

EQUITY - SPAIN

Sector: Biotechnology - Functional Ingredients

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Review of estimates

Closing price: EUR 1.15 (29 Apr 2020)

Biosearch (BIOS) is a small, Spanish biotech company based in Granada, specialising in the research, development and sale of functional ingredients (natural extracts, omega-3 and probiotics) for the nutrition and healthcare markets. It has an international presence (78% of revenues). A former subsidiary of the former EBRO-Puleva, its core shareholder remains the Lactalis group (30% of capital).

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Market Data

Market Cap (Mn EUR and USD)	66.4	72.2
EV (Mn EUR and USD) ⁽¹⁾	68.3	74.2
Shares Outstanding (Mn)	57.7	
-12m (Max/Med/Min EUR)	1.46 / 1.08 / 0.61	
Daily Avg volume (-12m Mn EUR)	0.25	
Rotation ⁽²⁾	96.3	
Thomson Reuters / Bloomberg	BIOS.MC / BIO SM	
Close fiscal year	31-Dec	

Shareholders Structure (%)

Lactalis Group	29.5
Pescaderías Coruñas, S.A.	10.0
Free Float	60.5

Financials (Mn EUR)	2019	2020e	2021e	2022e
Adj. nº shares (Mn)	57.7	57.7	57.7	57.7
Total Revenues	23.3	28.2	30.8	34.7
Rec. EBITDA ⁽³⁾	2.4	3.5	4.7	6.3
% growth	-57.8	46.4	35.5	33.1
% Rec. EBITDA/Rev.	10.3	12.4	15.4	18.2
% Inc. EBITDA sector ⁽⁴⁾	18.4	-0.3	10.1	12.6
Net Profit	0.6	1.1	2.4	3.6
EPS (EUR)	0.01	0.02	0.04	0.06
% growth	-81.0	74.9	113.1	51.0
Ord. EPS (EUR)	0.01	0.02	0.04	0.06
% growth	-82.3	145.5	63.4	51.0
Rec. Free Cash Flow ⁽⁵⁾	-4.4	1.1	0.6	2.4
Pay-out (%)	0.0	0.0	0.0	0.0
DPS (EUR)	0.00	0.00	0.00	0.00
Net financial debt	4.2	2.5	1.4	-1.0
ND/Rec. EBITDA (x)	1.8	0.7	0.3	-0.2
ROE (%)	2.7	4.5	9.0	12.3
ROCE (%) ⁽⁵⁾	2.8	4.4	8.9	12.6

Ratios & Multiples (x)⁽⁶⁾

P/E	n.a.	60.1	28.2	18.7
Ord. P/E	n.a.	46.1	28.2	18.7
P/BV	2.8	2.7	2.4	2.2
Dividend Yield (%)	0.0	0.0	0.0	0.0
EV/Sales	2.93	2.42	2.22	1.97
EV/Rec. EBITDA	28.6	19.5	14.4	10.8
EV/EBIT	n.a.	46.2	22.6	15.3
FCF Yield (%) ⁽⁵⁾	n.a.	1.7	0.9	3.6

(1) Please refer to Appendix 3.

(2) Rotation represents the % of the capitalisation traded - 12m.

(3) Financial projections include IFRS 16 adjustments. FY 19 EBITDA is c. EUR 0.0Mn higher due to IFRS 16..

(4) Sector: Eurostoxx 600 Health Care.

(5) Please see Anex 2 for the theoretical tax rate (ROCE) and recurrent FCF calculation.

(6) Multiples and ratios calculated over prices at the date of this report.

A paradox: we downgrade estimates (2020), but the business is getting stronger ("on paper")

COVID-19: WE DOWNGRADE ESTIMATES FOR 2020E AND 2021E. 2020 revenues are higher (+7.8% vs. previous estimate), but the mix (a priori) is worse (smaller weighting of probiotics and lipids), impacting EBITDA and NP (-29.2% and -62.3% vs previous estimates, respectively). However, 2020 numbers will benefit from a, "circumstantially", low 2019 comps base (sales and EBITDA 2020e, c.+20% and c. +45% y/y respectively).

WITH A GRADUAL IMPROVEMENT IN MARGINS: 12.4% Rec. EBITDA/revenues 2020e (+2.1p.p. vs. -1y) that increases to 18.2% +2y (favourable revenue mix), boosting EBITDA to EUR 6.3Mn in 2020e (c. 2.5x vs 2019 and +11% vs. 2018).

BIOS COULD EMERGE STRONGER FROM A CRISIS: that has put health concerns ahead of the potential damage from economic hibernation. Clear changes in consumer behaviour can be discerned that are favourable to BIOS' sector.

1Q RESULTS VALIDATE THE COMPANY'S BUSINESS MODEL: i) positioning in markets geared towards health care (via natural extracts, probiotics and Omega-3), ii) capacity for innovation (9 lines of research), iii) geographical diversification (c.75% of 2019 turnover was international) and iv) reasonable levels of debt (1.1x ND/EBITDA 2019) with c. 70% of debt maturing > 2023.

IN CONCLUSION: Whilst the 2020 P/L will improve considerably vs. the "collapse" of 2019 (c. +75% NP), there are credible reasons for believing the post Covid-19 recovery (2021-2022) will provide a significant boost to BIOS's business. Our central scenario envisages CAGRs of 10.8% and 43.2% respectively in revenue and EBITDA 2020e-2022e, raising cash generation (average FCF to the firm of c. EUR 2Mn +3y, net cash EUR 1.0Mn 2022e).

THE KEY LIES IN THE CHANGE OF MIX: If BIOS is able to grow in probiotics and lipids, the gross margin will quickly approach 70% (vs 64% 2022e) and make feasible levels of EBITDA 2022 > EUR 8 Mn (FCF > EUR 4 Mn). This is not our central scenario. But a "best of all worlds" that this sector provides food for thought for. And with the M&A option hanging over it.

Relative performance -5y (Base 100)



Stock performance (%)	-1m	-3m	-12m	YTD	-3Y	-5Y
Absolute	43.8	-14.6	-21.4	9.3	82.5	70.4
vs Ibex 35	38.1	15.6	6.0	47.9	177.2	174.8
vs Ibex Small Cap Index	23.7	4.3	-6.6	29.3	87.6	66.3
vs Eurostoxx 50	30.9	6.5	-8.2	36.6	116.9	105.7
vs Sector benchmark ⁽⁴⁾	24.2	-11.9	-33.4	8.8	53.4	53.7

(*) Unless otherwise indicated, all the information contained in this report is based on: The Company, Thomson Reuters and Lighthouse

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1Q 2020 results
Downgrade to estimates

**2020: We downgrade our estimates (EBITDA 2020e: -29.2%).
But there is a (sector) growth opportunity.**

Chart 1. BIOS revenues mix performance (2009-2019)

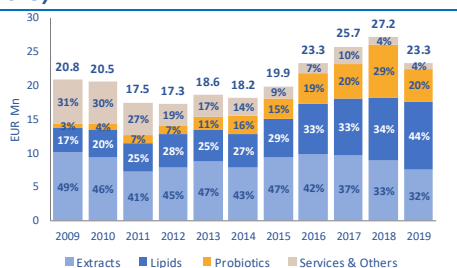


Chart 2. BIOS interdivision revenues' growth comparison (2008-2019)

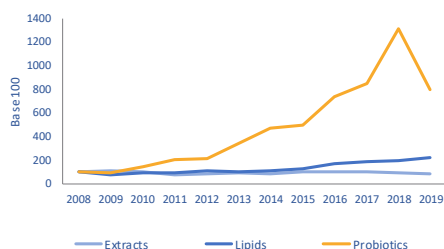
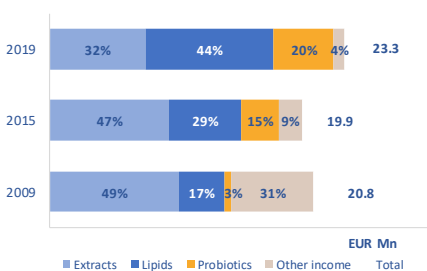


Chart 3. Revenues mix variation (2019 vs 2015 & 2009)



BIOS' play on developing new products in expanding markets (probiotics, Omega-3 and natural extracts, respectively 32%, 44% and 20% of 2019 revenue) and the company's internationalisation (c. 75% of 2019 sales, c. 2.5x. vs. -10y) has resulted in a mid single-digit CAGR (4% -5y). The expansion of its most lucrative segments (probiotics and lipids, with CAGRs of 12.4% and 15.6% respectively -5y) has made up for the fall in revenues of the extracts division (CAGR -5.4% in the same period).

