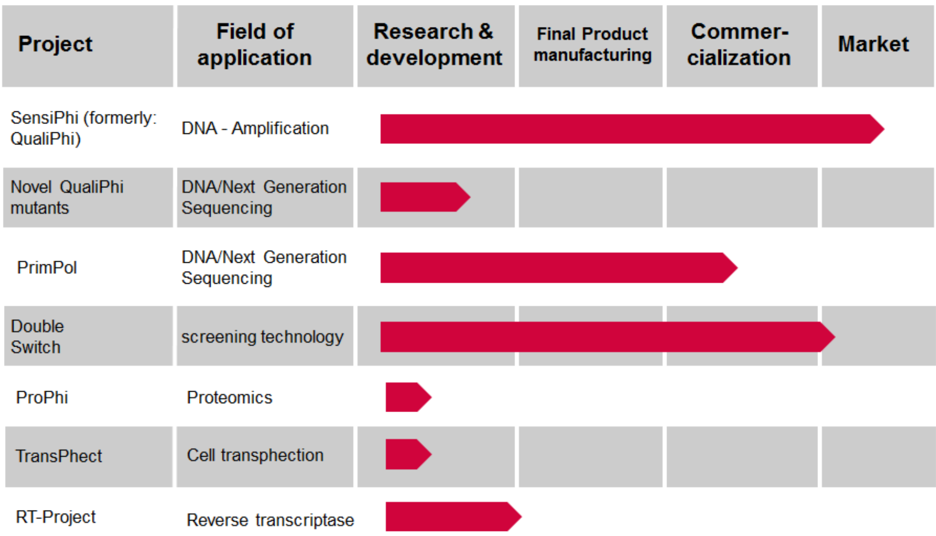
Shareholder structure

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**

Source: SYGNIS AG; GBC AG



Product portfolio and strategy



Source: SYGNIS AG; GBC AG

As a manufacturer of biotechnological products with a focus on polymerases (enzymes for the area of preparation and analysis of genetic information), SYGNIS AG currently has several projects that are at different stages. An important criterion for the projects in this field is a quick “time to market”. In contrast to the development of pharmaceutical products, no lengthy clinical approvals are required for market entry in this area.

One of the company's main products, **SensiPhi®**, already completed its market entry in February 2014. A decisive component for this is the out-licensing to Qiagen, one of the world's leading companies for sampling and testing technologies. SensiPhi® provides the basis for two amplification kits, i.e. REPLI-g WTA Single Cell Kit and REPLI-g Cell WGA & WTA Kit. These are currently being marketed worldwide, on the basis of a license agreement from 2012. The enzyme SensiPhi® is an improved version of the well-known phi-29 DNA polymerase and according to the company offers improved properties compared to the polymers currently available on the market. SensiPhi® is an enzyme that has been developed by the company, meaning that DNA multiplication from smaller input volumes, with less time and greater efficiency, is possible.

With the modular **Double Switch technology** developed by SYGNIS AG that can be used for the identification of protein-protein interactions, the company has a second out-licensed product. In April 2014, some patents of this technology were out-licensed to the

German company SYSTASY Bioscience GmbH, in the course of which small upfront payments have already been made. Furthermore, it is possible to out-license remaining protection rights of the Double Switch technology at short notice to pharmaceutical and biotechnology companies.

In addition to SensiPhi®, the company has with **PrimPol** and **Novel QualiPhi® mutants** (mutants of QualiPhi® that are specifically adapted to the requirements of the NGS) two other projects in the field of NGS (Next Generation Sequencing) in its portfolio.

The developed enzyme **PrimPol** that has an improved property to reproduce damage or conserved DNA material is particularly interesting. According to the company, great interest is already visible from the leading providers of NGS technologies. In addition, SYGNIS is developing its own product line with TruePrime™ within the framework of a possible own marketing of PrimPol. Own marketing is easy to achieve with existing laboratory capacities and therefore the production of the enzyme and the production of end products for use in the research sector does not require any high investments.

According to the company, the focus of development will be on the PrimPol kit and on other products already initiated. The company is also developing first kits for **Reverse Transcriptase**, which are planned to be launched in the first quarter 2015.

