

## Bioton SA - under the Yifan' umbrella

The company has taken another step in the ongoing restructuring process last quarter. The distribution agreements with Harbin Gloria and Sequoia were both terminated and Biolek's goodwill was written down from Bioton's books. Bioton is developing insulin analogues itself, and the contract with Yifan provides it with needed research funding. Yifan's acquisition of the Bioton stake seems to confirm its faith in success story. As a result of forecasts update, I am adjusting Bioton's valuation from 7.48 to 6.37 PLN.

### Results of 2019 under the pressure of one-off events

Biolek's goodwill write-off had a high negative impact on Bioton's 2019 financial results and reduced the operating result by almost PLN 147m. In 2019, the Group generated sales revenues of PLN 202m compared to PLN 241m in 2018. However, if we deduct SciGen's revenues from the first half of 2018 (PLN 57.7m), then the adjusted revenues in 2019 increased by 10% yoy. EBITDA in 2019 amounted to PLN -131.3m, while after adjusting for other operating income and expenses; it amounted to PLN +PLN 23.1m. I expect 2020 revenues to increase to PLN 255m, and 2020 EBITDA to PLN 32m inflated by assumed PLN 15m one-off compensation for termination of the distribution agreement with Harbin Gloria.

### New owner and a chance for growth in exports

Ownership changes from October 2019, which had resulted Yifan becoming 32% stakeholder in the company, as well as the termination of the distribution agreement with Harbin Gloria and the novation agreement between Bioton, Yifan and SciGen had sorted out Bioton's distribution issues and seem to create the opportunity for Bioton to increase sales on the Chinese market - I assume an increase in exports in 2020 by 20% yoy.

### Development of insulin analogues

A framework agreement with Yifan Pharmaceutical Co. Ltd regarding the development of Bioton's insulin analogues had secured funding for this process. In 2020, the scaling of production of the first analogue to the industrial scale and the production of clinical batches shall begin. In 2019, Bioton also began testing reference products to prove biosimilarity and conducted intensive work on the production process of the third insulin analogue.

### Potential impact of COVID-19 on financial results

The COVID-19 pandemic mainly affects the supply chain of raw materials for the company, through their availability and increase in prices (may have a negative impact on margins - I include their decrease in the forecast) and a decrease in sales of OTC preparations (due to the low scale I skip this effect).

### Risks for our forecasts and valuation

Main risk factor as we see in our forecasts and valuation is the risk related to the registration and launch of insulin analogues.

**Our valuation is equally based on DCF (PLN6.47/share) and peers valuation (6.26/share) and indicates present fair price at PLN6.37/share.**

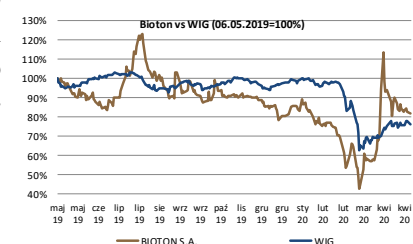
PLNm	2018	2019	2020F	2021F	2022F
Revenues	241	202	255	280	426
EBITDA	-23	-131	32	29	43
EBIT	-52	-164	0	-2	13
Net profit	26	-127	-5	-7	5
P/E (x)	12,8	-2,6	-66,8	-50,8	62,6
EV/EBITDA (x)	-19,1	-3,4	13,8	14,6	10,2

Source: Bioton (results 2018,2019), Noble Securities (forecasts 2020-2022)

The preparation of report was finalized on 05/05/2020 at 5:20 p.m.. The first publication took place on 05/05/2020 at 5:30 p.m..

**NOBLE  
SECURITIES**  
DOM MAKLECKI

Current price	3.89 PLN
Valuation	6.37 PLN
Upside/downside	64%
Market cap.	334 PLNm
Free float	38.9%
Avg. Vol. 6M	109 352



## COMPANY PROFILE

Bioton is a recombinant human insulin (RHI) manufacturer and is in a process of development of his own analogue insulin. Main business area of Bioton is diabetology. Capital Group includes feed additives manufacturer (Biolek). At the end of 2019 Company was employing 511 people.

## SHAREHOLDERS

Yifan Pharmaceutical Co. Ltd	31,6%
Bimeda Holding Ltd.	13,2%
Jiman Zhu	11,4%
Troqueera Enterprises Ltd	9,9%
Pozostali	33,9%

Source: infostrefa.com, Noble Securities

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## VALUATION

I calculated the value of one share of Bioton as the average of the peers and DCF valuation with equal weights. On this basis, I estimated the current value of the company's stock at 6.37 PLN per share.

