# **BRASTER S.A.**



Fair Value: PLN 32-PLN 40 Initiating Coverage Rating: n.a.

BRASTER (BRA) is a company that was founded in 2008 by Polish experts in liquid crystals in order to develop and commercialize a thermographic device for early diagnostics of breast cancer. The BRASTER Tester is a much more precise and easier-to-perform alternative to breast self-exams and in contrast to diagnostic devices such as mammograms and USGs is significantly cheaper and can be used by women of all age. For the technology relating to the production of matrices for the BRASTER Tester (unique mixture of liquid-crystal compounds and emulsion formula), BRA has already secured patent protection in c. 20 countries worldwide until c. 2030.

At the end of 2014, BRASTER changed its strategy with regard to the customer group, at which it wants to target its device. It now plans to focus on individual patients rather than doctors, which in our view makes sense as (1) women are a much larger group and (2) health prevention is a global trend. A woman, who bought the device and paid the 2-year subscription fee, will be able to check her breast anytime and everywhere without going to the doctor. Her BRASTER Tester will send the thermographic pictures of her breast to BRA's own data center for analysis. In our view, this approach will save the women time and the society health costs as she will only need to undergo a medical treatment e.g. a mammogram if BRA's medical consultants recommend that to her.

According to GLOBOCAN, the number diagnosed breast cancer cases will increase from 1.8m worldwide in 2015E to 2m by 2020E. With a share of 25.2%, breast cancer is the most frequent malignancy of women. BCC Research and Research and Markets estimate the CAGR 14-19E of the global market for telehealth at 17.7% from USD 19.2bn, while in Europe the CAGR 11-19E is forecast at 12.8% from USD 4.8bn.

We initiate coverage of BRASTER with a fair value range of PLN 32-PLN 40 per share based on three different scenarios. While there are significant risks as its product and the relating sales infrastructure are not yet ready, we think that due to the track record of its management and the proven advantages of its technology BRA could achieve a large international success. However, we believe that in order to be able to finance the necessary investments the company first needs to raise at least PLN 38m of new capital.

in PLNm	2014	2015E	2016E	2017E	2018E	2019E
Net sales	0.00	0.00	0.65	6.10	40.66	86.77
EBITDA	-3.28	-18.10	-11.56	-8.11	7.45	25.68
EBIT	-3.59	-18.50	-15.16	-11.91	3.58	21.73
Net income	-3.50	-18.36	-15.00	-11.72	3.79	21.97
Diluted EPS	-1.16	-4.03	-2.65	-2.07	0.67	3.89
DPS	0.00	0.00	0.00	0.00	0.00	0.00
Dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RoE	-48.76%	-93.14%	-63.86%	-115.79%	61.53%	115.41%
Net gearing	-94.37%	-42.63%	161.47%	844.05%	428.72%	69.58%
EV/Sales	n.a	n.a	157.58x	16.83x	2.53x	1.18x
EV/EBITDA	n.a	n.a	n.a	n.a	13.78x	4.00x
P/E	n.a	n.a	n.a	n.a	30.59x	5.28x

Company profile

BRASTER S.A. is a company, which develops a telehealth device that allows non-invasive, early-stage detection of breast cancer.

Website	www.braster.eu
Sector	Medical Technology
Country	Poland
ISIN	PLBRSTR00014
Reuters	BRAR.WA
Bloomberg	Bra PW

### Share information

Last price	20.50
Number of shares (m)	3.01
Market cap. (PLNm)	61.80
Market cap. (EURm)	14.98
52-weeks range	PLN 34.44 / PLN 3.40
Average volume	20,160

#### Performance

4-weeks	59.91%
13-weeks	161.15%
26-weeks	381.22%
52-weeks	55.30%
YTD	165.89%

### Shareholder structure

DM BOS	10.85%
Ipopema TFI	10.63%
PZU TFI	6.39%
Tadeusz Wesolowski	6.15%
Grzegorz Pielak (Superv. Board)	5.08%
Henryk Jaremek (Mgmt. board)	5.03%
Free float	66.72%

#### Financial calendar

O1 2015 results	May 14, 2015

### Analyst

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### **Investment Case**

- BRASTER (BRA) was founded in 2008 by five Polish scientists in order to commercialize their research in the area of liquid crystals. The scientists developed a new method of mixing liquid-crystal compounds that allowed the creation of corresponding matrices, which makes the early diagnosis of breast cancer much cheaper, efficient and secure. In the last years, BRASTER has developed a prototype of its BRASTER Tester device, which uses the matrices, and secured patents for its technology in already c. 20 countries. They are valid until c. 2030.
- At the end of 2014, the company announced a change of its strategy, which now focuses on telemedicine services for women instead of product sales to medical practitioners. Upon completion of the necessary investments in the production facility for matrices, software development, data center and marketing, BRASTER plans to earn money from selling the devices, 2-year subscriptions and medical consultancies. The company wants to sell the BRASTER Tester itself (own sales team, online shop), through pharmacies and drug stores or on a white-label basis. In our view, wealthy countries such as Germany, France or UK are much more promising for the company due to higher incomes and willingness to spend money on healthcare from own pocket.
- According to GLOBOCAN, breast cancer is the most serious type of cancer in case of women with a share of 25.2% (1.8m new cases in 2015E) in total diagnosed cases and a death rate of >30%. Most of the diagnosed breast cancer cases occur in Western and Northern Europe and the US, making the malignancy a civilization disease. According to BCC Research and Research and Markets, the global market for telemedicine is expected to grow by 2019E on average by 17.7% y-o-y to USD 43.4bn (thereof: home-based telehealth at a CAGR of 24%), while in Europe the CAGR 11-19E is forecast at 12.8% to USD 12.6bn.
- We have determined a fair value range for BRASTER's shares of PLN 32-PLN 40 based on three different scenarios. We think that while there are significant risks, BRASTER has a chance to achieve a large international success due to (1) its competent management (2) a product with proven advantages and (3) a strategy focused on telemedicine services for women. We have assumed that the company will need min. PLN 38m of fresh capital in order to be able to finance the necessary investments in production, IT, and marketing. While the prices of the devices and 2-year subscriptions are the same, our three scenarios are based on different market penetration rates (we would like to emphasize that while BRASTER has plans to expand globally, we have only accounted for sales in Europe). Also, our model does not include any additional revenues from "big data", statistical information that BRASTER will collect from its customers. In our opinion, they could be sold in anonymised form to e.g. insurance companies. We believe that the acquisition of WhatsApp for USD 19bn by Facebook in 2014 clearly showed the value, which companies can generate by simply collecting large data volumes.