The wide spread of margins among the various divisions means the evolution of the revenue mix is crucial to the P/L. In fact, 2019 was shaped by a fall in¹ sales of probiotics (the company's most lucrative division, c.-40% y/y), the absence of significant milestones and tougher competition for other divisions (-15.8% y/y in revenues from extracts), resulting in c. -60% y/y in recurrent EBITDA, taking margins to lows vs. -10y (Rec. EBITDA/revenues 10.3% 2019, -10.5 p.p. vs 2018), reversing the trend of previous years (+7.6p.p. 2015-2018). Even so, BIOS' business model remained intact in 2019.

But, against a backdrop of a deep global recession, with a rate of recovery that is as yet unknown, we need to ask: (i) How will the crisis unleashed by the Covid-19 impact BIOS in 2020? and (ii) what can be expected after 2020 in a (theoretical) context of macro normalisation in 2022?.

BIOS is in a better position today to tackle the current crisis than it was in 2008 ("Lehman Crisis")

Given the discretionary nature of the consumption of the products sold by BIOS, and, although, in our opinion, the current crisis is not comparable to that of 2009, and, so cannot be extrapolated to numbers going forward, it is worth taking a look at the historical performance of the various business platforms (Table 1). The extracts division (in a market characterised by a high degree of competition), is the one to have shown the greatest cyclicity in the past (accumulating c. -25% in revenues in the 3y subsequent to the crisis of 2008).

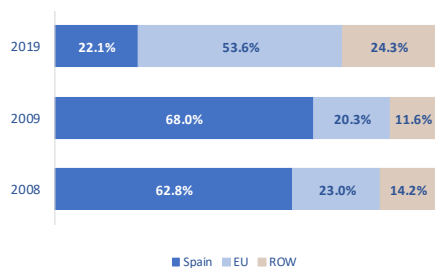
Table 1. Revenues growth (divisions) vs. BIOS total revenues and EBITDA/Rev. (2008-2019)

Year since "crisis"	Year	Extracts	Total BIOS				Revenues (EUR Mn)	Total BIOS		
			Base 100	Lipids	Base 100	Probiotics		Base 100	EBITDA/Rev.	
0	2008		100.0		100.0	100.0	21.5	100.0	13.8%	
1	2009	7.9%	107.9	-23.2%	76.8	94.1	20.8	96.7	11.4%	
2	2010	-8.0%	99.3	14.1%	87.6	50.5%	141.6	20.5	95.3	22.9%
3	2011	-23.1%	76.4	5.0%	92.0	44.0%	203.9	17.5	81.1	13.5%
4	2012	8.6%	82.9	14.7%	105.5	5.6%	215.3	17.3	80.2	14.5%
5	2013	11.0%	92.1	-5.0%	100.3	57.6%	339.3	18.6	86.3	18.1%
6	2014	-10.0%	82.9	5.5%	105.8	38.8%	470.8	18.2	84.3	18.7%
7	2015	20.4%	99.8	15.3%	122.0	5.8%	498.2	19.9	92.3	13.2%
8	2016	3.5%	103.3	34.6%	164.1	48.0%	737.3	23.3	108.3	17.7%
9	2017	-1.3%	101.9	10.9%	182.1	14.8%	846.2	25.7	119.5	20.2%
10	2018	-7.0%	94.8	8.6%	197.7	55.2%	1313.0	27.2	126.1	20.8%
11	2019	-15.8%	79.8	10.2%	217.8	-39.5%	794.8	23.3	108.1	10.5%

However, in the very origin of the current global crisis lies an important differentiating factor vs the previous one that favours the health industry. The "Covid-19 crisis" has prioritised public health concerns over the damage that economic hibernation (due to the measures taken to contain the pandemic) could do to the global economy. In addition, this crisis is triggering a significant change in consumption habits, in which clear patterns of behaviour can be identified (Nielsen) such as: pro-active shopping aimed at caring for health and reactive health management in a framework of (obligatory) growth in e-commerce. In our opinion, once the

¹ Impacted by the consolidation of one of its main Asian clients, resulting in a normalisation of inventories in that year.

Chart 4. Revenues geographic split (2019 vs. 2008-2009)

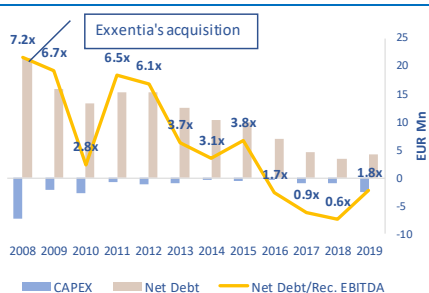


Covid-19 pandemic is over, this behaviour will be here to stay and could become the “new normal”.

In this situation, we believe BIOS has elements that will allow it to weather the crisis and even emerge from it stronger: i) a positioning in markets focused on health care and/or strengthening the immune system (natural extracts, probiotics and omega-3), aimed both at children and seniors and more specifically at women, ii) high geographical diversification (c.75% of 2019 revenue from the external market) and iii) a healthier financial situation than during the previous crisis (ND EUR 4.2Mn 2019, -73% vs. -10y), despite higher capex (+c.2.5x y/y).

However, given the current low visibility for all companies, we have chosen to split our estimates in two parts. Firstly, what can be expected in 2020e, in a context shaped by the measures adopted to contain the pandemic and uncertainty over how long it will take to return to a certain “normality”. And secondly, the likely performance of BIOS in the mid term, after the macro shock caused by Covid-19.

Chart 5. Net Debt vs. ND/Rec. EBITDA and CAPEX (2008-2019)



2020e: a global health crisis...that (a priori) favours the company's business

Uncertainty is maximum as regards the final impact of Covid-19. Advance estimates provided by the main economic bodies demonstrate that it is still too early to assess the severity of the economic consequences of the crisis, although all scenarios envisaged are disheartening: while at the domestic level, the Bank of Spain² estimates a decline in GDP of 6.6% y/y (its most favourable scenario) and of 13.6% (in the most unfavourable) in 2020 (vs. -3.8% in the 2009 crisis), the IMF points to -3% for global GDP (vs. -0.1% in 2009), which can now be seen as optimistic. In addition, there is the uncertainty about the effectiveness of the potential economic measures to be adopted (Marshall Plan).

1Q20: Revenue c.+6% (validating the business model), but c. -23% in Rec. EBITDA due to the worse mix.

1Q20 results were affected by the pandemic in Asia in 1Q (Asia-Pacific accounted for c. 12% of sales in 2019) and partially by its impact on the rest of the world (March). Even so, the strategy of diversifying BIOS' business has been bolstered: the “unexpected” growth in sales of the extracts division (+53.7% y/y, after 2 years of declines) and robust growth in lipids (+13.8% y/y), offset the worse “circumstantial” performance by probiotics (-19.3% y/y), still affected by delays to the marketing schedule and the “one-off” paralysis of restocking by some key Asian clients (which we expect to reverse over the year).

Table 2. BIOS 1Q 2020 results

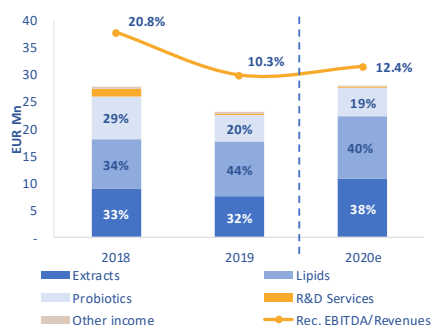
	1Q20	1Q19	1Q20 vs 1Q19	2020e	2020e vs 2019
Total Revenues	6.6	6.2	6.3%	28.2	21.3%
Lipids	2.5	2.2	13.8%	11.4	12.1%
Probiotics	1.2	1.5	-19.3%	5.4	12.2%
Extracts	2.8	1.8	53.7%	10.8	45.0%
Services & others	0.1	0.1	-17.6%	0.7	-24.7%
Rec. EBITDA	0.7	0.9	-22.8%	3.5	46.4%
Rec. EBITDA / Rev.	10.6%	14.5%	-4.0 p.p.	12.4%	2.1 p.p.
EBITDA	0.5	0.9	-37.8%	3.1	25.6%
EBITDA / Rev.	8.1%	13.8%	-5.7 p.p.	10.9%	0.4 p.p.
EBT	0.1	0.5	-74.7%	1.4	62.5%
NP	0.1	0.3	-73.2%	1.1	74.9%
Ordinary NP	n.a.	n.a.	n.a.	1.4	145.5%
Net Debt	2.8	3.4	-18%	2.5	n.m.

