Pangaea Oncology





EQUITY - SPAIN Sector: Biotechnology

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Important news Closing price: EUR 1.72 (1 Sep 2021)

+34 915 904 226

Important news

Opinion (1): Positive

Impact (1): We will have to raise our estimates

Pangaea Oncology (PANG) is a small Spanish biotech company (Zaragoza). specialising in differentiated cancer diagnosis and treatment and corporate services (molecular diagnostics and biomarker discovery for the pharmaceutical industry). It is run by a prestigious medical team that includes its founders (c.20% of capital). The Solans family (G. Pikolin) and GPI (Mayoral) are reference shareholders.

Market Data

Market Cap (Mn EUR and USD)	32.2	38.1
EV (Mn EUR and USD) (2)	28.1	33.2
Shares Outstanding (Mn)	18.7	
-12m (Max/Med/Mín EUR)	2.70 / 1.74	/ 1.40
Daily Avg volume (-12m Mn EUR)	n.m.	
Rotation ⁽³⁾	3.5	
Factset / Bloomberg	PANG-ES /	PANG SM
Close fiscal year	31-Dec	

Shareholders Structure (%)(7)

Founders	23.3
GPI (Domínguez Family, Mayoral)	22.5
Vidaro Inv. (Villagrá Blanco Fam.)	13.4
Solans Family	3.0
Free Float	19.2

Financials (Mn EUR)	2020	2021 e	2022 e	2023 e
Adj. nº shares (Mn)	18.7	20.0	23.0	23.0
Total Revenues	4.1	5.2	6.8	8.2
Rec. EBITDA	-1.6	-0.6	0.6	1.5
% growth	9.3	60.4	195.0	153.4
% Rec. EBITDA/Rev.	n.a.	n.a.	8.7	18.5
% Inc. EBITDA sector (4)	-3.0	-13.4	2.8	11.1
Net Profit	-1.8	-0.2	0.8	1.4
EPS (EUR)	-0.10	-0.01	0.03	0.06
% growth	66.6	91.6	517.7	84.9
Ord. EPS (EUR)	-0.12	-0.02	0.03	0.06
% growth	63.5	82.3	235.6	103.3
Rec. Free Cash Flow ⁽⁵⁾	-2.0	-1.0	0.1	1.2
Pay-out (%)	0.0	0.0	0.0	0.0
DPS (EUR)	0.00	0.00	0.00	0.00
Net financial debt	5.3	0.4	0.1	-1.3
ND/Rec. EBITDA (x)	n.a.	n.a.	0.1	-0.8
ROE (%)	n.a.	n.a.	5.2	9.0
ROCE (%) ⁽⁵⁾	n.a.	n.a.	5.0	9.1

Ord. P/E	n.a.	n.a.	62.3	30.7
P/BV	3.8	2.2	2.1	1.9
Dividend Yield (%)	0.0	0.0	0.0	0.0
EV/Sales	6.84	5.40	4.10	3.44
EV/Rec. EBITDA	n.a.	n.a.	47.1	18.6
EV/EBIT	n.a.	n.a.	27.9	15.1
FCF Yield (%) ⁽⁵⁾	n.a.	n.a.	0.3	3.6

- The opinion regarding the results is on reported EBITDA with respect to our estimate for the year (12m). The impact reflects whether, due to the results, we envisage a significant revision (>5% - 10%, depending on the sector) of our EBITDA estimate (for any of the estimated years).
- Please refer to Appendix 3.

Ratios & Multiples (x)(6)

- Rotation is the % of the capitalisation traded 12m.
- Sector: TR Europe Biotechnology & Medical Research
- Please see Appendix 2 for the theoretical tax rate (ROCE) and rec. FCF calculation.
- Multiples and ratios calculated over prices at the date of this report.
- Others: Inv. Indust. Serpis 9.6%, Inv. Orensanas 8.9%. Founders: BIOsense (J. Rivela)
- (*) Unless otherwise indicated, all the information contained in this report is based on: The Company, Factset and Lighthouse.

Enhanced position in personalised oncology

PANG VENTURES INTO IN VITRO 3D ORGANOID TECHNOLOGY, via a strategic commercial alliance with the biotech company Invitrocue (Singapore) to create ONCOPDO (Spain; with both partners owning 50%), specialised in personalised oncological treatment.

Ana Isabel González García, CIIA – ana.gonzalez@lighthouse-ieaf.com

TO EXCLUSIVELY SELL ONCO-PDO IN SPAIN AND PORTUGAL, a new diagnostic test developed by Invitrocue that identifies the most effective drugs for treating cancer (lung, breast, prostate, pancreatic and ovarian; c. 110,000 new cases diagnosed in Spain in 2020, c. 40% of total oncological incidence). The arrangement allows agreements to be signed for distribution, licensing and sub-licensing (not exclusive) in other countries and for marketing to the pharmaceutical industry. It also envisages the creation of a laboratory at a national level (Invitrocue already has laboratories in Germany, Singapore and Brazil).

A STATE-OF-THE-ART TECHNOLOGY THAT IS SYNERGETIC FOR PANG... Invitrocue is at the forefront of 3D cell-based models (>90% success rate in culturing organoids) used in in vitro testing of cancer treatment drugs. Organoids are three-dimensional cell cultures generated from stem cells that partially reproduce the characteristics of the original tissue. The technology used is based on patient tumour samples (obtained in routine biopsies) that are cultured in the laboratory to create complex structures (PDOs: patient-derived organoids), that are subsequently tested against anti-tumour drugs (those already being marketed and those still under development).

...AND ATTRACTIVE FOR THE PHARMACEUTICAL INDUSTRY, to which PANG already provides its services (molecular diagnostics), as it increases the efficacy of drug development. This new business line will also enhance PANG's data base.