In table below we present valuation summary:

Valuation summary	Weight (x)	Per share (PLN)	Previously	% change
DCF	0.5	6.47	8.21	-21%
Peers	0.5	6.26	6.75	-7%
Average valuation		6.37	7.48	-15%
Current price		3.89	5.26	-26%
Upside/downside		64%		

Source: Noble Securities

## DCF VALUATION

Assumptions:

- FCF discounted at the beginning of May 2020 (previously: August 2019),
- Net debt on 31.12.2019 calculated at 112 PLNm (previously: net debt on 31.12.2018 calculated at 104 PLNm),
- Effective tax rate at the level of 20% (no change),
- Growth rate (g) 2% (no change),
- Beta 1.5, risk free rate 3.5%, market risk premium 6% (no change).

## DCF AND SENSITIVITY ANALYSIS

DCF	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F
Revenues	255	280	426	425	284	346	408	633	647	662
NOPAT	0	-1	10	11	7	23	39	100	102	105
Depreciation and amortization	32	31	30	30	29	29	28	27	27	26
Change in WC	-13	-6	-35	0	33	-16	-16	-58	-4	-4
CAPEX	-8	-8	-8	-8	-8	-8	-8	-8	-8	-26
<b>FCFF</b>	11	16	-2	33	62	29	44	63	118	101
WACC	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%
Discount factor	0,93	0,84	0,76	0,68	0,62	0,56	0,50	0,45	0,41	0,37
DFCFF	10	14	-2	23	39	16	22	28	48	37
Sum of DFCFF to 2029	235									
Growth rate (g)	2%									
Residual value 2029	1 157									
Discounted Residual value	426									
Enterprise Value (EV)	662									
Net debt 31/12/2018	106									
Minorities	0									
Equity Value	555									
Shares (ths.)	85.9									
<b>Equity Value per share</b>	<b>6.5</b>									

Sensitivity analysis					
	Growth rate (g)				
	0%	1%	2%	3%	4%
WACC - 1.0%	6.4	7.0	7.8	8.7	10.0
WACC - 0.5%	5.9	6.4	7.1	7.9	8.9
WACC	5.5	5.9	6.5	7.2	8.0
WACC + 0.5%	5.1	5.5	5.9	6.5	7.3
WACC + 1.0%	4.7	5.0	5.4	5.9	6.6

Source: Noble Securities

Below we present Cost of Equity and WACC calculation:

WACC	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F
Risk free rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Market risk premium	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Beta	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Cost of equity</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>	<b>12.5%</b>
Effective tax rate	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Cost of debt	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Cost of debt after tax bracket	4.40%	4.40%	4.40%	4.40%	4.40%	4.40%	4.40%	4.40%	4.40%	4.40%
Net debt/EV	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
<b>WACC</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>	<b>10.9%</b>

Source: Noble Securities

## PEERS VALUATION

I've based comparative analysis on foreign insulin manufacturers. In valuation process I've taken into account EV/EBITDA and EV/Sales multiples (I assign 75% weight to EV/EBITDA and 25% to EV/Sales valuation – previously 50% EV/EBITDA and 50% EV/Sales – currently I assign more weight to EV/EBITDA multiples, because I believe that the write-down period in the company has finished). I've adjusted revenues by invoiced R&D expenses concerning insulin analogues. **On the base of peers valuation, I have valued Bioton at PLN6.26/share.**

Peers valuation summary of Bioton:

Company	Market cap. (PLNm)	P/E (x)			EV/EBITDA (x)			EV/Sales		
		2020F	2021F	2022F	2020F	2021F	2022F	2020F	2021F	2022F
NOVO NORDISK-B	621 574	23.7	21.1	18.7	16.7	15.5	14.1	7.8	7.2	6.6
ELI LILLY & CO	613 046	22.6	19.5	18.2	18.3	16.6	15.4	6.3	5.7	5.5
SANOVI	497 670	13.9	12.8	11.8	10.8	9.8	9.0	3.3	3.1	2.9
MERCK & CO	818 247	14.5	13.0	11.8	10.8	9.8	8.9	4.4	4.0	3.8
TONGHUA DONGBA-A	15 234	26.0	21.3	17.6	20.0	16.8	14.4	8.0	6.6	5.7
BIOCON LTD	23 676	48.8	35.9	27.1	25.0	19.3	15.3	6.8	5.5	4.5
<b>Median</b>		<b>23.2</b>	<b>20.3</b>	<b>17.9</b>	<b>17.5</b>	<b>16.1</b>	<b>14.3</b>	<b>6.6</b>	<b>5.6</b>	<b>5.0</b>
Bioton	327	-65.5	-49.8	61.4	13.6	14.4	10.0	2.0	1.9	1.8
Premium/discount to median (%)		-383%	-345%	243%	-22%	-10%	-30%	-69%	-66%	-63%
Implied fair value of Bioton					5.3	4.4	5.9	14.9	13.5	12.4
Weight					25%	25%	25%	8%	8%	8%
Implied fair value of Bioton					<b>6.26</b>					