# **SWOT Analysis**

#### Strengths

- The BRASTER Tester is a low-cost, safe and efficient telehealth device, which in contrast to e.g. mammograms allows the diagnosis of breast cancer in case of <50 year old women at home; it is complemented by a dedicated software for test recording, analysis, visualisation and archiving
- The relating technology (mixture of liquid crystal compounds, liquid crystal emulsion formula) has already been secured by patents in c. 20 countries worldwide that are valid until c. 2030
- The usefulness of the BRASTER Tester has been proven in a six-months, multi-center trial, which concluded that it improved the results of traditional methods for breast cancer detection e.g. mammograms, ultrasound scanners
- Research co-operations with leading Polish universities e.g. experts from the Warsaw University of Technology, with whom BRASTER develops algorithms for the automatic analysis of thermographic pictures
- In Poland, BRASTER has access to generous EU subsidies for medical research; so far, it has received c. PLN 14m of grants
- Excellent management team with long, successful careers in healthcare-related research, management and marketing

### Weaknesses

- No revenues so far; first sales are planned for Q4/16E
- The product is not yet ready; BRASTER still has to develop the mobile application and construct the data center, which together with investments in production capacity and international marketing will in our opinion require min. PLN 38m
- Listing in the illiquid NewConnect segment of the WSE; however BRASTER is part of the NCIndex30, which comprises the most liquid stocks of the segment

### **Opportunities**

- Roll-out of the BRASTER Tester from H2/16E, first in PL, then other European countries such as Germany and UK (BRA-STER also wants to expand to other continents later); BRA-STER plans to distribute the devices by an own sales team, through an online shop as well as distribution partners; the product could also be sold as a white-label solution e.g. to medical chains
- The statistical data, which BRASTER is supposed to collect from women, could be an additional valuable source of revenue; for example, the company could sell it to insurance firms
- According to Frost & Sullivan, predictive medicine is one of the global trends in the area of healthcare
- BCC Research and Research and Markets estimate the value of the global market for telehealth technology at USD 19.2bn in 2014 and the average growth rate until 2019E at 17.7%; thereof, home-based telehealth is expected to grow by 24% on average; for Europe, they forecast a CAGR of 12.8% to USD 12.6bn in 2019E
- Takeover by a large healthcare company

#### **Threats**

- Inability to raise the necessary capital for investments
- Risks relating to willingness of individual patients to pay for the device from own pocket
- Although the BRASTER Tester is already registered in the European database for medical devices (EUDAMED), before market introduction in the US (largest healthcare market worldwide) it needs approval from the FDA, which takes up to 12-24 months and costs USD 1.5m-2m (EVRe)
- Loss of key employees and problems to find qualified personnel
- Risks relating to potential competition by much larger and financially stronger players
- Risks relating to dilution of existing shareholders due to additional capital measures

# **Valuation**

Due to the company's early-stage character we have decided to value BRASTER by using a DCF approach only. Our three scenarios result in a fair value range for the company's shares of PLN 32-PLN 40. We have assumed that in 2015 BRASTER will issue 2.6m new shares at PLN 15.50 per share in order to be able to finance the necessary investments.

## **DCF model (Pessimistic scenario)**

in PLNm		2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Net sales		0.00	0.65	4.99	34.55	80.43	117.01	164.36	206.48	286.50
(y-o-y change)		n.a	n.a	666.3%	592.1%	132.8%	45.5%	40.5%	25.6%	38.8%
EBIT		-18.50	-15.16	-12.49	1.34	19.70	34.97	56.22	70.21	97.38
(operating margin)			-2326.2%		3.9%	24.5%	29.9%	34.2%	34.0%	34.0%
NOPLAT		-18.50	-15.16	-12.49	1.34	19.70	34.97	56.22	70.21	78.88
+ Depreciation & amortisation		0.40	3.60	3.80	3.88	3.95	4.03	4.11	4.20	4.28
= Net operating cash flow		-18.10	-11.56	-8.69	5.21	23.65	39.00	60.34	74.41	83.15
- Total investments (Capex and WC)		-17.68	-27.62	-1.65	-6.04	-12.04	-21.21	-11.32	-2.36	-17.46
Capital expenditure		-17.80	-19.40	-7.80	-4.93	-5.00	-5.08	-5.16	-5.25	-5.33
Working capital		0.11	-8.22	6.15	-1.11	-7.04	-16.13	-6.16	2.88	-12.13
= Free cash flow (FCF)		-35.78	-39.17	-10.34	-0.83	11.61	17.79	49.01	72.04	65.69
PV of FCFs		-31.62	-29.57	-6.67	-0.46	5.46	7.15	16.84	21.15	16.47
PV of FCFs in explicit period	-1.24									
PV of FCFs in terminal period	142.57									
Enterprise value (EV)	141.33									
+ Net cash / - net debt (31 December 2015)	13.21									
+ investments / - minorities	0.00									
Shareholder value	154.54									
Post-money shares outstanding (m)	5.65				To	erminal E	BIT margi	n		
WACC	17.1%	_		30.5%	31.5%	32.5%	33.5%	34.5%	35.5%	36.5%
Cost of equity	17.1%		8.7%	56.78	58.46	60.14	61.81	63.49	65.17	66.84
Pre-tax cost of debt	10.0%		9.7%	47.78	49.19	50.60	52.01	53.42	54.83	56.24
Normal tax rate	19.0%	Ω	10.7%	40.45	41.65	42.85	44.04	45.24	46.44	47.64
After-tax cost of debt	8.1%	WACC	11.7%	34.40	35.43	36.45	37.48	38.50	39.53	40.55
Share of equity	100.0%	≩	12.7%	29.35	30.23	31.12	32.00	32.88	33.77	34.65
Share of debt	0.0%		13.7%	25.09	25.86	26.62	27.39	28.15	28.92	29.68
Fair value per share in PLN (today) Fair value per share in PLN (in 12 months)	27.34 32.00		14.7%	21.47	22.13	22.80	23.47	24.13	24.80	25.47