A STRATEGIC MOVE THAT WILL STRENGTHEN PANG'S P&L IN THE LONG TERM. This still nascent technology (that requires specialist publications that underpin its market penetration) complements existing treatments and so its most immediate marketing (at similar prices to those of sequencing tests) is likely to be aimed at the pharmaceutical industry (and some refractory patients), being reflected in the P&L from 2023e (Rec. EBITDA c. +15% if proportionally consolidated), without raising CAPEX (short term).

IN CONCLUSION, PANG ENHANCES ITS POSITION AS AN INNOVATIVE PLAY ON PRECISION ONCOLOGY, in cutting edge technologies at the ramp-up stage: liquid biopsies and in vitro diagnosis of 3D organoids, that improve the efficacy of treatment decisions with the speed of penetration being critical in both cases.

Relative performance (Base 100)



Stock performance (%)	-1m	-3m	-12m	YTD	-3Y	-5Y
Absolute	3.6	-8.5	18.6	7.5	-21.0	n.a.
vs Ibex 35	0.0	-6.5	-8.2	-3.5	-17.4	n.a.
vs Ibex Small Cap Index	2.7	-4.4	-9.2	2.1	-29.1	n.a.
vs Eurostoxx 50	0.2	-11.9	-8.0	-9.7	-36.6	n.a.
vs Sector benchmark ⁽⁴⁾	-4.5	-24.3	-6.2	-10.1	-60.0	n.a.





27.7



Pangaea Oncology (PANG) is a BME Growth company

BME Growth is the segment of BME MTF Equity aimed at small and medium sized companies, directed and managed by the Spanish stock market and is subject to the CNMV supervision. BME MTF Equity is not a Regulated Market but instead falls within the classification of a Multilateral Trading Facility (MTF) as defined under the Markets in Financial Instruments Directive (MiFID). In July 2020, BME Growth obtained the status of SME Growth Market, a new category of EU regulations, which in Spain is called Mercado de Pymes en Expansión.

BME Growth is the Spanish equity market for companies of reduced capitalization which aim to grow, with a special set of regulations, designed specifically for them, and with costs and process tailored to their particular features. Operations in BME Growth (former MAB) started in July 2009. There are currently c.120 companies listed on it. Companies listed on the MAB can choose to present their financial statements under IFRS or the General Accounting Plan (PGC) and Royal Decree 1159/2010 (NOFCAC).



(PANG-ES / PANG SM) Report date: 2 Sep 2021

Valuation inputs

Inputs for the DCF Valuation Approach

	2021 e	2022 e	2023 e	Terminal Value ⁽¹⁾		
Free Cash Flow "To the Firm"	(1.8)	(0.8)	0.0	n.a.		
Market Cap	32.2	At the date of this	report			
Net financial debt	0.4	Debt net of Cash (12m Results 2020))		
					Best Case	Worst Case
Cost of Debt	3.0%	Net debt cost			2.8%	3.3%
Tax rate (T)	20.0%	T (Normalised tax	rate)		=	=
Net debt cost	2.4%	Kd = Cost of Net D	ebt * (1-T)		2.2%	2.6%
Risk free rate (rf)	0.3%	Rf (10y Spanish bo	nd yield)		=	=
Equity risk premium	9.0%	R (own estimate)			8.5%	9.5%
Beta (B)	1.4	B (own estimate)			1.3	1.5
Cost of Equity	12.9%	Ke = Rf + (R * B)			11.4%	14.6%
Equity / (Equity + Net Debt)	98.9%	E (Market Cap as e	equity value)		=	=
Net Debt / (Equity + Net Debt)	1.1%	D			=	=
WACC	12.8%	WACC = Kd * D + F	(e * E		11.3%	14.5%
G "Fair"	2.5%				2.5%	1.5%

⁽¹⁾ The terminal value calculated beyond the last FCF estimate does not reflect the company's growth potential (positive/negative) at the date of publication of this report.