Although 1Q demonstrated the strength of the business model (+6.3% y/y in revenues), the less favourable revenue mix (a larger contribution from the less lucrative extracts division) fed through to the bottom of the P/L leading to a decline in recurrent EBITDA of 22.8% y/y and of 73.2% in NP, which was also affected by restructuring costs (EUR -0.2Mn).

² The Bank of Spain in its report “Reference Macroeconomic Scenarios For The Spanish Economy After Covid-19”. The most favourable scenario envisages an almost immediate recovery after the lockdown, while the most unfavourable sees the recovery as incomplete at the end of the year (hotel and leisure sectors).

The results and the current macro context lead us to change our estimates for 2020e, summarised as:

Chart 6. Revenues vs. EBITDA Margin (2018-2020e)

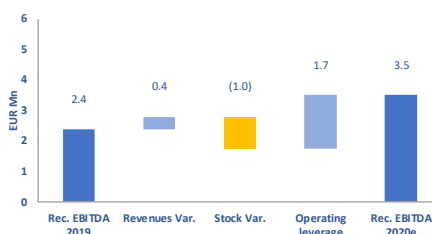


- An increase in revenues (to EUR 28.2Mn, +7.8% vs initial estimates); +21.3% vs 2019 favoured by the smaller comps base...** The Covid-19 pandemic is increasing the consumption of products that bolster health (dietary supplements and foods with functional ingredients). Despite initial warnings about a potential disruption of supplies in the sector, a good part of this says their businesses are not being affected for now (including BIOS). In fact, demand for certain natural products (such as vegetable extracts) associated with improving the immune system has rocketed in recent months, in addition to a growing interest in probiotics.

Despite the rebound in demand for these products since the beginning of the pandemic, the sustainability of this after the lockdown ends remains to be seen (due to the impact of the potential anticipation of orders). However, concerns over a possible second wave of the virus this year, and the absence of a vaccine in the short term means interest in these products is likely to continue throughout the year.

- With a less favourable mix resulting in lower rec. EBITDA (EUR 3.5Mn, -29.2% vs previous estimate) and +46.4% y/y with +2.1p.p. in the margin vs. 2019.** Due to the convergence of the worse revenue mix (vs. the initial estimate: -4.5p.p. and -1.6p.p. respectively in the contributions of probiotics and lipids to revenue, and +6.7% for extracts, the least lucrative segment). The restructuring carried out over the year is also likely to have a negative impact (EUR -0.4Mn).
- Net profit (-62.3% vs initial estimate):** at EUR 1.1Mn 2020e (c. +75% y/y), after an increase in the tax rate to 20% (+2p.p. vs. the previous one).

Chart 7. EBITDA 2020e vs 2019



What would happen in an even worse scenario in 2020?

An extension of economic hibernation for a longer period of time than envisaged would deepen the recessive economic cycle, reducing per capita disposable income (and consumption), with an additional impact to the scenario envisaged in our new estimates. Given the current high macro uncertainty, the question is what can we expect in the event of an even worse scenario for 2020e?

Table 3. 2020e: P&L, Cash Flow and ND main figures vs changes in the Current Scenario

	2020e		
	Worst Case	Current Scenario	Best Case
Total Revenues	24.0	28.2	29.7
Revenues growth vs 2019	3.1%	21.3%	27.4%
Growth. vs Current Scenario	-15.0%		5.0%
Rec. EBITDA	2.6	3.5	3.7
Growth vs 2019	7.9%	46.4%	55.7%
Growth vs Current Scenario	-26.3%	0	6.4%
EBITDA/Revenues	10.7%	12.4%	12.5%
EBITDA Mg. increase vs 2019 (p.p.)	0.5	2.1	2.3
EBIT	0.6	1.5	1.7
Growth vs 2019	-41.0%	56.1%	79.7%
Growth vs Current Scenario	-62.2%	0	15.2%
EBIT/Revenues	2.3%	5.2%	5.7%
EBIT Mg. Increase vs 2019 (p.p.)	(1.7)	1.2	1.7
Working Capital/Revenues (%)	60%	48%	40%
Working Capital Increase	(0.9)	0.0	1.5
=Recurrent Operating Cash Flow	1.7	3.5	5.2
Effective Tax Rate	20.0%	20.0%	20.0%
Taxes	(0.1)	(0.3)	(0.3)
Capex/Sales	6.2%	7.1%	7.8%
-CAPEX	(1.5)	(2.0)	(2.3)
- Acquisitions / +Divestments	1.0	1.0	1.0
=FCF to the firm	1.0	2.2	3.5
ND	3.7	2.5	1.2
ND/EBITDA 2019	1.4x	0.7x	0.3x

* Recurrent Operating CF calculated as Recurrent EBITDA – Rentals (IFRS 16) +/- Working Capital variation. BIOS reports according to Spanish GAAP.

**Taxes are calculated on EBIT according to a theoretical tax rate (if EBIT > 0).

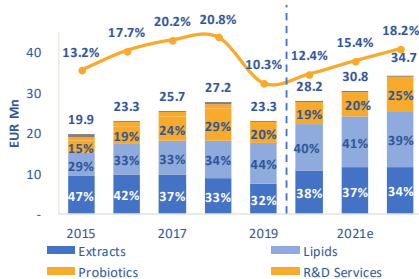
A deceleration of revenue growth over the rest of the year (c. -50% vs. 1Q20) with 15% lower revenue (in the 3 segments) vs. our central scenario, would leave BIOS' EBITDA close to the level reported in 2019 (and 2009). In this more adverse scenario, which envisages an increase in the working capital/revenue ratio to 60% (vs. 55% in 2009 and +2p.p. vs. -1y), BIOS would continue to record positive FCF in 2020e, enabling it to restrain its level of debt (ND/EBITDA 1.4x).

What can be expected in the mid term? A slowdown in growth (2021e and 2022e), with improved profitability (due to the revenue mix)

In a scenario that envisages the gradual (partial) normalisation of economic activity at the end of 2H20 and 1H21, with the (incomplete) recovery accelerating from 2H21, we expect BIOS to obtain revenues of c. EUR 35Mn 2022e (+14.2% CAGR 2019-2022e), exceeding the EUR 6Mn threshold in terms of EBITDA, and raising the margin to > 18% (EBITDA/revenue of 18.2% 2022e), boosted by a more favourable revenue mix. The main drivers of growth in this period will be:

- **A presence in expanding markets.** The Covid-19 crisis has underlined human (and economic) vulnerability, causing significant changes in consumer habits with a switch towards “healthy” products. Growth in demand for nutraceuticals and functional foods has been notable during the pandemic, and could accelerate in coming years. While their (verified) ability to strengthen the immune system should favour the consumption of certain probiotics and natural extracts, the favourable regulatory framework³ will enhance the consumption of omega-3.
- **Commitment to R+D (c.9% of revenues) to renew the product portfolio:** BIOS has recently announced: 1) the filing of two patents for its extracts line (in therapeutic areas for the elderly: cardiovascular problems and cognitive decline), 2) a third one for probiotics (the Gesta Health project, for women's health care) and 3) the start of clinical trials with its probiotic Hereditum Immunactiv K8 in health workers exposed to Covid-19 patients (aimed at measuring its efficacy in reducing the incidence and/or severity of the infection). BIOS has been selling the latter probiotic for several years, with positive results in clinical trials in two vaccination protocols (hepatitis A and influenza).
- **The quest for strategic alliances,** with emblematic industry players (such as Nestlé) which could emerge stronger from the current crisis (consumption focused on quality products), with the aim of reducing business risk in the mid/long term.