With the development already started of the products **ProPhi** and **TransPhect**, SYGNIS AG is also intending to address the associated areas of proteomics (deciphering and categorisation of all proteins in the organism) and of transfection (transfer of foreign DNA to a host cell).

Increased focus on own marketing

Due to the experience of possible delays in the marketing of products that have already been out-licensed by partners, SYGNIS has changed its strategy and will in future place a stronger focus on the self-marketing of its own technology. It is planned to reduce dependence on the marketing partners here. As a general rule, the product manufacture and/or the own production of the new product lines can be covered by the company's own laboratory capacities, meaning that no high investments are necessary. In-house distribution or the usage of sales channels within partnerships with distributors are conceivable options of this new strategy. Within the framework of the strategy, the own marketing of the product line TruePrime™ based on the PrimPol technology is already to be started at the beginning of 2015. The capital increase is to provide the financial basis for this.

Business development 9m 2014

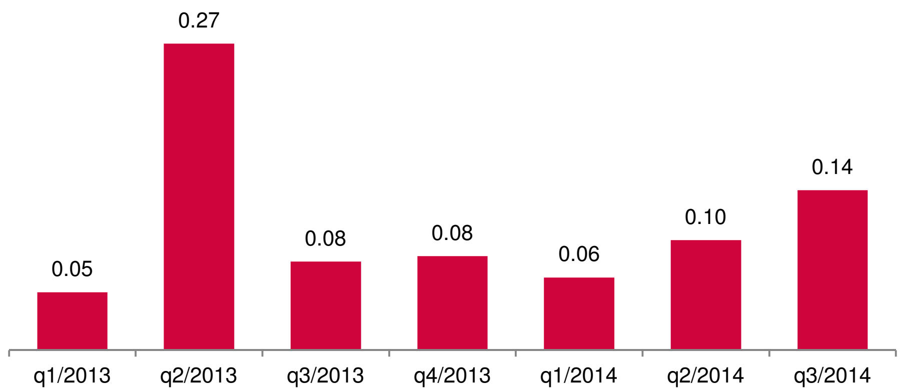
in million €	9m 2013	9m 2014
Revenue	0.40	0.30
EBITDA	-2.57	-2.06
EBIT	-2.83	-2.27
Net profit	-2.85	-2.37
EPS in €	-0.30	-0.22

Source: SYGNIS AG; GBC AG

The first three quarters of 2014 were dominated by the market introduction of two amplification kits (REPLI-g WTA Single Cell Kit and REPLI-g Cell WGA & WTA Kit) by the license partner Qiagen. In addition and as expected, the company's focus was on the further out-licensing of technologies and the further development of the product pipeline. However, the market introduction of the two kits based on the SensiPhi® technology has not yet contributed any major revenue impulses to date due to delayed marketing by Qiagen, meaning that a continued low level of revenue amounting to €0.30m (PY: €0.40m) was presented.

A more insightful picture is revealed by a revenue analysis broken down according to quarters, in which a substantial increase is visible in the completed Q3 2014. In addition to sales from the marketing of Caco-2 license rights, SYGNIS AG also received advance payments in Q3 2014 for the transfer of protection rights for the Double Switch technology. In addition, revenues were generated from the marketing of SensiPhi® for the first time, albeit at a low level:

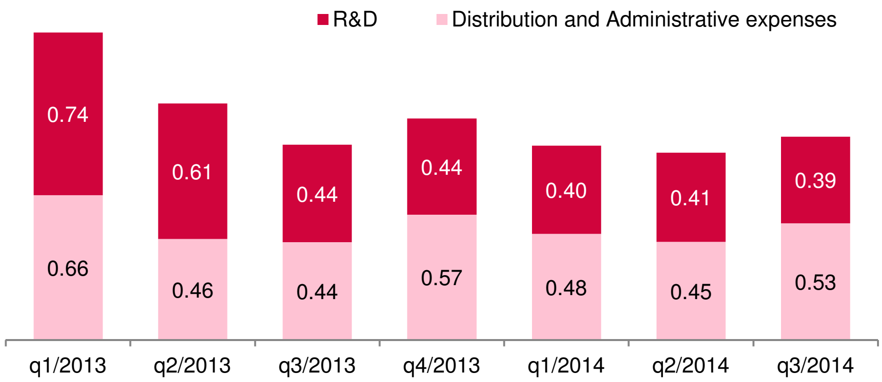
Revenue development on a quarterly basis (in million €)



Source: SYGNIS AG; GBC AG

Despite the almost unchanged top-line development compared to the previous year, EBIT improved in the first nine months of 2014 to €-2.37m (PY: -€2.85m). The revenue level was still not yet at break-even level. The improved operational earnings situation is attributable to the cost savings measures implemented in the 2013 financial year and which were primarily implemented in the HR sector. In a similar manner, the costs of the two important cost blocks (sales and administration expenses; research and development) were reduced to a total of €2.66m (PY: €3.36m).