Inputs for the Multiples Valuation Approach

Ticker Factset	Mkt Can	D/F 21e	EPS 21e-23e	EV/EBITDA	EBITDA	EV/Sales	Revenues	EBITDA/Sales	FCF Yield	FCF 21e-23e
										n.a.
										n.a.
										n.a.
									n.a.	50.2%
GH-US	11,238.2	n.a.	15.6%	n.a.	20.6%	n.a.	33.9%	n.a.	n.a.	2.7%
EXAS-US	15,344.0	n.a.	22.2%	n.a.	49.5%	11.1	19.6%	n.a.	n.a.	57.3%
NEO-US	5,206.3	n.a.	55.0%	n.a.	n.a.	12.4	15.7%	2.6%	n.a.	n.a.
boratories		45.0	35.3%	20.5	36.2%	6.7	20.7%	13.5%	n.a.	36.7%
TMO-US	186,427.6	25.3	-1.5%	20.3	-2.3%	6.5	3.1%	31.8%	3.1%	6.4%
QGEN-US	10,846.2	23.2	-3.1%	16.4	-2.1%	6.5	0.8%	39.4%	4.1%	1.6%
DHR-US	197,295.0	34.6	3.4%	25.5	3.2%	8.7	4.6%	34.3%	2.9%	5.6%
A-US	44,846.8	40.7	10.9%	31.5	9.4%	8.6	6.5%	27.4%	2.4%	11.2%
BDX-US	61,166.6	19.6	2.7%	15.3	2.6%	4.3	1.4%	28.3%	5.7%	-0.3%
ment		28.7	2.5%	21.8	2.2%	6.9	3.3%	32.3%	3.6%	4.9%
ROG-CH	295,559.5	18.5	4.6%	12.8	3.8%	5.2	2.6%	40.9%	4.8%	6.4%
		n.a.	n.a.	n.a.	n.a.	5.4	25.3%			82.4%
	Factset BIOC-US MDXH-BE BCART-BE ATRY-ES GH-US EXAS-US NEO-US boratories TMO-US QGEN-US DHR-US A-US BDX-US DOMENTAL ROG-CH	Factset Mkt. Cap BIOC-US 45.6 MDXH-BE 141.0 BCART-BE 245.4 ATRY-ES 671.8 GH-US 11,238.2 EXAS-US 15,344.0 NEO-US 5,206.3 boratories TMO-US 186,427.6 QGEN-US 10,846.2 DHR-US 197,295.0 A-US 44,846.8 BDX-US 61,166.6	Factset Mkt. Cap P/E 21e BIOC-US 45.6 n.a. MDXH-BE 141.0 n.a. BCART-BE 245.4 n.a. ATRY-ES 671.8 45.0 GH-US 11,238.2 n.a. EXAS-US 15,344.0 n.a. NEO-US 5,206.3 n.a. boratories 45.0 TMO-US 186,427.6 25.3 QGEN-US 10,846.2 23.2 DHR-US 197,295.0 34.6 A-US 44,846.8 40.7 BDX-US 61,166.6 19.6 Dment 28.7 ROG-CH 295,559.5 18.5	Factset Mkt. Cap P/E 21e 21e-23e BIOC-US 45.6 n.a. n.a. MDXH-BE 141.0 n.a. n.a. BCART-BE 245.4 n.a. 42.6% ATRY-ES 671.8 45.0 41.0% GH-US 11,238.2 n.a. 15.6% EXAS-US 15,344.0 n.a. 22.2% NEO-US 5,206.3 n.a. 55.0% boratories 45.0 35.3% TMO-US 186,427.6 25.3 -1.5% QGEN-US 10,846.2 23.2 -3.1% DHR-US 197,295.0 34.6 3.4% A-US 44,846.8 40.7 10.9% BDX-US 61,166.6 19.6 2.7% coment 28.7 2.5% ROG-CH 295,559.5 18.5 4.6%	Factset Mkt. Cap P/E 21e 21e-23e 21e BIOC-US 45.6 n.a. n.a. n.a. MDXH-BE 141.0 n.a. n.a. n.a. BCART-BE 245.4 n.a. 42.6% n.a. ATRY-ES 671.8 45.0 41.0% 20.5 GH-US 11,238.2 n.a. 15.6% n.a. EXAS-US 15,344.0 n.a. 22.2% n.a. NEO-US 