November 18, 2019

**OUTPERFORM** 

Reason for report:

**COMPANY UPDATE** 

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## **GALAPAGOS NV**

**R&D Day Displays Fruits of Innovative Spirit** 

- **Bottom Line:** GLPG showcased their capabilities and strategy during their R&D day, positioning themselves as a company with a pliable, productive platform, a deep pipeline, but more importantly a method and culture to their creative process promising much more to come. We reiterate our OP rating and \$194 PT.
- Our Take. We spent considerable time with management after the R&D day presentations, as we hosted two days of meetings with GLPG management. We believe outside a few investors, the company is undervalued for its creativity, courage, and productivity. As Toledo's identity remains speculative, we have not included its valuation in our models, but given the size of the effort from GLPG, we expect significant upside at the current valuations as we get to see the program in detail; perhaps even reinventing an entire class of therapeutics as the JAK inhibitors and the anti-cytokine biologics have. We remain sanquine about the prospects for success in their osteoarthritis program, given the enormity of challenge in the field, but we have also seen steady progress by the clinical academic community in using imaging to identify responder populations which can now be used for testing of a narrower responsive diseased population. While we have heard a lot of grumblings around the idiopathic pulmonary fibrosis (IPF) program and why GLPG did not perform a Phase 2b study, we also have noticed that many are quite ignorant of the pathway, the Bristol Myers parallel program, and the clear reasoning behind the jump from GLPG. In our view GLPG is in that sweet spot of growth and inflection that makes the company highly attractive. With ample cash, a careful management, a solid translational biologybased discovery platform, nothing they are doing has even the slightest whiff of "me too" science. Thinking 10-15 year horizons seems absurd in the biotech business, but in our view every move that GLPG has been making today has been, from a bird's-eye view, strategic to build a fully integrated company that in 15 years will likely be in the top 10 of biotech.

Continued inside with discussions on discovery, filgotinib, IPF, and Toledo...

Key Stats: (NASDAQ: GLPG)

Sector: Biopharma / Immunology & Metabolism S&P 500 Health Care Index: 1,126.75
Price: \$183.75
Price Target: \$194.00
Methodology: SOTP with WACC-calculated 11.9%

discount rate and a 2% terminal growth rate to the discounted cash flow value of each asset. DCF values were adjusted by asset specific probability of regulatory success.

 52 Week High:
 \$192.89

 52 Week Low:
 \$85.00

 Shares Outstanding (mil):
 61.7

 Market Capitalization (mil):
 \$11,337.4

 Cash Per Share:
 \$102.10

 Dividend (ann):
 \$0.00

 Dividend Yield:
 0.0%

Completion: November 18, 2019, 6:49AM EDT. Distribution: November 18, 2019, 6:49AM EDT.



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	
2018A	€44.8	€57.0	€103.2	€112.8	€317.8	(€0.73)	(€0.42)	€0.29	€0.28	(€0.56)	NM
2019E	€40.9A	€67.6A	€644.0A	€135.1	€887.6	(€0.89)A	(€0.86)A	€6.03A	(€0.29)	€4.31	NM
2020E	€107.5	€107.5	€238.1	€199.3	€652.4	(€0.79)	(€0.84)	€1.20	€0.51	€0.12	NM

Source: Company Information and SVB Leerink LLC Research.

Revs in €MM; EPS diluted non-GAAP



# **INVESTMENT THESIS**

Filgotinib's superior safety profile versus other JAKi's makes it a potentially best-in-class JAKi that has an opportunity to compete with anti-TNF agents in rheumatoid arthritis (RA) and inflammatory bowel disease (IBD). We believe GLPG has a potential best-in-care drug in GLPG1690 that has the potential to become the standard of care in IPF treatment. With limited effective treatments in IPF, GLPG1690 carries blockbuster potential but with a projected 2023 market launch. While we view gaining approval to treat osteoarthritis (OA) highly unlikely given the history of clinical efforts, we cannot ignore the massive opportunity should GLPG1972 gain regulatory approval. Finally, TOLEDO offers valuation upside that is as yet unaccounted for in our 12-month price target until further details on the target are revealed.

The research and development collaboration with GILD provides significant upfront cash for the promise of future development. We expect GLPG's proprietary discovery platform to continue to produce uniquely profiled drugs that will keep the doors open and the partnership productive.

2019 2025 6000 genes 20,000 genes primary screen re-screen ~ 150 confirmed hits ~ 300 confirmed hits on target selection validation add'l validated ~ 10 validated > 10 validated targets SM targets drugability > 6 SM targets 6 SM targets + PROTACS 3 PCC > 3 PCC's

Exhibit 1. GLPG aims to expand discovery platform capabilities to cover ~20,000 protein coding genes by adding oligonucleotide and PROTACS programs

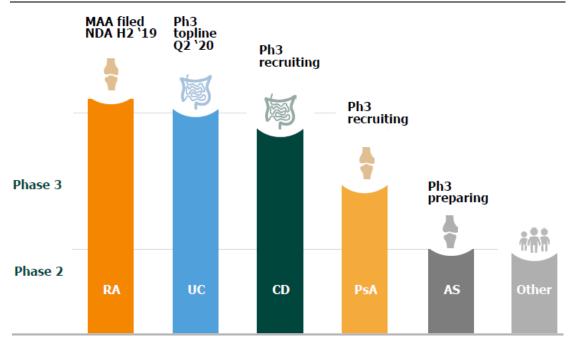
Source: GLPG R&D Day Presentation

Strong foundation remains competitive and productive. GLPG's discovery platform and R&D capabilities drive our bullish thesis for the company (see <u>HERE</u> and <u>HERE</u>). While early R&D efforts have focused on inflammatory diseases, the company acknowledges that the platform is indication agnostic. With advanced inflammation and fibrosis programs in place, pilot programs are being initiated for metabolic diseases and new discovery in osteoarthritis (OA) despite a midstage program in the works with GLPG1972. GLPG plans to expand their discovery platform, announcing plans for oligonucleotide and proteolysis-targeting chimeric molecule (PROTACS) programs that expand their gene targeting capabilities from the current ~6,000 genes outward to



the ~20,000 protein coding genome. The new goal is to discover and validate at least 10 new small molecule targets yielding >3 preclinical candidates per year once the new programs are fully online in 2025. Management plans to judiciously use the cash received in the GILD (MP) deal to selectively expand their R&D platform. Rather than trying to make a splash with big name acquisitions, they expect M&A activity to focus purely on the science, with additions that provide synergistic benefit to the company's platform.

Exhibit 2. A broad label is being pursued for filgotinib with pivotal programs in IBD, PsA, and AS planned or underway



RA = rheumatoid arthritis; UC = ulcerative colitis; CD = Crohn's disease; psoriatic arthritis; AS = ankylosing spondylitis

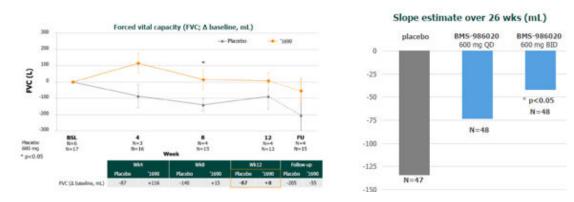
Source: GLPG R&D Day Presentation

Targeting a broad label for filgotinib: GLPG's selective JAK1 inhibitor filgotinib has pending registrational filing in the E.U. and in Japan for rheumatoid arthritis, and an NDA guided to be filed in the U.S. before the end of the year (see HERE). With a strategy reminiscent of the broad label obtained for Humira, filgotinib is chasing indications in hopes of building a broadly active label making it attractive across indications, practices, and payers. Top-line readouts are expected from the Phase 3 Selection trial in ulcerative colitis (UC) in 1H20, and from the Phase 3 Diversity trial in Crohn's disease (CD) in 2H21. Other label expansion efforts include the recent initiation of a Phase 3 trial in psoriatic arthritis (PsA), a Phase 3 trial in ankylosing spondylitis (AS) planned to start in 2020, and a Phase 2 study in systemic lupus erythematosus (SLE) aimed at identifying



responding subpopulations for future trials. Management noted that while the cutaneous lupus and Sjogren trials were small, patients whose disease was dominated by inflammatory components demonstrated signal which will be further investigated in future trials.

