PHARMENA S.A.



Fair value: PLN 28.80 Update Rating: n.a.

PHARMENA S.A. (PHR)'s Q1 results were significantly weaker y-o-y due to a promotional campaign at pharmacies in Q1/15, which was not repeated. Sales amounted to PLN 2.5m (-38.6% y-o-y). EBITDA declined from PLN -0.5m to PLN -1.2m, while net income reached PLN -1.4m vs. PLN -0.7m in Q1/15. Nevertheless, free cash flow equaled PLN 1.2m (Q1/15: PLN 465k).

In February 2016, PHR informed the public that one country denied the approval of its 1-MNA dietary supplement by EU authorities and three others sent remarks. Even after PHR had sent additional explanations, the denial was not withdrawn, which is why the company will now ask the Food Standards Agency (FSA) to release a final evaluation. Because of that, we now believe that the 1-MNA dietary supplement will only generate sales from 2017E (previously: 2016).

On 20 July 2016, PHR published the results of Phase II of clinical research relating to its 1-MNA drug TRIA-662. The study proved that the drug is safe and well-tolerated. However, it only lowers the level of triglycerides by 9% and does not show any effect on bad cholesterol. But on the other hand, it has a strong, significant impact on hs-CRP and TNF-alpha levels in the blood, which are important biomarkers for detecting risk of cardiovascular and rheumatic diseases. PHR has already filed for patent protection of these additional applications and hopes that they will increase the attractiveness of its 1-MNA drug for pharma companies. We estimate the markets for respective drugs at c. USD 11bn and c. USD 50bn worldwide, with past licensing deals ranging between USD 840m and USD 1bn.

Our updated SOTP model, which accounts for the latest news flow, derives a 12-months fair value for the stock of PLN 28.80 vs. PLN 32 before. Although its results in 2016 will be lower than we had previously forecast, the dermocosmetics & dietary supplement segment will benefit from the introduction of 50 new products until 2017E and distribution agreements e.g. in the Middle East and South Korea. While results of the Phase II study relating to the ability of the 1-MNA drug to reduce triglycerides and bad cholesterol somehow disappointed, we believe that the significant impact on hs-CRP and TNF-alpha biomarkers provides PHR with additional opportunities to sell the drug, which we expect in 2017E (earlier: 2016).

in PLNm	2010	2011	2012	2013	2014	2015
Net sales	7.70	7.40	9.13	14.14	14.13	17.47
EBITDA	0.05	-2.29	-2.87	-1.19	-3.60	-2.63
EBIT	-0.07	-2.41	-3.01	-1.34	-3.79	-2.84
Net income	0.12	-2.90	-4.10	-2.84	-4.09	-3.62
EPS	0.02	-0.46	-0.58	-0.32	-0.46	-0.41
DPS	0.01	0.05	0.10	0.11	0.11	0.12
Dividend yield	0.05%	0.27%	0.54%	0.59%	0.59%	0.65%
RoE	0.77%	-23.74%	-46.93%	-21.04%	-26.25%	-33.24%
Net gearing	-19.98%	-33.68%	-34.12%	-60.68%	-30.37%	17.18%
EV/Sales	21.07x	21.95x	17.78x	11.48x	11.49x	9.29x
EV/EBITDA	3063.39x	-70.86x	neg	neg	neg	neg
P/E	924.50x	-40.20x	neg	neg	neg	neg

Company profile

PHARMENA is a leading Polish cosmetics and biotech company. Its products contain the 1-MNA substance, for which PHR has secured patent protection on the most important global markets until 2025/26.

Website	www.pharmena.com.pl
Sector	Biotechnology
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Country	Poland
ISIN	PLPHRMN00011
Reuters	PHR.WA
Bloomberg	PHR PW

Share information

Last price	18.49
Number of shares ((m) 8.80
Market cap. (PLNm)) 162.62
Market cap. (EURm) 37.22
52-weeks range	PLN 25.50 / PLN 16.22
Average volume	3,312

Performance

4-weeks	-1.91%
13-weeks	-17.96%
26-weeks	-23.63%
52-weeks	-9.95%
YTD	-26.53%

Shareholder structure

Pelion S.A.	50.01%
Jerzy Gebicki	7.69%
KI Polskiej Farmacji Sp. z o.o.	6.91%
Konrad Palka	5.43%
Max Welt Holdings Ltd.	5.29%
Robert Bozyk	5.01%
Free float	19.66%

Financial calendar

Q2/16 report	August 12, 2016
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Analyst

Adrian Kowollik a.kowollik@eastvalueresearch.com

Recent results

Revenues and Profitability

In Q1/16, PHARMENA generated consolidated revenues of PLN 2.5m compared to PLN 4m last year. The reason for the 38.6% decline y-o-y were lower sales of the Dermena product line following a promotional campaign at pharmacies in Q1/15, which was not repeated this year. However, in the first three months of 2016 the company introduced a double-digit number of new Skin Care products on the market and signed contracts with distribution partners in the Middle East and South Korea, which should have a positive impact on results later in the year.

Consolidated results of PHARMENA

in PLNm	Q1/16	Q1/15	change (%)
Net sales	2.48	4.03	-38.6%
EBITDA	-1.21	-0.52	131.7%
EBITDA margin	-48.7%	-12.9%	
EBIT	-1.27	-0.57	123.1%
EBIT margin	-51.2%	-14.1%	
Net income	-1.37	-0.69	98.5%
Net margin	<i>-55.2%</i>	-17.1%	

Source: Company information, East Value Research GmbH

Results of PHR's dermocosmetics segment

in PLNm	Q1/16	Q1/15	change (%)
Net sales	2.71	4.27	-36.5%
EBITDA	0.31	1.18	-74.1%
EBITDA margin	11.3%	27.7%	
EBIT	0.25	1.14	-78.2%
EBIT margin	9.2%	26.6%	

Source: Company information, East Value Research GmbH

Both consolidated EBIT (PLN -1.3m vs. PLN -0.6m) and net income (PLN -1.4m vs. PLN -0.7m) deteriorated compared to Q1/15. The reason was a significant increase of the share of distribution (52.7% vs. 39.2% in Q1/15) and administration expenses (69.9% vs. 46.8%), which include among others costs relating to the 1-MNA drug and dietary supplement.