Source: Company information, East Value Research GmbH

## **DCF model (Base Case scenario)**

in PLNm		2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Net sales		0.00	0.65	6.10	40.66	86.77	132.99	180.07	233.50	303.08
(y-o-y change)		n.a	n.a	836.2%	566.6%	113.4%	53.3%	35.4%	29.7%	29.8%
EBIT		-18.50	-15.16	-11.91	3.58	21.73	40.64	62.05	80.30	103.88
(operating margin)			-2326.2%	-195.2%	8.8%	25.0%	30.6%	34.5%	34.4%	34.3%
NOPLAT		-18.50	-15.16	-11.91	3.58	21.73	40.64	62.05	80.30	84.14
+ Depreciation & amortisation		0.40	3.60	3.80	3.88	3.95	4.03	4.11	4.20	4.28
= Net operating cash flow		-18.10	-11.56	-8.11	7.45	25.68	44.67	66.16	84.49	88.42
- Total investments (Capex and WC)		-17.68	-27.62	-2.24	-6.20	-12.29	-24.18	-10.78	-3.39	-15.75
Capital expenditure		-17.80	-19.40	-7.80	-4.93	-5.00	-5.08	-5.16	-5.25	-5.33
Working capital		0.11	-8.22	5.56	-1.27	-7.29	-19.10	-5.61	1.86	-10.42
= Free cash flow (FCF)		-35.78	-39.17	-10.35	1.25	13.39	20.49	55.38	81.11	72.68
PV of FCF's		-31.62	-29.57	-6.68	0.69	6.30	8.24	19.03	23.81	18.22
PV of FCFs in explicit period	8.43									į
PV of FCFs in terminal period	152.20									Į.
Enterprise value (EV)	160.63									
+ Net cash / - net debt (31 December 2015)	13.21									
+ investments / - minorities	0.00									
Shareholder value	173.84									
Post-money shares outstanding (m)	5.65				To	erminal E	BIT margi	n		
WACC	17.1%		- 1	30.5%	31.5%	32.5%	33.5%	34.5%	35.5%	36.5%
Cost of equity	17.1%	_	8.7%	62.82	64.59	66.36	68.14	69.91	71.68	73.46
Pre-tax cost of debt	10.0%		9.7%	53.11	54.60	56.09	57.59	59.08	60.57	62.07
Normal tax rate	19.0%	()	10.7%	45.20	46.47	47.73	49.00	50.27	51.54	52.80
After-tax cost of debt	8.1%	WACC	11.7%	38.66	39.74	40.83	41.91	43.00	44.08	45.17
Share of equity	100.0%	≩	12.7%	33.19	34.13	35.06	36.00	36.93	37.87	38.80
Share of debt	0.0%		13.7%	28.58	29.39	30.19	31.00	31.81	32.62	33.43
Fair value per share in PLN (today)	30.75		14.7%	24.64	25.35	26.05	26.76	27.46	28.17	28.87
Fair value per share in PLN (in 12 months)	36.00									

Source: Company information, East Value Research GmbH

# **DCF model (Optimistic scenario)**

in PLNm		2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Net sales		0.00	0.65	7.21	49.09	97.43	158.37	190.82	250.11	318.76
(y-o-y change)		n.a	n.a	1006.0%	581.3%	98.5%	62.5%	20.5%	31.1%	27.4%
EBIT		-18.50	-15.16	-11.32	6.67	25.08	49.55	66.51	87.58	109.54
(operating margin)		n.a	-2326.2%	-157.1%	13.6%	25.7%	31.3%	34.9%	35.0%	34.4%
NOPLAT		-18.50	-15.16	-11.32	6.67	25.08	49.55	66.51	87.58	88.73
+ Depreciation & amortisation		0.40	3.60	3.80	3.88	3.95	4.03	4.11	4.20	4.28
= Net operating cash flow		-18.10	-11.56	-7.52	10.55	29.04	53.58	70.62	91.77	93.01
- Total investments (Capex and WC)		-17.68	-27.62	-2.84	-6.65	-12.88	-28.84	-6.88	-3.73	-15.59
Capital expenditure		-17.80	-19.40	-7.80	-4.93	-5.00	-5.08	-5.16	-5.25	-5.33
Working capital		0.11	-8.22	4.96	-1.72	-7.87	-23.76	-1.71	1.52	-10.26
= Free cash flow (FCF)		-35.78	-39.17	-10.36	3.90	16.16	24.74	63.75	88.04	77.42
PV of FCF's		-31.62	-29.57	-6.68	2.15	7.61	9.95	21.90	25.84	19.41
PV of FCFs in explicit period	18.99									
PV of FCFs in terminal period	160.98									
Enterprise value (EV)	179.97									
+ Net cash / - net debt (31 December 2015)	13.21									
+ investments / - minorities	0.00									
Shareholder value	193.18									
Post-money shares outstanding (m)	5.65				To	erminal E	BIT margi	n		
WACC	17.1%			30.5%	31.5%	32.5%	33.5%	34.5%	35.5%	36.5%
Cost of equity	17.1%	-	8.7%	68.73	70.59	72.46	74.32	76.19	78.05	79.92
Pre-tax cost of debt	10.0%		9.7%	58.37	59.94	61.51	63.08	64.65	66.22	67.79
Normal tax rate	19.0%	O	10.7%	49.91	51.24	52.58	53.91	55.24	56.58	57.91
After-tax cost of debt	8.1%	WACC	11.7%	42.91	44.05	45.20	46.34	47.48	48.62	49.76
Share of equity	100.0%	≩	12.7%	37.05	38.04	39.02	40.00	40.98	41.97	42.95
Share of debt	0.0%		13.7%	32.10	32.95	33.80	34.65	35.50	36.35	37.21
Fair value per share in PLN (today)	34.18		14.7%	27.87	28.61	29.35	30.09	30.83	31.58	32.32
Fair value per share in PLN (in 12 months)	40.00	<del></del> .								

Source: Company information, East Value Research GmbH

### **Peer Group**

We have found the following companies, which like BRASTER operate in the area of telehealth:

- (1) *Medicalgorithmics S.A.*: Medicalgorithmics (MDG), which is based in Warsaw, is a producer and supplier of innovative technologies in the area of distant cardio-diagnostics. The company focuses on distant monitoring and analysis of the heart based on a proprietary technology called PocketECG. Apart from cardiac telemetry, the system is also used in clinical trials on drugs relating to cardiac safety as well as research projects. Medicalgorithmics is listed on the Warsaw Stock Exchange. In fiscal-year 2013, it generated sales of PLN 15.7m and an EBIT margin of 63.7%.
- (2) AMD Global Telemedicine Inc.: AMD Global, which is headquartered in Chelmsford/US, provides clinical telemedicine equipment and technology that is used to connect a patient with a remote healthcare provider or specialist. Its products include fully-customizable Telemedicine Carts & Systems, AGNES Interactive web-based telemedicine software (enables remote clinical healthcare providers to capture and share medical device data, exchange documents and medical images in real-time, and participate in a live video conference), Telehealth Consult (web-based patient record system designed for the needs of both live and deferred telemedicine consultations) and Telemedicine Medical Devices (Examination Cameras, Stethoscopes, Vital Sign Monitors etc.).
- (3) *McKesson Corporation*: McKesson, which is headquartered in San Francisco/US, provides distribution of healthcare products and technology. It is listed on the New York Stock Exchange and in fiscal-year 2014 generated total sales of USD 137.6bn. The Technology segment, which also provides telehealth software and hardware solutions, reported sales of USD 3.2bn and an EBIT margin of 12.2%.
- (4) LifeWatch AG: LifeWatch AG, which is based in Zurich, is an industry leader in the area of patient monitoring solutions, especially relating to heart and sleep monitoring. Its main markets are Switzerland, the US and Israel. LifeWatch is listed on the Swiss stock exchange and in 2014 generated revenues of USD 91.1m at an EBITDA margin of 1.7%.
- (5) Aerotel Medical Systems Ltd: Aerotel Medical Systems, which is based in Israel, is a leading global manufacturer of modular, mobile and home-based telemedicine solutions for transferring medical and lifestyle data over the phone, wireless and the Internet. With clients in more than 40 countries worldwide, the company provides transtelephonic devices for a variety of remote diagnostic, emergency services, rehabilitation and monitoring applications incl. hardware and software platforms (phone and webbased).

