ALPHAVALUE CORPORATE SERVICES

18 Apr 2024
Sponsored research
Supergenerics
France

Crossject

Things get going

Opinion	**Buy**
Upside (%)	452
Price (€)	2.08
Target Price (€)	11.4
Bloomberg Code	ALCJ FP
Market Cap (€M)	75.8
Enterprise Value (€M)	114

Momentum	NEGATIVE
Sustainability	4/10
Credit Risk	BBB

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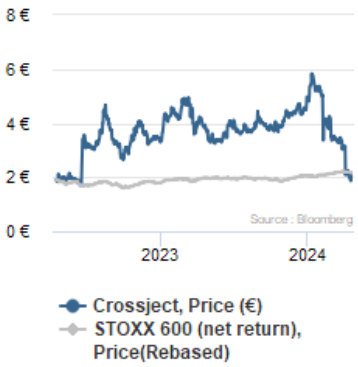


KEY DATA	12/21A	12/22A	12/23E	12/24E	12/25E
Adjusted P/E (x)	**-6.80**	**-8.01**	**-17.5**	**4.17**	**1.98**
Dividend yield (%)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
EV/EBITDA(R) (x)	-12.4	-16.5	-28.5	3.31	1.89
Adjusted EPS (€)	**-0.45**	**-0.36**	**-0.23**	**0.50**	**1.05**
Growth in EPS (%)	*n/a*	*n/a*	*n/a*	*n/a*	*111*
Dividend (€)	0.00	0.00	0.00	0.00	0.00
Sales (€M)	6.77	9.72	14.0	59.0	92.9
EBIT margin (%)	*0.00*	*0.00*	*0.00*	*78.0*	*100*
Attributable net profit (€M)	-10.7	-11.2	-8.47	18.4	38.8
ROE (after tax) (%)	**325**	**798**	**550**	**410**	**112**
Gearing (%)		*418*		*173*	*79.2*

Conflicts of interest

Corporate broking	No
Trading in corporate shares	No
Analyst ownership	No
Advice to corporate	No
Research paid for by corporate	Yes
Corporate access	No
Brokerage activity at AlphaValue	No
Client of AlphaValue Research	No

Crossject (Buy)

Detailed financials at the end of this report

Key Ratios

		12/22A	12/23E	12/24E	12/25E
Adjusted P/E	x	-8.01	-17.5	4.17	1.98
EV/EBITDA	x	-16.5	-28.5	3.31	1.89
P/Book	x	38.8	-25.3	5.11	1.39
Dividend yield	%	0.00	0.00	0.00	0.00
Free Cash Flow Yield	%	-11.7	-2.24	-35.3	-11.0
ROE (after tax)	%	798	550	410	112
ROCE	%	-51.3	-58.9	34.5	40.2
Net debt/EBITDA	x	-1.28	-2.17	1.12	0.73

Consolidated P&L

		12/22A	12/23E	12/24E	12/25E
Sales	€M	9.72	14.0	59.0	92.9
EBITDA	€M	-6.93	-5.59	34.5	64.9
Underlying operating profit	€M	-13.3	-11.9	28.2	58.5
Operating profit (EBIT)	€M	-13.3	-11.9	28.2	58.5
Net financial expenses	€M	0.11	-0.70	-0.70	-0.70
Pre-tax profit before exceptional items	€M	-13.2	-12.6	27.5	57.8
Corporate tax	€M	2.22	4.17	-9.07	-19.1
Attributable net profit	€M	-11.2	-8.47	18.4	38.8
Adjusted attributable net profit	€M	-11.2	-8.47	18.4	38.8

Cashflow Statement

		12/22A	12/23E	12/24E	12/25E
Total operating cash flows	€M	-5.50	-0.31	-20.6	-5.10
Capital expenditure	€M	-6.78	-2.27	-5.38	-2.50
Total investment flows	€M	-6.78	-2.27	-5.38	-2.50
Dividends (parent company)	€M				
New shareholders' equity	€M	4.09	0.00	0.00	0.00
Total financial flows	€M	11.2	-3.34	51.1	6.21
Change in net debt position	€M	-4.19	-3.27	-26.6	-8.30
Free cash flow (pre div.)	€M	-12.2	-3.27	-26.6	-8.30

Balance Sheet

		12/22A	12/23E	12/24E	12/25E
Goodwill	€M	0.00	0.00	0.00	0.00
Total intangible	€M	10.7	10.1	9.42	8.78
Tangible fixed assets	€M	7.67	5.17	5.78	3.51
WCR	€M	1.08	-0.02	46.0	96.9
Total assets (net of short term liabilities)	€M	22.3	17.1	62.8	111
Ordinary shareholders' equity (group share)	€M	2.69	-5.77	14.8	54.2
Provisions for pensions	€M		0.00	0.00	0.00
Net debt / (cash)	€M	8.86	12.1	38.8	47.1
Total liabilities and shareholders' equity	€M	22.3	17.1	62.8	111
Gross Cash	€M	7.13	1.22	26.4	25.0

Per Share Data

		12/22A	12/23E	12/24E	12/25E
Adjusted EPS (bfr gwill amort. & dil.)	**€**	**-0.36**	**-0.23**	**0.50**	**1.05**
Net dividend per share	**€**	**0.00**	**0.00**	**0.00**	**0.00**
Free cash flow per share	€	-0.39	-0.09	-0.72	-0.22
Book value per share	€	0.07	-0.16	0.41	1.49
Number of diluted shares (average)	**Mio**	**31.2**	**37.0**	**37.0**	**37.0**

Contents

Businesses & Trends

A new entrant on the New Therapeutic Entities market (NTEs)

We regard Crossject as a new entrant in the speciality pharma field. Its differentiating feature is its delivery mechanism, Zeneo, a pretty unique needle-free injection system. Zeneo is the fruit of over 15 years of R&D. It is an automatic single-use pre-filled needle-free injection device to be used, for example, on the thigh or abdomen. The technology is based on a high-pressure injection allowing a drug to be administered rapidly (1/10 sec) into the tissue. This is a major technological breakthrough in relation to traditional injection methods (syringe and needle) and to the best current auto-injectors (injector pens). This new medical device is user-friendly, reliable and safe and is the best self-injection device among the known products being developed. Zeneo guarantees a safe, controlled and effective injection to patients. It can perform intramuscular or subcutaneous injections, the most commonly used methods. All tests on healthy volunteers and animal or human-skin *ex-vitro* models have shown that Zeneo is as efficient as current injection methods and easier/intuitive to use, avoids contamination issues due to needles and is more rapid than existing methods. The device has been tested on various molecules (size, structure, fragility….). This said, the device still needs to be approved "once it is combined with a drug", since it then represents a new therapeutic entity.

Crossject has initially chosen to address the NTE (New Therapeutic Entities) market, a concept that consists of using a known drug with an innovative delivery system, thus improving patient comfort. This strategy, particularly used by Teva, has proven to be successful since it typically results in an improved administration of the drug as well as offering its promoters patent protection, independent of the initial molecule. This results in better patient compliance and in turn enhanced overall drug efficacy. Crossject's strategy is to develop its NTE proprietary portfolio and to use partnerships for the marketing/distribution.

The portfolio is already wide

Today, Crossject has a portfolio of seven products under development: Midazolam (epilepsy), Naloxone (opioid overdoses), Sumatriptan (acute migraine), Epinephrine (treatment of anaphylactic shocks), Methotrexate (anti-rheumatic), Hydrocortisone (anti inflammation) and Terbutaline (acute asthma). Lastly, Apomorphine (Parkinson's disease) has been put on stand-by (replaced by Terbutaline, within a financing programme of BPI France). We expect the first sales to take place in FY24 once clinical studies and the registration process have been completed.

The competition Crossject has to face depends on the NTEs currently under development one looks at: pens or nasal sprays already exist as far as Naloxone ("Evzio" pen and Narcan), Midazolam (Pfizer, Upsher-Smith) or Epinephrine (six pens on the market) are concerned, while injections are available for most of the diseases mentioned (as well as other routes, e.g. oral or inhalation). The key point is that Zeneo offers a superior quality (in terms of ease-of-use, efficiency, control and safety) and thus aims at gaining market share over existing products, while its needle-free feature is a clear competitive advantage. A study quoted by EMA (European Medicines Agency – 25/062015

EMA/478468/2015, Committee for Medicinal Products for Human Use – CHMP) showed that only 16% of pen users performed the injection correctly in cases of severe anaphylactic shock (Adrenaline), which gives a feeling for the sound prospects of Zeneo. Other needle-free devices are available on the market or being developed, but usually dedicated to other uses (vaccines, insulin), such as Bioject's Biojector, Zomacton or Prime.

A huge market backs sound growth prospects

It is not easy to determine the total size of the markets Crossject addresses: first, the company will develop other NTEs in the future. From c. 900 identified compounds that could be injected, Crossject estimates that 200 are compatible with the Zeneo device, 100 of which are free of rights. The company has thus identified 20 molecules which could be developed as first priorities. Secondly, each market should be looked at independently, since their size varies a lot. As an example, we estimate the Triptan market to be worth more than US$5bn (but of course less in the non-injectable form), the Methotrexate market to be worth US$1bn worldwide while the Midazolam (US$1bn) or Naloxone markets (US$2bn) also offer significant opportunities. The market for Terbutaline is also probably at least in the US$1bn region, considering that 8% of people suffer from asthma, of which 10% in its severe form, on both sides of the Atlantic (we have not considered the Asian opportunity). Lastly, Hydrocortisone, as far as it is concerned, is a niche market of c. US$50m. However, we can still derive from these numbers that the total addressable market today is worth a good US$5bn (for the seven NTEs under development) which gives Crossject ample room for growth. Moreover, the theoretical total market is much wider, since many NTEs are compatible with the Zeneo drug-delivering device, as stated earlier. Although this is not in management's plans today, we can only notice that the vaccine market (almost US$15bn, with a CAGR of c.10%) would more than double the total market targeted by Crossject, which gives an indication of the potential "limitless" growth the company could enjoy, without other potential fields such as hypoglycaemia for example.