Balance sheet and Cash flow

At the end of March 2016, PHARMENA had consolidated equity of PLN 7.3m, which corresponded to a share of 56.5% in the balance sheet total. Property, plant and equipment equaled PLN 186k (31/03/2015: PLN 151k), while intangible assets amounted to PLN 804k (PLN 734k). We estimate the working capital at PLN 5.8m (PLN 5.8m). As of 31 March 2016, PHARMENA had interest-bearing debt of PLN 2.5m (PLN 449k).

Between January and March 2016, PHARMENA generated an operating cash flow of PLN 1.3m compared to PLN 523k in Q1/15. The main reason for the improvement was a cash inflow from working capital of PLN 2.6m. While cash flow from investing was PLN -62k (Q1/15: PLN -58k), cash flow from financing amounted to PLN -1.7m (PLN -625k) as the company repaid debt. In the first three months of 2016, PHARMENA's consolidated cash position decreased by PLN 474k to PLN 2.4m.

Financial forecasts

Revenues and Profitability

Since the beginning of 2016, PHARMENA has published two very important news, which both impact our valuation model. In the first one from 9 February 2016 the company announced that according to the European Commission one EU member state denied the approval of market introduction of its 1-MNA dietary supplement, while three had some remarks. Unfortunately, the denial was not withdrawn even after PHR had sent its explanations, which is why it asked the UK-based Food Standards Agency to release a final evaluation. Because of that, the dietary supplement will likely be introduced on the market only in 2017E instead of 2016.

The second important news from 20 July 2016 concerned the final results of Phase II of clinical research relating to the 1-MNA drug TRIA-662, whose objective was to show how much the drug lowers the level of triglycerides in case of patients, who have a higher level than allowed (200-500 md/dl). While the study confirmed that the drug is secure and does not cause any side effects, it concluded that the 1-MNA drug only lowers the level of triglycerides by 9%. Also, the drug does not reduce the level of bad (LDL) cholesterol with statistical significance.

Overview over Phase II results of TRIA-662

Element/Biomarker	Reduction (vs. Placebo)	Statistical significance
Triglycerides	9% (7%)	Yes
Bad cholesterol (LDL)	n.a	n.a
hsCRP	16% (17%)	Yes
TNF-alpha	9% (14%)	Yes
TNF-alpha (Q3)*	20% (29%)	Yes

^{*} Patients with highest level of TNF-alpha

Source: Company information, East Value Research GmbH

However, an additional finding of the study was that TRIA-662 has anti-inflammatory characteristics and that it reduces the level of the biomarkers hs-CRP and TNF-alpha by 16% and 9% respectively with statistical significance. Compared to placebo, the reduction was even higher and amounted to 17% and 14% respectively. The lower the level of hs-CRP (High-sensitivity C-reactive Protein) in the blood, the lower the probability of cardiovascular diseases such as heart attacks or strokes. So far, only statins, whose market we estimate at USD 11bn worldwide, have been used for lowering hs-CRP, however they have serious side effects such as muscle pain and weakness and all respective drugs are now without patent protection. The conclusion of the Phase II study is that TRIA-662 can be an alternative for patients with higher level of hs-CRP but normal level of bad (LDL) cholesterol both alone and in combination with statins.

The other biomarker TNF-alpha (Tumor Necrosis Factor) influences autoimmune and immune-mediated disorders such as rheumatoid arthritis, ankylosing spondylitis, inflammatory bowel disease, psoriasis, hidradenitis suppurativa and refractory asthma. The lower its level, the lower the probability that one of these illnesses occurs. The table below shows the most important TNF-alpha inhibitors, most of which are however available as injectables that are associated with a relatively high probability of injection site reactions and infections. According to PMLive, three of them (Humira, Remicade and Enbrel) generated sales of c. USD 31bn in 2014. EvaluatePharma estimates the total global market for TNF-alpha inhibitors to grow from USD 49bn in 2014 to USD 53bn in 2020E (CAGR of 1.3%).

Overview over TNF-alpha inhibitors

Drug	Manufacturer	Dosage form	Comment
Remicade	Janssen Biotech (formely Centocor)	Vial	Original approval in 1998; Biosimilar Inflectra was approved by FDA in April 2016
Enbrel	Immunex (now part of Amgen)	Vial & Syringe	Original approval in 1998
Humira	AbbVie	Vial & Syringe	Original approval in 2002, world's best- selling drug in 2014 with USD 13bn
Cimzia	UCB	Injectable	Original approval in 2008
Simponi	Janssen Biotech (formely Centocor)	Injectable	Original approval in 2009
Actemra/RoActemra	Genentech (now part of Roche)	Injectable	Original approval in 2010
Xeljanz	Pfizer	Pill	Regulatory approvals at the end of 2014
Baricitinib	Elli Lily/Incyte	Pill	Filed for regulatory approvals in North America, Europe and Japan in 2016

Source: Fiercebiotech.com, pmlive.com, drugs.com, FDA.gov, East Value Research GmbH

Due to results relating to the two biomarkers PHARMENA has already prepared additional clinical studies (Phase IIb, dose escalation), which will be presented to international pharma companies in the coming months. The company has also filed for new patents, which would increase the patent protection of its 1-MNA drug by additional 20 years.

Below are our new assumptions for PHARMENA's segments "Hair Care", "Skin Care" and "Dietary supplement 1-MNA":

Hair Care: For the Hair Care segment, which also includes sales of the dietary supplement Dermena Complex against hair loss (based on vitamins; does not contain 1-MNA), we expect sales of 456.9k in full-year 2016 at an EBITDA margin of 12% (previously: 873k at EBITDA margin of 26%). The reason, why we have lowered our forecasts, are the weak results in Q1/16. While the average sale price should remain stable at PLN 22 and long-term EBITDA margin should reach >25%, we now expect a lower revenue CAGR of 9.7% (previously: CAGR 15-23E of 12.9%) by 2024E. We still believe that while sales in Poland will be positively affected by strong brand recognition of PHR's cosmetics, PHR will strongly increase its exports due to new distribution agreements in the Middle East, South Korea, Western Europe and Canada.