Exhibit 3. The LPA pathway for GLPG1690 has strong scientific roots with validation from a competitive program

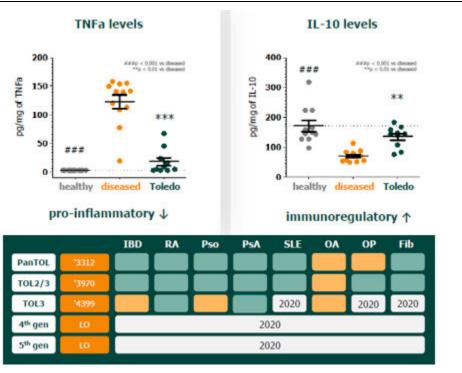


Source: GLPG R&D Day Presentation

**Updates in IPF.** GLGP's pipeline also features a late stage IPF program led by the twin Phase 3 Isabela 1 and 2 trials for autotaxin (ATX) inhibitor GLPG1690, and followed up by the proof of concept (PoC) Phase 2 PINTA trial for GPR84 inhibitor GLPG1205. The LPA pathway was discovered as a driver of IPF in a masterstroke of translational research. Follow-up research to validate and therapeutically pursue this target builds on our conviction in GLPG1690 (see HERE). GLPG provided timing updates for a futility analysis for the Isabela trials, now guiding to the analysis in 1Q21 rather than 3Q20, but now with data from ~28% rather than 25% of the total patients. The Isabela trials continue to enroll rapidly, with ~1/3 of the trial (~500 patients) enrolled to date. Pending the outcome of the PINTA trial expected in 2H20, GLPG will next run a Phase 2b combination trial for GLPG1690 and GLPG1205 in IPF. GLPG is also running a Phase 2 PoC study for GLPG1690 in systemic scleroderma expected to read out in 2H20.



Exhibit 4. Toledo impacts pro- and anti-inflammatory cytokines, opening opportunities in a range of inflammatory diseases



Source: GLPG R&D Day Presentation

Anticipation and optimism for Toledo remains high. GLPG's enthusiasm for the Toledo program is marked by their devotion of 70 biologists and 40 chemists to the program (out of about 250 total R&D employees). During the R&D day, GLPG indicated that Toledo (TOL) is a multiprotein family able to modulate expression of inflammatory and anti-inflammatory cytokines. Panselective first-generation molecule GLPG3312 and Tol2/Tol3 selective second-generation molecule GLPG3970 are currently in Phase 1 MAD studies and with multiple PoC studies expected to start in 2020 in set up for dose finding and larger PoC studies in 2021. Thirdgeneration molecule GLPG4399 is a selective TOL3 molecule with potential applications in RA and PsA. The Toledo molecules are optimized for their respective indications. For example, GLPG3312 has shown the best results they have ever seen across all of their IBD models. The targeting of various members of this multiprotein family allows a broad tuning of both pro- and counter-inflammatory cytokines making the Toledo program so compelling in the eyes of senior leadership that they have kept its identity a secret out of fear of fierce competition. After all, the secret sauce here is the translational discovery and careful testing of the pathway in various models driving the thinking forward rather than a hard to reach or technically combative target that would make fast following impossible. While the IP information is in the public domain, the sheer volume of IP that GLPG has applied for makes it highly uncertain as to the true identity of the Toledo target, which is just how they want it to be. Management has not guided to precisely when



the they will reveal the identity of Toledo, although our expectations are for an announcement coincident with the first PoC results in 2H20.

Filgotinib will set the stage for GLPG's commercial presence in Europe. GLPG will be splitting commercial efforts for filgotinib in Europe 50/50 with GILD (see HERE). GLPG will have full commercial rights to filgotinib in Belgium, the Netherlands, and Luxembourg, and will lead commercial efforts for filgotinib in RA in France, Italy, and Spain while GILD leads the RA efforts in U.K. and Germany. These territories will be reversed for filgotinib in IBD, with GLPG leading efforts in the U.K. and Germany instead. GLPG holds full commercial rights in Europe for all other assets, except GLPG1972 in OA (partnered with Servier). The launch for filgotinib in Europe will give GLPG the opportunity to steadily buildout their commercial footprint with the long-term goal of developing an entrenched commercial base in their own back yard. When coupled with their elite R&D presence, this will position GLPG as a major biotechnology powerhouse in Europe.

# Exhibit 5. GLPG's long-term vision focuses on establishing commercial roots in Europe



# 2020-2021

- Benelux
- France, Italy, Spain
- UK, Germany

## 2022-2023

- Roll out in rest of Europe
- Future products



Source: GLPG R&D Day Presentation



## **VALUATION**

Our \$194 PT was determined using a probability weighted scenario analysis. Individual scenario values were determined by sum of the parts valuation that applied a WACC calculated 11.9% discount rate and 2% terminal growth rate to revenues and cash flows projected into 2028. Revenues for each asset were adjusted independently twice: by probability of regulatory approval and by asset specific commercial profile.

A commercial probability distribution was determined based on a revenue weighted distribution of independent commercial scenarios projected for each drug candidate. GLPG1690, filgotinib, and cash reserves comprise a majority of the valuation. Galapagos held €5.6B in cash and cash equivalents as of the end of 3Q19.

# **RISKS TO VALUATION**

Risks to Valuation include the following:

Product Risk – One or more of the clinical trials for filgotinib or GLPG1690 may fail to meet its primary endpoint necessitating a deeper decision into continued development in that particular indication. Additionally, any safety issues that occur within one trial for filgotinib may read negatively across the entire filgotinib franchise.

Collaboration Risk – GLPG's pipeline and lead asset filgotinib are subject to risk related to GLPG's R&D collaboration agreement with Gilead. This collaboration agreement gives GLPG limited ability to address situational issues surrounding the success of these drugs.

Regulatory Risk – The FDA has previously indicated a belief in drug combinations as the likely future for IPF treatment. With this in mind, GLPG has pursued pivotal trial investigating GLPG1690 in combination with standard of care. While we believe this creates a safer path to approval, it nonetheless opens the door to potential competitors pursuing a path to approval as a monotherapy to significantly disrupt expectations for market competition.

Financing Risk – GLPG currently has no revenue producing products on the market. Though well capitalized over the near term, negative outcomes for any of its asset franchises may significantly impact its ability raise funds in the future.

SVB Leerink Catalyst Tracker

Stock (Ticker Symbol)	Lateral Impact (Other companies/ stocks)	Drug (Brand or chemical name)	Indication	Type of Event	Event or Trial Details	Expected Timing	Specific Event Date if known or specified	Impact: H(igh) > 9% M(edium) 3 - 9% L(ow) < 2%	Estimated Stock Up/Down % on Best/Worst Outcomes	SVB Leerink View of Expected Outcome
GLPG	GILD	Filgotinib	Rheumatoid arthritis	NDA/BLA Filing	U.S. NDA filing	4Q19		M	5%	Positive
GLPG	GILD	GLPG1205	Idiopathic pulmonary fibrosis	Other Event	Complete Phase 2 enrollment	2H19		L		Neutral
GLPG	GILD	GLPG3312	Inflammatory bowel disease	Phase II Trial Initiation	Proof of concept trial, 1st generation Toledo molecule	1H20		L	2%	Positive
GLPG	GILD	GLPG3970	Inflammatory diseases	Phase II Trial Initiation	Initiate multiple PoC studies in 2020	1H20		L		Positive
GLPG	GILD	GLPG3690	Inflammatory diseases	Phase I Data Announcement	Topline results	1H20		L		Positive
GLPG	GILD	GLPG1972	Osteoarthritis	Phase II Data Announcement	Proof of concept topline results	1H20		М	5%	Neutral
GLPG	GILD	GLPG1690	Ulcerative colitis	Phase III Results Announcement	Topline results	1H20		Н	10%	Positive
GLPG	GILD	TOLEDO	Inflammatory diseases	Other Event	Announce Toledo target	2H20		М	5%	Positive
GLPG	GILD	Filgotinib	Rheumatoid arthritis	EMA Approval	Launch 2H20 in E.U.	2H20		н	10%	Positive
GLPG	GILD	Filgotinib	Rheumatoid arthritis	FDA Approval	Launch 2H20 in U.S.	2H20		Н	10%	Positive
GLPG	GILD	GLPG1690	Idiopathic pulmonary fibrosis	Other Event	Futility analysis for Phase 3 ISABELA trials	2H20		Н	10%	Positive