Development of operational costs on a quarterly basis (in million €)



Source: SYGNIS AG; GBC AG

Plus depreciation amounting to €0.21m (PY: €0.25m), the total operational costs in the first nine months of 2014 amount to €2.72m (PY: €3.22m). Based on this level, the break-even revenue (at EBIT level) on an annual basis is around €3.5m.

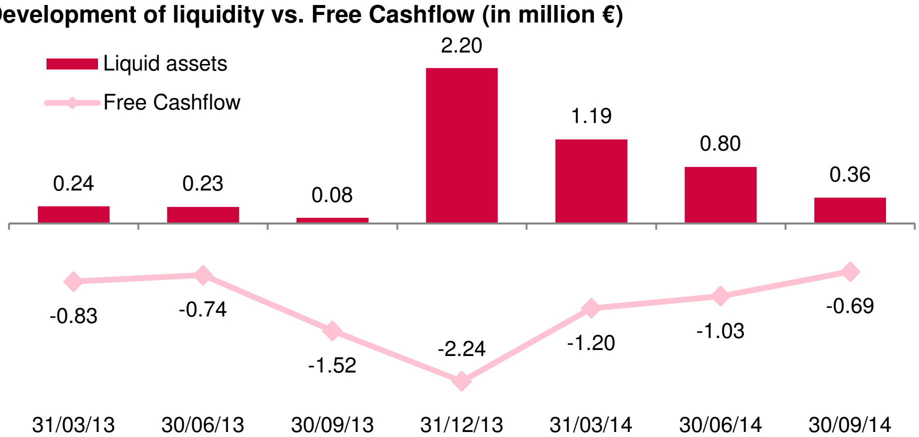
Development of liquidity as of 30/09/2014

in million €	30/09/2013	30/09/2014
Cashflow from operating activities	-2.13	-2.56
Cashflow from investing activities	-0.13	-0.36
Cashflow from financing activities	1.87	1.05

Source: SYGNIS AG; GBC AG

At SYGNIS AG, the liquidity development and, derived from this, the liquidity range, are of fundamental importance. The operational cash burn was €2.56m (PY: €2.13m) and thus around the EBIT level. The investments made in the current 2014 financial year amount to €0.36m (PY: €0.13m), resulting in a liquidity outflow of €2.92m (PY: €2.26m) for the first nine months of 2014. Consequently, liquid assets in the first nine months of 2014 were reduced from €2.20m (31.12.2013) to €0.36m (30.09.2014).

Development of liquidity vs. Free Cashflow (in million €)



Source: SYGNIS AG; GBC AG

Over the last quarters, however, the operational cash burn has declined considerably. To compensate for this overall, SYGNIS AG has a number of different financing instruments at its disposal. This includes the call-up of shareholder loans, of so-called soft loans (state interest-free research loans) and the conducting of capital increases. In the current 2014 financial year, new shares with net issue revenues amounting to €1.19m were placed via capital increases within the framework of a Standby Equity Distribution Agreement (SEDA) with YA Global Master SPV Ltd.

According to information from the company, the liquidity range (incl. the further usage of the SEDA equity line) extends to the end of the current financial year. A substantial expansion of the liquidity buffer is to be implemented through the current capital increase (issuing of up to 2.48m new shares, expected gross capital increase volume: up to €4.95m). In addition and in light of increasing sales revenues, we are anticipating a successively reduction in the cash burn.