Skin Care: As results in Q1/16 were weak, we now forecast sales of 49.4k packages and EBITDA margin of 12% in full-year 2016 (previously: 97.3k packages and EBITDA margin of 26%). In our view, the average sales price will reach PLN 22 this year and in the future. While we still expect that EBITDA margin of the segment will equal >25% in the future, our assumption for the long-term sales CAGR now equals 10.3% vs. 13.5% before following lower estimates for 2016. We maintain our view that the main growth drivers for the Skin Care segment will be the introduction of 50 new products and 2016 and 2017E as well as increasing export sales.

Dietary supplement 1-MNA: As one of the EU member states is still against the market introduction of PHARMENA's dietary supplement and therefore the company plans to ask the UK-based Food Standards Agency to release the final evaluation of the product, we now believe first sales will be generated in 2017E (150k packages at PLN 35 on average). As previously, we believe that in the first year EBITDA margin will be significantly negative due to costs relating to launch of production. However, due to a focus on both Poland and international markets in the long run the number of sold packages should grow at a CAGR of 25.2% and constant prices, while EBITDA margins should reach >25%.

in PLNm	2016E	2017E	2018E	2019E
Hair Care	10.05	11.86	13.29	14.88
(% of net sales)	90.2%	64.4%	<i>54.2%</i>	51.8%
Number of packages sold per year	456,940	539,189	603,892	676,359
Average price in PLN	22	22	22	22
EBITDA margin	12.0%	26.0%	25.9%	25.7%
Skin Care	1.09	1.30	1.50	1.68
(% of net sales)	9.8%	7.1%	6.1%	5.9%
Number of packages sold per year	49,400	59,280	68,172	76,353
Average price in PLN	22	22	22	22
EBITDA margin	12.0%	26.0%	25.9%	25.7%
Dietary supplement 1-MNA	0.00	5.25	9.71	12.14
(% of net sales)	0.0%	28.5%	39.6%	42.3%
Number of packages sold per year	0	150,000	277,500	346,875
Average price in PLN	35	35	35	35
EBITDA margin	0.0%	-25.0%	14.5%	19.8%
Total net sales	11.14	18.42	24.50	28.70
(change y-o-y)	-36.2%	65.3%	33.0%	17.2%

Source: East Value Research GmbH

in PLNm	Q1/14	Q2/14	Q3/14	Q4/14	2014	Q1/15	Q2/15	Q3/15	Q4/15	2015	Q1/16	Q2/16E
Net sales	3.96	2.58	3.47	4.12	14.13	4.03	3.81	4.72	4.92	17.47	2.48	3.80
y-o-y change	26.4%	-32.5%	-8.5%	21.6%	-0.1%	1.7%	47.6%	35.8%	19.5%	23.7%	-38.6%	-0.2%
EBITDA	-1.33	-0.80	-0.35	-1.12	<i>-3.60</i>	-0.52	-0.42	0.20	-1.89	-2.63	-1.21	-0.50
EBITDA margin	-33.6%	-30.9%	-10.1%	-27.3%	-25.5%	-12.9%	-10.9%	4.2%	-38.4%	-15.0%	-48.7%	-13.2%
EBIT	-1.37	-0.84	-0.40	-1.17	<i>-3.79</i>	-0.57	-0.46	0.14	-1.95	-2.84	-1.27	-0.55
EBIT margin	-34.6%	-32.7%	-11.5%	-28.4%	-26.8%	-14.1%	-12.1%	2.9%	-39.6%	-16.3%	-51.2%	-14.5%
Net income	-1.59	-1.05	-0.26	-1.19	-4.09	-0.69	-0.72	-0.09	-2.12	-3.62	-1.37	-0.65
Net margin	-40.1%	-40.6%	-7.5%	-29.0%	-28.9%	-17.1%	-19.0%	-1.9%	-43.0%	-20.7%	-55.2%	-17.1%

Source: Company information (consolidated figures), East Value Research GmbH

CAPEX and Working capital

We have left our assumptions relating to CAPEX and working capital of the dermocosmetics and dietary supplement business unchanged. We have assumed that yearly net CAPEX will amount to PLN 100k and the share of investments in working capital in annual sales 8.5%.

Valuation

Due to the news flow in the last months we have assumed weaker sales of Hair Care and Skin Care dermocosmetic products in 2016 and beyond as well as a later introduction of the 1-MNA dietary supplement on the market (2017E instead of 2016). We now also believe that a licensing partner for the 1-MNA drug will only be found in 2017E, however due to the results of Phase II clinical research have accounted for both a potential sale of a cardiovascular and TNF-alpha drug in our NAV calculation. All together reduces our 12-months fair value for PHR's share from previously PLN 32 to PLN 28.80.

DCF model (Dermocosmetics & dietary supplements)