### **Recent results**

### **Revenues and Profitability**

In fiscal-year 2014, BRASTER generated no revenues, an EBIT of PLN -3.6m (2013: PLN -2.8m) and net income of PLN -3.5m (PLN -3m). The largest cost position were Cost of Goods Sold of PLN 2.3m (PLN 1.7m), which comprised external services e.g. of outsourcing partners. Other costs included Personnel expenses of PLN 1.1m, Depreciation and Amortization of PLN 309k and Other operating expenses incl. travel costs of PLN 104k.

in PLNm	2014	2013	change (%)
Net sales	0.00	0.00	n.a
EBITDA	-3.28	-2.50	31.1%
EBITDA margin	n.a	n.a	
EBIT	-3.59	-2.79	28.9%
EBIT margin	n.a	n.a	
Net income	-3.50	-3.02	16.1%
Net margin	n.a	n.a	

Source: Company information, East Value Research GmbH

in PLNm	Q1/13	Q2/13	Q3/13	Q4/13	2013	Q1/14	Q2/14	Q3/14	Q4/14	2014
Net sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
y-o-y change	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
EBITDA	-0.61	-0.85	-0.68	-0.37	<i>-2.50</i>	-0.58	-0.77	-1.20	-0.73	-3.28
EBITDA margin	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
EBIT	-0.67	-0.91	-0.75	-0.46	<i>-2.79</i>	-0.65	-0.85	-1.28	-0.81	-3.59
EBIT margin	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Net income	-0.50	-0.71	-0.57	-1.24	-3.02	-0.67	-0.82	-1.24	-0.78	-3.50
Net margin	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a

Source: Company information, East Value Research GmbH

### **Balance sheet and Cash flow**

As of 31 December 2014, BRASTER had equity of PLN 8.5m, which was much higher than in 2013 (PLN 5.9m) due to a capital increase of PLN 6.5m in April 2014. Fixed assets (equipment, IT) equaled PLN 1.5m and intangibles (software, patents, licenses) PLN 1.6m, while cash and working capital amounted to PLN 8m and PLN -2.7m respectively. In 2014, BRASTER was debt-free.

Between January and December 2014, BRASTER's operating cash flow improved from PLN -2.9m in the previous year to PLN -54k, which resulted from a significant increase of other short-term liabilities. While cash flow from investing remained more or less at the same level (PLN -876k), cash flow from financing (PLN 6m vs. PLN 0 in 2013) was affected by the capital increase in April 2014. In total, BRASTER's cash position increased since January 2014 by PLN 5.1m.

### **Financial forecasts**

### **Revenues and Profitability**

BRASTER is a relatively young company with no revenues to date and a product, which is still at an early stage of development. We believe that in order to generate first sales it needs at least PLN 38m for further medical tests, additional staff, software development, construction of a production plant for matrices and a data center as well as marketing activities. Hence, it should be clear that all of our model assumptions are highly uncertain and risky.

We have calculated three scenarios for BRASTER dependent on different forecasts relating to market penetration in its target markets. We would like to emphasize that although BRASTER plans to expand with its product globally, our estimates only account for sales in Europe.

The following shows our assumptions when its comes to market penetration in the respective markets. BRASTER defines its total market as women, who are between 20 and 69 years old, have higher education and income. The reasons are their higher awareness when it comes to breast cancer as well as willingness and ability to spend money from own pocket on prevention.

Country	20-69 year old women with higher education and income
Poland	3,948,792
Germany	7,822,365
United Kingdom	6,000,726
Rest of Europe	30,312,310
USA	27,337,918
Japan	13,041,099
South Korea	4,961,816
Canada	3,454,128
Russia + Brasil + Australia	36,572,318
BRASTER's potential market	133,451,472

Source: Company data, East Value Research GmbH

The following assumptions are fixed in all scenarios:

→ Average price/Gross margin per BRASTER Tester sold: PLN 400 / 35%

→ Average price/Gross margin per Matrice sold: PLN 100 / 48%

→ Average price/Gross margin per Subscription sold: PLN 150 / 100%

→ Average price/Gross margin per Medical consulting sold: PLN 35 / 50%

→ Share of women renewing the subscription every two years: 70%

→ Share of women ordering a medical consultancy per year: 30%

### Base Case scenario:

Base Case scenario	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Poland	•		•	•		•		
Market penetration rate	0.03%	0.20%	0.67%	1.45%	2.50%	3.80%	5.15%	6.55%
Number of new customers	1,185	6,713	<i>18,559</i>	30,801	41,462	51,334	53,309	<i>55,283</i>
Total number of customers	1,185	7,898	26,457	<i>57,257</i>	98,720	<i>150,054</i>	203,363	<i>258,646</i>
Germany								
Market penetration rate	0.00%	0.03%	0.35%	0.90%	1.70%	2.65%	3.65%	4.69%
Number of new customers	0	2,347	25,032	43,023	62,579	74,312	78,224	81,353
Total number of customers	0	2,347	27,378	70,401	132,980	207,293	285,516	366,869
United Kingdom								
Market penetration rate	0.00%	0.03%	0.35%	0.90%	1.70%	2.65%	3.65%	4.69%
Number of new customers	0	1,800	19,202	33,004	48,006	57,007	60,007	62,408
Total number of customers	0	1,800	21,003	<i>54,007</i>	102,012	159,019	219,026	281,434
Rest of Europe								
Market penetration rate	0.00%	0.00%	0.03%	0.17%	0.35%	0.60%	1.05%	1.80%
Number of new customers	0	0	9,093	42,437	54,562	75,781	136,405	227,949
Total number of customers	0	0	9,094	51,531	106,093	181,874	318,279	<i>546,228</i>
Total new users	1,185	10,860	71,887	149,265	206,609	258,434	327,945	426,992
Total users	1,185	12,045	83,931	233,196	439,805	698,240	1,026,185	1,453,177