Based on our estimates, Crossject should be able to generate a total turnover of over €200m in 2025 (at in-market prices), which should breakdown as follows:

Turnover per NTE (€m)	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e
Naloxone								
units sold (m)					0,3	1	1,5	2
Turnover				0,0				
Sumatriptan								
units sold (m)					0,1	0,2	0,4	0,6
Turnover								
Midazolam								
units sold (m)			0,5	0,75	1	1,3	1,6	2
Turnover								
Epinephrin								
units sold (m)				0,6	1	1,6	2	2,5
Turnover								
Methotrexate								
units sold (m)					1	1,5	2	3
Turnover								
Hydrocrotisone								
units sold (m)				0,1	0,15	0,15	0,2	0,3
Turnover								
Terbutaline								
units sold (m)					0,5	1	1,5	2,5
Turnover								
Total turnover (€m)		0,0	102,2	206,5	350,4	512,4	657,5	869,6

Divisional Breakdown Of Revenues

	Sector	12/22A	12/23E	12/24E	12/25E	Change 23E/22 €M	Change 23E/22 of % total	Change 24E/23E €M	Change 24E/23E of % total
Total sales		**9.73**	**14.0**	**59.0**	**92.9**	**4**	**100%**	**45**	**100%**
Methotrexate	Smaller Pharma	0.00	0.00	0.00	0.00	0	0%	0	0%
Epinephrine	Smaller Pharma	0.00	0.00	0.00	27.7	0	0%	0	0%
Sumatriptan	Smaller Pharma	0.00	0.00	0.00	0.00	0	0%	0	0%
Midazolam	Smaller Pharma	0.00	0.00	46.0	60.1	0	0%	46	102%
Hydrocortisone	Smaller Pharma	0.00	0.00	0.00	5.15	0	0%	0	0%
Naloxone	Smaller Pharma	0.00	0.00	0.00	0.00	0	0%	0	0%
Apomorphine	Smaller Pharma	0.00	0.00	0.00	0.00	0	0%	0	0%
Terbutaline	Supergenerics	0.00	0.00	0.00	0.00	0	0%	0	0%
Other		9.73	14.0	13.0	0.00	4	100%	-1	-2%

Key Exposures

	Revenues	Costs	Equity
Dollar	80.0%	5.0%	0.0%
Emerging currencies	5.0%	0.0%	0.0%
Long-term global warming	0.0%	0.0%	0.0%

Sales By Geography

Europe	100.0%
Of which France	100.0%

We address exposures (eg. how much of the turnover is exposed to the $) rather than sensitivities (say, how much a 5% move in the $ affects the bottom line). This is to make comparisons easier and provides useful tools when extracting relevant data.
Actually, the subject is rather complex on the ground. The default position is one of an investor managing in €. An investor in £ will obviously not react to a £ based stock trading partly in € as would a € based investor. In addition, certain circumstances can prove difficult to unravel such as for eg. a € based investor confronted to a Swiss company reporting in $ but with a quote in CHF... Sales exposure is probably straightforward but one has to be careful with deep cyclicals. Costs exposure is a bit less easy to determine (we do not allow for hedges as they can only be postponing the day of reckoning). How much of the equity is exposed to a given subject is rarely straightforward but can be quite telling
In addition, subjects are frequently intertwined. A $ exposure may encompass all revenues in $ pegged currencies and an emerging currency exposure is likely to include $ pegged currencies as well.
Exposure to global warming issues is frequently indirect and may require to stretch a bit imagination.

Money Making

Rather conservative assumptions

Our assumptions are based on the launches of the seven current NTEs the group is developing, only one of which (Methotrexate) has already successfully completed clinical studies. For the remaining specialities, clinical studies will be carried out in FY23-24. Thereafter, regulatory approvals can be obtained with commercial launches expected in FY25-26; We have based our estimates on the following assumptions: first, products will be sold through partnership agreements. This means Crossject will benefit from upfront fees and royalties, the former financing part of the clinical studies. Altogether, this boils down to considering that Crossject's turnover is a fraction (40%) of the final user's purchasing price, the difference representing the distributor/wholesaler's margin to account for logistics and marketing costs. We have also considered a risk factor: 50% for all NTEs, except for Midazolam, Epinephrine and Hydrocortisone (70%, i.e. a 30% risk of failure). This seems to be reasonable and quite conservative, given the fact that the registration/filing process is much lighter and, in all odds, much quicker than for a new compound (which typically takes 10 years from early development stages to the market). In the case of NTEs, the time needed is closer to three years, depending on which product/geography is involved and should never exceed five years in our view. The efficacy of molecules has already been proven (as is the lack of safety). The application for NTEs should only require bioequivalence studies (and not the full scope of clinical surveys), reducing costs (€3-4m vs €200m for a new chemical entity, i.e. a new drug) and, just as important, the time needed before products reach the market. In brief, the filing (FDA and EMA) will then only focus on the product's reliability (technical file) and the bioequivalence results.

Our forecasts are not that aggressive

As a result, our estimates are based on the group's assumptions in terms of number of units sold (i.e. Zeneo devices) and their ramp-up from commercial launch to maturity, for each sub-market (i.e. each NTE), with a probability that is the risk factor assessing both potential issues in the approval process and the risk not being able to find a suitable partner. Although it is not easy to determine so early on the market share Crossject could gain in each sub-market, the group has reasonable targets (10-20% except for Hydrocortisone where it claims to be able to control 30% of this small market). To be on the conservative side, we have also considered that these market share targets will not be reached before 2030 that is some five years after market launch depending on the NTE.

As an example, we have assumed Adrenaline will be launched in 2025, but we have also considered a 70% probability, and that Crossject will sell 2.5m doses a year by 2029 for an in-market price of €40 in Europe and US$200 in the US. This results in a theoretical €92m turnover by 2028 (at end-user price), or €64m given the 70% probability we assign to this NTE (even if, from an accounting standpoint, Crossject will get only a share of it (45%) and the "full" turnover (volumes at in-market price) will be booked on its partner's books.

Lastly, the company will be quite heavily dependent on the US$, first because volumes will be significant in the US and, second, since prices are also much higher there (sometimes as much as 5-6 times the price in the EU). The impact

will be both translation-wise (pure US$/€ parity) and transaction-wise (costs are mainly in €).

Divisional EBIT

	12/22A	12/23E	12/24E	12/25E	Change 23E/22 €M	Change 23E/22 of % total	Change 24E/23E €M	Change 24E/23E of % total
Total	**0.00**	**0.00**	**46.0**	**92.9**	**0**	**NA**	**46**	**100%**
Royalty income								
Product sales	0.00	0.00	46.0	92.9	0	NA	46	100%
Other/cancellations								

Divisional EBIT margin

	12/22A	12/23E	12/24E	12/25E
Total	**0.00%**	**0.00%**	**78.0%**	**100%**

Valuation

All peer-based valuations have no meaning since Crossject currently has no revenues and negative results. Our NAV valuation is based on a 3x multiple of 2025-26 revenues for all segments. On the one hand, these revenues will not be booked for three years, which should lead us to a discount, however, they only correspond to the ramp-up in sales, meaning that growth rates will be high after 2025 and that these figures are very conservative ones indeed, which explains why we chose not to discount them. The multiple used is rather common for biotech and pharma companies, particularly for those that have a significant R&D pipeline and, thus, high growth prospects. A transaction value would certainly end up at a higher level (5-10x sales, depending on the pharma segment). As an indication of this, Emergent Biosolutions announced in FY18 that it would buy Adapt Pharma (the developer of Narcan, an FDA-approved naloxone nasal spray for US$635m (+US$100m in sales milestones), while we estimate sales of c.US$150m for FY18, implying a c.4.9x sales multiple.

Our DCF is based on our forecasts for each of the seven NTEs currently under development, considering that all of them will be sold through partnerships. We have also factored in a risk associated with the development of each specialty (50% or 70% probability of success as discussed in the Money Making section, depending on the status of clinical trials and the need to find a partner).

It is worth noting that our target price is derived from a weighted average of all methods used, NAV and DCF both showing huge potential upsides (which together account for 55% of our total valuation), while all comparison-based methods lead to weak numbers in the absence of results for the time being. In other words, the valuation of the stock is penalized and should go up quickly when the first products reach the market and enable Crossject to post profits. This also suggests it will take some time for the market to reflect the group's potential fully. Patience will indeed be needed but the reward could be huge.

Valuation Summary

Benchmarks		Values (€)	Upside	Weight
DCF		14.7	611%	40%
NAV/SOTP per share		12.5	500%	40%
P/E	*Peers*	4.15	100%	5%
EV/Ebitda	*Peers*	4.15	100%	5%
P/Book	*Peers*	3.03	46%	5%
Dividend Yield	*Peers*	0.00	-100%	5%
Target Price		**11.4**	**452%**	

Comparison based valuation

Computed on 18 month forecasts	P/E (x)	Ev/Ebitda (x)	P/Book (x)	Yield(%)
Peers ratios	28.1	15.0	3.66	1.36
Crossject's ratios	2.91	2.53	2.51	0.00
Premium	0.00%	0.00%	0.00%	0.00%
Default comparison based valuation (€)	**4.15**	**4.15**	**3.03**	**0.00**
Coloplast	33.2	22.4	10.7	2.51
Sartorius	58.1	24.7	8.75	0.40
UCB	35.6	14.9	2.37	0.87
bioMerieux	22.6	12.0	2.73	0.92
Ipsen	13.6	6.69	1.89	1.24
Carl Zeiss Meditec	29.3	17.2	3.72	1.19
Hikma Pharmaceuticals	10.2	5.79	1.75	2.96
Faes Farma	11.3	7.55	1.34	3.94
Innate Pharma	-7.17	13.5	-7.81	0.00

DCF Valuation Per Share

WACC	%	6.69	Avg net debt (cash) at book value	€M	25.5
PV of cashflow FY1-FY11	€M	37.2	Provisions	€M	1.42
FY11CF	€M	49.5	Unrecognised actuarial losses (gains)	€M	0.00
Normalised long-term growth"g"	%	2.00	Financial assets at market price	€M	0.00
Sustainability "g"	%	1.85	Minorities interests (fair value)	€M	0.00
Terminal value	€M	1,022	Equity value	€M	545
PV terminal value	€M	535	Number of shares	Mio	37.0
PV terminal value in % of total value	*%*	*93.5*	**Implied equity value per share**	**€**	**14.7**
Total PV	€M	572	Sustainability impact on DCF	%	-3.04