<u>•</u>		-			-					
in PLNm		2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E
Net sales		11.14	18.42	24.50	28.70	33.72	37.87	41.78	45.13	48.76
(y-o-y change)		-36.2%	65.3%	33.0%	17.2%	17.5%	12.3%	10.3%	8.0%	8.0%
EBIT		1.19	1.87	4.91	6.29	8.25	9.22	10.12	10.87	11.68
(EBIT margin)		10.7%	10.2%	20.1%	21.9%	24.5%	24.4%	24.2%	24.1%	24.0%
NOPLAT		0.97	1.52	3.98	5.10	6.69	7.47	8.20	8.80	9.46
+ Depreciation & amortisation		0.14	0.24	0.32	0.37	0.44	0.49	0.54	0.59	0.63
= Net operating cash flow		1.11	1.76	4.30	5.47	7.12	7.96	8.74	9.39	10.09
- Total investments (Capex and WC)		-1.19	-1.90	-2.50	-2.91	-3.40	-3.81	-4.19	-4.52	-4.88
Capital expenditure		-0.24	-0.34	-0.42	-0.47	-0.54	-0.59	-0.64	-0.69	-0.73
Working capital		-0.95	-1.57	-2.08	-2.44	-2.87	-3.22	-3.55	-3.84	-4.14
= Free cash flow (FCF)		-0.08	-0.15	1.80	2.56	3.72	4.15	4.55	4.87	5.21
PV of FCF's		-0.08	-0.13	1.41	1.81	2.38	2.40	2.37	2.30	2.22
PV of FCFs in explicit period	14.67									
PV of FCFs in terminal period	49.76									
Enterprise value (EV)	64.43									
+ Net cash / - net debt (PHR excl. Cortria)	0.28									
Shareholder value	64.71									
Number of shares outstanding (m)	8.80					Terminal E	BIT margin	ı		
WACC	10.6%			21.1%	22.1%	23.1%	24.1%	25.1%	26.1%	27.1%
Cost of equity	10.6%	-	6.6%	17.79	18.61	19.42	20.24	21.06	21.88	22.70
Pre-tax cost of debt	6.0%		7.6%	13.41	14.01	14.60	15.19	15.79	16.38	16.97
Normal tax rate	19.0%	u	8.6%	10.62	11.07	11.52	11.97	12.43	12.88	13.33
After-tax cost of debt	4.9%	WACC	9.6%	8.69	9.05	9.40	8.14	10.11	10.46	10.82
Share of equity	100.0%	>	10.6%	7.28	7.57	7.85	8.14	8.43	8.71	9.00
Share of debt	0.0%		11.6%	6.22	6.45	6.68	6.92	7.15	7.39	7.62
Fair value per share in PLN (today) Fair value per share in PLN (in 12 months)	7.36 8.14		12.6%	5.38	5.58	5.77	5.97	6.16	6.36	6.55

Source: East Value Research GmbH

NAV model 1-MNA drug (Cardiovascular / 50% weight)

We have estimated the value of drug 1-MNA (TRIA-662), which completed Phase II of research on 30 October 2015, with the NPV method. Although according to PHR the 1-MNA drug reduces the level of triglycerides only by 9% with no impact on bad (LDL) cholesterol, we have kept the probability of a licensing deal for the cardiovascular application of the drug and all other assumptions e.g. relating to milestone payments unchanged. The reasons are the promising results of the Phase II study relating to the impact of the TRIA-662 on the hsCRP biomarker, which is very important when it comes to risk of cardiovascular diseases. However, we now assume that PHR will receive the first payment relating to the drug in 2017E vs. 2016 before and that the market introduction will also happen one year later (2022E vs. previously 2021E).

Probabilities of success of respective research stages

	Phase I	Phase II	Phase III	NDA	Cumulated
Cardiovascular	62.7%	43.3%	76.3%	84.4%	17.5%

Source: IMAP, Industry Global Report 2011, East Value Research GmbH

Cardiovascular partnering deals 2009-2015

Seller	Acquirer	Drug	Phase of research	Initial payment (USDm)	Potential additional payments (USDm)	Total value (USDm)	Initial payment as % of total value	Year
Dezima	Amgen	TA-8995		300	1250	1550	19.4%	2015
Omthera Pharmaceuticals	AstraZeneca	Epanova	Phase III completed/registration pending	323	120	443	72.9%	2013
Portola Pharmaceuticals	Novartis	Elinogrel	Phase II	75	500	575	13.0%	2009
Portola Pharmaceuticals	Merck & Co.	Betrixaban	Phase II	50	420	470	10.6%	2009
Corthera	Novartis	Relaxin	Phase II completed	120	500	620	19.4%	2009
Calixa Therapeutics	Cubist Pharmaceuticals	CXA-201	Phase II	93	310	403	23.0%	2009
Median		•		106	460	<i>523</i>	19.4%	•

Source: pmlive.com, fiercebiotech.com, East Value Research GmbH

PHR's cash flows from TRIA-662 (cardiovascular application) and their probabilities

Phase	Year	Milestone payment (USDm)	_	Cumulated probability
Initial payment (19.4% of total value)	2017	48.50	30.3%	30.3%
Phase III	2019	50.38	76.3%	23.1%
Registration in the US and EU	2021	50.38	84.4%	19.5%
Start of commercial sales	2022	50.38	100.0%	19.5%
Sales of USD >500m per year	2023	50.38	100.0%	19.5%
Commissions on est. USD 800m sales (5.6% per year)	2023			
Percentage of CF for ex-Cortria shareholders (9%)				
Total value (initial payment plus milestones)		250.00		

Source: East Value Research GmbH

NPV model of TRIA-662 (cardiovascular application)

	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
CF before probabilities, investments and taxes (USDm)	0.00	48.50	0.00	50.38	0.00	50.38	50.38	95.18	44.80	44.80	44.80	44.80	44.80
CF accounting for probabilities (USDm)	0.00	14.70	0.00	11.65	0.00	9.83	9.83	18.57	8.74	8.74	8.74	8.74	8.74
9% share in CF for ex-Cortria shareholders (USDm)	0.00	-1.32	0.00	-1.05	0.00	-0.88	-0.88	-1.67	-0.79	-0.79	-0.79	-0.79	-0.79
CF accounting for probabilities and payments to ex- Cortria shareholders (USDm)	0.00	13.37	0.00	10.60	0.00	8.94	8.94	16.90	7.95	7.95	7.95	7.95	7.95
Investments in the 1-MNA project (USDm)	-0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CF after accounting for probabilities, payments to ex- Cortria shareholders and investments (USDm)	-0.50	13.37	0.00	10.60	0.00	8.94	8.94	16.90	7.95	7.95	7.95	7.95	7.95
PLN-USD rate	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
CF accounting for probabilities, payments to ex-Cortria shareholders and investments (PLNm)	-1.96	52.55	0.00	41.65	0.00	35.15	35.15	66.41	31.26	31.26	31.26	31.26	31.26
Tax rate	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
CF accounting for probabilities, payments to ex-Cortria shareholders, investments and taxes (PLNm)	-1.59	42.57	0.00	33.74	0.00	28.47	28.47	53.79	25.32	25.32	25.32	25.32	25.32
Discount factor	1.04	1.16	1.28	1.41	1.57	1.73	1.92	2.12	2.35	2.59	2.87	3.18	3.51
Discounted CF accounting for probabilities, payments to ex-Cortria shareholders, investments and taxes (PLNm)	-1.52	36.84	0.00	23.85	0.00	16.44	14.86	25.38	10.80	9.76	8.82	7.97	7.21
NPV (PLN m)	160.41												
Number of PHR's shares	8.80												
NPV per share (PLN)	18.24												