5,206.3 n.a. 55.0% n.a. boratories 45.0 35.3% 20.5 TMO-US 186,427.6 25.3 -1.5% 20.3 QGEN-US 10,846.2 23.2 -3.1% 16.4 DHR-US 197,295.0 34.6 3.4% 25.5 A-US 44,846.8 40.7 10.9% 31.5 BDX-US 61,166.6 19.6 2.7% 15.3 coment 28.7 2.5% 21.8 ROG-CH 295,559.5	Factset Mikt. Cap P/E 21e 21e-23e 21e 21e-23e BIOC-US 45.6 n.a. n.a. n.a. n.a. n.a. MDXH-BE 141.0 n.a. n.a. n.a. n.a. BCART-BE 245.4 n.a. 42.6% n.a. 44.9% ATRY-ES 671.8 45.0 41.0% 20.5 29.8% GH-US 11,238.2 n.a. 15.6% n.a. 20.6% EXAS-US 15,344.0 n.a. 22.2% n.a. 49.5% NEO-US 5,206.3 n.a. 55.0% n.a. n.a. NEO-US 5,206.3 n.a. 55.0% n.a. n.a. boratories 45.0 35.3% 20.5 36.2% TMO-US 186,427.6 25.3 -1.5% 20.3 -2.3% QGEN-US 10,846.2 23.2 -3.1% 16.4 -2.1% DHR-US 197,295.0 34.6 3.4% 25.5 3.2%	Factset Mkt. Cap P/E 21e 21e-23e 21e 21e-23e 21e BIOC-US 45.6 n.a. n.a. n.a. n.a. 0.8 MDXH-BE 141.0 n.a. n.a. n.a. n.a. 6.0 BCART-BE 245.4 n.a. 42.6% n.a. 44.9% 5.1 ATRY-ES 671.8 45.0 41.0% 20.5 29.8% 5.0 GH-US 11,238.2 n.a. 15.6% n.a. 20.6% n.a. EXAS-US 15,344.0 n.a. 22.2% n.a. 49.5% 11.1 NEO-US 5,206.3 n.a. 55.0% n.a. n.a. 12.4 boratories 45.0 35.3% 20.5 36.2% 6.7 TMO-US 186,427.6 25.3 -1.5% 20.3 -2.3% 6.5 QGEN-US 10,846.2 23.2 -3.1% 16.4 -2.1% 6.5 DHR-US 197,295.0 34.6	Factset Mkt. Cap P/E 21e 21e-23e 21e 21e-23e 21e 21e-23e BIOC-US 45.6 n.a. n.a. n.a. n.a. 0.8 -18.1% MDXH-BE 141.0 n.a. n.a. n.a. n.a. 6.0 n.a. BCART-BE 245.4 n.a. 42.6% n.a. 44.9% 5.1 51.2% ATRY-ES 671.8 45.0 41.0% 20.5 29.8% 5.0 22.1% GH-US 11,238.2 n.a. 15.6% n.a. 20.6% n.a. 33.9% EXAS-US 15,344.0 n.a. 22.2% n.a. 49.5% 11.1 19.6% NEO-US 5,206.3 n.a. 55.0% n.a. n.a. 12.4 15.7% boratories 45.0 35.3% 20.5 36.2% 6.7 20.7% TMO-US 186,427.6 25.3 -1.5% 20.3 -2.3% 6.5 3.1% QGEN-US	Factset Mkt. Cap P/E 21e 21e-23e 21e 21e-23e 21e 21e-23e 21e BIOC-US 45.6 n.a. n.a. n.a. n.a. 0.8 -18.1% n.a. MDXH-BE 141.0 n.a. n.a. n.a. 6.0 n.a. n.a. BCART-BE 245.4 n.a. 42.6% n.a. 44.9% 5.1 51.2% n.a. ATRY-ES 671.8 45.0 41.0% 20.5 29.8% 5.0 22.1% 24.5% GH-US 11,238.2 n.a. 15.6% n.a. 20.6% n.a. 33.9% n.a. EXAS-US 15,344.0 n.a. 22.2% n.a. 49.5% 11.1 19.6% n.a. NEO-US 5,206.3 n.a. 55.0% n.a. n.a. 12.4 15.7% 2.6% boratories 45.0 35.3% 20.5 36.2% 6.7 20.7% 13.5% TMO-US 186,427.6	Factset Mkt. Cap P/E 21e 21e-23e 21e 21e