Assessing The Cost Of Capital

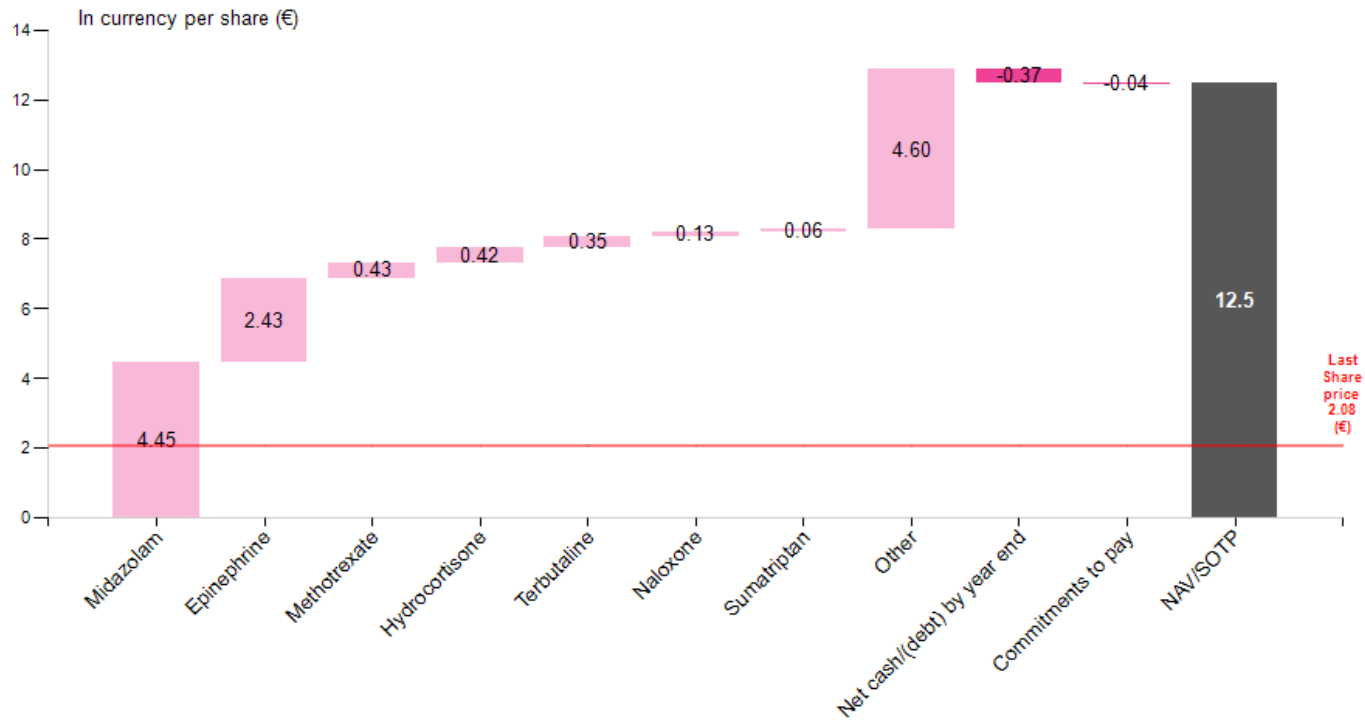
Synthetic default risk free rate	%	3.50	Company debt spread	bp	150
Target equity risk premium	%	5.00	Marginal Company cost of debt	%	5.00
Tax advantage of debt finance (normalised)	%	25.0	**Company beta (leveraged)**	**x**	**0.73**
Average debt maturity	Year	5	Company gearing at market value	%	16.1
Sector asset beta	x	0.65	Company market gearing	%	13.9
Debt beta	x	0.30	**Required return on geared equity**	**%**	**7.15**
Market capitalisation	€M	75.4	Cost of debt	%	3.75
Net debt (cash) at book value	€M	12.1	**Cost of ungeared equity**	**%**	**6.77**
Net debt (cash) at market value	€M	11.7	WACC	%	6.69

DCF Calculation

		12/22A	12/23E	12/24E	12/25E	Growth	12/26E	12/33E
Sales	€M	9.72	14.0	59.0	92.9	**15.0%**	107	284
EBITDA	€M	-6.93	-5.59	34.5	64.9	**17.0%**	75.9	228
EBITDA Margin	*%*	*-71.3*	*-39.9*	*58.5*	*69.8*		*71.0*	*80.2*
Change in WCR	€M	-2.80	1.11	-46.0	-50.9	**12.5%**	-57.3	-131
Total operating cash flows (pre tax)	€M	-7.72	-4.48	-11.5	14.0		18.7	97.3
Corporate tax	€M	2.22	4.17	-9.07	-19.1	**10.0%**	-21.0	-40.9
Net tax shield	**€M**	**0.03**	**-0.18**	**-0.18**	**-0.18**	**0.00%**	**-0.18**	**-0.18**
Capital expenditure	€M	-6.78	-2.27	-5.38	-2.50	**15.0%**	-2.87	-7.64
Capex/Sales	*%*	*-69.8*	*-16.2*	*-9.12*	*-2.69*		*-2.69*	*-2.69*
Pre financing costs FCF (for DCF purposes)	€M	-12.3	-2.75	-26.1	-7.78		-5.39	48.5
Various add backs (incl. R&D, etc.) for DCF purposes	€M							
Free cash flow adjusted	**€M**	**-12.3**	**-2.75**	**-26.1**	**-7.78**		**-5.39**	**48.5**
Discounted free cash flows	**€M**	**-12.3**	**-2.75**	**-24.5**	**-6.83**		**-4.44**	**25.4**
Invested capital	€	19.4	15.2	61.2	109		126	334

NAV/SOTP Calculation

	% owned	Valuation technique	Multiple used	Valuation at 100% (€M)	Stake valuation (€M)	In currency per share (€)	% of gross assets
Midazolam	100%	EV/Sales	3	164	164	4.45	34.6%
Epinephrine	100%	EV/Sales	3	90.0	90.0	2.43	18.9%
Methotrexate	100%	EV/Sales	3	15.9	15.9	0.43	3.34%
Hydrocortisone	100%	EV/Sales	3	15.6	15.6	0.42	3.28%
Terbutaline	100%	EV/Sales	3	12.9	12.9	0.35	2.71%
Naloxone	100%	EV/Sales	3	4.80	4.80	0.13	1.01%
Sumatriptan	100%	EV/Sales	3	2.10	2.10	0.06	0.44%
Apomorphine	100%	EV/Sales	3	0.00	0.00	0.00	0.00%
Other					170	4.60	35.7%
Total gross assets					**476**	**12.9**	**100%**
Net cash/(debt) by year end					-13.6	-0.37	-2.86%
Commitments to pay					-1.42	-0.04	-0.30%
Commitments received							
NAV/SOTP					461	12.5	96.8%
Number of shares net of treasury shares - year end (Mio)					**37.0**		
NAV/SOTP per share (€)					**12.5**		
Current discount to NAV/SOTP (%)					**83.3**		



Debt

At year-end 2020, the group had a net debt position of €17m. The bulk of the capex has been spent (i.e. the industrial investment needed for the production of c.1.5m Zeneo devices). This includes €3.8m in capex in 2014-15, €3.2m in FY18, €4.4m in FY19 and another €6m in FY20. Looking onwards, we have considered a recurring capex (€2m) to which is added an “expansion” capex of €3m for each additional 2.5m units sold (which is probably not the way capex will be spent since these “thresholds” do not necessarily require such high levels of investment). Another important issue before first sales are booked is the amount needed to finance the clinical studies. According to management, the full development of each NTE costs c. €2-3m (including clinical studies) and is spent in the two years preceding market approval. This comes on top of the “normal” cash-burn of the company before its products are on shelves. However, Crossject will also benefit from upfront fees once partnership agreements are signed, on top of the benefit for tax credits and the remaining part of the “PIAVE” financing. At the end of the day, our view is that the group is self-financed provided it is able to sign partnerships in the short term. Otherwise, Crossject may have to resort to the financial markets or find another financial solution to raise cash (for instance, by “selling” future royalties to a financial partner). The group, which has already resorted to capital increases to finance its short-term needs (first through an equity line in place since FY16 and a €5m capital increase in March 2017), has issued a €5.3m convertible bond in March 2018 and another €2.5m in July. A €3.9m capital increase was announced on 28 November 2018, at a price of €1.16, with the new 3.4m shares listed before the year-end (28 December 2018). The conversion of convertible bonds in FY19 has reduced bond debt by c. €5m. At the end of FY19, the group issued a new convertible bond worth €5.7m. More recently, the group issued two bonds (each worth €5.24m, one of which is a convertible) in December 2020. The group also issued €7.5m worth of convertible bonds in December 2021, with a conversion price of the minimum between €3.30 and 92% of the market price while existing shareholders were granted a free subscription price (with 20 rights needed to buy one share). In FY22, the net debt reached c.€9m, with gross debt of €17m entirely composed of bank debt, all the convertible bonds having been converted during the year.

Detailed financials at the end of this report

Funding - Liquidity

		12/22A	12/23E	12/24E	12/25E
EBITDA	€M	-6.93	-5.59	34.5	64.9
Funds from operations (FFO)	€M	-3.71	-2.11	24.8	45.1
Ordinary shareholders' equity	**€M**	**2.69**	**-5.77**	**14.8**	**54.2**
Gross debt	€M	16.0	13.4	65.2	72.1
+ Gross Cash	€M	7.13	1.22	26.4	25.0
= Net debt / (cash)	**€M**	**8.86**	**12.1**	**38.8**	**47.1**
Gearing (at book value)	%	418		173	79.2
Equity/Total asset (%)	%	12.1	-33.7	23.5	49.0
Adj. Net debt/EBITDA(R)	*x*	*-1.28*	*-2.17*	*1.12*	*0.73*
Adjusted Gross Debt/EBITDA(R)	*x*	*-2.51*	*-2.64*	*1.89*	*1.11*
Adj. gross debt/(Adj. gross debt+Equity)	*%*	*86.6*	*164*	*81.5*	*57.1*
Ebit cover	*x*	*121*	*-17.1*	*40.3*	*83.6*
FFO/Gross Debt	*%*	*-21.3*	*-14.3*	*38.0*	*62.6*
FFO/Net debt	*%*	*-41.8*	*-17.4*	*63.9*	*95.8*
FCF/Adj. gross debt (%)	*%*	*-69.9*	*-22.2*	*-40.9*	*-11.5*
(Gross cash+ "cash" FCF+undrawn)/ST debt	*x*	*-1.91*	*-0.98*	*-0.24*	
"Cash" FCF/ST debt	*x*	*-5.02*	*-1.57*	*-26.6*	

Worth Knowing

Zeneo, an automatic, single-use needle-free injection device was originally developed within Laboratoires Fournier in its « drug delivery » division, together with SNPE (Société Nationale des Poudres et Explosifs, which is a shareholder of Crossject). In 2001, the technology was sold to the newly-created Crossject. GSK was originally the main partner of Crossject, with a view to developing a solution for its vaccines. This market was ultimately considered as too risky in terms of investment needs, low margins and the high volumes required and so Crossject was restructured in 2011-13, with a change in the group's strategy: the goal of Crossject is no longer to sell a device to the Big Pharmas to market their own chemical entities, but to provide the market with its own pre-filled devices, on the basis of New Therapeutic Entities, using a known drug with an innovative delivery system. An industrial partnership has also been signed with Cenexi in 2016 (aseptic filling and final packaging). Today, the Zeneo device is protected by over 400 patents in countries covering 80% of the global market (including the US, Europe and Japan) and valid until 2036.

Shareholders

Name	% owned	Of which % voting rights	Of which % free to float
Gemmes Ventures	24.0%	30.0%	0.00%
Vester Finance	14.8%	11.0%	14.8%
SNPE	2.80%	2.80%	0.00%
Other	2.42%	2.42%	0.00%
IDEB	0.65%	0.65%	0.00%
Treasury Shares	0.65%	0.65%	0.00%
Apparent free float			**69.5%**

Sustainability

As a small cap company, Crossject probably still pays less attention to ESG issues than larger groups at this stage. Still, a brief section of its annual report describes what the company considers as the seven fields where these concerns are doomed to rise in the future: governance (see the relevant section), human rights, the environment, working relations, ethics, local development and consumer related issues. The group also indicated that an ethical charter (particularly useful in the US context) had been released in FY20.