Source: East Value Research GmbH

NAV model 1-MNA drug (TNF-alpha / 50% weight)

We would like to emphasize that Phase II of research showed other potential applications of the drug in the area of TNF-alpha biomarker, which PHR wants to present to potential licensing partners. Licensing deals of drugs in these areas have had a total value of USD 840m to USD 1bn in the past, with initial payments ranging between USD 85m and USD 175m. All of them were conducted after completion of Phase IIa, thus at the same stage as TRIA-662 is now.

In our valuation model, we have conservatively assumed that in case of PHR a TNF-alpha partnering deal would have roughly half the value of the median of benchmark transactions. We have also assumed a very cautious 20% probability that the company finds a partner, with all other assumptions being the same as in case of the cardiovascular partnering deal.

Examples of TNF-alpha partnering deals

Seller	Acquirer	Drug	Phase of research	Initial payment (USDm)	Potential additional payments (USDm)	Total value (USDm)	Initial payment as % of total value	Year
Alder Biopharmaceuticals	Bristol-Myers Squibb	ALD518	Phase II completed	85	964	1049	8.1%	2009
Ablynx	AbbVie	ALX-0061	Phase II completed	175	665	840	20.8%	2013
Median	_			130	815	945	14.5%	

Source: pmlive.com, fiercebiotech.com, East Value Research GmbH

PHR's cash flows from TRIA-662 (TNF-alpha application) and their probabilities

Phase	Year	Milestone payment (USDm)	Probability of success	Cumulated probability
Initial payment (19.4% of total value)	2017	91.18	20.0%	20.0%
Phase III	2019	94.71	76.3%	15.3%
Registration in the US and EU	2021	94.71	84.4%	12.9%
Start of commercial sales	2022	94.71	100.0%	12.9%
Sales of USD >500m per year	2023	94.71	100.0%	12.9%
Commissions on est. USD 800m sales (5.6% per year)	2023			
Percentage of CF for ex-Cortria shareholders (9%)				
Total value (initial payment plus milestones)		470.00		

Source: East Value Research GmbH

NPV model of TRIA-662 (TNF-alpha application)

	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
CF before probabilities, investments and taxes (USDm)	0.00	91.18	0.00	94.71	0.00	94.71	94.71	139.51	44.80	44.80	44.80	44.80	44.80
CF accounting for probabilities (USDm)	0.00	18.24	0.00	14.45	0.00	12.20	12.20	17.97	5.77	5.77	5.77	5.77	5.77
9% share in CF for ex-Cortria shareholders (USDm)	0.00	-1.64	0.00	-1.30	0.00	-1.10	-1.10	-1.62	-0.52	-0.52	-0.52	-0.52	-0.52
CF accounting for probabilities and payments to ex- Cortria shareholders (USDm)	0.00	16.59	0.00	13.15	0.00	11.10	11.10	16.35	5.25	5.25	5.25	5.25	5.25
PLN-USD rate	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
CF accounting for probabilities, payments to ex-Cortria shareholders (PLNm)	0.00	65.22	0.00	51.68	0.00	43.62	43.62	64.26	20.63	20.63	20.63	20.63	20.63
Tax rate	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
CF accounting for probabilities, payments to ex-Cortria shareholders and taxes (PLNm)	0.00	52.82	0.00	41.86	0.00	35.33	35.33	52.05	16.71	16.71	16.71	16.71	16.71
Discount factor	1.04	1.16	1.28	1.41	1.57	1.73	1.92	2.12	2.35	2.59	2.87	3.18	3.51
Discounted CF accounting for probabilities, payments to ex-Cortria shareholders and taxes (PLNm)	0.00	45.71	0.00	29.60	0.00	20.41	18.44	24.56	7.13	6.44	5.82	5.26	4.76
NPV (PLN m) Number of PHR's shares	168.12 8.80												
NPV per share (PLN)	8.80 19.12												

Source: East Value Research GmbH

Sum-of-the-Parts calculation

Sum-of-the-Parts	Fair value
Dermocosmetics and dietary supplements	7.36
1-MNA drug (50% Cardiovascular, 50% TNF-alpha)	18.68
Implied equity value per share (today)	26.03
In 12-months (PV * (1+WACC))	28.80

Source: East Value Research GmbH

Peer Group Analysis

We have created two peer groups: One with manufacturers of pharmaceuticals and/or dietary supplements and one with producers of cosmetics:

Drugs and dietary supplements:

- (1) Neptune Technologies & Bioressources Inc.: Neptune, which is based in Laval/Canada, is a pioneer in the research, development and commercialization of natural omega-3 phospholipid products, derived from marine biomass, for the nutraceutical and pharmaceutical markets. Its subsidiaries, Acasti Pharma Inc. and NeuroBioPharm Inc. operate in the medical food and pharmaceutical markets focusing on the treatment of cardiometabolic and neurological conditions respectively. In fiscal-year 2015/16, Neptune generated revenues of CAD 22.6m.
- (2) *Perrigo Company PLC*: Perrigo Company, which is headquartered in Dublin/Ireland, is a healthcare supplier that develops, manufactures and distributes OTC and generic prescription pharmaceuticals, infant formulas, nutritional products, animal health, dietary supplements, active pharmaceutical ingredients and medical diagnostic products. Moreover, the company receives royalties from multiple sclerosis drug Tysabri. In fiscal-year 2015/16, Perrigo generated revenues of USD 2.8bn.
- (3) Abbott Laboratories Inc.: Abbott, which is based in Abbott Park/US, is a global healthcare company. In 2015, it generated revenues of USD 20.4bn, thereof 34% stemmed from nutritional and 18% from established pharmaceutical products. Its drugs against dyslipidemia are Tricor, Niaspan and Advicor.
- (4) Merck & Co Inc.: Merck, which is based in Kenilworth/US, offers health solutions through its prescription medicines, vaccines, biologic therapies and animal health products. In 2015, it generated revenues of USD 39.5bn. The company's three drugs for reduction of bad (LDL) cholesterol are Zocor, Zetia and Vytorin (combination of Zocor and Zetia in a single tablet).
- (5) *Pfizer Inc.*: Pfizer, which is headquartered in New York/US, offers medicines and vaccines as well as many well-known consumer healthcare products. Its drug Lipitor is the most successful drug for lowering bad cholesterol to date. In 2015, Pfizer had revenues of USD 48.9bn.
- (6) Bristol-Myers Squibb Corp.: BMS, which is based in New York/US, is engaged in the discovery, development, licensing, manufacturing, marketing, distribution and sale of biopharmaceutical. Its anti-atherosclerosis drug is Pravachol. In 2015, BMS generated total sales of USD 16.6bn.

- (7) AstraZeneca PLC: AstraZeneca, which is headquartered in London/UK, discovers, develops and commercializes biopharmaceuticals. Its drug for managing cholesterol levels is Crestor. In 2015, AstraZeneca had revenues of USD 24.7bn.
- (8) Amgen Inc.: Amgen, which is based in Thousand Oaks/US, is a biotechnology company. In 2015, it had revenues of USD 21.7bn. Amgen's primary drug against bad cholesterol (LDL) is Repatha. Moreover, in September 2015 it bought Dutch company Dezima, which owns the midstage drug TA-8995, an oral CETP (Cholesterylester Transfer Protein) inhibitor that has shown the ability to slash LDL by up to 48%, while simultaneously boosting HDL (good cholesterol). Amgen will pay Dezima USD 300m upfront and min. USD 1.25bn in milestones depending on the registration and commercialization progress of the drug.

	EV/S	Sales	EV/E	BITDA	P	/E	EBITDA margin	Net gearing	P/BVPS
Company	2016E	2017E	2016E	2017E	2016E	2017E	2015	Latest	Latest
Neptune Technol. & Bioress. Inc. (USD)	2.85x	2.49x	18.66x	9.67x	143.00x	13.00x	n.a	56.15%	2.14x
Perrigo Company PLC (USD)	3.34x	3.18x	11.39x	11.03x	31.42x	17.88x	24.10%	60.24%	1.32x
Abbott Laboratories Inc. (USD)	3.27x	3.09x	12.58x	10.24x	24.09x	18.96x	21.70%	20.66%	3.09x
Merck & Co Inc. (USD)	4.42x	4.49x	10.57x	10.98x	25.48x	19.58x	51.60%	29.50%	3.69x
Pfizer Inc. (USD)	4.63x	4.47x	12.27x	11.44x	20.58x	17.13x	38.50%	32.08%	3.54x
Bristol-Myers Squibb Inc. (USD)	6.89x	6.14x	22.54x	16.51x	30.27x	24.06x	16.30%	17.77%	8.71x
AstraZeneca PLC (GBP)	3.18x	3.23x	11.00x	11.02x	22.48x	21.35x	32.20%	95.75%	4.01x
Amgen Inc. (USD)	5.56x	5.38x	11.23x	10.42x	17.06x	15.55x	49.20%	-1.51%	4.39x
Median	3.88x	3.85x	11.83x	11.00x	24.79x	18.42x	<i>32.20%</i>	<i>30.79%</i>	3.61x

Source: Thomson Reuters Eikon, East Value Research GmbH

Dermocosmetics:

- (9) *Beiersdorf AG*: Beiersdorf, which is based in Hamburg/Germany, manufactures cosmetic products. It operates under the brands NIVEA, Eucerin, Labello, La Prairie, Hansaplast, Florena, 8x4, tesa, atrix and SLEK. In 2015, Beiersdorf generated revenues of EUR 6.7bn.
- (10) L'Oreal SA: L'Oreal, which is based in Clichy/France, is a cosmetics company. Its Professional Products division offers beauty products used and sold in hair salons. The Consumer Products division offers products sold in mass-market retail channels. L'Oreal Luxe division offers products sold in selective retail outlets e.g. department stores, perfumeries, the Group's own boutiques and certain online stores. Active Cosmetics division offers products for borderline complexions, while the Body Shop unit offers natural cosmetics and toiletry products. In 2015, L'Oreal generated total sales of EUR 25.3bn.

L'Oreal's subsidiary Vichy, a premium brand of skincare, bodycare, make-up and antiaging products, owns the product line Dercos, which is No 1 on the Polish market for hair care dermocosmetics in terms of revenues.