Base Case scenario	2015E	2016E	2017E	2018E	2019E
BRASTER Tester	0.00	0.47	4.34	28.75	59.71
(% of sales)	0.0%	72.7%	71.2%	70.7%	68.8%
Gross margin	35.0%	35.0%	35.0%	35.0%	35.0%
Units	0	1,185	10,860	71,887	149,265
Average price per unit	400	400	400	400	400
Matrices (new required every two years)	0.00	0.00	0.00	0.12	1.09
(% of sales)	0.0%	0.0%	0.0%	0.3%	1.3%
Gross margin	48.0%	48.0%	48.0%	48.0%	48.0%
Units	0	0	0	1,185	10,860
Average price per unit	100	100	100	100	100
Subscriptions (70% renewed every two years)	0.00	0.18	1.63	10.91	23.53
(% of sales)	0.0%	27.3%	26.7%	26.8%	27.1%
Gross margin	100.0%	100.0%	100.0%	100.0%	100.0%
Subscribers	0	1,185	10,860	72,716	156,867
Average price per subscription	150	150	150	150	150
Medical consulting	0.00	0.00	0.13	0.88	2.45
(% of sales)	0.0%	0.0%	2.1%	2.2%	2.8%
Gross margin	50.0%	50.0%	50.0%	50.0%	50.0%
Subscribers (30% of all)	0	0	3,613	25,179	69,959
Average price per consulting	35	35	35	35	35
Total revenues	0.00	0.65	6.10	40.66	86.77
(change y-o-y)	n.a	n.a	836.2%	566.6%	113.4%

Source: East Value Research GmbH

# Optimistic scenario:

Optimistic scenario	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Poland								
Market penetration rate	0.03%	0.25%	0.75%	1.58%	2.70%	3.95%	5.25%	6.75%
Number of new customers	1,185	8,687	19,744	<i>32,775</i>	44,226	49,360	51,334	59,232
Total number of customers	1,185	9,872	29,616	62,391	106,617	155,977	207,312	266,543
Germany								
Market penetration rate	0.00%	0.03%	0.45%	1.05%	1.85%	2.72%	3.68%	4.90%
Number of new customers	0	2,347	<i>32,854</i>	46,934	62,579	68,055	<i>75,095</i>	95,433
Total number of customers	0	2,347	<i>35,201</i>	82,135	144,714	212,768	287,863	383,296
United Kingdom								
Market penetration rate	0.00%	0.03%	0.45%	1.05%	1.85%	2.72%	3.68%	4.90%
Number of new customers	0	1,800	<i>25,203</i>	36,004	48,006	<i>52,206</i>	57,607	<i>73,209</i>
Total number of customers	0	1,800	27,003	63,008	111,013	163,220	220,827	294,036
Rest of Europe								
Market penetration rate	0.00%	0.00%	0.03%	0.20%	0.50%	0.83%	1.35%	2.08%
Number of new customers	0	0	9,093	51,531	90,937	100,031	157,624	221,128
Total number of customers	0	0	9,094	60,625	<i>151,562</i>	<i>251,592</i>	409,216	630,344
Total new users	1,185	12,835	86,894	167,244	245,748	269,651	341,660	449,002
Total users	1,185	14,019	100,914	268,158	513,906	783,558	1,125,218	1,574,219

Optimistic scenario	2015E	2016E	2017E	2018E	2019E
BRASTER Tester	0.00	0.47	5.13	34.76	66.90
(% of sales)	0.0%	72.7%	71.2%	70.8%	68.7%
Gross margin	35.0%	35.0%	35.0%	35.0%	35.0%
Units	0	1,185	12,835	86,894	167,244
Average price per unit	400	400	400	400	400
Matrices (new required every two years)	0.00	0.00	0.00	0.12	1.28
(% of sales)	0.0%	0.0%	0.0%	0.2%	1.3%
Gross margin	48.0%	48.0%	48.0%	48.0%	48.0%
Units	0	0	0	1,185	12,835
Average price per unit	100	100	100	100	100
Subscriptions (70% renewed every two years)	0.00	0.18	1.93	13.16	26.43
(% of sales)	0.0%	27.3%	26.7%	26.8%	27.1%
Gross margin	100.0%	100.0%	100.0%	100.0%	100.0%
Subscribers	0	1,185	12,835	87,724	176,229
Average price per subscription	150	150	150	150	150
Medical consulting	0.00	0.00	0.15	1.06	2.82
(% of sales)	0.0%	0.0%	2.0%	2.2%	2.9%
Gross margin	50.0%	50.0%	50.0%	50.0%	50.0%
Subscribers (30% of all)	0	0	4,206	30,274	80,447
Average price per consulting	35	35	35	35	35
Total revenues	0.00	0.65	7.21	49.09	97.43
(change y-o-y)	n.a	n.a	1006.0%	581.3%	98.5%

Source: East Value Research GmbH

## Pessimistic scenario:

Pessmistic scenario	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Poland								
Market penetration rate	0.03%	0.15%	0.52%	1.40%	2.42%	3.50%	4.85%	6.40%
Number of new customers	1,185	4,739	14,611	<i>34,749</i>	40,278	42,647	53,309	61,206
Total number of customers	1,185	5,923	20,534	<i>55,283</i>	95,561	138,208	191,516	252,723
Germany								
Market penetration rate	0.00%	0.03%	0.30%	0.90%	1.60%	2.40%	3.30%	4.56%
Number of new customers	0	2,347	21,120	46,934	54,757	62,579	70,401	98,562
Total number of customers	0	2,347	23,467	70,401	125,158	187,737	258,138	356,700
United Kingdom		•		•			•	•
Market penetration rate	0.00%	0.03%	0.30%	0.90%	1.60%	2.40%	3.30%	4.58%
Number of new customers	0	1,800	16,202	36,004	42,005	48,006	54,007	76,809
Total number of customers	0	1,800	18,002	54,007	96,012	144,017	198,024	274,833
Rest of Europe		•		•			•	•
Market penetration rate	0.00%	0.00%	0.03%	0.10%	0.25%	0.52%	0.89%	1.46%
Number of new customers	0	0	9,093	21,219	45,468	81,843	112,156	171,416
Total number of customers	0	0	9,094	30,312	75,781	157,624	269,780	441,196
Total new users	1,185	8,886	61,026	138,907	182,508	235,075	289,872	407,993
Total users	1,185	10,070	71,097	210,003	392,511	627,586	917,458	1,325,451

Pessimistic scenario	2015E	2016E	2017E	2018E	2019E
BRASTER Tester	0.00	0.47	3.55	24.41	55.56
(% of sales)	0.0%	72.7%	71.2%	70.6%	69.1%
Gross margin	35.0%	35.0%	35.0%	35.0%	35.0%
Units	0	1,185	8,886	61,026	138,907
Average price per unit	400	400	400	400	400
Matrices (new required every two years)	0.00	0.00	0.00	0.12	0.89
(% of sales)	0.0%	0.0%	0.0%	0.3%	1.1%
Gross margin	48.0%	48.0%	48.0%	48.0%	48.0%
Units	0	0	0	1,185	8,886
Average price per unit	100	100	100	100	100
Subscriptions (70% renewed every two years)	0.00	0.18	1.33	9.28	21.77
(% of sales)	0.0%	27.3%	26.7%	26.9%	27.1%
Gross margin	100.0%	100.0%	100.0%	100.0%	100.0%
Subscribers	0	1,185	8,886	61,856	145,127
Average price per subscription	150	150	150	150	150
Medical consulting	0.00	0.00	0.11	0.75	2.21
(% of sales)	0.0%	0.0%	2.1%	2.2%	2.7%
Gross margin	50.0%	50.0%	50.0%	50.0%	50.0%
Subscribers (30% of all)	0	0	3,021	21,329	63,001
Average price per consulting	35	35	35	35	35
Total revenues	0.00	0.65	4.99	34.55	80.43
(change y-o-y)	n.a	n.a	666.3%	592.1%	132.8%