Free Cash Flow sensitivity analysis (2022e)

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

Scenario	EBITDA/Sales 22e	EBITDA 22e	EV/EBITDA 22e
Max	9.6%	0.7	42.7x
Central	8.7%	0.6	47.1x
Min	7.8%	0.5	52.6x

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

Rec. FCF EUR Mn		CAPEX/Sales 22e	
EBITDA 22e	1.5%	1.7%	1.9%
0.7	0.2	0.1	0.1
0.6	0.1	0.1	0.1
0.5	0.0	0.0	0.0



Scenario		Rec. FCF/Yield 22e	
Max	0.5%	0.5%	0.4%
Central	0.3%	0.3%	0.2%
Min	0.1%	0.1%	0.0%



Appendix 1. Financial Projections(1)

Balance Sheet (EUR Mn)	2016	2017	2018	2019	2020	2021e	2022e	2023e		
Intangible assets	8.2	10.0	10.3	7.1	6.9	7.4	7.8	8.1	-	
Fixed assets	0.9	0.9	0.8	0.6	0.6	0.8	0.8	0.8		
Other Non Current Assets	2.7	4.0	3.8	4.0	3.9	3.1	2.2	1.0		
Financial Investments	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2		
Goodwill & Other Intangilbles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Current assets	1.8	2.4	3.6	3.6	4.4	5.2	6.4	7.3		
Total assets	13.7	17.4	18.5	15.4	15.8	16.6	17.2	17.4		
Total assets	13.7	17.4	10.5	13.4	13.0	10.0	17.2	17.4		
Equity	6.0	5.0	8.5	8.3	8.6	14.4	15.2	16.6		
Minority Interests	-	-	-	-	-	-	-	-		
Provisions & Other L/T Liabilities	0.1	0.4	0.4	0.3	0.2	0.2	0.2	0.2		
Other Non Current Liabilities	-	-	-	-	-	-	-	-		
Net financial debt	4.8	10.7	8.0	5.5	5.3	0.4	0.1	(1.3)		
Current Liabilities	2.8	1.3	1.6	1.3	1.6	1.6	1.7	1.8		
Equity & Total Liabilities	13.7	17.4	18.5	15.4	15.8	16.6	17.2	17.4		
									CA	AGR
P&L (EUR Mn)	2016	2017	2018	2019	2020	2021 e	2022e	2023e	16-20	20-23e
Total Revenues	2.5	2.6	3.1	3.3	4.1	5.2	6.8	8.2	13.0%	25.8%
Total Revenues growth	29.2%	4.1%	16.7%	8.4%	23.6%	26.7%	31.9%	19.1%	13.070	23.070
COGS	(2.1)	(2.8)	(1.4)	(1.1)	(1.6)	(1.6)	(1.7)	(1.9)		
Gross Margin	0.4	, ,	1.7	2.2	2.5	3.6	5.2	6.3	57.7%	35.4%
Gross Margin/Revenues	16.3%	(0.2)	54.5%	66.9%	61.9%	69.1%	75.3%	77.2%	31.170	33.4%
_	(2.3)	n.a. (2.8)	54.5% (2.7)	(2.7)	(2.8)	(3.0)	(3.3)			
Personnel Expenses Other Operating Expenses	(2.3) (1.4)	(2.8) (1.4)	(2.7)		(2.8)	(3.0)		(3.4)		
	, ,			(1.3)			(1.3)	(1.4)	4.000/	42 50/
Recurrent EBITDA	(3.3)	(4.5)	(2.3)	(1.7)	(1.6)	(0.6)	0.6	1.5	16.9%	43.5%
Recurrent EBITDA growth	-60.5%	-34.3%	47.7%	25.3%	9.3%	60.4%	195.0%	153.4%		
Rec. EBITDA/Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8.7%	18.5%		
Restructuring Expense & Other non-rec.	0.0	(0.1)	0.3	0.3	0.2	0.2	0.2	0.2	20.20/	40.40/
EBITDA	(3.3)	(4.5)	(2.1)	(1.4)	(1.3)	(0.4)	0.8	1.7	20.3%	48.4%
Depreciation & Provisions	(0.9)	(1.8)	(2.4)	(3.1)	(2.4)	(1.5)	(1.6)	(1.7)		
Capitalized Expense	2.7	3.7	2.6	2.2	2.1	1.9	1.8	1.8		
Rentals (IFRS 16 impact)	-	-	-	-	-	(0.0)	-	-		
BIT	(1.5)	(2.6)	(1.8)	(2.3)	(1.7)	(0.0)	1.0	1.9	-2.8%	46.1%
EBIT growth	-52.7%	-74.8%	30.3%	-26.7%	27.5%	99.9%	n.a.	84.4%		
EBIT/Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	14.7%	22.8%		
mpact of Goodwill & Others	(0.0)	(0.1)	0.0	(2.5)	-	- (2.2)	- (2.2)	-		
Net Financial Result	(0.2)	(0.4)	(0.3)	(0.2)	(0.2)	(0.2)	(0.0)	(0.0)		
ncome by the Equity Method					(0.0)		0.1	0.1		
Ordinary Profit	(1.7)	(3.1)	(2.1)	(5.0)	(1.9)	(0.2)	1.0	1.9	-2.4%	44.2%
Ordinary Profit Growth	-55.9%	-81.8%	32.4%	-134.2%	61.7%	88.8%	581.0%	84.9%		
Extraordinary Results	- 						-	-		
Profit Before Tax	(1.7)	(3.1)	(2.1)	(5.0)	(1.9)	(0.2)	1.0	1.9	-2.4%	44.2%
Tax Expense	1.1	1.5	0.9	0.1	0.1	0.1	(0.3)	(0.5)		
Effective Tax Rate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	25.0%	25.0%		
Minority Interests	-	-	-	-	-	-	-	-		
Discontinued Activities		-	-	-		-	-	-		
Net Profit	(0.6)	(1.6)	(1.3)	(4.8)	(1.8)	(0.2)	0.8	1.4	-31.8%	40.9%
Net Profit growth	-22.2%	-177.0%	23.9%	-286.4%	62.9%	91.1%	581.0%	84.9%		
Ordinary Net Profit	(1.8)	(3.1)	(2.4)	(5.3)	(2.2)	(0.4)	0.6	1.3	- 5.3 %	37.5%
Ordinary Net Profit growth	-42.2%	-76.2%	22.9%	-123.7%	59.5%	81.1%	256.1%	103.3%		
									CA	AGR
Cash Flow (EUR Mn)	2016	2017	2018	2019	2020	2021 e	2022e	2023e	16-20	20-23e
Recurrent EBITDA						(0.6)	0.6	1.5	16.9%	43.5%
Rentals (IFRS 16 impact)						` - ´	-	-		
Working Capital Increase						(0.8)	(1.1)	(0.9)		
Recurrent Operating Cash Flow						-1.5	-0.5	0.6	2.8%	32.3%
CAPEX						(0.1)	(0.1)	(0.1)		
Net Financial Result affecting the Cash Flow						(0.2)	(0.0)	(0.0)		
ax Expense						0.8	0.7	0.7		
Recurrent Free Cash Flow						(1.0)	0.1	1.2	10.2%	37.2%
						0.2	0.1	0.2	10.270	31.2%
Restructuring Expense & Other non-rec. Acquisitions / + Divestures of assets							- 0.2	0.2		
						(0.2)				
Extraordinary Inc./Exp. Affecting Cash Flow						(4.0)	0.2	1.2	7.00/	20 501
ree Cash Flow						(1.0)	0.3	1.3	7.6%	38.5%
Capital Increase						6.0	-	-		
						-	-	-		
Dividends Net Debt Variation						(5.0)	(0.3)	(1.3)		