Chart 8. Revenues Mix performance vs. EBITDA Rec./Revenues



What would be the worst case scenario for BIOS when 2022 arrives?

Assuming that the increasing channelling of consumption towards health care resulting from the current pandemic were the “new normal” (a likely scenario in our opinion), BIOS would emerge stronger (to a greater or lesser extent) from the current crisis. The outlook for BIOS is that of a business that (*a priori*) will be able to continue growing during the next two years (EUR 34.7Mn in 2022e in our central scenario, c. +23% vs. 2020e).

However, the final impact associated with the duration of the (partial) paralysis of economic activity (in terms of the extent of the decline in global GDP and of the increase in the level of unemployment), and so in the reduction of per capital disposable income (a factor which has contributed to sector growth in recent years), will be critical to the speed of the recovery after the “Covid-19” shock.

³ The FDA (US Food and Drug Administration) stated in 2019 that it would not oppose the use of claims regarding the positive effects that the consumption of supplements or functional foods containing EPA/DHA omega-3 might have on the potential reduction of the risk of high blood pressure and cardiovascular disease. Coming into force (2020) of European directive 2016/127 (in infant formulas) and directive 2016/128 (in formulas for specific medical purposes)

Table 4. 2022e ¿What would happend if...?

	Slow Recovery	2022e	
		Current Scenario	Fast Recovery
Total Revenues	31.4	34.7	36.1
2022e Revenues vs 2020e	11.2%	22.8%	27.9%
Rec. EBITDA	4.3	6.3	8.1
Var. 2022e Rec. EBITDA vs 2020e	23.1%	80.4%	132.6%
Var. 2022e Rec. EBITDA vs 2019	80.1%	164.0%	240.5%
Rec. EBITDA/Revenues	13.7%	18.2%	22.5%
2022e Rec. EBITDA Mg. vs 2020e (p.p.)	1.3	5.8	10.1
2022e Rec. EBITDA Mg. vs 2019 (p.p.)	3.4	7.9	12.3
2022e Net Debt	1.7	(1.0)	(3.0)
2022e EV/Sales	2.3	2.1	2.0
Premium / (Discount) vs Feb. 2020 EV/Sales	-27.3%	-34.2%	-36.8%

In a more adverse scenario, in which the recovery took longer than expected, with tougher competition (and the consequent pressure on margins), we estimate 2022e revenue of c. EUR 31Mn, with an EBITDA margin of c.14% (EBITDA EUR 4.3Mn, c. +80% vs 2019), approaching 2010 levels (+2y after the “Lehman crisis” exploded). Even so, debt would remain at acceptable levels (0.4x ND/EBITDA), bolstering the viability of the business model.

Conversely, an acceleration in the recovery of consumption (given the discretionary component of the consumption of nutraceuticals and functional foods), would enable BIOS to exceed EUR 8Mn in EBITDA (maximum levels), subject to c. +5p.p. higher than estimated growth vs. 2020e linked to the probiotics division (the most lucrative), accelerating cash generation (net cash c. EUR 3Mn) and resulting in an EV/sales ratio of c. 2x in 2022e (c. -35% vs. February 2020).

In conclusion: BIOS is well placed to emerge stronger from the current crisis, although (a priori) it will have to wait until 2022 to exceed 2018 EBITDA.

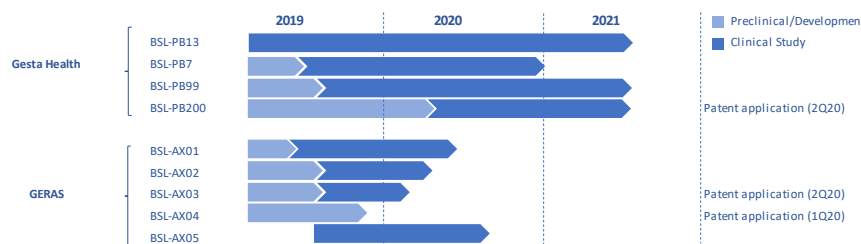
The worse macro context has led us to significantly downgrade our estimates (Table 5), given the discretionary nature of the consumption of the products sold. However, the Covid-19 crisis is boosting demand for, among others, nutraceuticals that are effective in strengthening the immune system, a trend that could continue over the mid/long term.

Tabla 5. Lighthouse estimates review

EUR Mn	2020e (New)	Review (%)	2021 (New)	Review (%)	2022e (New)
Total Revenues	28.2	7.8%	30.8	-3.7%	34.7
Recurrent EBITDA	3.5	-29.2%	4.7	-36.8%	6.3
Recurrent EBITDA growth	46.4%	-36.6 p.p.	35.5%	-16.1 p.p.	33.1%
Rec. EBITDA/Revenues	12.4%	-6.5 p.p.	15.4%	-8.0 p.p.	18.2%
Net Profit	1.1	-62.3%	2.4	-50.5%	3.6
Recurrent Free Cash Flow	1.1	-63.1%	0.6	-75.9%	2.4
ND / EBITDA	0.7 x	0.7 x	0.3 x	0.7 x	-0.2 x

Among the arguments underpinning our estimates for BIOS we would highlight: i) its commitment to R+D in order to renew its product portfolio (9 ongoing clinical trials, Table 6) aimed at growing markets (therapeutic areas: immune system, cardiovascular disease, cognitive decline...), (ii) success in the search for alliances with large players in order to reduce business model risk, iii) a change of direction in the sector towards quality and/or validated products, iv) the growing geographical diversification of the business, v) proven cost control discipline and vi) reasonable levels of debt (ND EUR 2.8Mn 1Q20, c. -35% vs. 2019), with c. 70% of debt being subsidised and with long terms to maturity (> 2023).

Table 6: R&D Pipeline



In other words, a significant downgrade to 2020 estimates. Although compatible with strong growth in two years, with the central scenario pointing to, without “stressing the model”, EBITDA > EUR 6 Mn (an all-time high for the company).

The BIOS share price has regained levels prior to the beginning of the crisis, reflecting the favourable sector situation. It currently trades at an EV/sales 2019e multiple of 2.9x (vs. an average of c. +2x -5y and -10y), in line with 2009 multiples (Table 8). Perhaps the 2022 EV/sales multiple (2.0x) does not reflect the combination of organic growth and a potential “passive” role in sector concentration movements (free float of c. 60%) currently offered by BIOS.

Finally, something that is obvious but that is worth underlining. The most positive aspect of the BIOS equity story lies in the (potential) for growth in the most profitable products (lipids and, especially, probiotics). Our model is not aggressive in this respect which explains a 2022e gross margin of c.64% (still 1p.p. below 2019). A return, via an improvement in the mix, to gross margins of 70% (seen in 2018) would take EBITDA > EUR 8 Mn. This is not our central scenario today but one which coexists with a “worst case scenario” in which FCF is positive throughout the period analysed (2020 – 2022).

Table 7: Lighthouse 2020e Central Scenario vs 2008 “Lehman” Crisis

"Lehman" Crisis	2008	2009	Drop (%)
	Pre Crisis Year	1 Year since Crisis	
Revenues	21.5	20.8	-3.3%
EBITDA	3.0	2.4	-20.0%
EBITDA/Sales	13.8%	11.4%	-2.4 p.p.

"Covid-19" Crisis	2019	2020e	Drop (%)
	Pre Crisis Year	1 Year since Crisis	
Revenues	23.3	28.2	21.3%
EBITDA	2.4	3.5	46.4%
EBITDA/Sales	10.3%	12.4%	2.1

"Lehman" Crisis	Reference	IBEX (Points)	BIOS (EUR/share)
Market "Pre Crisis"	2Q 08	12,046.2	1.9
Market "Post Crisis"	1Q 09	7,815.0	0.7
Drop (%)		-35.1%	-65.8%

"Covid-19" Crisis	Reference	IBEX (Points)	BIOS (EUR/share)
Market "Pre Crisis"	Feb-20	9,367.9	1.26
Market "Today"	"Today"	7,055.7	1.15
Drop (%)		-24.7%	-8.6%

Table 8: Crisis impact in BIOS valuation multiples

EV/Sales	"Lehman" Crisis		"Covid-19" Crisis	
	Reference	EV/Sales 2008	Reference	EV/Sales 2019
Pre Crisis	2Q 08	6.0	Jan-20	3.1
Post Crisis	1Q 09	3.1	"Today"	2.9
Drop in valuation multiple (%)*		-48.7%		-5.1%

(*) BIOS EV/Sales comparison over the year prior to the crisis, understood as the one that best reflects the revenues that the company should obtain once the macro collapse has been overcome. Therefore, we use the revenues for 2008 and 2019 as references to make the EV/EBITDA comparison between the “Lehman” crisis and that produced by the “Covid-19” effect.