Source: Bloomberg, Noble Securities, data on 04/05/2020 y. at 11:33 a.m.

Profil and loss account	2018	2019	2020F	2021F	2022F
<b>Net revenues</b>	<b>241</b>	<b>202</b>	<b>255</b>	<b>280</b>	<b>426</b>
Gross profit from sales	116	102	135	158	299
Cost of sales	83	70	68	69	69
SG&A costs	51	39	37	37	37
R&D costs	33	7	45	55	180
Other operating revenues and expenses	-2	-150	15	0	0
<b>EBIT</b>	<b>-52</b>	<b>-164</b>	<b>0</b>	<b>-2</b>	<b>13</b>
Financial income and costs	68	1	-6	-6	-6
Profit before tax	15	-162	-6	-8	7
Income tax	-11	35	-1	-2	1
<b>Net profit</b>	<b>26</b>	<b>-127</b>	<b>-5</b>	<b>-7</b>	<b>5</b>
Depreciation and amortization	29	32	32	31	30
<b>EBITDA</b>	<b>-23</b>	<b>-131</b>	<b>32</b>	<b>29</b>	<b>43</b>

Source: Bioton (2018, 2019), Noble Securities (2020F-2022F)

Balance Sheet	2018	2019	2020F	2021F	2022F
<b>Assets</b>	<b>1 010</b>	<b>881</b>	<b>910</b>	<b>904</b>	<b>904</b>
<b>Non-current Assets</b>	<b>859</b>	<b>744</b>	<b>720</b>	<b>697</b>	<b>674</b>
Tangible assets	336	327	315	303	292
Intangible assets	405	377	364	353	341
Other non-current assets	118	40	40	40	40
<b>Current Assets</b>	<b>151</b>	<b>137</b>	<b>190</b>	<b>208</b>	<b>231</b>
Inventories	78	80	96	97	102
Trade receivables	62	49	61	67	102
Cash and cash equivalents	8	7	31	42	25
Other current assets	3	2	2	2	2
<b>Liabilities</b>	<b>1 010</b>	<b>881</b>	<b>910</b>	<b>904</b>	<b>904</b>
<b>Equity</b>	<b>713</b>	<b>582</b>	<b>577</b>	<b>570</b>	<b>576</b>
<b>Non-current liabilities</b>	<b>123</b>	<b>103</b>	<b>103</b>	<b>103</b>	<b>103</b>
Loans, borrowings and other financial liabilities	18	41	41	41	41
Deferred tax liabilities	33	0	0	0	0
Other	72	62	62	62	62
<b>Current liabilities</b>	<b>174</b>	<b>197</b>	<b>231</b>	<b>231</b>	<b>226</b>
Loans, borrowings and other financial liabilities	94	78	96	96	86
Accounts payable	56	77	94	94	99
Other	24	41	41	41	41

Source: Bioton (2018, 2019), Noble Securities (2020F-2022F)

Cash flow statement	2018	2019	2020F	2021F	2022F
Profit before tax	26	-127	-5	-7	5
Depreciation and amortization	29	32	32	31	30
Other	-57	87	6	6	6
Change in working capital	29	54	-13	-6	-35
<b>CF from operating activities</b>	<b>28</b>	<b>47</b>	<b>20</b>	<b>25</b>	<b>6</b>
CAPEX	43	53	8	8	8
Divestments and other	81	0	0	0	0
<b>CF from investment activities</b>	<b>37</b>	<b>-54</b>	<b>-8</b>	<b>-8</b>	<b>-8</b>
Increase of share capital	0	0	0	0	0
Change of financial liabilities	-85	18	18	0	-10
Other	-7	-11	-6	-6	-6
Dividends and other proceeds to shareholders	0	0	0	0	0
<b>CF from financial activities</b>	<b>-96</b>	<b>7</b>	<b>11</b>	<b>-6</b>	<b>-16</b>
<b>CF</b>	<b>-31</b>	<b>-1</b>	<b>23</b>	<b>11</b>	<b>-17</b>
Cash at the beginning of the period	39	8	7	31	42
Cash at the end of the period	8	7	31	42	25