Sustainability score

Sustainability is made of analytical items contributing to the E, the S and the G, that can be highlighted as sustainability precursors and can be combined in an intellectually acceptable way. This is the only scale made available

	Score	Weight
Governance		
Independent directors rate	**8/10**	25%
Board geographic diversity	**0/10**	20%
Chairman vs. Executive split	✓	5%
Environment		
CO^2 Emission	**2/10**	25%
Water withdrawal	**1/10**	10%
Social		
Wage dispersion trend	**7/10**	5%
Job satisfaction	**10/10**	5%
Internal communication	**10/10**	5%
Sustainability score	**4.3/10**	100%

Governance & Management

The Board comprises four members, mainly representing the group's main shareholder (Gemmes Venture) and chaired by Philippe Monnot, also representing this shareholder. For this reason, we do not consider it very independent, as is often the case for small-cap companies.

Governance score

Company (Sector)	Independent board
6.7 (6.5)	Yes

Parameters	Company	Sector	Score	Weight
Number of board members	4	10	10/10	5.0%
Board feminization (%)	0	34	1/10	5.0%
Board domestic density (%)	100	52	0/10	5.0%
Average age of board's members	67	60	2/10	5.0%
Type of company : Small cap, not controlled			10/10	25.0%
Independent directors rate	75	39	8/10	20.0%
One share, one vote			✗	5.0%
Chairman vs. Executive split			✓	5.0%
Chairman not ex executive			✓	5.0%
Full disclosure on mgt pay			✗	5.0%
Disclosure of performance anchor for bonus trigger			✗	5.0%
Compensation committee reporting to board of directors			✓	5.0%
Straightforward, clean by-laws			✓	5.0%
Governance score			**6.7/10**	**100.0%**

Management

Name		Function	Birth date	Date in	Date out	Compensation, in k€ (year) Cash	Equity linked
Patrick ALEXANDRE	M	CEO	1955	2001		202 (2022)	
Olivier GIRÉ	M	Member of the management board		2016			
Isabelle LIEBSCHUTZ	F	Member of the management board		2013			

Board of Directors

Name		Indep.	Function	Completion of current mandate	Birth date	Date in	Date out	Fees / indemnity, in k€ (year)	Value of holding, in k€ (year)
Philippe MONNOT	M	✗	President/Chairman of th...		1955		2025		
Eric NEMETH	M	✓	Deputy Chairman		1952		2025		
Jean-François LOUMEAU	M	✓	Member	2021	1955	2018	2025		
Yannick PLÉTAN	M	✓	Member		1965	2019			

Environment

As a small cap company, Crossject still releases a very limited amount of information of this topic. The annual report briefly addresses some sustainability issues (see the related section), but it is clearly not unusual for a small cap company not to close too many details at this point in time.

Environmental score

Data sets evaluated as trends on rolling calendar, made sector relative

Parameters	Score	Sector	Weight
CO^2 Emission	2/10	4/10	30%
Water withdrawal	1/10	4/10	30%
Energy	1/10	4/10	25%
Waste	1/10	4/10	15%
Environmental score	**1.3**		**100%**

Company (Sector)

1.3 (3.9)

Environmental metrics

	Company		
2021	2022	2023	2024
1.6	1.3	1.4	1.3

Sector figures

Company	Country	Environment score	Energy (total, in GJ)	CO2 Emissions (in tons)	Water Withdrawal (in m3)	Waste (total, (in tons)
BioNTech		10/10	153,684	3,963	75,000	1,488
CureVac		1/10				
Idorsia		1/10	39,006	311	18,304	243
ATAI Life Sciences		1/10				
PolyPeptide		1/10				
Sandoz		6/10	1,776,300	90,089	9,348,005	17,404
GSK plc		5/10	9,932,400	714,000	7,500,000	57,200
Novartis		7/10	6,200,000	298,100	34,600,000	34,900
Sanofi		7/10	12,122,294	536,804	11,600,000	165,432
AstraZeneca		8/10	5,889,712	263,608	3,750,000	25,493
Bayer		4/10	35,010,000	3,000,000	53,000,000	1,164,000
Novo Nordisk		9/10	3,784,000	93,000	4,150,000	189,091
Merck		5/10	8,755,200	1,667,000	13,160,000	371,000
Roche Holding		7/10	9,403,000	364,480	14,900,000	23,674
Lonza Group		3/10	6,269,000	551,000	28,628,000	61,664
Grifols		6/10	3,205,764	200,310	3,034,355	44,954
Novonesis		6/10	4,840,000	161,000	8,720,000	20,500
UCB		8/10	932,600	22,166	476,866	10,858
H Lundbeck		10/10	374,414	27,173	219,159	16,027
Faes Farma		1/10	52,172	6,112	185,685	1,517
BB Biotech		1/10		77	3,434	9
Genmab		6/10	11,257	394	n/a	n/a
Hikma Pharmaceuticals		4/10	1,557,580	123,144	1,175,224	13,275
Ipsen		8/10	272,955	18,810	94,401	3,319
Bachem		1/10	155,705	8,476	139,315	14,439
Virbac		4/10	299,686	23,727	313,840	5,380
Siegfried		2/10	1,942,100	65,130	5,985,000	75,989
Crossject		1/10				

Social

The level of information concerning social issues is also quite limited, not a real surprise for a small cap company. However, the group indicates that its equality index (Gaia index) reached 60/100 for FY22 vs 46 in FY21. The ESG Gaia Research rating agency rates the ESG performances of SMEs listed on the European markets, i.e. more than 2,300 companies, Also see the “Workforce section”.

Social score

Company (Sector)

4.7 (5.9)

Quantitative metrics (67%)

Set of staff related numerical metrics available in AlphaValue proprietary modelling aimed at ranking on social/HR matters

Parameters	Score	Weight
Staffing Trend	8/10	15%
Average wage trend	3/10	30%
Share of added value taken up by staff cost	1/10	20%
Share of added value taken up by taxes	1/10	15%
Wage dispersion trend	7/10	20%
Pension bonus (0 or 1)	0	
Quantitative score	**3.9/10**	**100%**

Qualitative metrics (33%)

Set of listed qualitative criterias and for the analyst to tick

Parameters	Score	Weight
Accidents at work	4/10	25%
Human resources development	8/10	35%
Pay	3/10	20%
Job satisfaction	10/10	10%
Internal communication	10/10	10%
Qualitative score	**6.4/10**	**100%**

Crossject (Buy)

AlphaValue analysts tick boxes on essential components of the social/HR corporate life.
Decision about ticking Yes or No is very much an assessment that combines the corporate's communication on relevant issue and the analyst's better judgment from experience.

Qualitative score

Parameters	Yes ✔ / No ✖	Weight
Accidents at work		**25%**
Set targets for work safety on all group sites?	✔	10.0%
Are accidents at work declining?	✖	15.0%
Human resources development		**35%**
Are competences required to meet medium term targets identified?	✔	3.5%
Is there a medium term (2 to 5 years) recruitment plan?	✔	3.5%
Is there a training strategy tuned to the company objectives?	✔	3.5%
Are employees trained for tomorrow's objectives?	✔	3.5%
Can all employees have access to training?	✖	3.5%
Has the corporate avoided large restructuring lay-offs over the last year to date?	✔	3.5%
Have key competences stayed?	✔	3.5%
Are managers given managerial objectives?	✔	3.5%
If yes, are managerial results a deciding factor when assessing compensation level?	✔	3.5%
Is mobility encouraged between operating units of the group?	✖	3.5%
Pay		**20%**
Is there a compensation committee?	✔	6.0%
Is employees' performance combining group AND individual performance?	✖	14.0%
Job satisfaction		**10%**
Is there a measure of job satisfaction?	✔	3.3%
Can anyone participate ?	✔	3.4%
Are there action plans to prop up employees' morale?	✔	3.3%
Internal communication		**10%**
Are strategy and objectives made available to every employee?	✔	10.0%
Qualitative score	**6.4/10**	**100.0%**

Staff & Pension matters

At year-end 2022, Crossject employed 102 people (99 in 2021,97 in 2020, 79 in 2019, 72 in 2018, 59 employees in 2017, 39 in FY16 and 23 in FY15). We expect this number to rise, although we have considered that all NTEs under development will be marketed through partnerships, which does not require a significant workforce. Of course, the situation could be different if the group decided to change this marketing policy in the future, although we don't believe Crossject will market its products on its own in the foreseeable future.

Recent updates

03/04/2024

Patience is a virtue… hopefully

Earnings/sales releases

The group took the market by surprise, issuing a press release on the progress made in its US strategy and a (very summarized) set of results for FY23. We mostly see negative points in this release and the hope of Zeneo reaching the US market through an EUA in FY24 have vanished… we will downgrade our numbers after the release of the FY23 detailed results, in particular by postponing the launch of the group's NTEs.

Fact

Crossject issued a press release to detail its US strategy as well as to publish its (partial) annual accounts for FY23 (full report due on 24 April).

Analysis

First and foremost, this release came as a surprise since, as already mentioned, the annual report is due on 24 April.
Second, the release is rather bad news for investors. Actually:

- The group now expects the EUA for Zepizure in the US no sooner than in Q125 (the last target communicated was FY23/Q124 and today's news can only disappoint investors).

- The group has also indicated that it is able to finance its business plan until… September 2024. Note that it issued €7m in bonds in February (see our Latest dated 28 Feb 2024) and the release clearly underscores that there will be other financing in the short-erm, implying further dilution in our view.

- This will prevent the group from requesting the total or partial drawdown of the Second Tranche of the latest bond issuance (up to €5m) in the short-term (which could have been the case as of July otherwise) since the conditions will not be met soon (at best next year).

- To a lesser extent, the P&L still shows a fairly hefty loss (€-12.3m vs -13.3m a year ago at the operating level) and this despite the amount invoiced to the BARDA (€6.7m vs €1.8m). While this had been expected – i.e. more costs on the development side partly compensated by the BARDA – it remains that the P&L does not look much better than last year and implies that the group is still burning a significant amount of cash.

- We fail to understand why the full set of accounts has not been released (or why we have this very partial report), which hardly makes investors' lives easier.

The group also expects to file in H125 for an NDA (New Drug Application) of Zepizure and is "working on activities related to its registration and pre-commercialization in the United States, since Crossject intends to retain U.S. commercial rights to Zepizure". The group will "only" have to demonstrate the

bioequivalence of Zepizure (as compared to other injectables). Fair enough. But this means that these products will certainly not be able to reach the market before FY26 at best. Now the key issue in the short-term remains financing and the market will probably be happy to wait to know more on this point before the momentum on the stock can improve and the short-term market reaction is very likely to be negative.

Impact

We will adjust our model after the release of the FY23 detailed results (24 April). The big difference will be the timing of product launches as well as the dilution (on which we will have to make a number of assumptions). These two elements can clearly only lead to a lower valuation, as we had already underscored after the announcement of the bond issue last February.

28/02/2024

Securing the financing needs

Financing issue

With the issuance of bonds, the details of which are given below, the group is securing its short-term financing. We will integrate this new financing in our model. Depending on a number of assumptions (partial or total conversion, interest paid, cash repayments, etc.) our target is price is likely to go down, even if the upside will remain significant in any case.

Fact

The group has announced an issue of 70 amortizable bonds convertible into new stock with a nominal value of €100,000, for an amount of €7m, waiving preferential subscription rights.