- (11) Estee Lauder Companies Inc.: Estee Lauder, which is based in New York/US, is a manufacturer and marketer of skin care, makeup, fragrance and hair care products. The company's products are sold in over 150 countries under such brand names as Estee Lauder, Aramis, Clinique, Origins, Le Labo, M.A.C, Bobbi Brown, La Mer and Aveda. It is also the global licensee for fragrances and/or cosmetics sold under e.g. Tommy Hilfiger, Donna Karan, Michael Kors, Tom Ford and Coach. In fiscal-year 2014/15, Estee Lauder had revenues of USD 10.8bn.
- (12) *Shiseido Co Ltd.*: Shiseido, which is based in Chuo-Ku/Japan, is engaged in the manufacture and sale of cosmetics, toiletries, beauty products, health foods, beauty foods and pharmaceuticals. In fiscal-year 2015/16, Shiseido had total sales of JPY 763.1bn.
- (13) *Procter & Gamble Corp.*: Procter & Gamble, which is headquartered in Cincinnati/US, provides consumer packaged goods, which are sold in over 180 countries. It operates in five segments: Beauty, Grooming, Health Care, Fabric Care and Home Care as well as Baby Feminine and Family Care. In fiscal-year 2014/15, Procter & Gamble generated revenues of USD 76.3bn.
- (14) *Coty Inc.*: Coty, which is based in New York/US, manufactures and markets beauty products in the Fragrances, Color Cosmetics and Skin & Body Care segments with distribution in over 130 countries. In fiscal-year 2014/15, it had revenues of USD 4.4bn.
- (15) Aflofarm Farmacja Polska Sp. z.o.o: Aflofarm, which is based in Pabianice, is a privately-owned Polish manufacturer of pharmaceuticals, dietary supplements and cosmetics. Its label DX2 is No 3 on the Polish market for hair care dermocosmetics.
- (16) ZIAJA Ltd Zaklad Produkcji Lekow sp. z.o.o: ZIAJA is a privately-owned Polish manufacturer of dermocosmetics with headquarters in Gdansk. It was founded in 1989. Apart from Poland, its products are available in 12 European countries, selected Asian markets and Chile.

	EV/S	ales	EV/E	BITDA	P	/E	EBITDA margin	Net gearing	P/BVPS
Company	2016E	2017E	2016E	2017E	2016E	2017E	2015	Latest	Latest
Beiersdorf AG (EUR)	2.57x	2.46x	15.17x	14.15x	28.50x	26.44x	16.30%	-42.22%	4.57x
L'Oreal SA (EUR)	3.79x	3.61x	17.58x	16.54x	27.38x	25.63x	20.80%	-3.04%	4.17x
Estee Lauder Comp. Inc. (USD)	3.12x	2.95x	17.11x	15.67x	30.21x	26.36x	18.70%	22.62%	9.01x
Shiseido Co Ltd. (JPY)	1.30x	1.25x	12.90x	10.80x	33.14x	34.75x	11.50%	-4.86%	2.88x
Procter & Gamble Inc. (USD)	3.76x	3.65x	14.55x	13.77x	20.85x	19.92x	20.90%	34.98%	3.83x
Coty Inc. (USD)	1.59x	1.46x	10.02x	8.60x	37.07x	28.19x	19.60%	869.31%	20.69x
Median	2.85x	2.71x	14.86x	13.96x	29.35x	26.40x	19.15%	9.79%	4.37x

Source: Thomson Reuters Eikon, East Value Research GmbH

Profit and loss statement

in PLNm	2010	2011	2012	2013	2014	2015
Net sales	7.70	7.40	9.13	14.14	14.13	17.47
Cost of goods sold	-2.58	-2.57	-2.84	-4.11	-3.93	-4.85
Gross profit	5.13	4.82	6.29	10.03	10.20	12.62
Other operating income	0.00	0.02	0.03	0.02	0.02	0.02
Distribution costs	-2.45	-2.37	-2.40	-5.89	-6.56	-8.15
Administration costs	-2.61	-4.74	-6.75	-5.27	-7.17	-7.01
Other operating expenses	-0.01	-0.03	-0.04	-0.07	-0.09	-0.10
EBITDA	0.05	-2.29	-2.87	-1.19	-3.60	-2.63
Depreciation & Amortization	-0.12	-0.12	-0.14	-0.16	-0.18	-0.22
EBIT	-0.07	-2.41	-3.01	-1.34	-3.79	-2.84
Net financial results	0.26	0.19	-0.18	-0.49	0.84	0.22
Write-down of negative goodwill	0.00	-0.52	-0.52	-0.52	-0.52	-0.34
ЕВТ	0.19	-2.74	-3.71	-2.35	-3.46	-2.96
Income taxes	-0.07	-0.15	-0.39	-0.50	-0.62	-0.66
Net income / loss	0.12	-2.90	-4.10	-2.84	-4.09	-3.62
EPS	0.02	-0.46	-0.58	-0.32	-0.46	-0.41
DPS	0.01	0.05	0.10	0.11	0.11	0.12
Share in total sales						
Net sales	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Cost of goods sold	-33.47 %	-34.80 %	-31.08 %	-29.06 %	-27.82 %	-27.77 %
Gross profit	66.53 %	65.20 %	68.92 %	70.94 %	72.18 %	72.23 %
Other operating income	0.01 %	0.20 %	0.32 %	0.13 %	0.15 %	0.09 %
Distribution costs	-31.81 %	-31.97 %	-26.33 %	-41.66 %	-46.44 %	-46.65 %
Administration costs	-33.88 %	-64.01 %	-73.95 %	-37.30 %	-50.74 %	-40.12 %
Other operating expenses	-0.17 %	-0.39 %	-0.43 %	-0.50 %	-0.64 %	-0.57 %
EBITDA	0.69 %	-30.97 %	-31.48 %	-8.38 %	-25.50 %	-15.02 %
Depreciation & Amortization	-1.56 %	-1.66 %	-1.52 %	-1.12 %	-1.29 %	-1.24 %
EBIT	-0.87 %	-32.63 %	-33.00 %	-9.51 %	-26.79 %	-16.26 %
Net financial results	3.33 %	2.51 %	-2.00 %	-3.44 %	5.92 %	1.28 %
Write-down of negative goodwill	0.00 %	-6.98 %	-5.65 %	-3.65 %	-3.65 %	-1.97 %
EBT	2.46 %	-37.10 %	-40.66 %	-16.59 %	-24.52 %	-16.95 %
Income taxes	-0.86 %	-2.07 %	-4.25 %	-3.52 %	-4.40 %	-3.75 %
Net income / loss	1.61 %	-39.16 %	-44.91 %	-20.11 %	-28.92 %	-20.69 %