Source: SVB Leerink LLC Equity Research and Company Filings

(€ thousands, except per share)	1Q18A	2Q18A	3Q18A	4Q18A	2018A	1Q19A	2Q19A	3Q19A	4Q19E	2019E	1Q20E	2Q20E	3Q20E	4Q20E	2020E
Revenue:															
Revenue	37,907	49,676	94,874	106,379	288,836	33,047	58,738	633,934	127,107	852,826	99,489	99,489	230,020	191,156	620,153
Other revenue (Grant Income)	6,931	7,358	8,334	6,386	29,009	7,872	8,852	10,020	7,978	34,722	8,014	8,050	8,086	8,122	32,272
	44,838	57,034	103,208	112,765	317,845	40,919	67,590	643,954	135,085	887,548	107,502	107,539	238,106	199,278	652,425
Cost of goods sold	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,226)	(1,226)
Research and development expenses	(69,765)	(81,680)	(80,314)	(91,117)	(322,876)	(83,195)	(94,372)	(120,680)	(130,334)	(428,581)	(132,941)	(135,600)	(138,312)	(141,078)	(547,931)
General and administrative expenses	(6,697)	(8,503)	(9,725)	(10,706)	(35,631)	(9,221)	(13,711)	(28,565)	(28,708)	(80,205)	(28,851)	(28,996)	(29,141)	(29,286)	(116,274)
Sales and marketing expenses	(413)	(602)	(898)	(2,234)	(4,147)	(1,746)	(3,875)	(4,078)	(4,282)	(13,981)	(4,325)	(4,368)	(4,412)	(4,456)	(17,560)
Total operating expenses	(76,875)	(90,785)	(90,937)	(104,057)	(362,654)	(94,162)	(111,958)	(153,323)	(163,324)	(522,767)	(166,117)	(168,963)	(171,864)	(176,046)	(682,991)
Profit (Loss) from operations	(32,037)	(33,751)	12,271	8,708	(44,809)	(53,243)	(44,368)	490,631	(28,239)	364,781	(58,615)	(61,425)	66,241	23,232	(30,566)
Other income (expense):															
Fair value re-measurement of share subscription agreement	-	-	-	-	-	-	-	(142,349)	-	(142,349)	-	-	-	-	-
Financial income	1,610	6,499	2,558	7,668	18,335	6,999	(1,349)	34,755	10,306	50,711	9,431	9,239	9,530	9,901	38,101
Financial expenses	(6,794)	5,553	(467)	(1,028)	(2,736)	(2,345)	(1,472)	(38,631)	-	(42,448)	-	-	-	-	-
Total other income (expense)	(5,184)	12,052	2,091	6,640	15,599	4,654	(2,821)	(146,225)	10,306	(134,086)	9,431	9,239	9,530	9,901	38,101
Loss from operations before taxes	(37,221)	(21,699)	14,362	15,348	(29,210)	(48,589)	(47,189)	344,405	(17,933)	230,695	(49,184)	(52,186)	75,771	33,133	7,535
Income tax benefit (expense)	(62)	(75)	480	(392)	(49)	(68)	(61)	16,828	-	16,699	-	-	-	-	-
Net profit (loss)	(37,283)	(21,774)	14,842	14,956	(29,259)	(48,657)	(47,250)	361,233	(17,933)	247,394	(49,184)	(52,186)	75,771	33,133	7,535
Basic common shares outstanding	50,973	51,235	51,179	54,385	51,943	54,615	54,823	57,705	61,954	57,401	61,954	61,954	63,189	64,425	62,881
Diluted common shares outstanding	50,973	51,235	53,007	54,385	51,943	54,615	54,823	59,906	61,954	57,401	61,954	61,954	63,189	64,425	62,881
Basic net loss per share	(0.73)	(0.42)	0.29	0.28	(0.56)	(0.89)	(0.86)	6.26	(0.29)	4.31	(0.79)	(0.84)	1.20	0.51	0.12
Diluted net loss per share	(0.73)	(0.42)	0.28	0.28	(0.56)	(0.89)	(0.86)	6.03	(0.29)	4.31	(0.79)	(0.84)	1.20	0.51	0.12

(€ thousands, except per share)	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Revenue:												
Revenue	127,087	288,836	852,826	620,153	474,553	966,169	1,041,501	1,388,734	1,226,717	1,468,831	1,752,027	2,001,610
Other revenue (Grant Income)	28,830	29,009	34,722	32,272	32,852	28,326	13,480	13,723	13,970	14,221	14,477	14,738
	155,917	317,845	887,548	652,425	507,405	994,495	1,054,980	1,402,457	1,240,686	1,483,052	1,766,504	2,016,347
Cost of goods sold	-	-	-	(1,226)	(7,310)	(29,261)	(77,878)	(118,209)	(154,856)	(181,077)	(222,400)	(265,619)
Research and development expenses	(218,502)	(322,876)	(428,581)	(547,931)	(558,890)	(530,945)	(504,398)	(479,178)	(464,803)	(469,451)	(474,145)	(478,887)
General and administrative expenses	(24,415)	(35,631)	(80,205)	(116,274)	(117,437)	(118,611)	(119,797)	(120,995)	(122,205)	(123,427)	(124,661)	(125,908)
Sales and marketing expenses	(2,803)	(4,147)	(13,981)	(17,560)	(22,828)	(29,677)	(37,096)	(44,515)	(51,192)	(56,311)	(59,127)	(62,083)
Total operating expenses	(245,720)	(362,654)	(522,767)	(682,991)	(706,465)	(708,494)	(739,169)	(762,897)	(793,056)	(830,266)	(880,333)	(932,497)
Profit (Loss) from operations	(89,803)	(44,809)	364,781	(30,566)	(199,060)	286,001	315,812	639,560	447,631	652,786	886,170	1,083,850
Other income (expense):												
Fair value re-measurement of share subscription agreement	-	-	(142,349)	-	-	-	-	-	-	-	-	-
Financial income	4,877	18,335	50,711	38,101	38,273	37,441	38,339	39,655	41,398	43,623	47,086	51,874
Financial expenses	(30,582)	(2,736)	(42,448)	-	-	-	-	-	-	-	-	-
Total other income (expense)	(25,705)	15,599	(134,086)	38,101	38,273	37,441	38,339	39,655	41,398	43,623	47,086	51,874
Loss from operations before taxes	(115,508)	(29,210)	230,695	7,535	(160,786)	323,442	354,151	679,215	489,028	696,410	933,257	1,135,724
Income tax benefit (expense)	(198)	(49)	16,699	-	-	(15,221)	(85,269)	(172,681)	(120,860)	(176,252)	(239,266)	(292,640)
Net profit (loss)	(115,706)	(29,259)	247,394	7,535	(160,786)	308,221	268,882	506,534	368,168	520,157	693,991	843,085
Basic common shares outstanding	49,479	51,943	57,401	62,881	64,425	64,425	64,425	64,425	64,425	64,425	64,425	64,425
Diluted common shares outstanding	49,479	51,943	57,401	62,881	64,425	64,425	64,425	64,425	64,425	64,425	64,425	64,425
Basic net loss per share	(2.34)	(0.56)	4.31	0.12	(2.50)	4.78	4.17	7.86	5.71	8.07	10.77	13.09
Diluted net loss per share	(2.34)	(0.56)	4.31	0.12	(2.50)	4.78	4.17	7.86	5.71	8.07	10.77	13.09
Growth and profitability ratios	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Revenue growth rate				-26%	-22%	96%	6%	33%	-12%		19%	14%
Gross profit margin				100%	99%	97%	93%	92%	88%		87%	87%
Operating profit margin				-5%	-39%	29%	30%	46%	36%		50%	54%
Effective tax rate				0%	0%	-5%	-24%	25%	25%		26%	26%
Net profit margin				1%	-32%	31%	25%	36%	30%		39%	42%
net pront margin		ı		1/0	32/0	31/0	23/0	30/0	3070	5570	3370	72/0