Appendix 1. Financial Projections⁽¹⁾

Balance Sheet (EUR Mn)	2015	2016	2017	2018	2019	2020e	2021e	2022e		
Intangible assets	1.2	0.8	0.8	1.0	1.3	1.1	0.9	0.6		
Fixed assets	10.2	8.9	8.7	8.1	8.9	9.5	11.0	11.4		
Other Non Current Assets	6.3	7.3	5.7	5.1	4.8	4.8	4.8	4.8		
Financial Investments	0.1	0.1	0.1	3.1	0.9	0.9	0.9	0.9		
Goodwill & Other Intangibles	7.5	1.3	-	-	-	-	-	-		
Current assets	12.9	13.5	15.4	13.9	17.0	17.4	18.1	19.4		
Total assets	38.1	31.8	30.7	31.2	33.0	33.8	35.7	37.2		
Equity	22.5	18.8	20.7	23.3	23.7	24.8	27.2	30.7		
Minority Interests	-	-	-	-	-	-	-	-		
Provisions & Other L/T Liabilities	1.0	1.2	0.6	0.1	0.0	0.0	0.0	0.0		
Other Non Current Liabilities	-	-	-	-	1.4	2.4	2.9	2.9		
Net financial debt	10.0	6.9	4.5	3.4	4.2	2.5	1.4	(1.0)		
Current Liabilities	4.6	4.8	4.9	4.3	3.6	4.0	4.2	4.5		
Equity & Total Liabilities	38.1	31.8	30.7	31.2	33.0	33.8	35.7	37.2		
										CAGR
P&L (EUR Mn)	2015	2016	2017	2018	2019	2020e	2021e	2022e	15-19	19-22e
Total Revenues	19.9	23.3	25.7	27.2	23.3	28.2	30.8	34.7	4.0%	14.2%
<i>Total Revenues growth</i>	9.5%	17.4%	10.3%	5.6%	-14.3%	21.3%	9.0%	12.7%		
COGS	(6.4)	(7.1)	(8.4)	(7.7)	(8.1)	(11.5)	(11.7)	(12.5)		
Gross Margin	13.5	16.3	17.3	19.4	15.2	16.8	19.1	22.2	3.0%	13.5%
<i>Gross Margin/Revenues</i>	67.8%	69.7%	67.3%	71.5%	65.1%	59.4%	61.9%	63.9%		
Personnel Expenses	(5.4)	(6.2)	(6.7)	(7.6)	(6.7)	(6.5)	(7.1)	(7.9)		
Other Operating Expenses	(5.5)	(5.9)	(5.4)	(6.2)	(6.0)	(6.8)	(7.2)	(8.0)		
Recurrent EBITDA	2.6	4.1	5.2	5.7	2.4	3.5	4.7	6.3	-2.4%	38.2%
<i>Recurrent EBITDA growth</i>	-22.6%	57.5%	25.5%	9.0%	-57.8%	46.4%	35.5%	33.1%		
<i>Rec. EBITDA/Revenues</i>	13.2%	17.7%	20.2%	20.8%	10.3%	12.4%	15.4%	18.2%		
Restructuring Expense & Other non-rec.	-	-	-	-	0.1	(0.4)	-	-		
EBITDA	2.6	4.1	5.2	5.7	2.4	3.1	4.7	6.3	-1.7%	37.1%
Depreciation & Provisions	(2.3)	(3.0)	(1.9)	(1.6)	(1.5)	(1.6)	(1.7)	(1.9)		
Capitalized Expense	-	-	-	0.1	-	-	-	-		
Rentals (IFRS 16 impact)	-	-	-	-	-	-	-	-		
EBIT	0.4	1.1	3.3	4.2	0.9	1.5	3.0	4.4	27.1%	67.5%
<i>EBIT growth</i>	-64.8%	208.5%	192.7%	29.0%	-77.6%	56.1%	104.5%	47.3%		
<i>EBIT/Revenues</i>	1.8%	4.8%	12.7%	15.6%	4.1%	5.2%	9.8%	12.8%		
Impact of Goodwill & Others	(0.0)	(5.5)	(1.1)	(0.0)	-	-	-	-		
Net Financial Result	(0.5)	(0.3)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)		
Income by the Equity Method	-	-	-	-	-	-	-	-		
Ordinary Profit	(0.2)	(4.7)	2.0	4.1	0.8	1.4	2.9	4.4	n.a.	73.5%
<i>Ordinary Profit Growth</i>	-186.0%	n.a.	142.7%	103.3%	-79.2%	62.5%	113.1%	51.0%		
Extraordinary Results	0.0	0.0	0.2	-	-	-	-	-		
Profit Before Tax	(0.2)	(4.7)	2.2	4.1	0.8	1.4	2.9	4.4	n.a.	73.5%
Tax Expense	(0.2)	1.4	(0.2)	(0.8)	(0.2)	(0.3)	(0.6)	(0.9)		
<i>Effective Tax Rate</i>	n.a.	n.a.	7.8%	18.9%	25.7%	20.0%	20.0%	20.0%		
Minority Interests	-	-	-	-	-	-	-	-		
Discontinued Activities	-	-	-	-	-	-	-	-		
Net Profit	(0.3)	(3.3)	2.0	3.3	0.6	1.1	2.4	3.6	n.a.	77.9%
<i>Net Profit growth</i>	40.6%	-955.1%	160.3%	64.9%	-81.0%	74.9%	113.1%	51.0%		
Ordinary Net Profit	(0.2)	(4.7)	1.9	3.3	0.6	1.4	2.4	3.6	n.a.	82.3%
<i>Ordinary Net Profit growth</i>	-222.9%	n.a.	139.4%	78.8%	-82.3%	145.5%	63.4%	51.0%		
										CAGR
Cash Flow (EUR Mn)	2015	2016	2017	2018	2019	2020e	2021e	2022e	15-19	19-22e
Recurrent EBITDA						3.5	4.7	6.3	-2.4%	38.2%
Rentals (IFRS 16 impact)						-	-	-		
Working Capital Increase						0.0	(0.5)	(1.0)		
Recurrent Operating Cash Flow						3.5	4.3	5.3	n.a.	n.a.
CAPEX						(2.0)	(3.0)	(2.0)		
Net Financial Result affecting the Cash Flow						(0.1)	(0.1)	(0.0)		
Tax Expense						(0.3)	(0.6)	(0.9)		
Recurrent Free Cash Flow						1.1	0.6	2.4	n.a.	n.a.
Restructuring Expense & Other non-rec.						(0.4)	-	-		
- Acquisitions / + Divestures of assets						1.0	0.5	-		
Extraordinary Inc./Exp. Affecting Cash Flow						-	-	-		
Free Cash Flow						1.7	1.1	2.4	n.a.	n.a.
Capital Increase						-	-	-		
Dividends						-	-	-		
Net Debt Variation						(1.7)	(1.1)	(2.4)		

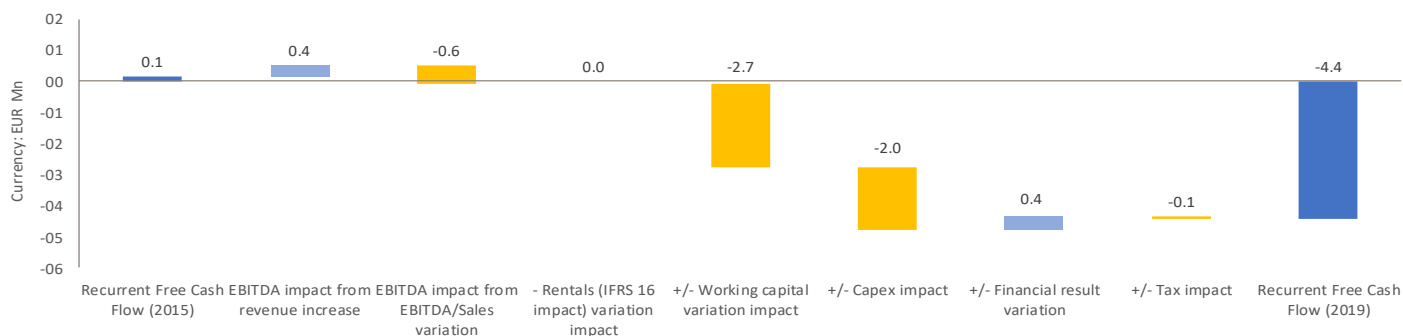
Note 1: Financial projections include IFRS 16 adjustments. BIOS reports according to Spanish GAAP so IFRS does not apply.