Note 1: Financial projections include IFRS 16 adjustments. FY 19 EBITDA is c. EUR 0.0Mn higher due to IFRS 16.





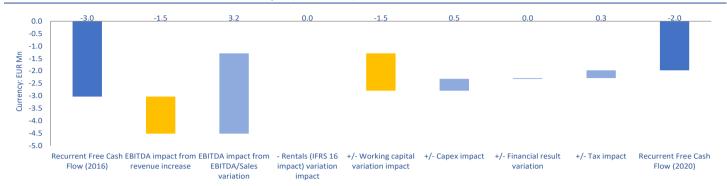
Appendix 2. Free Cash Flow(1)

A) Coch Flow Analysis (FUD Mar)	2047	2010	2010	2020	2024-	2022-	2022-		GR 20.22
A) Cash Flow Analysis (EUR Mn)	2017	2018	2019	2020	2021e	2022e	2023e	17-20	20-23
Recurrent EBITDA	(4.5)	(2.3)	(1.7)	(1.6)	(0.6)	0.6	1.5	29.2%	43.5%
Recurrent EBITDA growth	-34.3%	47.7%	25.3%	9.3%	60.4%	195.0%	153.4%		
Rec. EBITDA/Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	8.7%	18.5%		
- Rentals (IFRS 16 impact)	- (2.4)	- (0.0)	- (0.4)	- (0.4)	(0.0)	- (4.4)	-		
+/- Working Capital increase	(2.1)	(0.8)	(0.4)	(0.4)	(0.8)	(1.1)	(0.9)	22 70/	22.20
= Recurrent Operating Cash Flow	(6.6)	(3.2)	(2.1)	(2.0)	(1.5)	(0.5)	0.6	32.7%	32.3%
Rec. Operating Cash Flow growth	-193.7%	51.8%	33.9%	4.3%	27.6%	67.2%	233.6%		
Rec. Operating Cash Flow / Sales	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7.8%		
- CAPEX	(0.2)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)		
- Net Financial Result affecting Cash Flow	(0.4)	(0.3)	(0.2)	(0.2)	(0.2)	(0.0)	(0.0)		
- Taxes	0.4	0.4	0.4	0.3	0.8	0.7	0.7	00.00/	
= Recurrent Free Cash Flow	(6.8)	(3.1)	(1.9)	(2.0)	(1.0)	0.1	1.2	33.8%	37.2%
Rec. Free Cash Flow growth	-124.1%	54.2%	40.0%	-5.6%	51.7%	108.9%	n.a.		
Rec. Free Cash Flow / Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	1.2%	14.2%		
- Restructuring expenses & others	1.0	0.4	0.2	0.3	0.2	0.2	0.2		
- Acquisitions / + Divestments	-	-	-	(0.3)	(0.2)	-	-		
+/- Extraordinary Inc./Exp. affecting Cash Flow						-	-		
= Free Cash Flow	(5.8)	(2.7)	(1.7)	(2.0)	(1.0)	0.3	1.3	29.5%	38.5%
Free Cash Flow growth	-108.4%	53.0%	39.4%	-22.7%	50.5%	126.6%	399.2%		
Recurrent Free Cash Flow - Yield (s/Mkt Cap)	n.a.	n.a.	n.a.	n.a.	n.a.	0.3%	3.6%		
Free Cash Flow Yield (s/Mkt Cap)	n.a.	n.a.	n.a.	n.a.	n.a.	0.8%	4.2%		
B) Analytical Review of Annual Recurrent Free Cash Flow Performance (Eur Mn)	2017	2018	2019	2020	2021e	2022e	2023e		
Recurrent FCF(FY - 1)	(3.0)	(6.8)	(3.1)	(1.9)	(2.0)	(1.0)	0.1		
							0.1		
BITDA impact from FRITDA (Calas variation	(0.1)	(0.7)	(0.2)	(0.4)	(0.4)	(0.2)			
BITDA impact from EBITDA/Sales variation	(1.0)	2.9	0.8	0.6	1.4	1.4	0.8		
Recurrent EBITDA variation	(1.1)	2.1	0.6	0.2	1.0	1.2	0.9		
Rentals (IFRS 16 impact) variation impact	- (2.2)	-	-	- (0.4)	- (0.4)	- (0.2)	-		
-/- Working capital variation impact	(3.2)	1.3	0.5	(0.1)	(0.4)	(0.2)	0.2		
Recurrent Operating Cash Flow variation	(4.3)	3.4	1.1	0.1	0.6	1.0	1.1		
-/- CAPEX impact	0.4	0.1	0.0	(0.1)	(0.0)	(0.0)	(0.0)		
+/- Financial result variation	(0.2)	0.1	0.2	(0.0)	(0.0)	0.2	0.0		
+/- Tax impact	0.4	0.0	(0.0)	(0.1)	0.5	(0.1)	(0.0)		
= Recurrent Free Cash Flow variation	(3.8)	3.7	1.2	(0.1)	1.0	1.0	1.1		
Recurrent Free Cash Flow	(6.8)	(3.1)	(1.9)	(2.0)	(1.0)	0.1	1.2		
								CA	GR
c) "FCF to the Firm" (pre debt service) (EUR Mn)	2017	2018	2019	2020	2021 e	2022 e	2023e	17-20	20-23
BIT	(2.6)	(1.8)	(2.3)	(1.7)	(0.0)	1.0	1.9	13.8%	46.19
Theoretical Tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%		
= Taxes (pre- Net Financial Result)	-	-	-	-	-	(0.3)	(0.5)		
Requirement EPITDA	(A E)	(2.2)	(1.7)	(1.6)	(0.6)	0.6	1.5	20.20/	42 F
Recurrent EBITDA - Rentals (IFRS 16 impact)	(4.5)	(2.3)	(1.7)	(1.6)	(0.6)	0.6	1.5	29.2%	43.59
					(0.9)	(1.1)			
+/- Working Capital increase	(2.1)	(0.8)	(0.4)	(0.4)	(0.8)	(1.1)	(0.9)	22 70/	22.20
= Recurrent Operating Cash Flow - CAPEX	(6.6)	(3.2)	(2.1)	(2.0)	(1.5)	(0.5)	0.6	32.7%	32.39
	(0.2)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)		
- Taxes (pre- Financial Result)	- (6.7)	(2.2)	(2.4)	(2.4)	(4 F)	(0.3)	(0.5)	22 50/	26.20
= Recurrent Free Cash Flow (To the Firm)	(6.7)	(3.2)	(2.1)	(2.1)	(1.5)	(0.8)	0.0	32.5%	26.3 9
Rec. Free Cash Flow (To the Firm) growth	-141.5%	52.5%	34.5%	1.0%	25.7%	45.1%	103.7%		
Rec. Free Cash Flow (To the Firm) / Revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.4%		
- Acquisitions / + Divestments	-	-	-	(0.3)	(0.2)	-	-		
+/- Extraordinary Inc./Exp. affecting Cash Flow	-			-	-		-		
= Free Cash Flow "To the Firm"	(6.7)	(3.2)	(2.1)	(2.4)	(1.8)	(0.8)	0.0	29.1%	26.39
Frank Corale Flance (Tartha a Firms) amountly	-141.5%	52.5%	34.5%	-14.6%	25.6%	52.6%	103.7%		
Free Cash Flow (10 the Firm) growth	111.570								
Free Cash Flow (To the Firm) growth Rec. Free Cash Flow To the Firm Yield (o/EV)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1%		

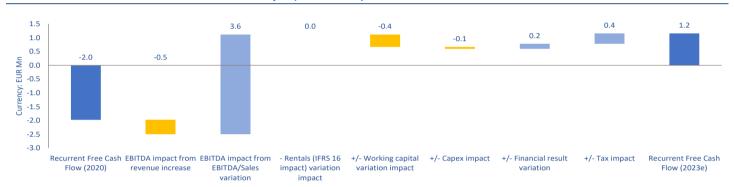
Note 1: Financial projections include IFRS 16 adjustments. FY 19 EBITDA is c. EUR 0.0Mn higher due to IFRS 16.