(€ thousands, except per share)	1Q18A	2Q18A	3Q18A	2018A	1Q19A	2Q19A	3Q19A	2019E	1Q20E	2Q20E	3Q20E	2020E
ASSETS	•											
Cash and cash equivalents	1,108,186	1,066,766	1,343,668	1,290,796	1,222,901	1,147,923	5,599,787	4,820,266	4,715,439	4,626,682	5,008,734	5,002,604
Current restricted cash	-	-	2,014	-	-	-	-	-	-	-	-	-
Inventories	293	267	280	-	-	-	-	-	-	-	-	(749)
Trade and other receivables	8,501	19,108	25,314	18,609	15,347	42,067	32,642	14,123	33,163	33,163	38,337	42,479
Current R&D incentives receivables	11,585	14,654	11,692	11,203	11,645	11,644	9,746	9,746	9,746	9,746	9,746	9,746
Other current assets	7,171	7,086	7,432	8,244	9,351	6,970	8,837	8,990	8,958	9,008	9,059	9,110
Total current assets	1,135,736	1,107,881	1,390,400	1,328,852	1,259,244	1,208,604	5,651,013	4,853,126	4,767,306	4,678,599	5,065,875	5,063,190
Intangible assets	2,555	1,403	2,058	3,632	6,497	7,191	23,492	21,728	20,097	18,589	17,193	15,902
Property, plant and equipment	16,971	17,854	18,113	23,137	49,542	51,180	61,883	61,529	61,176	60,826	60,478	60,132
Deferred tax assets	1,979	1,980	2,525	2,514	2,511	2,516	19,406	19,406	19,406	19,406	19,406	19,406
Non-current R&D incentives receivables	69,285	71,567	68,755	73,443	76,029	82,644	89,965	84,937	79,909	74,881	69,853	64,825
Non-current restricted cash	1,158	1,158	1,226	-	-	-	-	-	-	-	-	-
Other non-current assets	2,182	2,506	2,474	7,919	6,377	5,712	5,993	5,993	5,993	5,993	5,993	5,993
Total non-current assets	94,129	96,466	95,151	110,645	140,956	149,243	200,739	193,593	186,582	179,695	172,923	166,258
Total assets	1,229,864	1,204,347	1,485,551	1,439,496	1,400,200	1,357,848	5,851,752	5,046,719	4,953,888	4,858,294	5,238,798	5,229,449
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)												
Finance lease liabilities	-	-	-	-	4,580	5,141	5,251	5,251	5,251	5,251	5,251	5,251
Trade and other payables	55,657	69,141	80,721	68,928	69,880	86,216	156,254	118,073	120,092	122,150	124,247	126,729
Current tax payable	862	862	855	1,175	1,168	1,031	1,032	1,032	1,032	1,032	1,032	1,032
Accrued charges	943	861	867	-	-	-	-	-	-	-	-	-
Current deferred income	166,168	175,722	186,659	149,801	123,822	96,325	468,764	349,650	349,650	349,650	349,650	349,650
Total current liabilities	223,630	246,586	269,102	219,905	199,450	188,713	631,300	474,006	476,026	478,083	480,180	482,662
Pension liabilities	3,660	3,739	3,818	3,764	3,851	3,939	4,026	4,026	4,026	4,026	4,026	4,026
Provisions	65	58	57	-	-	-	-	-	-	-	-	-
Other non-current liabilities	677	878	1,269	1,578	736	1,373	2,471	2,471	2,471	2,471	2,471	2,471
Non-current deferred income	102,486	67,427	23,083	-	-	-	2,659,013	2,017,660	1,960,248	1,902,835	1,845,423	1,788,010
Total non-current liabilities	106,888	72,102	28,227	5,342	24,996	25,769	2,685,171	2,043,818	1,986,406	1,928,993	1,871,581	1,814,168
Total liabilities	330,519	318,688	297,329	225,247	224,445	214,482	3,316,471	2,517,824	2,462,431	2,407,076	2,351,761	2,296,830
Stockholders' equity (deficit):												
Share capital	235,027	235,583	235,672	236,540	237,348	238,475	272,605	272,605	272,605	272,605	273,062	273,062
Share premium account	995,336	996,117	1,276,284	1,277,780	1,280,452	1,283,650	2,268,585	2,280,133	2,291,879	2,303,826	2,663,418	2,675,865
Other reserves	(641)	(641)	(641)	(735)	(735)	(735)	(735)	(735)	(735)	(735)	(735)	(735)
Translation differences	(1,757)	(1,604)	(1,598)	(1,557)	(1,290)	(1,505)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)
Accumulated losses	(328,620)	(343,796)	(321,495)	(297,779)	(340,020)	(376,518)	(3,907)	(21,840)	(71,024)	(123,210)	(47,439)	(14,305)
Total stockholders' equity (deficit)	899,345	885,659	1,188,222	1,214,249	1,175,755	1,143,367	2,535,281	2,528,896	2,491,458	2,451,219	2,887,039	2,932,620
Total liabilities and stockholders' equity (deficit)	1,229,864	1,204,347	1,485,551	1,439,496	1,400,200	1,357,848	5,851,752	5,046,720	4,953,889	4,858,295	5,238,799	5,229,450
Outstanding shares at end of period (thousands)	51,235	51,338	54,299	54,470	54,615	54,823	61,954	61,954	61,954	61,954	64,425	64,425
SELECTED METRICS (€ thousands, except per share)	1Q18A	2Q18A	3Q18A	2018A	1Q19A	2Q19A	3Q19A	2019E	1Q20E	2Q20E	3Q20E	2020E
Current ratio	5	4	5	6	6	6	9	10	10	10	11	10
Working capital (in thousands)	912,106	861,295	1,121,298	1,108,947	1,059,794	1,019,891	5,019,713	4,379,120	4,291,280	4,200,516	4,585,695	4,580,529
Book value per common share	18	17	22	22	22	21	41	41	40	40	45	46
Cash, cash equivalents and marketable securities	1,108,186	1,066,766	1,343,668	1,290,796	1,222,901	1,147,923	5,599,787	4,820,266	4,715,439	4,626,682	5,008,734	5,002,604
per common share	22	21	25	24	22	21	90	78	76	75	78	78

(€ thousands, except per share)	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
ASSETS												
Cash and cash equivalents	1,151,211	1,290,796	4,820,266	5,002,604	4,672,012	4,792,250	4,898,999	5,124,976	5,339,442	5,687,473	6,214,828	6,897,642
Current restricted cash	-	-	-	-	-	-	-	-	-	-	-	-
Inventories	279	-	-	(749)	(1,102)	(4,409)	(11,735)	(17,812)	(23,334)	(27,286)	(33,512)	(40,025)
Trade and other receivables	27,966	18,609	14,123	42,479	26,003	52,941	57,069	76,095	67,217	80,484	96,001	109,677
Current R&D incentives receivables	11,782	11,203	9,746	9,746	4,718	39,376		-	-		-	-
Other current assets	6,409	8,244	8,990	9,110	37,871	40,038	42,361	44,688	46,817	48,529	49,623	50,758
Total current assets	1,197,647	1,328,852	4,853,126	5,063,190	4,739,503	4,920,195	4,986,694	5,227,946	5,430,142	5,789,201	6,326,940	7,018,052
Intangible assets	2,495	3,632	21,728	15,902	14,709	13,604	12,583	11,638	10,765	9,059	7,623	6,415
Property, plant and equipment	16,692	23,137	61,529	60,132	58,754	57,409	56,094	54,809	53,554	52,328	51,129	49,958
Deferred tax assets	1,978	2,514	19,406	19,406	19,406	19,406	19,406	19,406	19,406	19,406	19,406	19,406
Non-current R&D incentives receivables	64,001	73,443	84,937	64,825	49,741	_	-	_	_	-	_	_
Non-current restricted cash	1,158	-		-	-	-		-	-	-	-	-
Other non-current assets	2.303	7.919	5.993	5.993	5.993	5.993	5.993	5.993	5.993	5.993	5.993	5.993
Total non-current assets	88,627	110,645	193,593	166,258	148,603	96,412	94,076	91,847	89,718	86,785	84,151	81,772
Total assets	1,286,274	1,439,496	5,046,719	5,229,449	4,888,106	5,016,607	5,080,770	5,319,793	5,519,860	5,875,986	6,411,091	7,099,824
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)												
Finance lease liabilities	9	-	5,251	5,251	5,251	5,251	5,251	5,251	5,251	5,251	5,251	5,251
Trade and other payables	47,122	68,928	118,073	126,729	125,870	125,705	130,457	134,909	140,384	147,297	155,817	165,064
Current tax payable	865	1,175	1,032	1,032	1,032	1,032	1,032	1,032	1,032	1,032	1,032	1,032
Accrued charges	1,159			· -	· -		· -					
Current deferred income	122,544	149,801	349,650	349,650	349,650	349,650	317,565	221,310	221,310	221,310	221,310	172,238
Total current liabilities	171,699	219,905	474,006	482,662	481,804	481,639	454,305	362,503	367,978	374,891	383,410	343,585
Pension liabilities	3,582	3,764	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026
Provisions	65	-		-	-	-		· -	-		-	-
Other non-current liabilities	1,597	1,578	2,471	2,471	2,471	2,471	2,471	2,471	2,471	2,471	2,471	2,471
Non-current deferred income	97,348	-	2,017,660	1,788,010	1,558,360	1,328,710	1,099,060	869,410	639,760	410,110	180,460	, <u> </u>
Total non-current liabilities	102,592	5,342	2,043,818	1,814,168	1,584,518	1,354,868	1,125,218	895,568	665,918	436,268	206,618	26,158
Total liabilities	274,291	225,247	2,517,824	2,296,830	2,066,322	1,836,507	1,579,523	1,258,071	1,033,896	811,159	590,028	369,743
Stockholders' equity (deficit):												
Share capital	233,414	236,540	272,605	273,062	273,062	273,062	273,062	273,062	273,062	273,062	273,062	273,062
Share premium account	993,025	1,277,780	2,280,133	2,675,865	2,725,817	2,775,912	2,828,176	2,882,118	2,938,192	2,996,898	3,059,143	3,125,077
Other reserves	(1,260)	(735)	(735)	(735)	(735)	(735)	(735)	(735)	(735)	(735)	(735)	(735)
Translation differences	(1,754)	(1,557)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)	(1,267)
Accumulated losses	(211,441)	(297,779)	(21,840)	(14,305)	(175,091)	133,130	402,011	908,545	1,276,713	1,796,871	2,490,861	3,333,946
Total stockholders' equity (deficit)	1,011,983	1,214,249	2,528,896	2,932,620	2,821,785	3,180,101	3,501,247	4,061,723	4,485,965	5,064,828	5,821,064	6,730,082
Total liabilities and stockholders' equity (deficit)	1,286,274	1,439,496	5,046,720	5,229,450	4,888,107	5,016,608	5,080,771	5,319,794	5,519,861	5,875,987	6,411,092	7,099,825
Outstanding shares at end of period (thousands)	50,937	54,470	61,954	64,425	64,425	64,425	64,425	64,425	64,425	64,425	64,425	64,425
SELECTED METRICS (€ thousands, except per share)												
Current ratio	7	6	10	10	10	10	11	14	15	15	17	20
Working capital (in thousands)	1,025,948	1,108,947	4,379,120	4,580,529	4,257,699	4,438,556	4,532,388	4,865,443	5,062,165	5,414,310	5,943,530	6,674,467
Book value per common share	19.87	22.29	40.82	45.52	43.80	49.36	54.35	63.05	69.63	78.62	90.35	104.46
Cash, cash equivalents and marketable securities	1,151,211	1,290,796	4,820,266	5,002,604	4,672,012	4,792,250	4,898,999	5,124,976	5,339,442	5,687,473	6,214,828	6,897,642
per common share	22.60	23.70	77.80	77.65	72.52	74.38	76.04	79.55	82.88	88.28	96.47	107.06