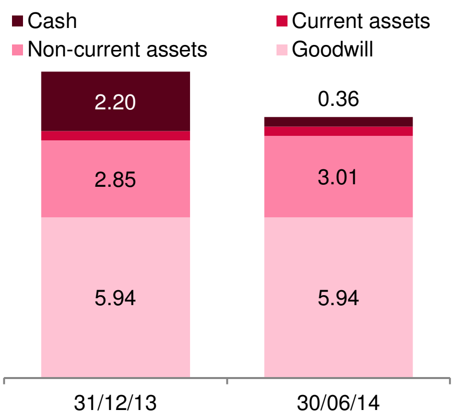
Balance sheet as of 30/09/2014

in million €	30/09/2013	31/12/2013	30/09/2014
Shareholder's capital	3.51	5.95	4.83
Equity ratio (in %)	39.5%	52.6%	50.0%
Operating assets	2.61	1.82	1.99
Working capital	-1.83	-1.94	-1.32
Net Debt	3.21	-0.13	1.77

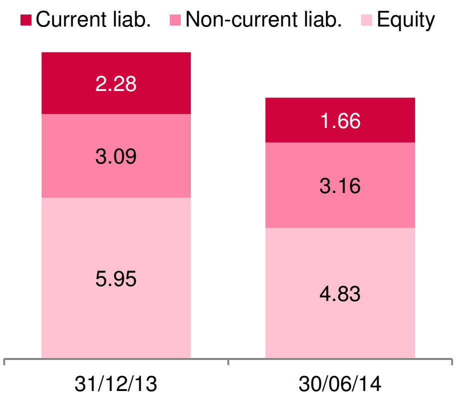
Source: SYGNIS AG; GBC AG

Due to the capital measures arising from the SEDA programme, the equity in the first nine months of 2014 posted only a disproportionately lower decline compared to the period result (€-2.37m) to € 4.83 m (31.12.13: €5.95m). Based on the balance sheet total, this corresponds to a continued solid equity ratio of 50.0% (31.12.13: 52.6%).

Assets (in million €)



Liabilities (in million €)



Source: SYGNIS AG; GBC AG

A decline in the short-term borrowed capital to €1.66m (31.12.13: €2.28m) is also visible and this relates primarily to positions of a working capital nature. The resulting increase in the working capital is also visible based on the operational cash flow which was below the period result.

Forecasts and model assumptions

P&L (in m €)	FY 14e	FY 15e (new)	FY 15e (old)	FY 16e (new)	FY 16e (old)
Revenue	0.64	2.06	2.62	5.45	6.23
EBITDA	-2.46	-1.54	-0.57	1.56	2.94
EBIT	-2.73	-1.81	-0.85	1.27	2.65
Net profit	-2.80	-1.62	-0.80	0.98	2.16

Source: GBC AG

As a product developer for the NGS (Next Generation Sequencing) area, the company's operational focus is on the one hand on the further development of the product range and on the other hand on the marketing of fully developed products. With SensiPhi® and the Double Switch technology, two self-developed technologies have already been out licensed and the "proof of concept" has therefore been provided. A particular focus is on the enzyme SensiPhi® which represents the basis for two amplification kits introduced by Qiagen in February 2014. The partnership with Qiagen, one of the world's leading companies for sampling and testing technology is highly promising, even if sales to date are still at a low level. A delayed marketing and also the still early life cycle of SensiPhi® are to be seen as the cause of the still low sales figures.

The demand for NGS technologies should, however, be characterised by dynamic growth. The research institute Marketsandmarkets is anticipating growth in the global NGS market from USD 2.5 billion (2014) to USD 8.7 billion (2020). An important factor in this is the high innovation speed, which facilitates more diverse use of NGS. The comparatively short development times of the SYGNIS products (usually less than two years) as well as a broader alignment of the product range should help to participate in market growth.