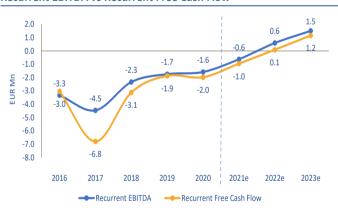
Recurrent Free Cash Flow accumulated variation analysis (2016 - 2020)



Recurrent Free Cash Flow accumulated variation analysis (2020 - 2023e)



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	32.2	
+ Minority Interests	-	12m Results 2020
+ Provisions & Other L/T Liabilities	0.2	12m Results 2020
+ Net financial debt	0.4	12m Results 2020
- Financial Investments	0.0	12m Results 2020
+/- Others ⁽¹⁾	(4.7)	12m Results 2020
Enterprise Value (EV)	28.1	
(1) Tax loss carry forward		



Appendix 4. Historical performance (1)(2)

Historical performance															CA	GR
(EUR Mn)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e	12-20	20-23e
Total Revenues			2.6	3.1	1.7	1.9	2.5	2.6	3.1	3.3	4.1	5.2	6.8	8.2	5.7%	25.8%
Total Revenues growth			n.a.	17.7%	-44.4%	13.5%	29.2%	4.1%	16.7%	8.4%	23.6%	26.7%	31.9%	19.1%		
EBITDA			(1.2)	(0.5)	(1.6)	(2.0)	(3.3)	(4.5)	(2.1)	(1.4)	(1.3)	(0.4)	0.8	1.7	-1.1%	48.4%
EBITDA growth			n.a.	61.2%	-237.0%	-22.1%	-69.4%	-37.0%	54.0%	32.7%	5.1%	67.4%	279.3%	117.3%		
EBITDA/Sales			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.4%	20.7%		
Net Profit			(0.4)	0.1	(0.2)	(0.5)	(0.6)	(1.6)	(1.3)	(4.8)	(1.8)	(0.2)	0.8	1.4	-20.0%	40.9%
Net Profit growth			n.a.	124.9%	-289.1%	-147.7%	-22.2%	-177.0%	23.9%	-286.4%	62.9%	91.1%	581.0%	84.9%		
Adjusted number shares (Mn)			0.2	0.2	0.2	0.2	10.6	10.6	13.1	16.9	18.7	20.0	23.0	23.0		
EPS (EUR)			-2.55	0.63	-1.20	-2.97	-0.06	-0.16	-0.10	-0.29	-0.10	-0.01	0.03	0.06	33.7%	38.3%
EPS growth			n.a.	n.a.	n.a.	n.a.	98.1%	n.a.	38.4%	n.a.	66.6%	91.6%	n.a.	84.9%		
Ord. EPS (EUR)			-4.30	0.57	-13.18	-11.77	-0.17	-0.29	-0.18	-0.32	-0.12	-0.02	0.03	0.06	36.4%	35.5%
Ord. EPS growth			n.a.	n.a.	n.a.	10.7%	98.6%	-76.2%	37.6%	-73.7%	63.5%	82.3%	n.a.	n.a.		
CAPEX			-	(0.1)	(0.1)	(0.2)	(0.5)	(0.2)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)		
CAPEX/Sales %)			0.0%	3.5%	3.5%	12.0%	21.8%	5.9%	0.9%	0.0%	1.7%	1.7%	1.7%	1.7%		
Free Cash Flow			(0.1)	(0.8)	(1.9)	(2.8)	(2.8)	(5.8)	(2.7)	(1.7)	(2.0)	(1.0)	0.3	1.3	-47.2%	38.5%
ND/EBITDA (x) ⁽³⁾			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1x	-0.7x		
P/E (x)			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	51.3x	27.7x		
EV/Sales (x)			0.00x	0.00x	0.00x	0.00x	16.16x	11.57x	10.30x	9.33x	5.52x	5.40x	4.10x	3.44x		
EV/EBITDA (x) (3)			0.0x	0.0x	0.0x	0.0x	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	36.1x	16.6x		
Absolute performance			n.a.	n.a.	n.a.	n.a.	n.a.	-22.0%	-4.3%	-16.3%	-5.9%	7.5%				
Relative performance vs Ibex 35			n.a.	n.a.	n.a.	n.a.	n.a.	-27.4%	12.6%	-25.2%	11.3%	-3.5%				

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 Factset.