Source: Bioton (2018, 2019), Noble Securities (2020F-2022F)

Selected indicators	2018	2019	2020F	2021F	2022F
EBITDA margin	-9.5%	-65.0%	12.5%	10.5%	10.1%
EBIT margin	-21.7%	-80.9%	0.1%	-0.6%	2.9%
Net profit margin	10.8%	-62.7%	-2.0%	-2.3%	1.2%
Net debt	104	112	106	95	102
Net debt/EBITDA	-4.5	-0.9	3.3	3.2	2.4
Number of shares issued	85.9	85.9	85.9	85.9	86.9
Dividend per share	0.0	0.0	0.0	0.0	0.0
P/BV	0.5	0.6	0.6	0.6	0.6

Source: Bioton (2018, 2019), Noble Securities (2020F-2022F)

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Analyst preparing the Report: Krzysztof Radojewski

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Direction of recommendation	nd
Date of publication	26/07/2019 8:58 a.m.
Stock price from the date of report	5.26
Valuation	7.48
WIG index from the date of report	60 249.72

**All recommendations distributed by NS in last 12 months:**

Company	Direction	Target price	Price at publication	Current price	Difference to price target	Date of publication (1)	Validity date (2)	Prepared by (3)
LW Bogdanka	Reduce	18.3	188.9	21.0	-13%	2020/04/30	9M	Michał Sztabler
Dino Polska	Sell	138.8	188.9	173.7	-20%	2020/04/23	9M	Dariusz Dadej
Eurocash	Hold	23.0	21.9	21.1	9%	2020/04/23	9M	Dariusz Dadej
MCI Capital	n.a.	21.9	8.3	9.1	140%	2020/03/12	24M	Kamil Jędrej
TIM	n.a.	17.3	11.4	10.0	74%	2020/01/31	24M	Michał Sztabler
PKP Cargo	Buy	30.6	20.9	11.5	167%	2020/01/07	9M	Michał Sztabler
Aplisens	n.a.	17.3	10.5	10.1	71%	2020/01/03	nd	Michał Sztabler
Forte	Hold	29.5	30.9	18.0	64%	2019/12/20	9M	Dariusz Dadej
Amica	Accumulate	165.2	138.0	95.8	72%	2019/12/13	9M	Michał Sztabler
11 bit studios	Kupuj	479.2	388.0	408.5	17%	2019/12/11	9M	Kamil Jędrej
Aparator	Accumulate	24.4	21.4	19.0	29%	2019/11/28	9M	Michał Sztabler
Dino Polska	Hold	129.0	134.2	173.7	-26%	2019/11/25	9M	Dariusz Dadej
CD Projekt	Hold	232.3	243.0	357.9	-35%	2019/10/15	9M	Kamil Jędrej
Bogdanka	Reduce	31.6	35.2	20.8	52%	2019/10/04	9M	Michał Sztabler
Dino Polska	Reduce	140.2	156.3			2019/09/16	9M	K. Radojewski, D. Dadej
Amrest Holdings	Buy	54.9	43.2	26.4	108%	2019/09/16	9M	K. Radojewski, D. Dadej
Eurocash	Accumulate	27.0	22.7	21.1	28%	2019/09/11	9M	K. Radojewski, D. Dadej
Bioton	n.a.	7.5	5.3	3.8	97%	2019/07/26	24M	K. Radojewski, K. Jędrej
MCI Capital	n.a.	26.5	7.3			2019/06/28	24M	K. Radojewski, K. Jędrej
TIM	n.a.	14.1	9.8			2019/06/17	24M	Michał Sztabler
11 bit studios	Accumulate	464.7	395.0			2019/06/06	9M	Kamil Jędrej
Amrest Holdings	Buy	52.1	37.5			2019/05/21	9M	Krzysztof Radojewski
Dino Polska	Hold	111.0	112.7			2019/05/20	9M	Krzysztof Radojewski

(1) Date of publication is simultaneously date of first publication, (2) recommendation is valid for a period of 9 months, unless it is previously updated

(3) Job position: Krzysztof Radojewski – Equity Analyst (finished work in NS with effect from 31.10.2019 and started from 15.04.2020), Michał Sztabler – Equity Analyst, Kamil Jędrej – Equity Analyst (finished work in NS with effect from 31.03.2020),

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