Source: East Value Research GmbH

### **CAPEX and Working capital**

In our model, we have assumed gross CAPEX of PLN 17.8m in 2015E and PLN 19.4m in 2016E (will be financed partly by an EU subsidy of PLN 6.1m), which in our opinion will increase both fixed assets and intangibles (production plant for matrices, data center, software). We have forecast that working capital will grow by PLN 8.2m in 2016E, the year when production is expected to start, and will amount to >13% of total sales in the long run (cash conversion cycle of 60 days).

# **Business description**

BRASTER S.A., which is based in Ozarow Mazowiecki, was founded by a group of Polish scientists, who developed a unique method called Continuous Liquid Crystal Film (CLCF) for using liquid crystals in early breast cancer diagnostics. The company uses a mixture of liquid-crystal compounds and a liquid-crystal emulsion for the production of matrices. Its thermographic device BRASTER Tester for non-invasive medical imaging of breasts is supposed to be introduced on the market in H2/16E after completion of the necessary investments in production, distribution and IT. Currently, BRASTER has c. 15 employees.

## **Company history**

- 2008: Foundation of BRASTER Sp. z.o.o. The company receives a subsidy from Polish PARP for research and development.
- 2009: Industrial research relating to liquid-crystal technology at the Technical Academy of the Polish Army. Initiation of clinical studies of the BRASTER Tester device.
- 2010: BRASTER files two patent applications at the international agency PCT. Registration of the Tester as a Class I medical product.
- 2011: Registration in the European EUDAMED database, which allows BRASTER to introduce its device in all EU markets. Creation of joint-stock company BRASTER S.A.
- 2012: IPO in the NewConnect segment of the Warsaw Stock Exchange, which was accompanied by a capital increase of PLN 10.5m (1.05m new shares at PLN 10 per share).
- 2014: Capital increase of PLN 6.5m (500k new shares at PLN 13 per share).
  - Completion of the THERMACRAC clinical study at the University of Cracow.
  - Changes within the management team and presentation of new strategy, which focuses on marketing the BRASTER Tester as a telehealth device to individual customers.
  - Initiation of research on an algorithm for automatic interpretation of medical results together with the Warsaw University of Technology.
- 2015: Registration of patents in c. 20 countries worldwide and applications in >10 others.
  - Implementation of the new strategy and extension of staff e.g. with experts in telemedicine.

#### **BRASTER Tester**

The BRASTER Tester device was developed in order to commercialize the research of five Polish scientists on liquid crystals. It uses thermographic matrices with foil that is covered with a liquid-crystal mixture in early diagnosis of breast cancer. The uniqueness of the BRASTER Tester stems from the fact that it registers higher temperature of the breast, which results from changes that might lead to tumors.

A clinical study in 2013 and 2014, which was conducted by scientists of the University in Cracow on a group of 736 women with breast cancer, confirmed that the BRASTER Tester is an effective, easy-to-use, non-invasive and secure device due to a lack of radiation and negative skin effects. Moreover, it found out that if complemented with traditional devices such as mammograms and USGs, the BRASTER Tester can significantly increase the effectiveness when it comes to detecting symptoms of breast cancer at a very early stage. It has to be noted that in contrast to traditional diagnostic devices the BRASTER Tester can be used by women of all age (not just 50-69 year olds) and much more often as it does not emit any harmful radiation.

### New product and distribution strategy

Until Q4/14, BRASTER had planned to sell its Tester device to doctors for a one-off fee. The new strategy, which was presented to investors in December last year, foresees that the company will target women directly, which makes sense in our view as they are a much larger customer group. More importantly, the company plans to put a strong focus on related services, for which it will receive cash on a regular basis e.g. analysis of thermographic pictures, which the BRASTER Tester will transmit to the company's own data center as well as medical consulting. We believe that in the future the resulting amount of data could be used to generate additional revenue streams e.g. through sales of "big data" to insurance companies, which might want to use it for statistical calculations.

Upon completion of the necessary investments (production plant for matrices, software for data analysis, mobile application, data center, marketing activities, additional clinical studies), which is scheduled for H2/16E, BRASTER will start distributing its product first in Poland and from 2017E in other EU countries. Later, it also plans to expand to other continents incl. North America and Asia.

We believe that the company will conduct the distribution itself e.g. through an own sales team and online shop as well as external sales channels such as pharmacies, drug stores or providers of medical care. As its Tester device is registered in the EUDAMED database, BRASTER is already allowed to distribute it in all EU member states. However, for distribution e.g. in the largest healthcare market worldwide the US it will first have to apply for a registration with the Food and Drug Administration (FDA), which in our view could take 12-24 months and cost USD 1.5m-2m.

### Management

Marcin Halicki (CEO): Mr Halicki has been BRASTERS's CEO since October 2014. Previously, he worked at the leading Polish private operator of medical facilities Luxmed, where he was the CEO between 2003 and 2008. At Luxmed, he restructured the business model, conducted several M&A transactions and successfully raised capital in order to finance further growth. From 1999 to 2001, Mr Halicki was Director Emerging Europe Private Equity Funds at Templeton Direct Advisors and between 1993 to 1999 Director of the Office for Capital Investments at one of the largest Polish banks Bank Handlowy. Mr Halicki graduated in foreign trade from Corvinus University in Budapest and also owns an MBA degree from Hofstra University in New York.

*Dr. Henryk Jaremek (Vice President of the Board):* Dr. Jaremek is responsible for BRASTER's technology and the production of the BRASTER Tester device. He is co-author of all of the company's patents and know-how. Dr. Jaremek, who has worked in research for many years, graduated in Chemistry from the Technical Academy of the Polish Army in 1975 and received his PhD in Material Science in 1989. He is author of many research papers, patents and implementations relating to advanced chemical technologies e.g. medical and cosmetic tests using thermotrophic crystals.

Konrad Kowalczuk (CFO): Mr Kowalczuk has been BRASTER's CFO since December 2014. He has been with the company since 2011, first as member of the Supervisory Board and later also as Director and Finance Manager. Previously, he was among others Investment Manager at Raiffeisen Private Equity Management, Investment Director at the European Centre for Entrepreneurship and Deputy Chairman and Financial Director of Arcus S.A., an IT company listed on the Warsaw Stock Exchange. Mr Kowalczuk has a Master's degree from the Warsaw School of Economics.