Analysis

The initial investment or First Tranche of €7m may be supplemented by a Second Tranche of a maximum amount of €5m on Crossject's initiative and subject to compliance with certain conditions. In particular, Crossject must have received authorization from the FDA to deliver the first units of ZEPIZURE to the Strategic National Stockpile under the contract between Crossject and BARDA.
For the First tranche, the convertible bonds may be converted into new ordinary stocks at an initial ratio of 19,420.5 stocks per convertible bond, i.e. a conversion price of €5.5 per ordinary stock.

The number of new stocks that may be issued under the convertible bonds (1st tranche) is between 1,359,434 and 7,816,6665. The convertible bonds bear a 7% interest yearly. All in all, the maximum dilution could be c.18% (first tranche) or 27% (tranche 1+2) depending on a number of assumptions on the amortization if the bonds (see below).

This move secures the financing of the group at least partly for FY24 and, as such, is good news. The interest paid also looks acceptable at this stage of the group's development. That said, the market seemed to be more interested in the dilution with the share price down by c. 15% yesterday. It is also important to keep in mind that this issue comes on top of the current funding by BARDA (for $6.7m invoiced over 2023 out of a maximum overall budget of $32m), for the advanced development of Zeneo Midazolam.

On the negative side, the potential dilution has obviously played a role in the fall in the share price, as did investor regret that the Group did not, or could not, have recourse to secured bank debt. For each tranche, the amortization schedule of the convertible bonds is provided for at the rate of 17 equal payments every 2 months, from the 4th month following the date of issue, payable according to the company's options: in cash for an amount equal to 102% of the amount due or in new ordinary stocks issued, the value of which is equal to 85% of the market Value of the stocks in a given period of time: in short, the dilution may start taking place as of June this year.

Lastly, the issue is the use of these bonds which the investors tend to dislike with a number of examples where share prices have remained under pressure for a long period of time.

Impact

We will factor this new financing into our model. Depending on a number of assumptions (partial or total conversion, interest paid, cash repayments, etc.) our target is price is likely to go down, even if the upside will remain significant in any case.

08/02/2024

No news is not always good news...

Strategic Plan

The presentation held on Tuesday gave little information (if any) on the recent developments of the company. We regret that no further details were given with respect to the filing processes in the US (Emergency Use Authorization), in particular concerning the timing. We also regret that it will take a long time (end of April!) to have more flavour on the FY23 accounts and financial perspectives to cope with the extra financing needed. In short, we are disappointed.

Fact

The group held an online "business briefing" on Tuesday to provide a summary of the recent milestones reached and an update on its strategic priorities for 2024.

Analysis

To start with, and quite bluntly, we found the presentation pretty “empty”, beginning with a reminder of what Crossject is, i.e. the product(s) it intends to sell and the developments during the last 20 years or so.

The group reminded that it had entered into an agreement in the US with Syneos, a service provider, which should help the group in the filing processes as well as the marketing of Zeneo once authoriaations are granted. The group again repeated that it is also advancing its licensing and commercialisation efforts for ZEPIZURE (e.g. with a licensing agreement with AFT Pharmaceuticals for Australia and New Zealand and a new commercialisation agreement for northern Europe) and that it will focus in 2024 on regulatory approvals for ZEPIZURE. Good, though nothing new.

In January 2024, Crossject engaged Syneos Health, a leading fully-integrated biopharmaceutical solutions organisation, to prepare for the commercial launch of its ZENEO-midazolam autoinjector, proposed name ZEPIZURE®, an innovative rescue therapy for epileptic seizures, including those caused by nerve agent exposure, in the US. Syneos Health has a strong US presence and significant expertise in commercialising new therapies for Crossject, as it approaches filing for regulatory approval. The main details of the BARDA contract in the US were also reminded (see our previous comments about this).
Now, the discussions with the FDA related to the requirements necessary for Emergency Use Authorization of ZEPIZURE were said to bw “continuing” moving forward, which we had no doubt about but the statement looks a bit too short to convince investors that things will get going any time soon.

We also regret that the presentation of the FY23 results will not take place before…24 April (!) which looks very late to us, in particular with respect to the current cash situation and the needs the group may/will have to keep financing its development prior to the launch of its products. In June 2023, the cash position was €5.3m, keeping in mind of course that Crossject is burning cash and will keep doing so for a (quite long) while. In H1 23, the free cash flow was actually a negative €8.3m including €4.5m in capex. To that extent, (part of) the very mild market reaction (c.-20%) came from the fact that new financing will be needed and, potentially, dilutive instruments could be used. Although management asserts it will do its best to avoid such an option, nothing is ruled out and investors seem unconvinced that such a solution can be avoided when looking at their reaction. We, too, have increasing doubts about the ability of the group to steer clear of a capital increase or other dilutive instruments.

Lastly, the COO of Engineering & Industry (in short production and supply) is leaving, replaced by the Industrial Director. These things happen of course but this can’t be considered as good news either.

All in all, we believe that the market needs more flesh to believe fully in the investment case. Even if some progress has been made on the marketing of Zeneo, things take a very long time to materialise and this implies some more negative news on the financing side. This is all the more the case since Crossject has already long been used to having problems with sticking to

deadlines. Even taking into account the money provided by the BARDA agreement (US$3.2m in FY23) and the lease-back of real estate over several years, the numbers hardly add up without external financing looking into FY24 and, even more so, if the EUA filing takes longer than expected. As a reminder, it was expected for the end of FY23/beginning of FY24 and the clock keeps ticking…

Impact

We will not change our numbers/model at this stage. In fact, we will wait for the release of the FY23 report before doing so, but we are a bit sceptical again about timing issues concerning the launch of products in the US market. The calendar is not really in the hands of management, true, but this can't be enough to ignore the likely need for more external financing. To that extent, we would rather expect a revision downwards of our estimates (most notably regarding the timing of the cash inflow into the company) which could/should weigh on our target price.

06/01/2024

Marketing initiative in the US

Latest

The group has engaged a supplier in the US to provide support for the pre-launch and launch activities.

Fact

Crossject has announced it has engaged Syneos Health, an integrated biopharmaceutical solutions organization, to prepare for the commercial launch of Crossject's ZEPIZURE rescue therapy for epileptic seizures in the U.S.

Analysis

Syneos Health will provide support in all pre-launch and launch activities for ZEPIZURE. Syneos Health brings a US presence and expertise in commercializing new therapies for Crossject.

Since the group is approaching a regulatory filing in the US, it is quite logical and useful to strengthen the group's local marketing power, where it is also expanding Crossject's presence. Note that the firm won an order placed by the BARDA (Biomedical Advanced Research and Development Authority) in the US and is in the process of filing to receive FDA authorization.

This news is reassuring as it confirms that group is active and confident about obtaining this authorization.

Impact

There is no impact on our numbers from this news as such, since it simply confirms that things are going in the right direction and moving forward.

03/01/2024

A new distribution agreement in Northern Europe

Significant news

After the firm order placed by the BARDA (Biomedical Advanced Research and Development Authority) in the US and the other commercialization agreement for Australia and New Zealand, Crossject has announced it has concluded a commercialization agreement in northern Europe for ZEPIZURE (ex Midazolam). There will be no real impact on our numbers, since they are based on the actual product launches.

Fact

Crossject has announced it has concluded a commercialization agreement in northern Europe for ZEPIZURE (previously called ZENEO Midazolam) covering Germany, the UK, Denmark, Sweden, Finland and Norway.

Analysis

Even if the partner for this agreement is undisclosed and that therefore its size and “distribution power” are not know, this is good news for the French group, covering a 170m population. In financial terms, Crossject will receive milestone payments of up to €1m in total, upon marketing authorizations granted in the countries concerned by the agreement, and receive a percentage of the gross margin achieved. In the agreement, Crossject is responsible for regulatory development costs and will own any resulting marketing authorizations. The partner will b e responsible for the commercial costs.

This also comes after the firm order placed by the BARDA (Biomedical Advanced Research and Development Authority), and the other commercialization agreement for Australia and New Zealand (with AF Pharmaceuticals and covering a c.30m population).

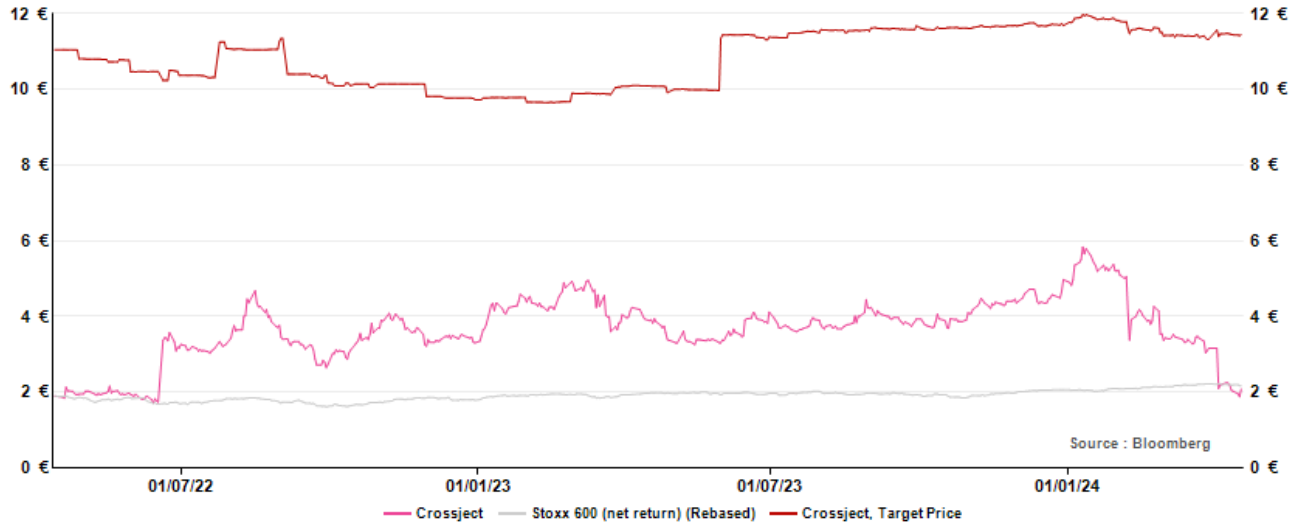
Both these agreements and the order placed in the US (BARDA) confirms that the firm is making progress on the future commercialization of Zepizure, and prepares the group for the product launch in these territories once the marketing authorizations are granted.