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 peers 2021e

			MDxHealth			Guardant	Exact	Neogenomics						Becton			
	EUR Mn	Biocept	SA	Biocartis	Atrys Health	Health Inc	Sciences Corp	Inc.	Average	Thermo Fisher	Qiagen	Danaher	Agilent	Dickinson	Average	Roche	PANG
	Ticker (Factset)	BIOC-US	MDXH-BE	BCART-BE	ATRY-ES	GH-US	EXAS-US	NEO-US		TMO-US	QGEN-US	DHR-US	A-US	BDX-US		ROG-CH	PANG-ES
ta ke	Country	USA	Belgium	Belgium	Spain	USA	USA	USA		USA	Netherlands	USA	USA	USA		Switzerland	Spain
Market	Market cap	45.6	141.0	245.4	671.8	11,238.2	15,344.0	5,206.3		186,427.6	10,846.2	197,295.0	44,846.8	61,166.6		295,559.5	32.2
	Enterprise value (EV)	40.3	127.3	272.3	725.7	10,918.2	16,265.3	5,220.6		196,334.0	11,704.9	211,112.4	46,053.1	73,339.7		298,848.6	28.1
	Total Revenues	48.8	21.4	52.9	144.7	310.2	1,460.1	421.5		30,412.9	1,807.6	24,203.7	5,329.2	16,880.1		57,200.7	5.2
	Total Revenues growth	110.5%	32.5%	22.6%	361.0%	28.2%	16.1%	12.4%	83.3%	11.9%	14.6%	28.8%	18.3%	16.9%	18.1%	6.3%	26.7%
	2y CAGR (2021e - 2023e)	-18.1%	n.a.	51.2%	22.1%	33.9%	19.6%	15.7%	20.7%	3.1%	0.8%	4.6%	6.5%	1.4%	3.3%	2.6%	25.3%
	EBITDA	n.a.	(20.9)	(51.3)	35.5	(336.0)	(443.4)	10.9		9,685.4	712.4	8,293.2	1,461.5	4,782.9		23,369.0	(0.4)
	EBITDA growth	n.a.	-0.2%	-2.8%	549.8%	-73.8%	n.a.	-56.3%	83.4%	12.0%	17.4%	61.5%	37.2%	35.4%	32.7%	13.6%	67.4%
=	2y CAGR (2021e - 2023e)	n.a.	n.a.	44.9%	29.8%	20.6%	49.5%	n.a.	36.2%	-2.3%	-2.1%	3.2%	9.4%	2.6%	2.2%	3.8%	n.a.
aţio	EBITDA/Revenues	n.a.	n.a.	n.a.	24.5%	n.a.	n.a.	2.6%	13.5%	31.8%	39.4%	34.3%	27.4%	28.3%	32.3%	40.9%	n.a.
Ĕ	EBIT	(0.7)	(19.8)	(59.7)	23.5	(325.2)	(605.4)	(50.0)		9,071.3	590.0	6,431.4	1,357.0	4,019.7		20,306.6	(0.0)
information	EBIT growth	94.3%	16.4%	-0.6%	n.a.	-57.2%	-396.9%	-378.5%	-120.4%	35.7%	30.1%	76.8%	68.4%	121.0%	66.4%	24.1%	99.9%
Basic financial i	2y CAGR (2021e - 2023e)	n.a.	n.a.	60.9%	37.1%	14.6%	26.2%	75.4%	42.9%	-4.5%	-3.0%	3.2%	8.6%	3.0%	1.4%	5.1%	n.a.
	EBIT/Revenues	n.a.	n.a.	n.a.	16.2%	n.a.	n.a.	n.a.	16.2%	29.8%	32.6%	26.6%	25.5%	23.8%	27.7%	35.5%	n.a.
	Net Profit	(0.9)	(20.8)	(72.4)	7.8	(329.7)	(420.4)	0.2		7,437.7	475.9	5,942.0	1,106.2	3,196.2		14,493.4	(0.2)
Sic	Net Profit growth	94.2%	17.2%	-15.0%	486.0%	-54.0%	41.3%	-93.6%	68.0%	38.3%	57.1%	93.2%	82.4%	333.5%	120.9%	9.9%	91.1%
ã	2y CAGR (2021e - 2023e)	n.a.	n.a.	41.0%	89.0%	12.9%	13.5%	n.a.	39.1%	-3.2%	-3.6%	2.7%	9.5%	2.1%	1.5%	5.9%	n.a.
	CAPEX/Sales %	n.a.	n.a.	5.4%	3.7%	11.0%	7.0%	11.0%	7.6%	6.9%	9.7%	4.4%	3.1%	5.0%	5.8%	6.8%	-1.7%
	Free Cash Flow	n.a.	(16.6)	(42.3)	(138.9)	(220.6)	(366.2)	n.a.		5,703.8	448.4	5,729.2	1,083.0	3,463.6		14,267.2	(1.0)
	Net financial debt	n.a.	7.0	101.5	94.9	(181.9)	1,367.6	97.4		11,019.2	802.8	9,845.6	1,065.1	11,847.5		(2,082.2)	0.4
	ND/EBITDA (x)	n.a.	n.a.	n.a.	2.7	n.a.	n.a.	9.0	5.8	1.1	1.1	1.2	0.7	2.5	1.3	(0.1)	n.a.
	Pay-out	n.a.	n.a.	n.a.	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	0.0%	8.7%	17.9%	27.0%	11.6%	51.1%	0.0%
	P/E (x)	n.a.	n.a.	n.a.	45.0	n.a.	n.a.	n.a.	45.0	25.3	23.2	34.6	40.7	19.6	28.7	18.5	n.a.
SO	P/BV (x)	n.a.	n.a.	n.a.	1.8	18.8	8.2	5.5	8.6	6.2	4.1	5.3	10.4	3.0	5.8	7.2	2.2
Ratios	EV/Revenues (x)	0.8	6.0	5.1	5.0	n.a.	11.1	12.4	6.7	6.5	6.5	8.7	8.6	4.3	6.9	5.2	5.4
and	EV/EBITDA (x)	n.a.	n.a.	n.a.	20.5	n.a.	n.a.	n.a.	20.5	20.3	16.4	25.5	31.5	15.3	21.8	12.8	n.a.
	EV/EBIT (x)	n.a.	n.a.	n.a.	30.9	n.a.	n.a.	n.a.	30.9	21.6	19.8	32.8	33.9	18.2	25.3	14.7	n.a.
Multiples	ROE	n.a.	n.a.	n.a.	4.0	n.a.	n.a.	n.a.	4.0	24.6	17.9	15.3	25.7	15.5	19.8	38.7	n.a.
=======================================	FCF Yield (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.1	4.1	2.9	2.4	5.7	3.6	4.8	n.a.
Σ	DPS	n.a.	n.a.	n.a.	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.73	0.64	3.09	1.06	8.67	0.00
	Dvd Yield	n.a.	n.a.	n.a.	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.4%	1.5%	0.5%	2.6%	0.0%

Note 1: Financial data, multiples and ratios based on market consensus (Factset). 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).



Pangaea Oncology

(PANG-ES / PANG SM) Report date: 2 Sep 2021

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Notes and Reports History

Date of report	Recommendation	Price (EUR)	Target price (EUR)	Period of validity	Reason for report	Analyst
02-Sep-2021	n.a.	1.72	n.a.	n.a.	Important news	Ana Isabel González García, CIIA
25-Jun-2021	n.a.	1.88	n.a.	n.a.	Important news	Ana Isabel González García, CIIA
05-May-2021	n.a.	2.20	n.a.	n.a.	12m Results 2020 - Estimates downgrade	Ana Isabel González García, CIIA
03-Nov-2020	n.a.	1.60	n.a.	n.a.	6m Results 2020	Ana Isabel González García, CIIA
16-Oct-2020	n.a.	1.58	n.a.	n.a.	Initiation of Coverage	Ana Isabel González García, CIIA