### **Market environment**

#### The breast cancer market and detection methods

In its latest report from 2011, BCC Research estimated the global market for breast cancer diagnostics and drug technologies at USD 21.2bn. According to GLOBOCAN, 1.7m women worldwide were diagnosed with breast cancer in 2012, a figure, which is expected to grow to 1.8m in 2015E and 2m by 2020E. With a share of 25.2%, it was the most-often diagnosed form of cancer in case of women. The highest number of new breast cancer cases was reported in rich and well-developed countries such as Germany (71.6k) and UK (52.4k). In Poland, there were 16.5k new breast cancer cases in 2012.

While the probability of death for breast cancer patients is estimated at >30% worldwide, the chance of survival will increase to almost 100% if the malignancy is detected at an early stage. This has been confirmed among others by the American Society of Cancer.

Breastcancer.org divides the types of tests for breast cancer in three groups: Screening (given to patients, who appear to be healthy), Diagnostic (given to women, who are suspected of having breast cancer) and Monitoring (tests used to monitor how well therapies are working). Together with mammograms, breast USGs, MRIs and clinical or breast self-exams, thermography belongs to the group of Screening tests.

### Thermography (infrared and contact)

Infrared thermography is a way to measure and map the heat on the surface of the breast using a special camera. It assumes that the temperature rises in areas with increased blood flow/metabolism, which could indicate a tumor. In contrast to other thermographic devices on the market, BRASTER's product uses matrices instead of a camera.

According to the American Cancer Society, infrared thermography itself delivers poor results when it comes to detecting breast cancers (3 of 4 known breast cancers are not found). However, as the THERMACRAC study shows, which BRASTER commissioned at the University of Cracow, in combination with mammograms or USGs the success rate can increase to 96%.

### Mammography

A mammogram is the most common screening test for breast cancer. It is an x-ray of the breast and may find tumors that are too small to feel. Mammograms are less likely to find breast tumors in women younger than 50 years than in older women. The reason may be that younger women have denser breast tissue that like tumors appears white on a mammogram.

### Breast ultrasound (USG)

Ultrasound is a painless, radiation-free imaging method using sound waves to look inside a part of the body, whereby a small, microphone-like instrument called a transducer is placed on the skin (which is often first lubricated with ultrasound gel). The transducer emits sound waves and picks up the echoes that bounce off body tissues, which are subsequently converted into a black and white image on a computer screen.

Breast ultrasound is helpful when it comes to distinguishing between cysts (fluid-filled sacs) and solid masses that are found during a screening, mammogram or physical exam. Also, it is often used to guide a needle to biopsy breast lesions and enlarged lymph nodes or to draw fluid from cysts.

According to Cancer.org, the use of USGs instead of mammograms is not recommended. However, it is sometimes used additionally e.g. in case of women with dense breasts (for whom mammography may not be as helpful).

### Clinical or breast self-exam (CBE)

During a clinical or breast self-exam the doctor or woman will feel the breast and under the arms for anything unusual. However, according to Cancer.org it is not very effective when it comes to finding breast cancer. The BRASTER Tester device can be a very good alternative to self-exams.

MRI (magnetic resonance imaging) in women with a high risk of breast cancer

MRI is a radiation-free procedure that uses a magnet, radio waves, and a computer to make detailed pictures of areas inside the body. It is used as a screening test for women, who have one or more of the following:

- → A family history (first degree relative) with breast cancer
- → Certain genetic syndromes such as Li-Fraumeni

MRIs find breast cancer more often than mammograms, but often deliver abnormal results, even when the patient is healthy. Like mammograms, they can be very expensive.

### The market for telehealth

According to BCC Research, the global market for telehealth technology is forecast to increase to USD 43.4bn (CAGR 14-19E = 17.7%). Thereof, home-based telehealth technology is expected to grow at a CAGR of 24% and reach 55% of the total market value (vs. 40% in 2013).

For Europe, Research and Markets forecasts the telemedicine market to almost triple by 2019E compared to 2011: from USD 4.8bn to USD 12.6bn. Telemedicine services are used in several areas of medicine e.g. diabetes control, primary health care, psychiatry, genetics, radiology, pathology and cardiology. The major market drivers are an aging population, increasing cost of healthcare and rising prevalence of chronic diseases.

# **Profit and loss statement**

in PLNm	2014	2015E	2016E	2017E	2018E	2019E
Revenues	0.00	0.00	0.65	6.10	40.66	86.77
Cost of goods sold	-2.27	-11.00	-0.31	-2.89	-19.19	-40.60
Gross profit	-2.27	-11.00	0.34	3.21	21.47	46.17
Other operating income	0.21	4.10	2.10	0.20	0.21	0.22
Personnel expenses	-1.12	-4.80	-5.20	-5.50	-6.40	-8.68
Marketing expenses	0.00	-4.40	-4.80	-5.00	-6.51	-10.41
Other operating expenses	-0.10	-2.00	-4.00	-1.02	-1.32	-1.62
EBITDA	-3.28	-18.10	-11.56	-8.11	7.45	25.68
Depreciation & amortisation	-0.31	-0.40	-3.60	-3.80	-3.88	-3.95
Operating income	-3.59	-18.50	-15.16	-11.91	3.58	21.73
Net financial result	0.11	0.14	0.16	0.19	0.21	0.24
ЕВТ	-3.48	-18.36	-15.00	-11.72	3.79	21.97
Income taxes	-0.02	0.00	0.00	0.00	0.00	0.00
Minorities	0.00	0.00	0.00	0.00	0.00	0.00
Net income / loss	-3.50	-18.36	-15.00	-11.72	3.79	21.97
EPS	-1.16	-4.03	-2.65	-2.07	0.67	3.89
DPS	0.00	0.00	0.00	0.00	0.00	0.00
Share in total sales						
Revenues	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Cost of goods sold	n.a	n.a	-47.27 %	-47.33 %	-47.20 %	-46.79 %
Gross profit	n.a	n.a	52.73 %	52.67 %	52.80 %	53.21 %
Other operating income	n.a	n.a	322.31 %	3.28 %	0.52 %	0.25 %
Personnel expenses	n.a	n.a	-798.10 %	-90.17 %	-15.74 %	-10.00 %
Marketing expenses	n.a	n.a	-736.70 %	-81.97 %	-16.00 %	-12.00 %
Other operating expenses	n.a	n.a	-613.92 %	-16.72 %	-3.25 %	-1.87 %
EBITDA	n.a	n.a	-1773.68 %	-132.92 %	18.33 %	29.60 %
Depreciation & amortisation	n.a	n.a	-552.53 %	-62.30 %	-9.53 %	-4.56 %
Operating income	n.a	n.a	-2326.21 %	-195.22 %	8.80 %	25.04 %
Net financial result	n.a	n.a	24.71 %	3.05 %	0.52 %	0.27 %
ЕВТ	n.a	n.a	-2301.51 %	-192.17 %	9.32 %	25.32 %
Income taxes	n.a	n.a	0.00 %	0.00 %	0.00 %	0.00 %
Minorities	n.a	n.a	0.00 %	0.00 %	0.00 %	0.00 %
Net income / loss	n.a	n.a	-2301.51 %	-192.17 %	9.32 %	25.32 %