(37,283) 5,140 5,246 141	9,084 (11,977) 4	14,842 8,593 (2,570)	14,956 (1,064)	(29,259) 21.753	(48,656)	(47,248)	361,236	(17,930)	247,394	(49,184)	(52,186)	75,771	33,133	
5,140 5,246 141	9,084 (11,977)	8,593 (2,570)	(1,064)	, , ,	(48,656)	(47,248)	361,236	(17,930)	247.394	(49.184)	(52 186)	75 771	22 122	
5,246 141	(11,977)	(2,570)		21 752							(32,100)	13,111	33,133	7,535
5,246 141	(11,977)	(2,570)		21 752										
141				21,/33	5,524	17,754	128,088	8,508	159,874	9,281	9,395	9,051	8,734	36,462
	4		4,912	(4,389)	(1,517)	(1,347)	(20,568)	-	(23,432)	-	-	-	-	
20.402		(266)	(547)	(668)	(3)	-	-	-	(3)	-	-	-	-	
20.402														1
20,482	(2,317)	8,888	(7,131)	19,922	(2,294)	(13,624)	57,045	(14,789)	26,338	(11,960)	7,035	1,900	4,065	1,040
(34,458)	(25,509)	(33,403)	(59,942)	(153,312)	(25,979)	(27,499)	2,943,764	(760,467)	2,129,819	(57,413)	(57,413)	(57,413)	(57,413)	(229,650)
(40,732)	(52,488)	(3,916)	(48,816)	(145,953)	(72,925)	(71,964)	3,469,565	(784,677)	2,539,991	(109,275)	(93,168)	29,310	(11,480)	(184,613)
(500)	(348)	(178)	(37)	(1,063)	(327)	(301)	(273)	-	(901)	-	-	-	-	-
1,428	1,361	463	1,306	4,558	1,565	2,301	1,263	10,306	15,435	9,431	9,239	9,530	9,901	38,101
-	-	(7)	(1)	(8)	(11)	(77)	(57)	-	(145)	-	-	-	-	
928	1,013	278	1,268	3,487	1,227	1,923	933	10,306	14,389	9,431	9,239	9,530	9,901	38,101
(39,804)	(51,475)	(3,638)	(47,548)	(142,466)	(71,698)	(70,041)	3,470,498	(774,372)	2,554,379	(99,844)	(83,928)	38,840	(1,579)	(146,511)
														ı
(1,192)	(1,811)	(1,256)	(6,133)	(10,392)	(2,103)	(2,930)	(12,289)	(3,189)	(20,511)	(3,171)	(3,152)	(3,134)	(3,116)	(12,574)
(340)	(382)	(811)	(1,792)	(3,325)	(1,201)	(2,334)	(1,930)	(1,960)	(7,425)	(1,813)	(1,677)	(1,551)	(1,434)	(6,474)
1	-	-	-	1	1	1	(1)	-	1	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	134	2,227	2,361	82	-	-	-	82	-	-	-	-	
-	-	-	(4,559)	(4,559)	(177)	-	-	-	(177)	-	-	-	-	-
(1,531)	(2,193)	(1,933)	(10,257)	(15,914)	(3,398)	(5,263)	(14,220)	(5,149)	(28,030)	(4,983)	(4,829)	(4,685)	(4,551)	(19,048
														1
(19)	12	1	1	(5)	(1,248)	(896)	(1,690)	-	(3,834)	-	-	-	-	
=	-	296,188	-	296,188	=	=	960,087	-	960,087	=	=	-	-	-
-	-	(15,008)	(956)	(15,964)	-	-	-	-	-	-	-	-	-	
3,924	1,337	-		7,657	3,481	4,324	6,675	-	14,480	-	-	347,897	-	347,897
3,905	1,349						965,072	-		-	-	347,897	-	347,897
(5,595)	-,	1,292		10,089	,		30,514	-	32,380	-	-	-	-	
(43,025)		276,902		139,585			4,451,864		3,529,462	(104,827)	(88,757)	382,051		182,338
1,151,211														4,820,266
1,108,186	1,066,766	1,343,668	1,290,797	1,290,796	1,222,901	1,147,923	5,599,787	4,820,266	4,820,258	4,715,439	4,626,682	5,008,734	5,002,604	5,002,604
1Q18A	2Q18A	3Q18A	4Q18A	2018A	1Q19A	2Q19A	3Q19A	4Q19E	2019E	1Q20E	2Q20E	3Q20E	4Q20E	2020E
(40,996)	(53,286)	(4,894)	(53,681)	(152,858)	(73,801)	(72,971)	(76,791)	(777,561)	2,533,868	(103,014)	(87,081)	35,705	(4,695)	(159,085
(163,984)	(213,144)	(19,576)	(214,724)	(152,858)		(291,884)	(307,164)	(3,110,243)	2,533,868	(412,058)	(348,322)	142,821	(18,781)	(159,085
7	5	69	. , ,	8	4	4	18	2		11			266	31
81	60	824	72	101	50	47	219			137			3.196	377
	(40,732) (500) 1,428 - 928 (39,804) (1,192) (340) 1 - (1,531) (19) - (3,924 3,905 (5,595) (43,025) (1,151,211 1,108,186 (40,996) (163,984)	(40,732) (52,488) (500) (348) 1,428 1,361 1 928 1,013 (39,804) (51,475) (1,192) (1,811) (340) (382) 1	(40,732) (52,488) (3,916) (500) (348) (178) 1,428 1,361 463 3.9 (7) 928 1,013 278 (39,804) (51,475) (3,638) (11,912) (1,811) (1,256) (340) (382) (8111) 1 134 134 134 (1,531) (2,193) (1,933) (19) 12 1 1 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 295,188 (15,008) 3,924 1,337 - 3,905 1,349 281,181 (15,595) 10,899 1,292 (43,025) (44,420) 275,502 1,151,211 1,108,186 1,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,343,668 (10,066,766 1,3	(40,732)         (52,488)         (3,916)         (48,816)           (500)         (348)         (178)         (37)           1,428         1,361         463         1,306           -         -         (7)         (1)           928         1,013         278         1,268           (39,804)         (51,475)         (3,638)         (47,548)           (1,192)         (1,811)         (1,256)         (6,133)           (340)         (382)         (811)         (1,792)           1         -         -         -         -           -         -         134         2,227         -         -         -         -           -         -         -         134         2,227         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)           (500)         (348)         (178)         (37)         (1,063)           1,428         1,361         463         1,306         4,558           -         -         (7)         (1)         (8)           928         1,013         278         1,268         3,487           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)           (1,192)         (1,811)         (1,256)         (6,133)         (10,392)           (340)         (382)         (811)         (1,792)         (3,325)           1         -         -         -         1           -         -         134         2,227         2,361           -         -         -         14,559)         (4,559)           (1,531)         (2,193)         (1,933)         (10,257)         (15,914)           (19)         12         1         1         (5)           (1,531)         (2,193)         (1,933)         (10,257)         (15,914)           (19)         12         1         1         (5)           (1,531)         (2,1	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)           (500)         (348)         (178)         (37)         (1,063)         (327)           1,428         1,361         463         1,306         4,558         1,565           -         -         (7)         (1)         (8)         (11)           928         1,013         278         1,268         3,487         1,227           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,698)           (1,192)         (1,811)         (1,256)         (6,133)         (10,392)         (2,103)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)           1         -         -         1         1         1           -         -         134         2,227         2,361         82           (1,531)         (2,193)         (1,933)         (10,257)         (15,914)         (3,398)           (19)         12         1         1         (5)         (1,586)         (1,596)         (1,596)           (19)         12         1         1         (5)	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)           (500)         (348)         (178)         (37)         (1,063)         (327)         (301)           1,428         1,351         463         1,306         4,558         1,565         2,301           -         -         (7)         (1)         (8)         (11)         (77,923)           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,698)         (70,041)           (1,192)         (1,811)         (1,256)         (6,6133)         (10,392)         (2,103)         (2,930)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)           1         -         -         1         1         1         1         -           -         -         134         2,227         2,361         82         -           -         -         134         2,227         2,361         82         -           (1,531)         (2,193)         (1,933)         (10,257)         (15,914)         (3,398)         (5,263)           (19)	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565           (500)         (348)         (178)         (37)         (1,063)         (327)         (301)         (273)           1,428         1,361         463         1,306         4,558         1,565         2,301         1,263           -         -         (7)         (1)         (8)         (11)         (77)         (57)           928         1,013         278         1,268         3,487         1,227         1,923         933           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,598)         (70,041)         3,470,498           (1,192)         (1,811)         (1,256)         (6,6133)         (10,392)         (2,103)         (2,934)         (12,289)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)         (1,930)           1         -         -         1         1         1         1         (1         (1         (1         (1         (2,334)         (1,930)         (1,2,289)         (4,559)         (4,559)         (4,5	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)           (500)         (348)         (178)         (37)         (1,063)         (327)         (301)         (273)         -           1,428         1,361         463         1,306         4,558         1,565         2,301         1,263         10,306           -         -         -         (7)         (1)         (8)         (11)         (77)         (57)         -           928         1,013         278         1,268         3,487         1,227         1,923         933         10,306           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,698)         (70,041)         3,470,498         (774,322)           (1,192)         (1,811)         (1,256)         (6,6133)         (10,392)         (2,103)         (2,930)         (12,289)         (3,189)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)         (1,930)         (1,960)           1         1         1         1         1         1         1         (1	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)         2,539,991           (500)         (348)         (178)         (37)         (1,063)         (327)         (301)         (273)         -         (901)           1,428         1,351         463         1,306         4,558         1,565         2,301         1,263         10,306         15,435           -         -         -         (7)         (1)         (8)         (11)         (77)         (57)         -         (1,45)           928         1,013         278         1,268         3,487         1,227         1,923         933         10,306         14,389           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,698)         (70,041)         3,470,498         (774,327)         2,554,379           (1,192)         (1,811)         (1,256)         (6,6133)         (10,392)         (2,103)         (2,930)         (12,289)         (3,189)         (20,511)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)         (1,939)         (1,9	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)         2,539,991         (109,275)           (500)         (348)         (178)         (178)         (37)         (1,063)         (327)         (301)         (273)         -         (901)         -           1,428         1,361         463         1,306         4,558         1,565         2,301         1,263         10,306         15,435         9,431           928         1,013         278         1,268         3,487         1,227         1,923         933         10,306         14,389         9,431           (39,804)         (51,475)         (3,688)         (47,548)         (142,466)         (71,698)         (70,041)         3,470,498         (774,372)         2,554,379         (99,844)           (1,192)         (1,811)         (1,256)         (6,133)         (10,392)         (2,930)         (12,289)         (3,189)         (20,511)         (3,171)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)         (1,930)         (1,960)         (7,425)         (1,813)           1 <td< td=""><td>(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)         2,539,991         (109,275)         (93,168)           (500)         (348)         (178)         (1,063)         (327)         (301)         (273)         - (901)          -           1,428         1,361         463         1,306         4,558         1,565         2,301         1,263         10,306         15,435         9,431         9,239           928         1,013         278         1,268         3,487         1,227         1,923         933         10,306         14,389         9,431         9,239           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,698)         (70,041)         3,470,498         (774,372)         2,554,379         (99,844)         (83,229)           (1,192)         (1,811)         (1,792)         (3,333)         (10,392)         (2,030)         (12,289)         (3,189)         (20,511)         (3,171)         (3,152)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)         (1,930)         (1,960)         (7,45</td><td>(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)         2,539,991         (109,275)         (93,168)         29,310           (500)         (348)         (178)         (37)         (1,063)         (327)         (301)         (273)         - (901)        </td><td>                                     </td></td<>	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)         2,539,991         (109,275)         (93,168)           (500)         (348)         (178)         (1,063)         (327)         (301)         (273)         - (901)          -           1,428         1,361         463         1,306         4,558         1,565         2,301         1,263         10,306         15,435         9,431         9,239           928         1,013         278         1,268         3,487         1,227         1,923         933         10,306         14,389         9,431         9,239           (39,804)         (51,475)         (3,638)         (47,548)         (142,466)         (71,698)         (70,041)         3,470,498         (774,372)         2,554,379         (99,844)         (83,229)           (1,192)         (1,811)         (1,792)         (3,333)         (10,392)         (2,030)         (12,289)         (3,189)         (20,511)         (3,171)         (3,152)           (340)         (382)         (811)         (1,792)         (3,325)         (1,201)         (2,334)         (1,930)         (1,960)         (7,45	(40,732)         (52,488)         (3,916)         (48,816)         (145,953)         (72,925)         (71,964)         3,469,565         (784,677)         2,539,991         (109,275)         (93,168)         29,310           (500)         (348)         (178)         (37)         (1,063)         (327)         (301)         (273)         - (901)	