Impact

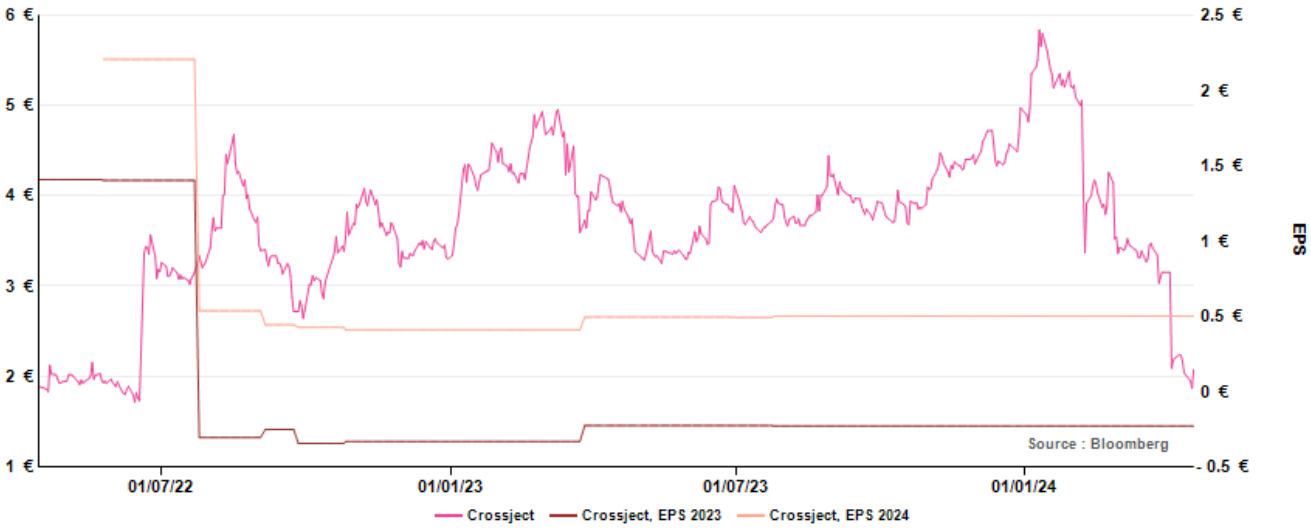
There will be no real impact on our numbers, since they are based on the actual product launches. As was the case for the other agreements, the partner will contribute to financing some of the costs the group is incurring with respect to development and “filing-related” expenses.

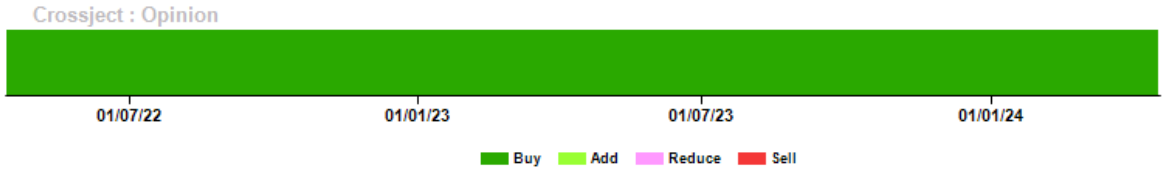
Crossject (Buy)

Stock Price and Target Price



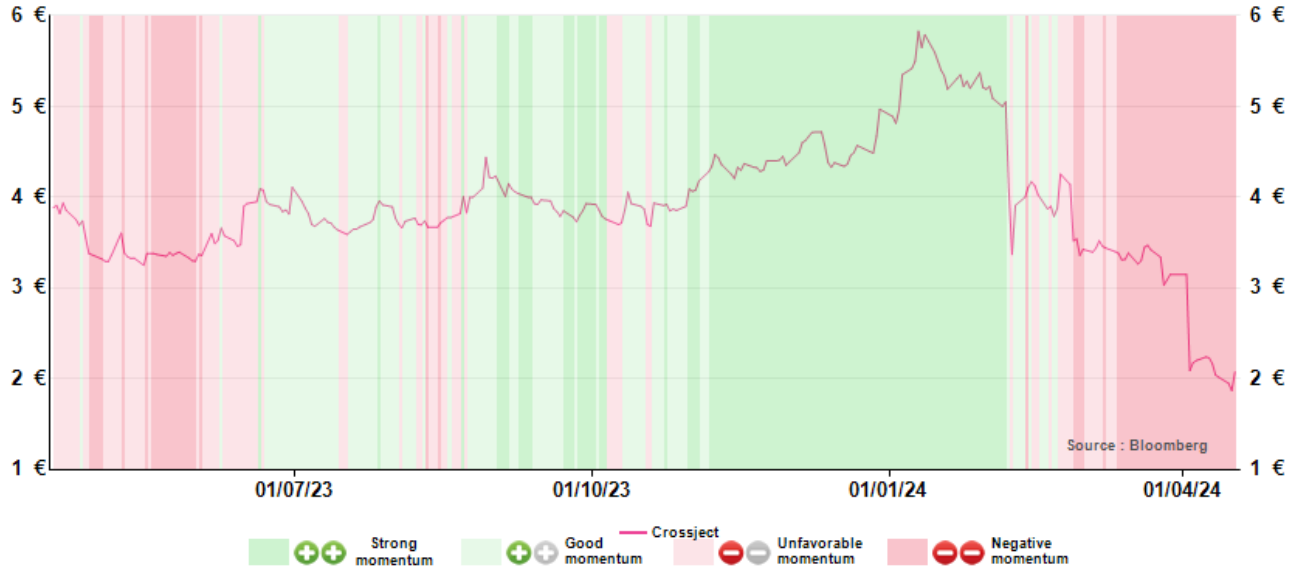
Earnings Per Share & Opinion





Crossject (Buy)

Momentum



Momentum analysis consists in evaluating the stock market trend of a given financial instrument, based on the analysis of its trading flows.
The main indicators used in our momentum tool are simple moving averages over three time frames: short term (20 trading days), medium term (50 days) and long term (150 days). The positioning of these moving averages relative to each other gives us the direction of the flows over these time frames.
For example, if the short and medium-term moving averages are above the long-term moving average, this suggests an uptrend which will need to be confirmed. Attention is also paid to the latest stock price relative to the three moving averages (advance indicator) as well as to the trend in these three moving averages - downtrend, neutral, uptrend - which is more of a lagging indicator.
The trend indications derived from the flows through moving averages and stock prices must be confirmed against trading volumes in order to confirm the signal. This is provided by a calculation based on the average increase in volumes over ten weeks together with a buy/sell volume ratio.

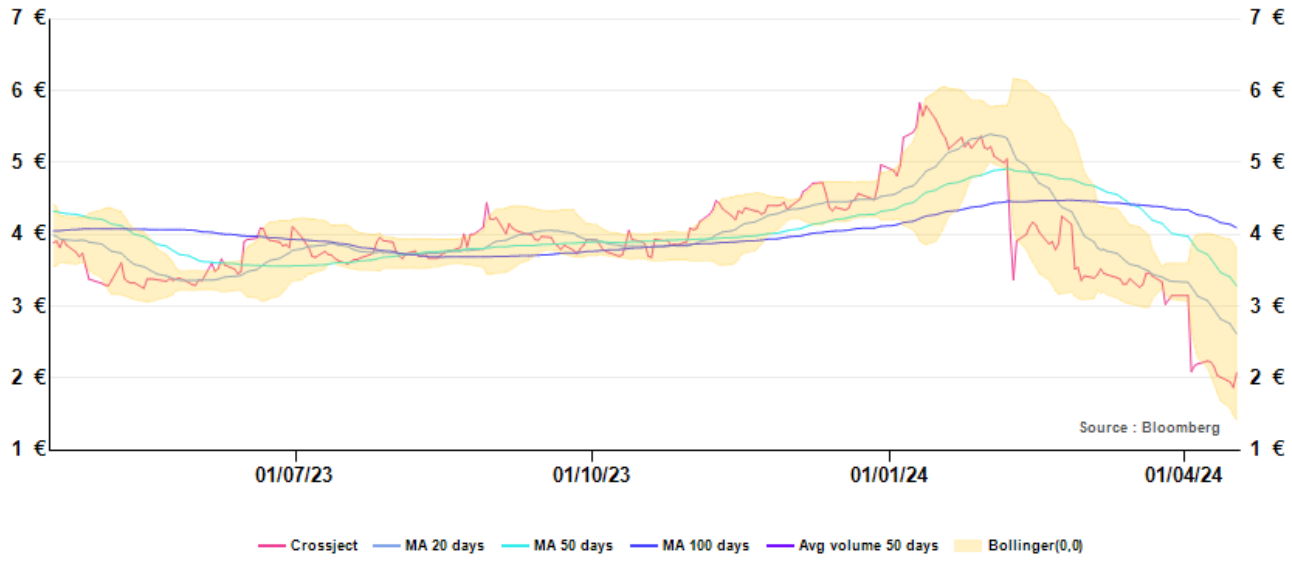
: Strong momentum corresponding to a continuous and overall positive moving average trend confirmed by volumes

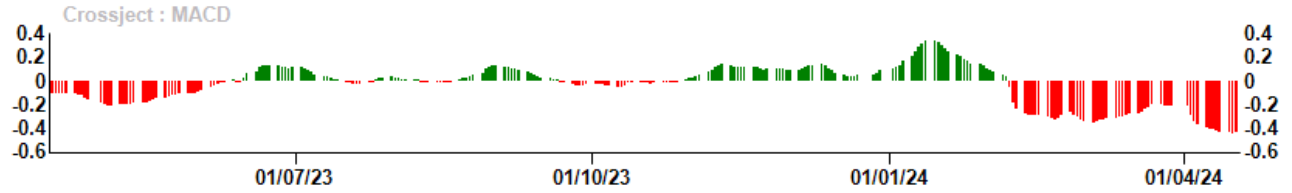
: Relatively good momentum corresponding to a positively-oriented moving average, but offset by an overbought pattern or lack of confirmation from volumes

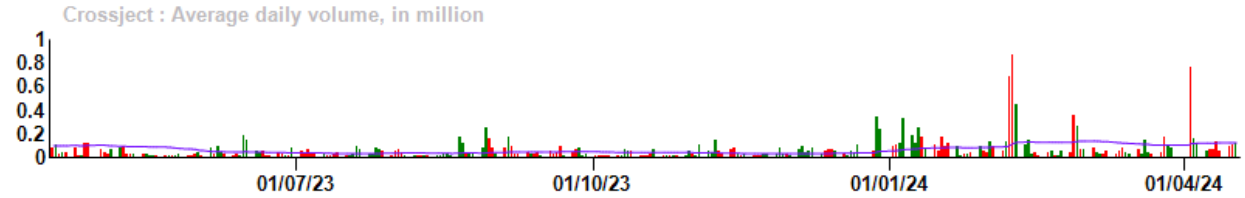
: Relatively unfavorable momentum with a neutral or negative moving average trend, but offset by an oversold pattern or lack of confirmation from volumes

: Strongly negative momentum corresponding to a continuous and overall negative moving average trend confirmed by volumes

Moving Average MACD & Volume







€/$ sensitivity

Sector Pharma

Detailed Financials

Valuation Key Data

		12/22A	12/23E	12/24E	12/25E
Adjusted P/E	**x**	**-8.01**	**-17.5**	**4.17**	**1.98**
Reported P/E	x	-9.33	-17.2	4.10	1.95
EV/EBITDA(R)	**x**	**-16.5**	**-28.5**	**3.31**	**1.89**
EV/EBIT	x	-8.61	-13.3	4.05	2.09
EV/Sales	x	11.8	11.4	1.94	1.32
P/Book	**x**	**38.8**	**-25.3**	**5.11**	**1.39**
Dividend yield	**%**	**0.00**	**0.00**	**0.00**	**0.00**
Free cash flow yield	*%*	*-11.7*	*-2.24*	*-35.3*	*-11.0*
Average stock price	€	2.86	4.01	2.08	2.08