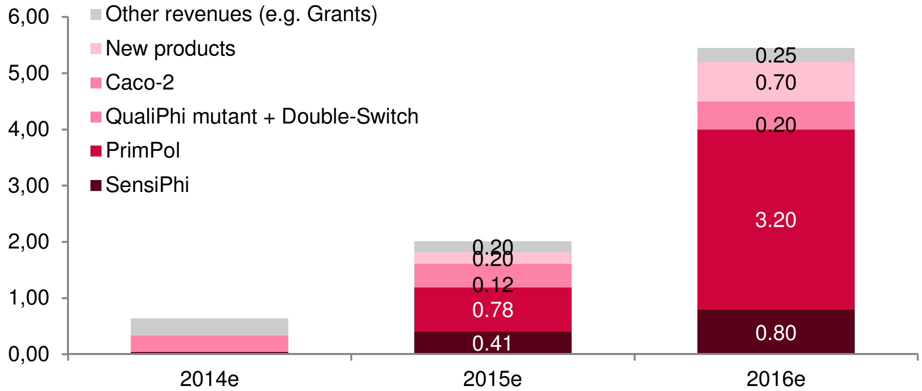
At the same time, the marketing strategy is being extended to own marketing of the product pipeline. This aims to reduce the dependence on the license partners and make better use of the marketing potential. The manufacture of the end products (kits) can be achieved with the existing laboratory capacities. Partnerships with distributors are also planned to make use of the sales channels of the partner companies. In light of this, an own product line was developed on the basis of PrimPol with TruePrime™. It is planned to market the first TruePrime™ kits from January 2015 onwards.

Revenue Forecasts

We are expecting comparatively low revenues for the current 2014 financial year. Like the company's forecast (expected revenues: €0.5 - 0.7m) we continue to anticipate turnover venues amounting to €0.64m. First revenues from the marketing of SensiPhi®, license earnings and from the marketing of Caco-2 in the US as well as upfront fees in connection with the out-licensing of some patents of the Double Switch technology will define the revenue development in the 2014 financial year.

For the forthcoming 2015 financial year, we are anticipating a substantial revenue-increase. The initial focus will be on the marketing of SensiPhi® and the planned own marketing of PrimPol (TruePrime™ product line). As a fundamental rule, the revenues generated within the framework of the own marketing are substantially higher than with license earnings as here the entire turnover is collected by SYGNIS AG. License revenues are usually a low two-digit percentage of the sales revenues generated. Accordingly, the forecast sales volume of the TruePrime™ product line dominates our estimates for the next two financial years. As a consequence, however, we have made our forecasts more conservative. For 2015, we are forecasting revenues of €2.06m (to date: €2.62m) and for 2016 amounting to €5.45m (to date: €6.23m).

Revenue breakdown by product (in million €)



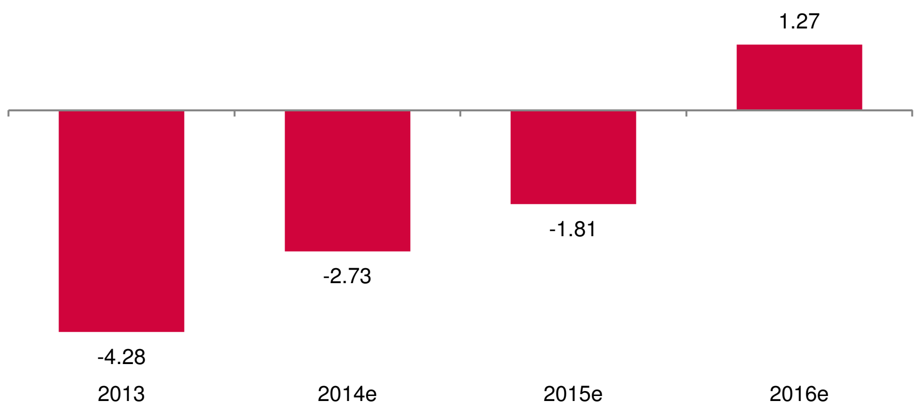
Source: GBC AG

Earnings forecasts

Over the last periods, SYGNIS AG has implemented cost optimization measures, which means that the current break-even threshold (at EBIT level) is a revenue level of around €3.5m. At this point, there is no further need for optimization in the costs. In the course of the own marketing, we are also anticipating an increase in the variable costs.

In light of expected revenues below the break-even level, it is anticipated that the EBIT of the financial years 2014 and 2015 will still be negative. With expected revenue amounting to €5.45m, the EBIT break-even on a year basis should be reached with an anticipated EBIT of €1.27m in the 2016 financial year. Economies of scale should successively take increasing revenues into account.

Expected EBIT-Development (in million €)



Source: GBC AG

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 €4.05. The share price target is based on our adjusted revenue and earnings expectations for the next two years and the unchanged long-term forecast. In addition, we took the capital increase with the increased number of shares (dilution effect) into account, assuming a full placement.