Appendix 2. Free Cash Flow⁽¹⁾

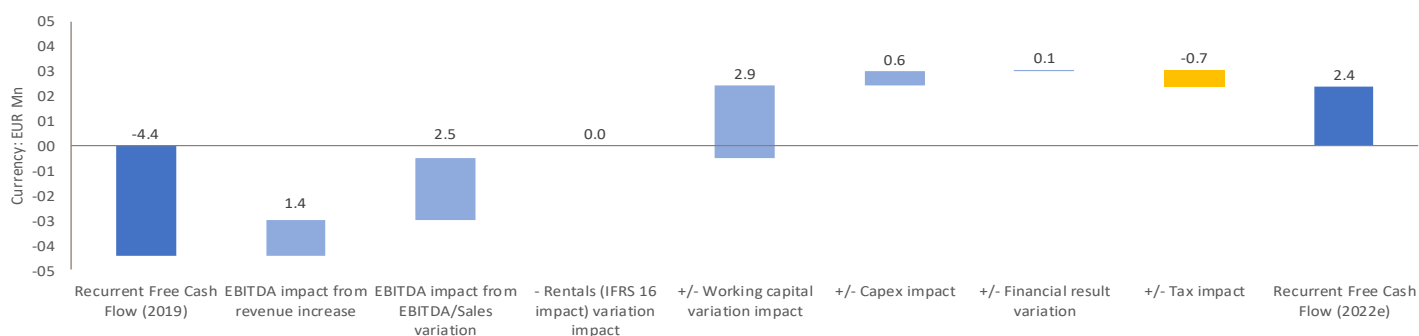
A) Cash Flow Analysis (EUR Mn)	2016	2017	2018	2019	2020e	2021e	2022e	CAGR	
								16-19	19-22e
Recurrent EBITDA	4.1	5.2	5.7	2.4	3.5	4.7	6.3	-16.7%	38.2%
<i>Recurrent EBITDA growth</i>	57.5%	25.5%	9.0%	-57.8%	46.4%	35.5%	33.1%		
<i>Rec. EBITDA/Revenues</i>	17.7%	20.2%	20.8%	10.3%	12.4%	15.4%	18.2%		
- Rentals (IFRS 16 impact)	-	-	-	-	-	-	-		
+/- Working Capital increase	(0.3)	(1.9)	0.9	(3.9)	0.0	(0.5)	(1.0)		
= Recurrent Operating Cash Flow	3.8	3.3	6.6	(1.5)	3.5	4.3	5.3	<i>n.a.</i>	<i>n.a.</i>
<i>Rec. Operating Cash Flow growth</i>	171.9%	-13.8%	100.2%	<i>n.a.</i>	<i>n.a.</i>	21.9%	24.3%		
<i>Rec. Operating Cash Flow / Sales</i>	16.4%	12.8%	24.3%	<i>n.a.</i>	12.4%	13.9%	15.3%		
- CAPEX	(0.4)	(0.9)	(1.1)	(2.6)	(2.0)	(3.0)	(2.0)		
- Net Financial Result affecting Cash Flow	(0.3)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)		
- Taxes	1.4	(0.2)	(0.8)	(0.2)	(0.3)	(0.6)	(0.9)		
= Recurrent Free Cash Flow	4.5	2.1	4.7	(4.4)	1.1	0.6	2.4	<i>n.a.</i>	<i>n.a.</i>
<i>Rec. Free Cash Flow growth</i>	<i>n.a.</i>	-52.9%	121.1%	<i>n.a.</i>	<i>n.a.</i>	-46.4%	292.6%		
<i>Rec. Free Cash Flow / Revenues</i>	19.2%	8.2%	17.1%	<i>n.a.</i>	4.0%	2.0%	6.9%		
- Restructuring expenses & others	-	-	(0.1)	(0.2)	(0.4)	-	-		
- Acquisitions / + Divestments	(1.7)	0.0	(2.7)	3.8	1.0	0.5	-		
+/- Extraordinary Inc./Exp. affecting Cash Flow	0.0	0.2	-	-	-	-	-		
= Free Cash Flow	2.8	2.3	1.8	(0.8)	1.7	1.1	2.4	<i>n.a.</i>	<i>n.a.</i>
<i>Free Cash Flow growth</i>	<i>n.a.</i>	-15.7%	-23.0%	<i>n.a.</i>	<i>n.a.</i>	-35.4%	115.5%		
<i>Recurrent Free Cash Flow - Yield (s/Mkt Cap)</i>	6.7%	3.2%	7.0%	<i>n.a.</i>	1.7%	0.9%	3.6%		
<i>Free Cash Flow Yield (s/Mkt Cap)</i>	4.2%	3.5%	2.7%	<i>n.a.</i>	2.6%	1.7%	3.6%		
B) Analytical Review of Annual Recurrent Free Cash Flow Performance (Eur Mn)									
Recurrent FCF(FY - 1)	0.1	4.5	2.1	4.7	(4.4)	1.1	0.6		
EBITDA impact from revenue increase	0.5	0.4	0.3	(0.8)	0.5	0.3	0.6		
EBITDA impact from EBITDA/Sales variation	1.1	0.6	0.2	(2.5)	0.6	0.9	1.0		
= Recurrent EBITDA variation	1.5	1.1	0.5	(3.3)	1.1	1.2	1.6		
- Rentals (IFRS 16 impact) variation impact	-	-	-	-	-	-	-		
+/- Working capital variation impact	0.9	(1.6)	2.8	(4.8)	3.9	(0.5)	(0.5)		
= Recurrent Operating Cash Flow variation	2.4	(0.5)	3.3	(8.1)	5.0	0.8	1.0		
+/- CAPEX impact	0.2	(0.4)	(0.2)	(1.5)	0.6	(1.0)	1.0		
+/- Financial result variation	0.2	0.1	0.0	0.0	-	0.0	0.1		
+/- Tax impact	1.5	(1.5)	(0.6)	0.6	(0.1)	(0.3)	(0.3)		
= Recurrent Free Cash Flow variation	4.3	(2.4)	2.6	(9.1)	5.6	(0.5)	1.8		
Recurrent Free Cash Flow	4.5	2.1	4.7	(4.4)	1.1	0.6	2.4		
C) "FCF to the Firm" (pre debt service) (EUR Mn)									
EBIT	1.1	3.3	4.2	0.9	1.5	3.0	4.4	-5.5%	67.5%
* <i>Theoretical Tax rate</i>	0.0%	7.8%	18.9%	25.7%	20.0%	20.0%	20.0%		
= Taxes (pre- Net Financial Result)	-	(0.3)	(0.8)	(0.2)	(0.3)	(0.6)	(0.9)		
Recurrent EBITDA	4.1	5.2	5.7	2.4	3.5	4.7	6.3	-16.7%	38.2%
- Rentals (IFRS 16 impact)	-	-	-	-	-	-	-		
+/- Working Capital increase	(0.3)	(1.9)	0.9	(3.9)	0.0	(0.5)	(1.0)		
= Recurrent Operating Cash Flow	3.8	3.3	6.6	(1.5)	3.5	4.3	5.3	<i>n.a.</i>	<i>n.a.</i>
- CAPEX	(0.4)	(0.9)	(1.1)	(2.6)	(2.0)	(3.0)	(2.0)		
- Taxes (pre- Financial Result)	-	(0.3)	(0.8)	(0.2)	(0.3)	(0.6)	(0.9)		
= Recurrent Free Cash Flow (To the Firm)	3.4	2.2	4.8	(4.3)	1.2	0.7	2.4	<i>n.a.</i>	<i>n.a.</i>
<i>Rec. Free Cash Flow (To the Firm) growth</i>	311.4%	-35.9%	117.8%	<i>n.a.</i>	<i>n.a.</i>	-44.6%	256.6%		
<i>Rec. Free Cash Flow (To the Firm) / Revenues</i>	14.6%	8.5%	17.5%	<i>n.a.</i>	4.3%	2.2%	6.9%		
- Acquisitions / + Divestments	(1.7)	0.0	(2.7)	3.8	1.0	0.5	-		
+/- Extraordinary Inc./Exp. affecting Cash Flow	0.0	0.2	-	-	-	-	-		
= Free Cash Flow "To the Firm"	1.7	2.4	2.0	(0.5)	2.2	1.2	2.4	<i>n.a.</i>	<i>n.a.</i>
<i>Free Cash Flow (To the Firm) growth</i>	98.1%	42.1%	-15.4%	<i>n.a.</i>	<i>n.a.</i>	-47.0%	104.5%		
<i>Rec. Free Cash Flow To the Firm Yield (o/EV)</i>	5.0%	3.2%	7.0%	<i>n.a.</i>	1.8%	1.0%	3.5%		
<i>Free Cash Flow "To the Firm" - Yield (o/EV)</i>	2.5%	3.5%	3.0%	<i>n.a.</i>	3.2%	1.7%	3.5%		