Case	(€ thousands)	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Recompliance of the last note t-table   Recompliance of the last note t-table   Recompliance of the last note t-table   Recompliance of the last note that note that note that note that note the last note that note the last note that note	Cash Flows from Operating Activities:												
Agustment for neuros disclose superlay under operating cash flow and Agustment for neuros disclose superlay under operating cash flow and Agustment for neuros disclose superlay under operating cash flow and all salities:  Agustment for neuros disclose superlay under operating cash flow and all salities:  Agustment for neuros disclose superlay under operating cash flow and all salities:  Energy and a superlay superlay of the superlay superla	Net Profit (loss)	(115,704)	(29,259)	247,394	7,535	(160,786)	308,221	268,882	506,534	368,168	520,157	693,991	843,085
Aguitament for fements of disclose under investing and financing ash flows (334) (6,88) (3,89) (2,842) (1,065) (1,065) (1,065) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067) (1,067)	Reconciliation of net loss to net cash:		-	-	-	-	-	-	-	-	-	-	-
Agustine for ferents to disclose under investing and financing cash files in increase) decrease in operating assistation in operating assistation in operating assistation of poreating assistant in operating assistant in operati	Adjustment for non-cash transactions	20,821	21,753	159,874	36,462	27,970	28,441	29,229	29,128	29,074	29,053	28,579	26,978
Changes in working assets and it is billithes:   1	Adjustment for items to disclose separately under operating cash flow	25,903	(4,389)	(23,432)	-	-	-	-	-	-	-	-	-
Changes in working capital other than deferred income	Adjustment for items to disclose under investing and financing cash flows	(334)	(668)	(3)	-	-	-	-	-	-	-	-	-
Decrease in deferred income   (65,722   15,131)   21,129,819   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (129,581)   (	(Increase) decrease in operating assets and liabilities:		-	-	-	-	-	-	-	-	-	-	-
Part	Changes in working capital other than deferred income	(12,862)	19,922	26,338	1,040	7,321	(10,877)	45,002	(10,824)	17,745	(4,115)	(1,865)	950
Interest pade	Decrease in deferred income	(65,722)	(153,312)	2,129,819	(229,650)	(229,650)	(229,650)	(261,735)	(325,905)	(229,650)	(229,650)	(229,650)	(229,533)
1.	Operating activity and working capital cash flow	(147,898)	(145,953)	2,539,991	(184,613)	(355,145)	96,135	81,378	198,933	185,337	315,446	491,055	641,479
Mathematic part part part part part part part part	Interest paid	(273)	(1,063)	(901)	-	-	-	-	-	-	-	-	-
Net material and parenting cash flow   14,380   34,071   38,071   38,071   38,071   38,071   39,085   31,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085   32,085	Interest received	1,341	4,558	15,435	38,101	38,273	37,441	38,339	39,655	41,398	43,623	47,086	51,874
Net cash used in operating activities   144/05    2,554,379   146,511    318,672    133,576   119,717   238,588   25,755   359,069   538,141   693,3535   258,675   140,675   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755   140,755	Income taxes paid	(199)	(8)	(145)	-	-	-	-	-	-	-	-	-
Purchase of property, plant and equipment   S.312	Net interest and tax- operating cash flow	869	3,487	14,389	38,101	38,273	37,441	38,339	39,655	41,398	43,623	47,086	51,874
Purchase of property, plant and equipment   \$1,512   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$1,0392   \$	Net cash used in operating activities	(147,029)	(142,466)	2,554,379	(146,511)	(316,872)	133,576	119,717	238,588	226,735	359,069	538,141	693,353
Purchase of and expenditure in intangible fixed asserts Proceeds from disposal of property, plant and equipment Proceeds from disposal of property, plant and equipment Proceeds from sale of financial asset held at fair value through profit or loss Proceeds from sale of financial asset held at fair value through profit or loss Proceeds from sale of financial asset held at fair value through profit or loss Proceeds from sale of financial asset held at fair value through profit or loss Proceeds from sale of financial asset held at fair value through profit or loss Proceeds from sale of financial asset held at fair value through profit or loss Proceeds from Enancial asset held at fair value through profit or loss Proceeds from Enancial Activities Proceeds from Enancial Activities Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases from exercise of warrants Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and share premium increases, gross amount Proceeds from Capital and Share premium increases, gross amount Proceeds from Capital and Share premium increases, gross amount Proceeds from Capital and Share premium increases, gross amount Proceeds from Capital and Share premium increases, gross amount Proceeds from Capital and Share premium increases, gross amount Proceeds from Capital and Share premium increases, gross amount Proceeds from Capital and Share	Cash Flows from Investing Activities:		-	-	-	-	-	-	-	-	-	-	-
Proceeds from disposal of property, plant and equipment 6,7 1, 6,11 1, 1 1, 1 1, 1 1, 1 1, 1 1,	Purchase of property, plant and equipment	(5,312)	(10,392)	(20,511)	(12,574)	(12,394)	(12,110)	(11,833)	(11,562)	(11,297)	(11,038)	(10,786)	(10,539)
Decrease in restricted cash	Purchase of and expenditure in intangible fixed assets	(2,125)	(3,325)	(7,425)	(6,474)	(1,327)	(1,227)	(1,135)	(1,050)	(971)	-	-	-
Proceeds from sale of financial asset held at fair value through profit or loss	Proceeds from disposal of property, plant and equipment	7	1	1	-	-	-	-	-	-	-	-	-
Acquisition of available-for-sale financial assets   4,559   177     19,088   13,721   19,088   13,731   12,988   12,581   12,268   11,038   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,788   10,7	Decrease in restricted cash	6,510	-	-	-	-	-	-	-	-	-	-	-
Net cash provided by (used in) investing activities:	Proceeds from sale of financial asset held at fair value through profit or loss	372	2,361	82	-	-	-	-	-	-	-	-	-
Cash Flows from Financing Activities:	Acquisition of available-for-sale financial assets	-	(4,559)	(177)	-	-	-	-	-	-	-	-	-
Repayment of obligations under finance leases and other debts (65) (3,834) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Net cash provided by (used in) investing activities	(548)	(15,914)	(28,030)	(19,048)	(13,721)	(13,337)	(12,968)	(12,612)	(12,268)	(11,038)	(10,786)	(10,539)
Proceeds from capital and share premium increases, gross amount 363,924 296,188 960,087	Cash Flows from Financing Activities:		-	-	-	-	-	-	-	-	-	-	-
State costs paid related to capital and share premium increases from exercise of warrants   15,790   15,964   14,480   347,897   14,480   347,897   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480   14,480	Repayment of obligations under finance leases and other debts	(65)	(5)	(3,834)	-	-	-	-	-	-	-	-	-
Proceeds from capital and share permium increases from exercise of warrants 5,288 7,657 14,480 347,897	Proceeds from capital and share premium increases, gross amount	363,924	296,188	960,087	-	-	-	-	-	-	-	-	-
Net cash provided by financing activities 35,357 287,86 970,733 347,897	Issue costs paid related to capital and share premium increases	(15,790)	(15,964)	-	-	-	-	-	-	-	-	-	-
Effect of exchange rate differences on cash and cash equivalents (27,808) 10,089 32,380	Proceeds from capital and share premium increases from exercise of warrants	5,288	7,657	14,480	347,897	-	-	-	-	-	-	-	-
Net increase (decrease) in cash and cash equivalents         177,972         139,585         3,529,462         182,338         (330,592)         120,238         106,749         225,977         214,67         348,031         527,355         682,814           Cash & cash equivalents at end of period         973,241         1,151,211         1,290,796         4,820,266         5,002,604         4,672,012         4,792,250         4,888,999         5,124,976         5,339,442         5,687,473         6,214,828           Cash Burn         2017A         2018A         2019E         202E         202E         202E         202E         202E         205E         205E         202E         202E           Cash burn: Sum of cash used in OpEx and P&E         (152,341)         (19,576)         2,533,868         (159,085)         (329,266)         121,466         107,884         227,026         215,438         348,031         527,355         682,814           Annual cash burn (Q x 4 or annual)         (152,341)         (19,576)         2,533,868         (159,085)         (329,266)         121,466         107,884         227,026         215,438         348,031         527,355         682,814           Years of cash remaining         8         6         6         6         159,085         (159,085	Net cash provided by financing activities	353,357	287,876	970,733	347,897								-
Cash & cash equiv. at beginning of period  973,241 1,151,211 1,290,796 4,820,266 5,002,604 4,672,012 4,792,250 4,898,999 5,124,976 5,339,442 5,687,473 6,214,828 6,897,642  Cash & cash equivalents at end of period  2017A 2018A 2019E 2020E 2021E 2022E 2023E 2024E 2025E 2026E 2026E 2027E 2028E  Cash burn: Sum of cash used in OpEx and P&E  (152,341) (4,894) 2,533,868 (159,085) (329,266) 121,466 107,884 227,026 215,438 348,031 527,355 682,814 Annual cash burn (Q x 4 or annual)  Years of cash remaining  8 6 6 Cash 8 6 6 Cash 8 3 1 1 4 Cash 8	Effect of exchange rate differences on cash and cash equivalents	(27,808)	10,089	32,380	-	-	-	-	-	-	-	-	-
Cash & cash equivalents at end of period 1,151,213 1,290,796 4,800,258 5,002,604 4,672,012 4,792,250 4,898,999 5,124,976 5,339,442 5,687,473 6,214,828 6,897,642    Cash Burn	Net increase (decrease) in cash and cash equivalents	177,972	139,585	3,529,462	182,338	(330,592)	120,238	106,749	225,977	214,467	348,031	527,355	682,814
Cash Burn         2017A         2018A         2019E         202E         2021E         2028E         2028E         2025E         2025E         2026E         2027E         2028E           Cash burn: Sum of cash used in OpEx and P&E         (152,341)         (4,894)         2,533,868         (159,085)         (329,266)         121,466         107,884         227,026         215,438         348,031         527,355         682,814           Annual cash burn (Q x 4 or annual)         (152,341)         (19,576)         2534,868         (159,085)         (329,266)         121,466         107,884         227,026         215,438         348,031         527,355         682,814           Years of cash remaining         8         69         Cash+         31         14         Cash+	Cash & cash equiv. at beginning of period	973,241	1,151,211	1,290,796	4,820,266	5,002,604	4,672,012	4,792,250	4,898,999	5,124,976	5,339,442	5,687,473	6,214,828
Cash burn: Sum of cash used in OpEx and P&E (152,341) (4,894) 2,533,868 (159,085) (329,266) 121,466 107,884 227,026 215,438 348,031 527,355 682,814  Annual cash burn (Q x 4 or annual) (152,341) (19,576) 2,533,868 (159,085) (329,266) 121,466 107,884 227,026 215,438 348,031 527,355 682,814  Years of cash remaining 8 69 Cash+ 31 14 Cash+	Cash & cash equivalents at end of period	1,151,213	1,290,796	4,820,258	5,002,604	4,672,012	4,792,250	4,898,999	5,124,976	5,339,442	5,687,473	6,214,828	6,897,642
Annual cash burn (Q x 4 or annual) (152,341) (19,576) 2,533,868 (159,085) (329,266) 121,466 107,884 227,026 215,438 348,031 527,355 682,814 Years of cash remaining 8 69 Cash+ 31 14 Cash+	Cash Burn	2017A	2018A	2019E	2020E :	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Years of cash remaining 8 69 Cash+ 31 14 Cash+ Cash+ Cash+ Cash+ Cash+ Cash+ Cash+ Cash+ Cash+	Cash burn: Sum of cash used in OpEx and P&E	(152,341)	(4,894)	2,533,868	(159,085)	(329,266)							682,814
	Annual cash burn (Q x 4 or annual)	(152,341)	(19,576)	2,533,868	(159,085)	(329,266)	121,466	107,884	227,026	215,438	348,031	527,355	682,814
Months of cash remaining 91 824 Cash+ 377 170 Cash+ Ca	Years of cash remaining	8	69	Cash+	31	14	Cash+						
	Months of cash remaining	91	824	Cash+	377	170	Cash+						