Consolidated P&L		12/22A	12/23E	12/24E	12/25E
Sales	€M	9.72	14.0	59.0	92.9
Sales growth	*%*	*43.5*	*44.2*	*321*	*57.5*
Sales per employee	*€th*	*116*	*140*	*536*	*774*
Purchases and external costs (incl. IT)	€M	8.61	11.6	15.5	17.7
R&D costs as % of sales	%	0.00	0.00	0.00	0.00
Staff costs	€M	-7.00	-7.00	-8.00	-9.00
Operating lease payments	€M				
Cost of sales/COGS (indicative)	€M	8.61	11.6	13.2	13.1
EBITDA	€M	-6.93	-5.59	34.5	64.9
EBITDA(R)	€M	-6.93	-5.59	34.5	64.9
EBITDA(R) margin	*%*	*-71.3*	*-39.9*	*58.5*	*69.8*
EBITDA(R) per employee	*€th*	*-82.5*	*-55.9*	*314*	*541*
Depreciation	€M	-6.36	-6.36	-6.36	-6.36
Depreciations/Sales	*%*	*65.4*	*45.4*	*10.8*	*6.84*
Amortisation	€M				
Additions to provisions	€M	0.00	0.00	0.00	0.00
Underlying operating profit	€M	-13.3	-11.9	28.2	58.5
Underlying operating margin	*%*	*-137*	*-85.3*	*47.8*	*63.0*
Other income/expense (cash)	€M	0.00	0.00	0.00	0.00
Impairment charges/goodwill amortisation	€M				
Operating profit (EBIT)	€M	-13.3	-11.9	28.2	58.5
Interest expenses	€M	0.00	-0.70	-0.70	-0.70
of which effectively paid cash interest expenses	*€M*	*-1.00*			
Financial income	€M	0.11	0.00	0.00	0.00
Other financial income (expense)	€M				
Net financial expenses	€M	0.11	-0.70	-0.70	-0.70
of which related to pensions	*€M*		*0.00*	*0.00*	*0.00*
Pre-tax profit before exceptional items	€M	-13.2	-12.6	27.5	57.8
Exceptional items and other (before taxes)	€M	-0.20	0.00	0.00	0.00
Current tax	€M	2.22	4.17	-9.07	-19.1
Deferred tax	€M				
Corporate tax	€M	2.22	4.17	-9.07	-19.1
Tax rate	*%*	*16.9*	*33.0*	*33.0*	*33.0*
Net margin	*%*	*-113*	*-60.5*	*31.2*	*41.7*
Equity associates	€M				
Actual dividends received from equity holdings	*€M*				
Minority interests	€M				
Income from discontinued operations	€M				
Attributable net profit	€M	-11.2	-8.47	18.4	38.8
Impairment charges/goodwill amortisation	€M	0.00	0.00	0.00	0.00
Other adjustments	€M				
Adjusted attributable net profit	€M	-11.2	-8.47	18.4	38.8
Fully diluted adjusted attr. net profit	€M	-11.2	-8.47	18.4	38.8
NOPAT	€M	-9.97	-8.96	21.1	43.9

Cashflow Statement		12/22A	12/23E	12/24E	12/25E
EBITDA	€M	-6.93	-5.59	34.5	64.9
Change in WCR	€M	-2.80	1.11	-46.0	-50.9
of which (increases)/decr. in receivables	*€M*	*-1.96*	*-1.56*	*-21.7*	*-25.7*
of which (increases)/decr. in inventories	*€M*	*-0.64*	*2.00*	*-25.2*	*-25.7*
of which increases/(decr.) in payables	*€M*	*-0.20*	*0.61*	*0.79*	*0.46*
of which increases/(decr.) in other curr. liab.	*€M*	*0.00*	*0.06*	*0.06*	*0.06*
Actual dividends received from equity holdings	€M	0.00	0.00	0.00	0.00
Paid taxes	€M	2.22	4.17	-9.07	-19.1
Exceptional items	€M	0.00	0.00	0.00	0.00
Other operating cash flows	€M	2.00	0.00	0.00	0.00
Total operating cash flows	€M	-5.50	-0.31	-20.6	-5.10
Capital expenditure	€M	-6.78	-2.27	-5.38	-2.50
Capex as a % of depreciation & amort.	*%*	*107*	*35.6*	*84.6*	*39.3*
Net investments in shares	€M	0.00	0.00	0.00	0.00
Other investment flows	€M	0.00	0.00	0.00	0.00
Total investment flows	€M	-6.78	-2.27	-5.38	-2.50
Net interest expense	€M	0.11	-0.70	-0.70	-0.70
of which cash interest expense	*€M*	*-1.00*	*-0.70*	*-0.70*	*-0.70*
Dividends (parent company)	€M				
Dividends to minorities interests	€M	0.00	0.00	0.00	0.00
New shareholders' equity	€M	4.09	0.00	0.00	0.00
of which (acquisition) release of treasury shares	*€M*				
Change in gross debt	€M	3.11	-2.64	51.8	6.91
Other financial flows	€M	5.00	0.00	0.00	0.00
Total financial flows	€M	11.2	-3.34	51.1	6.21
Change in cash position	€M	-1.08	-5.92	25.2	-1.39
Change in net debt position	€M	-4.19	-3.27	-26.6	-8.30
Free cash flow (pre div.)	€M	-12.2	-3.27	-26.6	-8.30
Operating cash flow (clean)	€M	-5.50	-0.31	-20.6	-5.10
Reinvestment rate (capex/tangible fixed assets)	*%*	*88.4*	*43.9*	*93.1*	*71.3*

Balance Sheet

		12/22A	12/23E	12/24E	12/25E
Capitalised R&D	€M	10.7	10.1	9.42	8.78
Goodwill	€M	0.00	0.00	0.00	0.00
Contracts & Rights (incl. concession) intangible assets	€M	0.00	0.00	0.00	0.00
Other intangible assets	€M	0.00	0.00	0.00	0.00
Total intangible	€M	10.7	10.1	9.42	8.78
Tangible fixed assets	€M	7.67	5.17	5.78	3.51
Financial fixed assets (part of group strategy)	€M	0.00	0.00	0.00	0.00
Financial hedges (LT derivatives)	€M	0.00	0.00	0.00	0.00
Other financial assets (investment purpose mainly)	€M	1.34	0.67	0.67	0.67
of which available for sale	*€M*	*0.00*	*0.00*	*0.00*	*0.00*
WCR	€M	1.08	-0.02	46.0	96.9
of which trade & receivables (+)	*€M*	*1.96*	*3.52*	*25.2*	*50.9*
of which inventories (+)	*€M*	*2.00*	*0.00*	*25.2*	*50.9*
of which payables (+)	*€M*	*1.76*	*2.37*	*3.17*	*3.63*
of which other current liabilities (+)	*€M*	*1.12*	*1.17*	*1.23*	*1.29*
Other current assets	€M	1.48	1.22	0.96	0.70
of which tax assets (+)	*€M*	*2.65*	*2.65*	*2.65*	*2.65*
Total assets (net of short term liabilities)	€M	22.3	17.1	62.8	111
Ordinary shareholders' equity (group share)	€M	2.69	-5.77	14.8	54.2
Minority interests	€M				
Provisions for pensions	€M		0.00	0.00	0.00
Other provisions for risks and liabilities	€M	1.42	1.42		
Deferred tax liabilities	€M	0.00	0.00	0.00	0.00
Other liabilities	€M	9.30	9.30	9.30	9.30
Net debt / (cash)	€M	8.86	12.1	38.8	47.1
Total liabilities and shareholders' equity	€M	22.3	17.1	62.8	111
Gross Cash	€M	7.13	1.22	26.4	25.0
Average net debt / (cash)	€M	11.2	10.5	25.5	42.9

EV Calculations

		12/22A	12/23E	12/24E	12/25E
EV/EBITDA(R)	**x**	**-16.5**	**-28.5**	**3.31**	**1.89**
EV/EBIT	**x**	**-8.61**	**-13.3**	**4.05**	**2.09**
EV/Sales	**x**	**11.8**	**11.4**	**1.94**	**1.32**
EV/Invested capital	x	5.88	10.5	1.87	1.12
Market cap	€M	104	146	75.4	75.4
+ Provisions (including pensions)	€M	1.42	1.42	0.00	0.00
+ Unrecognised actuarial losses/(gains)	€M	0.00	0.00	0.00	0.00
+ Net debt at year end (ex Right-of-use from 2019)	€M	8.86	12.1	38.8	47.1
+ Right-of-use (from 2019)/Leases debt equivalent	€M	0.00	0.00	0.00	0.00
- Financial fixed assets (fair value) & Others	€M				
+ Minority interests (fair value)	€M				
= Enterprise Value	**€M**	**114**	**159**	**114**	**123**

Per Share Data		12/22A	12/23E	12/24E	12/25E
Adjusted EPS (bfr gwill amort. & dil.)	**€**	**-0.36**	**-0.23**	**0.50**	**1.05**
Growth in EPS	*%*	*n/a*	*n/a*	*n/a*	*111*
Reported EPS	€	-0.31	-0.23	0.51	1.07
Net dividend per share	**€**	**0.00**	**0.00**	**0.00**	**0.00**
Free cash flow per share	€	-0.39	-0.09	-0.72	-0.22
Operating cash flow per share	€	-0.18	-0.01	-0.57	-0.14
Book value per share	€	0.07	-0.16	0.41	1.49
Number of ordinary shares	**Mio**	**36.5**	**36.5**	**36.5**	**36.5**
Number of equivalent ordinary shares (year end)	Mio	36.5	36.5	36.5	36.5
Number of shares market cap.	Mio	36.5	36.5	36.5	36.5
Treasury stock (year end)	Mio	0.16	0.16	0.16	0.16
Number of shares net of treasury stock (year end)	Mio	36.4	36.4	36.4	36.4
Number of common shares (average)	**Mio**	**30.8**	**36.4**	**36.4**	**36.4**
Conversion of debt instruments into equity	Mio	0.61	0.61	0.61	0.61
Settlement of cashable stock options	Mio				
Probable settlement of non mature stock options	Mio				
Other commitments to issue new shares	Mio				
Increase in shares outstanding (average)	Mio	0.36	0.61	0.61	0.61
Number of diluted shares (average)	**Mio**	**31.2**	**37.0**	**37.0**	**37.0**
Goodwill per share (diluted)	€	0.00	0.00	0.00	0.00
EPS after goodwill amortisation (diluted)	€	-0.36	-0.23	0.50	1.05
EPS before goodwill amortisation (non-diluted)	€	-0.36	-0.23	0.51	1.07
Payout ratio	**%**	**0.00**	**0.00**	**0.00**	**0.00**
Capital payout ratio (div +share buy back/net income)	**%**	**0.00**	**0.00**	**0.00**	