Note 1: Financial projections include IFRS 16 adjustments. BIOS reports according to Spanish GAAP so IFRS does not apply.

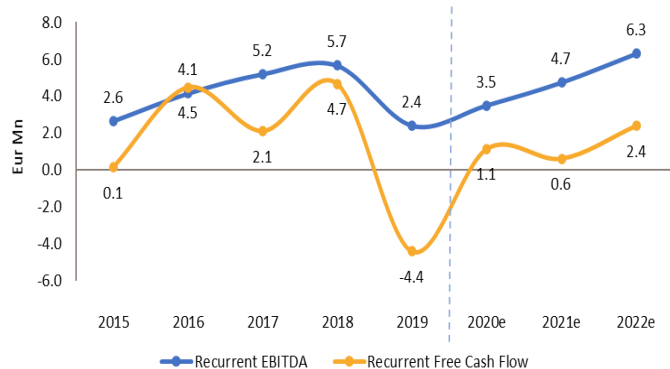
Recurrent Free Cash Flow accumulated variation analysis (2015 - 2019)



Recurrent Free Cash Flow accumulated variation analysis (2019 - 2022e)



Recurrent EBITDA vs Recurrent Free Cash Flow



Stock performance vs EBITDA 12m forward



Appendix 3. EV breakdown at the date of this report

	EUR Mn	Source
Market Cap	66.4	
+ Minority Interests	-	3m Results 2020
+ Provisions & Other L/T Liabilities	0.1	3m Results 2020
+ Net financial debt	2.8	3m Results 2020
- Financial Investments	0.9	3m Results 2020
+/- Others	-	3m Results 2020
Enterprise Value (EV)	68.3	

Appendix 4. Historical performance ⁽¹⁾⁽²⁾

Historical performance (EUR Mn)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e	CAGR	
															09-19	19-22e
Total Revenues	20.0	20.5	17.5	17.3	18.6	17.4	19.9	23.3	25.7	27.2	23.3	28.2	30.8	34.7	1.5%	14.2%
<i>Total Revenues growth</i>	-7.2%	2.7%	-14.9%	-1.1%	7.7%	-6.3%	14.1%	17.4%	10.3%	5.6%	-14.3%	21.3%	9.0%	12.7%		
EBITDA	2.7	4.8	2.2	2.5	3.5	3.1	2.6	4.1	5.2	5.7	2.4	3.1	4.7	6.3	-0.8%	37.1%
<i>EBITDA growth</i>	-10.0%	79.1%	-52.9%	13.5%	39.7%	-12.3%	-15.5%	57.5%	25.5%	9.0%	-56.7%	25.6%	54.0%	33.1%		
<i>EBITDA/Sales</i>	13.3%	23.1%	12.8%	14.7%	19.1%	17.8%	13.2%	17.7%	20.2%	20.8%	10.5%	10.9%	15.4%	18.2%		
Net Profit	(9.4)	0.6	(4.1)	(0.9)	(0.1)	(0.6)	(0.3)	(3.3)	2.0	3.3	0.6	1.1	2.4	3.6	n.a.	77.9%
<i>Net Profit growth</i>	n.a.	106.7%	-743.6%	77.5%	92.1%	-716.4%	47.0%	-955.1%	160.3%	64.9%	-81.0%	74.9%	113.1%	51.0%		
Adjusted number shares (Mn)	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7		
EPS (EUR)	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.03	0.06	0.01	0.02	0.04	0.06	n.a.	77.9%
<i>EPS growth</i>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	64.9%	-81.0%	74.9%	n.a.	51.0%		
Ord. EPS (EUR)	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.03	0.06	0.01	0.02	0.04	0.06	n.a.	82.3%
<i>Ord. EPS growth</i>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	78.8%	-82.3%	n.a.	63.4%	51.0%		
CAPEX	(2.1)	(2.7)	(0.7)	(1.1)	(0.9)	(0.4)	(0.6)	(0.4)	(0.9)	(1.1)	(2.6)	(2.0)	(3.0)	(2.0)		
<i>CAPEX/Sales %</i>	10.5%	13.1%	4.1%	6.2%	5.0%	2.4%	2.9%	1.8%	3.4%	3.9%	11.2%	7.1%	9.7%	5.8%		
Free Cash Flow	8.2	1.4	(2.4)	(0.6)	2.1	1.5	0.2	2.8	2.3	1.8	(0.8)	1.7	1.1	2.4	n.a.	n.a.
<i>ND/EBITDA (x) ⁽²⁾</i>	-0.1x	2.8x	6.5x	6.0x	3.5x	3.3x	3.8x	1.7x	0.9x	0.6x	1.7x	0.8x	0.3x	-0.2x		
<i>P/E (x)</i>	n.a.	56.2x	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17.1x	17.3x	96.2x	60.1x	28.2x	18.7x		
<i>EV/Sales (x)</i>	2.7x	2.4x	2.2x	2.1x	2.8x	1.9x	1.8x	1.8x	1.5x	2.1x	2.6x	2.2x	2.2x	2.0x		
<i>EV/EBITDA (x) ⁽²⁾</i>	20.3x	10.3x	16.9x	14.5x	14.7x	10.5x	13.5x	10.0x	7.3x	10.0x	24.8x	22.2x	14.4x	10.8x		
<i>Absolute performance</i>	5.6%	-34.0%	-34.7%	-7.4%	84.0%	-44.2%	22.1%	26.6%	0.0%	66.7%	6.0%	9.3%				
<i>Relative performance vs Ibxex 35</i>	-18.7%	-20.1%	-24.8%	-2.9%	51.5%	-46.2%	31.5%	29.2%	-6.9%	96.1%	-5.2%	47.9%				

Note 1: The multiples are historical, calculated based on the price and EV at the end of each year, except (if applicable) in the current year, when multiples would be given at current prices.

The absolute and relative behavior corresponds to each exercise (1/1 to 31/12). The source, both historical multiples and the evolution of the price, is Thomson Reuters.

Note 2: Financial projections include IFRS 16 adjustments. FY 19 EBITDA is c. EUR 0.0Mn higher due to IFRS 16.

Note 3: All ratios and multiples on EBITDA refer to total EBITDA (not to recurrent EBITDA).