Per share value (\$)	Undifferentiated	Incremental	Meaningful	Breakthrough
Filgotinib	35.71	71.20	104.55	155.06
GLPG1690	13.28	27.89	49.24	73.93
GLPG1972	0.45	2.11	2.33	2.66
GLPG1205	0.36	0.51	0.74	1.34
Cash	102.11	102.11	102.11	102.11
Operations	(28.31)	(38.42)	(58.13)	(74.13)
Total	123.60	165.40	200.84	260.97
Commercial probability distribution	5.0%	25.5%	59.7%	9.8%
Commercial adjusted total	6.20	42.16	119.87	25.59
Sum of the parts total (\$)	194.00			

Source: SVB Leerink Research



# Disclosures Appendix Analyst Certification

I, Pasha Sarraf, M.D., Ph.D., certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.



OP = Outperform MP = Market Perform UP = Underperform D = Drop Coverage I = Initiate SC = Suspended Coverage

Created by: BlueMatrix

# **Valuation**

Our \$194 PT was determined using a probability weighted scenario analysis. Individual scenario values were determined by sum of the parts valuation that applied a WACC calculated 11.9% discount rate and 2% terminal growth rate to revenues and cash flows projected into 2028. Revenues for each asset were adjusted independently twice: by probability of regulatory approval and by asset specific commercial profile.

A commercial probability distribution was determined based on a revenue weighted distribution of independent commercial scenarios projected for each drug candidate. GLPG1690, filgotinib, and cash reserves comprise a majority of the valuation. Galapagos held €5.6B in cash and cash equivalents as of the end of 3Q19.

# **Risks to Valuation**

Risks to Valuation include the following:

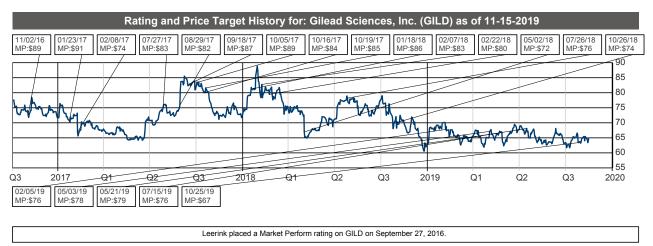
Product Risk – One or more of the clinical trials for filgotinib or GLPG1690 may fail to meet its primary endpoint necessitating a deeper decision into continued development in that particular indication. Additionally, any safety issues that occur within one trial for filgotinib may read negatively across the entire filgotinib franchise.

Collaboration Risk – GLPG's pipeline and lead asset filgotinib are subject to risk related to GLPG's R&D collaboration agreement with Gilead. This collaboration agreement gives GLPG limited ability to address situational issues surrounding the success of these drugs.

Regulatory Risk – The FDA has previously indicated a belief in drug combinations as the likely future for IPF treatment. With this in mind, GLPG has pursued pivotal trial investigating GLPG1690 in combination with standard of care. While we believe this creates a safer path to approval, it nonetheless opens the door to potential competitors pursuing a path to approval as a monotherapy to significantly disrupt expectations for market competition.

Financing Risk – GLPG currently has no revenue producing products on the market. Though well capitalized over the near term, negative outcomes for any of its asset franchises may significantly impact its ability raise funds in the future.





OP = Outperform MP = Market Perform UP = Underperform D = Drop Coverage I = Initiate SC = Suspended Coverage

Created by: BlueMatrix

# **Valuation**

Our \$67 price target for Gilead Sciences, Inc. (GILD) is based on an average of three approaches that we believe are a reasonable basis for valuing the stock today. These approaches are trough price to earnings multiples for large cap, slow-growth medical products businesses long term; revenue multiples for large cap medical products stocks with slow growth outlooks; and discounted cash flow (DCF). Using a trough consensus forward earnings (2019E) multiple for slow-growth medical products stocks (AGN, ABBV, CELG, BIIB, AMGN) of ~10x, applied to our 2020E EPS estimate for Gilead, gives a price of \$67. Alternatively we apply a slow-growing, large-cap biopharma products (ABBV, AMGN, BMY, PFE, CELG, RHHBY, NVS) revenue multiple (3.8x) to 2021E revenue estimates to derive a 2019 implied value of \$84bn, implying a one-year price target of \$66. Lastly, our DCF uses our forecast of free cash flow through 2029E and then applies a -5% growth rate to our terminal cash flow forecast and discounts the values back to the present at a 6.8% WACC to give a present value of \$68. The average of these three approaches is \$67, which is our price target.

### Risks to Valuation

The risks to our view, outlook, and valuation for Gilead include any major change in the labeling, price, or reimbursement coverage for the company's existing HIV or HCV products, emergence of further aggressive price discounting, rebating, or other value erosion in the HIV and HCV categories, over and above our current forecast, or any failure of the company's principal pipeline assets, selonsertib (NASH) and filgotinib (RA, IBD) to advance through development to commercialization. Opportunities for better performance and value than our expectations include delays or limitations in the development, profile, and adoption of competitive HIV products, successful development of underappreciated elements of the company's portfolio, such as GS-9674 (FXR agonist), GS-0976 (ACC Inhibitor), or follow-on CART indications and stronger-than-expected conversion of current HIV patients to Gilead's next generation TAF-based HIV treatment regimens.



	Distribution of Ratings/Investment Bank	king Services (II	•	erv./Past 12
				Mos.
Rating	Count	Percent	Count	Percent
BUY [OP]	148	74.4	54	36.5
HOLD [MP]	48	24.1	3	6.3
SELL [UP]	3	1.5	0	0.0

# **Explanation of Ratings**

Outperform (Buy): We expect this stock to outperform its benchmark over the next 12 months.

<u>Market Perform (Hold/Neutral):</u> We expect this stock to perform in line with its benchmark over the next 12 months.

<u>Underperform (Sell):</u> We expect this stock to underperform its benchmark over the next 12 months.

The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600<sup>®</sup> Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500<sup>®</sup> Health Care Index for issuers with a market capitalization over \$2 billion.



# **Important Disclosures**

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SVB Leerink LLC makes a market in Galapagos NV and Gilead Sciences, Inc.

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