Funding - Liquidity

		12/22A	12/23E	12/24E	12/25E
EBITDA	€M	-6.93	-5.59	34.5	64.9
Funds from operations (FFO)	€M	-3.71	-2.11	24.8	45.1
Ordinary shareholders' equity	**€M**	**2.69**	**-5.77**	**14.8**	**54.2**
Gross debt	€M	16.0	13.4	65.2	72.1
o/w Less than 1 year - Gross debt	€M	2.64	2.09	1.00	
o/w 1 to 5 year - Gross debt	€M	8.35	6.26	4.18	2.09
of which Y+2	€M	2.09	2.09	2.09	2.09
of which Y+3	€M	2.09	2.09	2.09	
of which Y+4	€M	2.09	2.09		
of which Y+5	€M	2.09			
o/w Beyond 5 years - Gross debt	€M	5.00	5.00	60.0	70.0
+ Gross Cash	€M	7.13	1.22	26.4	25.0
= Net debt / (cash)	**€M**	**8.86**	**12.1**	**38.8**	**47.1**
Bank borrowings	€M	14.0	12.0	64.0	72.0
Issued bonds	€M	1.00	1.00	1.00	
Other financing	€M	0.99	0.35	0.18	0.09
Gearing (at book value)	%	418		173	79.2
Equity/Total asset (%)	%	12.1	-33.7	23.5	49.0
Adj. Net debt/EBITDA(R)	*x*	*-1.28*	*-2.17*	*1.12*	*0.73*
Adjusted Gross Debt/EBITDA(R)	*x*	*-2.51*	*-2.64*	*1.89*	*1.11*
Adj. gross debt/(Adj. gross debt+Equity)	*%*	*86.6*	*164*	*81.5*	*57.1*
Ebit cover	*x*	*121*	*-17.1*	*40.3*	*83.6*
FFO/Gross Debt	*%*	*-21.3*	*-14.3*	*38.0*	*62.6*
FFO/Net debt	*%*	*-41.8*	*-17.4*	*63.9*	*95.8*
FCF/Adj. gross debt (%)	*%*	*-69.9*	*-22.2*	*-40.9*	*-11.5*
(Gross cash+ "cash" FCF+undrawn)/ST debt	*x*	*-1.91*	*-0.98*	*-0.24*	
"Cash" FCF/ST debt	*x*	*-5.02*	*-1.57*	*-26.6*	

ROE Analysis (Dupont's Breakdown)

		12/22A	12/23E	12/24E	12/25E
Tax burden (Net income/pretax pre excp income)	x	0.85	0.67	0.67	0.67
EBIT margin (EBIT/sales)	%	-137	-85.3	47.8	63.0
Assets rotation (Sales/Avg assets)	%	48.8	71.2	148	107
Financial leverage (Avg assets /Avg equity)	x	-14.2	-12.8	8.89	2.51
ROE	**%**	**798**	**550**	**410**	**112**
ROA	%	-68.3	-78.6	46.0	53.6

Shareholder's Equity Review (Group Share)

		12/22A	12/23E	12/24E	12/25E
Y-1 shareholders' equity	€M	0.74	2.87	-5.77	14.8
+ Net profit of year	€M	-11.2	-8.47	18.4	38.8
- Dividends (parent cy)	€M	0.00	0.00	0.00	0.00
+ Additions to equity	€M	4.09	0.00	0.00	0.00
o/w reduction (addition) to treasury shares	*€M*	*0.00*	*0.00*	*0.00*	*0.00*
- Unrecognised actuarial gains/(losses)	€M	0.00	0.00	0.00	0.00
+ Comprehensive income recognition	€M	9.20	-0.17	2.11	0.69
= Year end shareholders' equity	**€M**	**2.87**	**-5.77**	**14.8**	**54.2**

Staffing Analytics

		12/22A	12/23E	12/24E	12/25E
Sales per staff	€th	116	140	536	774
Staff costs per employee	€th	-83.3	-70.0	-72.7	-75.0
Change in staff costs	*%*	*16.7*	*0.00*	*14.3*	*12.5*
Change in unit cost of staff	*%*	*15.3*	*-16.0*	*3.90*	*3.13*
Staff costs/(EBITDA+Staff costs)	*%*	*9,859*	*495*	*18.8*	*12.2*
Average workforce	**unit**	**84.0**	**100**	**110**	**120**
Europe	unit	85.0	100	110	120
North America	unit	0.00	0.00	0.00	0.00
South Americas	unit	0.00	0.00	0.00	0.00
Asia	unit	0.00	0.00	0.00	0.00
Other key countries	unit	0.00	0.00	0.00	0.00
Total staff costs	**€M**	**-7.00**	**-7.00**	**-8.00**	**-9.00**
Wages and salaries	€M	-7.00	-7.00	-8.00	-9.00
of which social security contributions	*€M*	*-3.00*	*-3.00*	*-3.00*	*-3.00*
Pension related costs	€M		0.00	0.00	0.00

Divisional Breakdown Of Revenues

		12/22A	12/23E	12/24E	12/25E
Total sales	**€M**	**9.73**	**14.0**	**59.0**	**92.9**
Methotrexate	€M	0.00	0.00	0.00	0.00
Epinephrine	€M	0.00	0.00	0.00	27.7
Sumatriptan	€M	0.00	0.00	0.00	0.00
Midazolam	€M	0.00	0.00	46.0	60.1
Hydrocortisone	€M	0.00	0.00	0.00	5.15
Naloxone	€M	0.00	0.00	0.00	0.00
Apomorphine	€M	0.00	0.00	0.00	0.00
Terbutaline	€M	0.00	0.00	0.00	0.00
Other	€M	9.73	14.0	13.0	0.00

Divisional Breakdown Of Earnings

		12/22A	12/23E	12/24E	12/25E
EBIT Analysis					
Royalty income	€M				
Product sales	€M	0.00	0.00	46.0	92.9
Other/cancellations	€M				
Total	**€M**	**0.00**	**0.00**	**46.0**	**92.9**
EBIT margin	%	0.00	0.00	78.0	100

Revenue Breakdown By Country

		12/22A	12/23E	12/24E	12/25E
Europe	%	100	100		
Of Which France	%	100	100		
Americas	%	0.00	0.00		
Asia	%	0.00	0.00		
Of Which China	%	0.00	0.00		
Other	%	0.00	0.00		

ROCE

		12/22A	12/23E	12/24E	12/25E
ROCE (NOPAT+lease exp.(1-tax))/(net) cap employed adjusted*	*%*	*-51.3*	*-58.9*	*34.5*	*40.2*
CFROIC	*%*	*-62.6*	*-21.5*	*-43.5*	*-7.60*
Goodwill	€M	0.00	0.00	0.00	0.00
Accumulated goodwill amortisation	*€M*	*0.00*	*0.00*	*0.00*	*0.00*
All intangible assets	€M	0.00	0.00	0.00	0.00
Accumulated intangible amortisation	*€M*	*0.00*	*0.00*	*0.00*	*0.00*
Financial hedges (LT derivatives)	€M	0.00	0.00	0.00	0.00
Capitalised R&D	€M	10.7	10.1	9.42	8.78
Rights of use/ Capitalised leases	€M	0.00	0.00	0.00	0.00
Other fixed assets	€M	7.67	5.17	5.78	3.51
Accumulated depreciation	*€M*	*0.00*	*0.00*	*0.00*	*0.00*
WCR	€M	1.08	-0.02	46.0	96.9
Other assets	€M	0.00	0.00	0.00	0.00
Unrecognised actuarial losses/(gains)	€M	0.00	0.00	0.00	0.00
Capital employed after deprec. (Invested capital)	**€M**	**19.4**	**15.2**	**61.2**	**109**
Capital employed before depreciation	€M	19.4	15.2	61.2	109

Divisional Breakdown Of Capital Employed

		12/22A	12/23E	12/24E	12/25E
Royalty income	€M				
Product sales	€M				
Other	€M	19.4	15.2	61.2	109
Total capital employed	**€M**	**19.4**	**15.2**	**61.2**	**109**

Fundamental Opinion

It is implicit that recommendations are made in good faith but should not be regarded as the sole source of advice.

Recommendations are geared to a "**value**" approach.

Valuations are computed from the point of view of a **secondary market minority holder** looking at a medium term (say 6 months) performance.

Valuation tools are built around the concepts of **transparency,** all underlying figures are accessible, and **consistency,** same methodology whichever the stock, allowing for differences in nature between financial and non financial stocks. A stock with a target price below its current price should not and will not be regarded as an Add or a Buy.

Recommendations are based on target prices with no allowance for dividend returns. The thresholds for the four recommendation levels may change from time to time depending on market conditions. Thresholds are defined as follows, ASSUMING long risk free rates remain in the 2-5% region.

Recommendation	Low Volatility 10 < VIX index < 30	Normal Volatility 15 < VIX index < 35	High Volatility 35 < VIX index
Buy	More than 15% upside	More than 20% upside	More than 30% upside
Add	From 5% to 15%	From 5% to 20%	From 10% to 30%
Reduce	From -10% to 5%	From -10% to 5%	From -10% to 10%
Sell	Below -10%	Below -10%	Below -10%

There is deliberately no "neutral" recommendation. The principle is that there is no point investing in equities if the return is not at least the risk free rate (and the dividend yield which again is not allowed for).

Although recommendations are automated (a function of the target price whenever a new equity research report is released), the management of AlphaValue intends to maintain global consistency within its universe coverage and may, from time to time, decide to change global parameters which may affect the level of recommendation definitions and /or the distribution of recommendations within the four levels above. For instance, lowering the risk premium in a gloomy context may increase the proportion of positive recommendations.

Valuation

Valuation processes have been organized around transparency and consistency as primary objectives.

Stocks belong to different categories that recognise their main operating features : Banks, Insurers and Non Financials.

Within those three universes, the valuation techniques are the same and in relation to the financial data available.

The weighting given to individual valuation techniques is managed centrally and may be changed from time to time. As a rule, all stocks of a similar profile are valued using equivalent weighting of the various valuation techniques. This is for obvious consistency reasons.

Within the very large universe of Non Financials, there are in effect 4 sub-categories of weightings to cater for subsets: 1) 'Mainstream' stocks; 2) 'Holding companies' where the stress is on NAV measures; 3) 'Growth' companies where the stress is on peer based valuations; 4) 'Loss making sectors' where peers review is essentially pointing nowhere (ex: Bio techs). The bulk of the valuation is then built on DCF and NAV, in effect pushing back the time horizon.

Valuation Issue	Normal industrials	Growth industrials	Holding company	Loss runners	Bank	Insurers
DCF	35%	35%	10%	40%	0%	0%
NAV	20%	20%	55%	40%	50%	15%
PE	10%	10%	10%	5%	10%	20%
EV/EBITDA	20%	20%	0%	5%	0%	0%
Yield	10%	10%	20%	5%	10%	15%
Book	5%	5%	5%	5%	10%	10%
Banks' instrinsic method	0%	0%	0%	0%	10%	0%
Embedded Value	0%	0%	0%	0%	0%	40%
Mkt Cap/Gross Operating Profit	0%	0%	0%	0%	10%	0%