Appendix 5. Main Competitors 2020e

	EUR Mn	Industria Probióticos			Omega-3		
		Probi AB	Biogaia AB	Christian Hansen	Average	DSM	BIOS
Datos Mercado	Ticker (Reuters)	PROB.ST	BIOGb.ST	CHRH.CO		DSMN.AS	BIOS.MC
	País	Sweden	Sweden	Denmark		Netherlands	Spain
	Market cap	257.9	729.7	10,450.8		20,261.9	66.4
	Enterprise value (EV)	243.1	715.4	11,383.1		21,634.0	68.3
Información financiera básica	Total Ingresos	61.0	82.7	1,206.6		9,020.8	28.2
	Cto.Total Ingresos	2.2%	13.0%	3.9%	6.4%	0.1%	21.3%
	2y TACC (2020e - 2022e)	8.9%	12.4%	5.9%	9.1%	5.3%	10.8%
	EBITDA	17.5	27.2	428.4		1,683.8	3.1
	Cto. EBITDA	-5.6%	13.1%	5.0%	4.2%	2.1%	25.6%
	2y TACC (2020e - 2022e)	16.0%	14.2%	6.8%	12.3%	7.3%	43.2%
	EBITDA/Ingresos	28.7%	32.8%	35.5%	32.3%	18.7%	10.9%
	EBIT	10.5	26.1	354.6		1,065.3	1.5
	Cto. EBIT	-9.9%	13.0%	3.2%	2.1%	-1.2%	56.1%
	2y TACC (2020e - 2022e)	27.5%	14.2%	7.3%	16.3%	10.6%	73.6%
	EBIT/Ingresos	17.3%	31.6%	29.4%	26.1%	11.8%	5.2%
	Beneficio Neto	8.2	20.2	261.0		790.4	1.1
	Cto. Beneficio Neto	0.4%	13.0%	4.3%	5.9%	10.9%	74.9%
2y TACC (2020e - 2022e)	27.4%	14.0%	7.5%	16.3%	12.4%	79.4%	
CAPEX/Ventas	-5.0%	-3.5%	-11.2%	-6.6%	-8.1%	-7.1%	
Free Cash Flow	10.8	n.a.	204.2		575.1	1.7	
Deuda financiera Neta	(20.7)	(24.2)	696.5		1,888.6	2.5	
DN/EBITDA (x)	(1.2)	(0.9)	1.6	(0.2)	1.1	0.7	
Pay-out	17.9%	73.3%	63.5%	51.5%	54.7%	0.0%	
Múltiplos y Ratios	P/E (x)	30.4	38.4	40.4	36.4	24.3	60.1
	P/BV (x)	2.2	14.1	11.5	9.3	2.5	2.7
	EV/Ingresos (x)	4.0	8.7	9.4	7.4	2.4	2.4
	EV/EBITDA (x)	13.9	26.3	26.6	22.3	12.8	19.5
	EV/EBIT (x)	23.1	27.4	32.1	27.5	20.3	46.2
	ROE	7.6	39.0	29.9	25.5	10.2	4.5
	FCF Yield (%)	4.3	n.a.	1.9	3.1	2.8	1.7
	DPA	0.13	0.85	1.26	0.75	2.46	0.00
Dvd Yield	0.6%	1.9%	1.6%	1.4%	2.2%	0.0%	

Note 1: Financial data, multiples and ratios based on market consensus (Thomson Reuters). In the case of the company analyzed, own estimates (Lighthouse).

Note 2: All ratios and multiples on EBITDA refer to total EBITDA (not to recurrent EBITDA).

Note 3: Please note that peer's data is as of the date of this report and consensus could not fully reflect the impact in estimates of the Covid-19 effect.

Appendix 6. Valuation inputs

Inputs for the DCF Valuation Approach

	2020e	2021e	2022e	Terminal Value ⁽¹⁾		
Free Cash Flow "To the Firm"	2.2	1.2	2.4	23.1		
Market Cap	66.4	At the date of this report				
Net financial debt	2.8	Debt net of Cash (3m Results 2020)				
					Best Case	Worst Case
Cost of Debt	2.0%	Net debt cost			1.5%	2.5%
Tax rate (T)	20.0%	T (Normalised tax rate)			=	=
Net debt cost	1.6%	Kd = Cost of Net Debt * (1-T)			1.2%	2.0%
Risk free rate (rf)	0.9%	Rf (10y Spanish bond yield)			=	=
Equity risk premium	9.0%	R (own estimate)			8.5%	9.5%
Beta (B)	1.4	B (Thomson Reuters)			1.3	1.5
Cost of Equity	13.1%	Ke = Rf + (R * B)			11.9%	15.1%
Equity / (Equity + Net Debt)	96.0%	E (Market Cap as equity value)			=	=
Net Debt / (Equity + Net Debt)	4.0%	D			=	=
WACC	12.6%	WACC = Kd * D + Ke * E			11.5%	14.6%
G "Fair"	2.0%				2.5%	1.5%

(1) Terminal value calculated on the recurrent Free Cash Flow "to the Firm" of the last estimated year using the normalised tax rate (T) indicated in the upper table.

(2) The terminal value does not reflect the value related to the development of the company's pipeline at the issue date of this report.

Inputs for the Multiples Valuation Approach

Compañía	Ticker Reuters	Mkt. Cap	PER 20e	BPA 20e-22e	EV/EBITDA 20e	EBITDA 20e-22e	EV/Vtas. 20e	Ingresos 20e-22e	EBITDA/Vtas. 20e	FCF Yield 20e	FCF 20e-22e
Probi AB	PROB.ST	257.9	30.4	27.4%	13.9	16.0%	4.0	8.9%	28.7%	4.3%	21.0%
Biogaia AB	BIOGb.ST	729.7	38.4	14.1%	26.3	14.2%	8.7	12.4%	32.8%	n.a.	n.a.
Christian Hansen	CHRH.CO	10,450.8	40.4	7.2%	26.6	6.8%	9.4	5.9%	35.5%	1.9%	9.7%
Industria de probióticos			36.4	16.2%	22.3	12.3%	7.4	9.1%	32.3%	3.1%	15.4%
DSM	DSMN.AS	20,261.9	24.3	12.2%	12.8	7.3%	2.4	5.3%	18.7%	2.8%	24.7%
Industria de Omega 3			24.3	12.2%	12.8	7.3%	2.4	5.3%	18.7%	2.8%	24.7%
BIOS	BIOS.MC	66.4	60.1	79.4%	19.5	43.2%	2.4	10.8%	10.9%	1.7%	18.0%

(1) Please note that peer's data is as of the date of this report and consensus could not fully reflect the impact in estimates of the Covid-19 effect.

Free Cash Flow sensitivity analysis (2021e)

A) Rec. EBITDA and EV/EBITDA sensitivity to changes in EBITDA/Sales

Scenario	EBITDA/Sales 21e	EBITDA 21e	EV/EBITDA 21e
Max	17.4%	5.4	12.8x
Central	15.4%	4.7	14.4x
Min	13.4%	4.1	16.6x

B) Rec. FCF and Rec. FCF - Yield sensitivity to changes in EBITDA and CAPEX/sales

FCF Rec. EUR Mn	CAPEX/Sales 21e			Scenario	Rec. FCF/Yield 21e		
EBITDA 21e	8.7%	9.7%	10.7%				
5.4	1.5	1.2	0.9	Max	2.3%	1.8%	1.4%
4.7	0.9	0.6	0.3	Central	1.4%	0.9%	0.5%
4.1	0.3	(0.0)	(0.3)	Min	0.5%	n.a.	n.a.

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Recommendation History

Date of report	Recommendation	Price (EUR)	Target price (EUR)	Period of validity	Reason for report	Analyst
30-Apr-2020	n.a.	1.15	n.a.	n.a.	Review of estimates	Ana Isabel González García, CIIA
02-Mar-2020	n.a.	1.10	n.a.	n.a.	12m Results 2019	Ana Isabel González García, CIIA
29-Oct-2019	n.a.	0.95	n.a.	n.a.	9m Results 2019	Ana Isabel González García, CIIA
30-Jul-2019	n.a.	1.02	n.a.	n.a.	6m Results 2019	Ana Isabel González García, CIIA
14-May-2019	n.a.	1.24	n.a.	n.a.	3m Results 2019	Ana Isabel González García, CIIA
28-Feb-2019	n.a.	1.62	n.a.	n.a.	12m Results 2018	Ana Isabel González García, CIIA
31-Jan-2019	n.a.	1.56	n.a.	n.a.	Initial Coverage	Ana Isabel González García, CIIA