Balance Sheet

in PLNm	2010	2011	2012	2013	2014	2015
Assets						
Cash and cash equivalents Inventories Trade accounts and notes receivables Other financial assets Other current assets	3.31 1.35 2.60 0.00 0.38	3.00 1.10 1.89 0.00 0.48	3.20 1.40 2.86 0.00 0.80	11.15 2.09 3.83 0.00 0.76	5.22 2.91 5.28 0.00 0.87	2.79 3.02 5.78 0.00 1.65
Current assets	7.64	6.47	8.26	17.84	14.27	13.23
Property, plant and equipment Other intangible assets Goodwill Long-term financial assets Other long-term assets Deferred tax assets	0.15 0.67 0.00 7.56 0.76 0.04	0.15 0.63 1.89 0.05 0.96 0.05	0.16 0.78 1.38 0.05 0.90	0.11 0.67 0.86 0.05 0.85 0.18	0.16 0.73 0.34 0.05 1.20 0.10	0.21 0.80 0.00 0.05 0.76 0.11
Non-current assets	9.18	3.72	3.33	2.72	2.59	1.92
Total assets	16.82	10.19	11.59	20.56	16.86	15.16
Liabilities						
Trade payables Other liabilities Short-term financial debt Pension provisions	0.29 0.37 0.05 0.00	0.88 0.57 0.05 0.03	1.64 0.73 0.06 0.03	1.32 0.90 0.02 0.16	1.36 1.09 1.00 0.18	1.29 0.84 4.01 0.18
Current liabilities	0.71	1.53	2.47	2.40	3.64	6.33
Long-term financial debt Deferred tax liabilities	0.08 0.12	0.06 0.11	0.04 0.10	0.02 0.09	0.07 0.08	0.08 0.08
Long-term liabilities	0.20	0.17	0.14	0.11	0.14	0.16
Total liabilities	0.91	1.69	2.61	2.51	3.78	6.49
Shareholders equity Minority interests	15.91 0.00	8.50 0.00	8.98 0.00	18.05 0.00	13.08 0.00	8.67 0.00
Total liabilities and equity	16.82	10.19	11.59	20.56	16.86	15.16

Cash Flow Statement

in PLNm	2010	2011	2012	2013	2014	2015
Net income / loss	0.12	-2.90	-4.10	-2.84	-4.09	-3.62
Depreciation	0.12	0.12	0.14	0.16	0.18	0.22
Change of working capital	-1.05	0.34	-0.50	-1.85	-2.45	-1.35
Others	-0.28	0.72	0.41	0.70	0.60	0.58
Net operating cash flow	-1.08	-1.71	-4.05	-3.84	-5.75	-4.18
Cash flow from investing	-3.97	-0.05	-0.22	-0.01	-0.09	-0.10
Free cash flow	-5.05	-1.76	-4.27	-3.85	-5.84	-4.27
Cash flow from financing	-0.40	-0.13	4.48	11.81	-0.09	1.84
Change of cash	-5.45	-1.84	0.06	7.96	-5.72	-2.44
Cash at the beginning of the period	8.76	3.31	3.00	3.20	11.15	5.22
Cash at the end of the period	3.31	3.00	3.20	11.15	5.22	2.79

Financial ratios

Fiscal year	2010	2011	2012	2013	2014	2015
Profitability and balance sheet quality						
Gross margin	66.53%	65.20%	68.92%	70.94%	72.18%	72.23%
EBITDA margin	0.69%	-30.97%	-31.48%	-8.38%	-25.50%	-15.02%
EBIT margin	-0.87%	-32.63%	-33.00%	-9.51%	-26.79%	-16.26%
Net margin	1.61%	-39.16%	-44.91%	-20.11%	-28.92%	-20.69%
Return on equity (ROE)	0.77%	-23.74%	-46.93%	-21.04%	-26.25%	-33.24%
Return on assets (ROA)	-0.78%	-22.83%	-35.98%	-14.66%	-26.31%	-23.99%
Return on capital employed (ROCE)	-0.27%	-29.43%	-36.48%	-8.97%	-33.75%	-39.28%
Net debt (in PLNm)	-3.18	-2.86	-3.06	-10.95	-3.97	1.49
Net gearing	-19.98%	-33.68%	-34.12%	-60.68%	-30.37%	17.18%
Equity ratio	94.57%	83.40%	77.48%	87.81%	77.59%	57.21%
Current ratio	10.79	4.24	3.35	7.44	3.93	2.09
Quick ratio	8.35	3.20	2.46	6.26	2.89	1.35
Net interest cover	0.26	12.98	-16.46	-2.77	4.52	12.68
Net debt/EBITDA	-59.96	1.25	1.07	9.24	1.10	-0.57
Tangible BVPS	2.37	1.05	1.08	1.95	1.45	0.99
CAPEX/Sales	-1.69%	-26.61%	2.34%	3.61%	1.56%	0.12%
Working capital/Sales	57.51%	40.31%	39.32%	37.64%	55.19%	51.92%
Cash Conversion Cycle (in days)	273	125	83	168	280	250
Trading multiples						
EV/Sales	21.07	21.95	17.78	11.48	11.49	9.29
EV/EBITDA	3063.39	-70.86	-56.49	-137.00	-45.06	-61.84
EV/EBIT	-2423.70	-67.25	-53.88	-120.79	-42.89	-57.14
P/Tangible BVPS	7.79	17.64	17.12	9.46	12.76	18.75
P/E	924.50	-40.20	-31.88	-57.78	-40.20	-44.97
P/FCF	-32.21	-92.24	-38.05	-42.26	-27.83	-38.08

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Declaration according to § 34b WpHG and FinAnV on additional disclosures (As of July 24, 2013):

It is the sole decision of East Value Research GmbH whether and when a potential update of this research will be made.

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Buy: Based on our analysis, we expect the stock to appreciate and generate a total return of more than 10% over the next twelve months

Add: Based on our analysis, we expect the stock to appreciate and generate a total return between 0% and 10% over the next twelve months

Reduce: Based on our analysis, we expect the stock to cause a negative return between 0% and -10% over the next twelve months

Sell: Based on our analysis, we expect the stock to cause a negative return exceeding -10% over the next twelve months

The respective supervisory authority is:

Bundesanstalt für Finanzdienstleistungsaufsicht Lurgiallee 12 60439 Frankfurt