 $<sup>\</sup>ensuremath{^{*}}$  We believe that due to losses in the past BRA will not pay any income taxes until 2022

# **Balance Sheet**

in PLNm	2014	2015E	2016E	2017E	2018E	2019E
Cash and equivalents	7.98	13.21	0.19	0.02	0.09	7.71
Financial assets	0.00	0.00	0.00	0.00	0.00	0.00
Inventories	0.00	1.80	8.50	7.91	21.03	22.25
Trade accounts and notes receivables	0.00	2.00	6.80	16.71	44.56	47.55
Other current assets	2.19	4.37	4.59	4.82	5.06	5.31
Current assets, total	10.17	21.38	20.08	29.46	70.74	82.82
Property, plant and equipment	1.54	17.54	32.54	35.54	36.54	37.54
Other intangible assets	1.60	3.00	3.80	4.80	4.85	4.90
Goodwill	0.00	0.00	0.00	0.00	0.00	0.00
Other assets	0.06	0.06	0.06	0.06	0.07	0.07
Deferred tax assets	0.01	0.00	0.00	0.00	0.00	0.00
Non-current assets, total	3.21	20.60	36.40	40.41	41.46	42.51
Total assets	13.38	41.98	56.48	69.87	112.20	125.32
Trade payables	0.21	5.00	7.00	21.35	60.47	56.73
Other short-term liabilities	4.69	6.00	7.50	8.25	9.08	9.98
Short-term financial debt	0.00	0.00	0.00	0.00	0.00	0.00
Pension provisions	0.00	0.00	0.00	0.00	0.00	0.00
Provisions	0.02	0.00	0.00	0.00	0.00	0.00
Current liabilities, total	4.92	11.00	14.50	29.60	69.55	66.71
Long-term financial debt	0.00	0.00	26.00	36.00	34.60	28.60
Other long-term liabilities	0.00	0.00	0.00	0.00	0.00	0.00
Deferred tax liabilities	0.00	0.00	0.00	0.00	0.00	0.00
Long-term liabilities, total	0.00	0.00	26.00	36.00	34.60	28.60
Total liabilities	4.92	11.00	40.50	65.60	104.15	95.31
Shareholders equity, total	8.45	30.98	15.98	4.26	8.05	30.02
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00
Total liabilities and equity	13.38	41.98	56.48	69.87	112.20	125.32

# **Cash Flow Statement**

in PLNm	2014	2015E	2016E	2017E	2018E	2019E
Net income / loss	-3.50	-18.36	-15.00	-11.72	3.79	21.97
Depreciation & amortisation	0.31	0.40	3.60	3.80	3.88	3.95
Change of working capital	3.24	0.11	-8.22	5.56	-1.27	-7.29
Others	-0.09	-0.01	0.00	0.00	0.00	0.00
Net operating cash flow	-0.05	-17.86	-19.61	-2.37	6.39	18.63
Cash flow from investing	-0.88	-17.80	-19.40	-7.80	-4.93	-5.00
Free cash flow	-0.93	-35.66	-39.01	-10.17	1.46	13.63
Cash flow from financing	6.04	40.89	26.00	10.00	-1.40	-6.00
Change of cash	5.11	5.23	-13.02	-0.17	0.06	7.63
Cash at the beginning of the period	2.87	7.98	13.21	0.19	0.02	0.09
Cash at the end of the period	7.98	13.21	0.19	0.02	0.09	7.71

# **Financial ratios**

Fiscal year	2014	2015E	2016E	2017E	2018E	2019E	2020E	2021E
Profitability and balance sheet qu	ality							
Gross margin	n.a	n.a	52.73%	52.67%	52.80%	53.21%	55.06%	56.34%
EBITDA margin	n.a	n.a	-1773.68%	-132.92%	18.33%	29.60%	33.59%	36.74%
EBIT margin	n.a	n.a	-2326.21%	-195.22%	8.80%	25.04%	30.56%	34.46%
Net margin	n.a	n.a	-2301.51%	-192.17%	9.32%	25.32%	30.75%	34.62%
Return on equity (ROE)	-48.76%	-93.14%	-63.86%	-115.79%	61.53%	115.41%	81.04%	61.06%
Return on assets (ROA)	-27.03%	-44.07%	-26.83%	-17.04%	3.19%	17.34%	30.71%	32.67%
Return on capital employed (ROCE)	-42.77%	-59.72%	-36.10%	-29.57%	8.39%	37.07%	43.46%	41.41%
Economic Value Added (in PLN)	-5.06	-23.78	-22.31	-18.77	-3.69	11.74	24.69	36.50
Net debt (in PLNm)	-7.98	-13.21	25.81	35.98	34.51	20.89	0.13	-55.53
Net gearing	-94.37%	-42.63%	161.47%	844.05%	428.72%	69.58%	0.19%	-41.68%
Equity ratio	63.20%	73.80%	28.30%	6.10%	7.18%	23.95%	53.59%	70.16%
Current ratio	2.07	1.94	1.38	1.00	1.02	1.24	2.29	3.63
Quick ratio	1.62	1.38	0.48	0.57	0.64	0.83	1.66	2.97
Net interest cover	32.36	136.05	94.15	64.03	-16.95	-92.09	-155.72	-216.96
Net debt/EBITDA	2.43	0.73	-2.23	-4.44	4.63	0.81	0.00	-0.84
Tangible BVPS	2.80	6.80	2.83	0.75	1.42	5.31	12.55	23.57
CAPEX/Sales	n.a	n.a	2977.51%	127.88%	12.11%	5.77%	3.82%	2.87%
Working capital/Sales	n.a	n.a	827.09%	-2.73%	2.72%	9.67%	20.67%	18.39%
Cash Conversion Cycle (in days)	n.a	n.a	5587	-700	-350	-110	60	60
Trading multiples								
EV/Sales	n.a	n.a	157.58	16.83	2.53	1.18	0.77	0.57
EV/EBITDA	-31.28	-5.67	-8.88	-12.66	13.78	4.00	2.30	1.55
EV/EBIT	-28.59	-5.55	-6.77	-8.62	28.70	4.72	2.53	1.65
P/Tangible BVPS	7.31	3.01	7.25	27.19	14.39	3.86	1.63	0.87
P/E	-17.63	-5.08	-7.73	-9.89	30.59	5.28	2.83	1.86
P/FCF	-124.62	-3.25	-2.97	-11.40	79.16	8.50	5.58	2.08

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