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	4.0%

final - phase	
Eternal growth rate	3.0%
Eternal EBITA - margin	66.1%
Effective tax rate in final phase	27.0%

three phases DCF - model:

phase	**estimate**			**consistency**					**final**
in €m	FY 14e	FY 15e	FY 16e	FY 17e	FY 18e	FY 19e	FY 20e	FY 21e	**value**
Revenue	0.64	2.06	5.45	7.16	8.23	9.46	10.88	12.50	
Revenue change	32.6%	222.4%	164.6%	15.0%	15.0%	15.0%	15.0%	15.0%	3.0%
Revenue to fixed assets	0.26	0.69	1.82	1.82	1.82	1.82	1.82	1.82	
EBITDA	-2.46	-1.54	1.56	4.65	5.35	6.15	7.07	8.13	
EBITDA-Margin	-385.1%	-74.6%	28.6%	65.0%	65.0%	65.0%	65.0%	65.0%	
EBITA	-2.72	-1.81	1.27	4.51	5.16	5.94	6.82	7.84	
EBITA-Margin	-426.4%	-88.0%	23.2%	63.0%	62.7%	62.7%	62.7%	62.7%	66.1%
Taxes on EBITA	0.08	0.27	0.00	-0.68	-1.39	-1.60	-1.84	-2.12	
Taxes to EBITA	2.8%	15.0%	0.0%	15.0%	27.0%	27.0%	27.0%	27.0%	27.0%
EBI (NOPLAT)	-2.65	-1.54	1.27	3.84	3.77	4.33	4.98	5.73	
Return on capital	n.def	-67.0%	39.6%	116.2%	89.2%	89.2%	89.2%	89.2%	84.2%
Working Capital (WC)	-0.20	0.20	0.30	0.29	0.33	0.38	0.44	0.50	
WC to revenue	-31.3%	9.7%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	
Investment in WC	-1.74	-0.40	-0.10	0.01	-0.04	-0.05	-0.06	-0.07	
Operating fixed assets (OAV)	2.50	3.00	3.00	3.94	4.53	5.21	5.99	6.88	
Depreciation on OAV	-0.26	-0.28	-0.29	-0.14	-0.19	-0.21	-0.24	-0.28	
Depreciation to OAV	10.6%	9.2%	9.7%	4.7%	4.7%	4.7%	4.7%	4.7%	
Investment in OAV	-0.94	-0.78	-0.29	-1.08	-0.77	-0.89	-1.02	-1.18	
Capital employed	2.30	3.20	3.30	4.23	4.86	5.59	6.42	7.38	
EBITDA	-2.46	-1.54	1.56	4.65	5.35	6.15	7.07	8.13	
Taxes on EBITA	0.08	0.27	0.00	-0.68	-1.39	-1.60	-1.84	-2.12	
Total investment	-2.68	-1.18	-0.39	-1.07	-0.82	-0.94	-1.08	-1.24	
Investment in OAV	-0.94	-0.78	-0.29	-1.08	-0.77	-0.89	-1.02	-1.18	
Investment in WC	-1.74	-0.40	-0.10	0.01	-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	-2.44	1.17	2.91	3.14	3.61	4.15	4.77	77.46

Value operating business (due date)	47.66	55.22
Net present value explicit free Cashflows	9.72	13.21
Net present value of terminal value	37.93	42.01
Net debt	-0.74	1.79
Value of equity	48.40	53.43
Minority interests	0.00	0.00
Value of share capital	48.40	53.43
Outstanding shares in m	13.20	13.20
Fair value per share in €	3.67	**4.05**

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%**

Return on capital	**WACC**				
	9.7%	**10.2%**	**10.7%**	**11.2%**	**11.7%**
82.2%	4.63	4.27	3.97	3.70	3.47
83.2%	4.68	4.32	4.01	3.74	3.50
84.2%	4.72	4.36	**4.05**	3.77	3.53
85.2%	4.77	4.40	4.09	3.81	3.57
86.2%	4.82	4.45	4.12	3.85	3.60

ANNEX

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HOLD	The expected return, based on the derived target price, incl. dividend payments within the rel 10 % and < + 10 %.
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