BRYAN, GARNIER & CO

INDEPENDENT RESEARCH

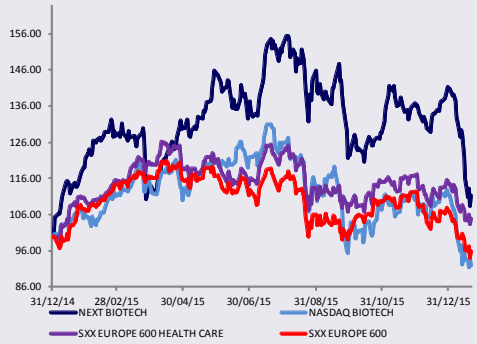
# Biotechnology

## Last mark down on biotech!

25th January 2016

Biotechnology

| | | | |
|---|---|---|---|
| **BONE THERAPEUTICS** | | **BUY** | **FV EUR29** |
| Bloomberg | BONE FP | Reuters | BONE.PA |
| Price | EUR16.38 | High/Low | 24.1/15.15 |
| Market cap. | EUR112m | Enterprise Val | EUR-28,133m |
| PE (2015e) | x | EV/EBIT (2015e) | NS |
| **ABLYNX** | | **BUY** | **FV EUR18** |
| Bloomberg | ABLX BB | Reuters | ABLX.BR |
| Price | EUR12.88 | High/Low | 16.1/9.06 |
| Market Cap. | EUR706m | Enterprise Val | EUR835m |
| PE (2015e) | NS | EV/EBIT (2015e) | NS |
| **DBV TECHNOLOGIES** | | **BUY** | **FV EUR92** |
| Bloomberg | DBV FP | Reuters | DBV.PA |
| Price | EUR47.74 | High/Low | 81.03/37.79 |
| Market Cap. | EUR1,151m | Enterprise Val | EUR808m |
| PE (2015e) | NS | EV/EBIT (2015e) | NS |
| **ERYTECH** | | **BUY** | **FV EUR51** |
| Bloomberg | ERYP FP | Reuters | ERYP.PA |
| Price | EUR20.14 | High/Low | 39.99/18.34 |
| Market Cap. | EUR158m | Enterprise Val | EUR138m |
| PE (2015e) | NS | EV/EBIT (2015e) | NS |
| **GALAPAGOS** | | **BUY** | **FV EUR64** |
| Bloomberg | GLPG BB | Reuters | GLPG.BR |
| Price | EUR50.24 | High/Low | 58.53/17.35 |
| Market Cap. | EUR1,963m | Enterprise Val | EURm |
| PE (2015e) | NS | EV/EBIT (2015e) | x |
| **GENMAB** | | **BUY** | **FV DKK1170** |
| Bloomberg | GEN DC | Reuters | GEN.CO |
| Price | DKK841.5 | High/Low | 954/413.4 |
| Market Cap. | DKK49,919m | Enterprise Val | DKK46,754m |
| PE (2015e) | NS | EV/EBIT (2015e) | NS |
| **INNATE PHARMA** | | **BUY** | **FV EUR19** |
| Bloomberg | IPH FP | Reuters | IPH.PA |
| Price | EUR12.31 | High/Low | 16.43/7.99 |
| Market Cap. | EUR662m | Enterprise Val | EUR403m |
| PE (2015e) | 72.1x | EV/EBIT (2015e) | 54.8x |




**The recent market volatility led to a significant sell-off in biotech stocks, and notably the less liquid ones, over the past week. While the STOXX600 Europe has fallen by 7.51% YTD, both the STOXX600HC and the NBI have declined by -5.8% and -14.87% respectively. In our biotechnology universe we have identified several companies that either have (i) near-term catalysts and/or (ii) valuations offering opportunities to play de-risked projects. Irrespective of whether they make our top picks for Q1 list, we believe that they might be the first to benefit from a re-rating.**

- In this note, we revisit the investment cases of seven biotechnology companies under our coverage. Following the recent de-rating of the sector, we remain confident that these are attractive stories which are poised to perform over the course of 2016. If forced, we would split them into two categories. Firstly, companies with identified near-term catalysts and thus potential for additional upside. Secondly, companies with no short-term catalysts but which still have unquestionable qualities (solid clinical package, attractive valuation, etc.).
- Genmab and Bone Therapeutics are two of our top picks for Q1. During the quarter, we identified two catalysts for both of these companies. For Genmab, we see 1/ Phase III results involving daratumumab, and 2/ Roche's ocrelizumab approval in multiple sclerosis (positive read-across for ofatumumab) as major catalysts. And the icing on the cake? The scope of possibilities could be expanded with the inking of collaboration between JNJ and another big pharma. Regarding Bone Therapeutics, we believe that 1/ the results from the second patient cohort could be a clear positive signal to anticipate a premature end to the trial which might be decided in Q2 by a DSMB and 2/ BD opportunities might arise should the first 8 osteoporotic patients treated be responders. These two stocks offer significant near-term potential for upward revision in our fair values.
- Galapagos, Innate, Ablynx, DBV and Erytech are de-risked long term plays that could be the first to benefit from a sector re-rating.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# 1. Short-term play

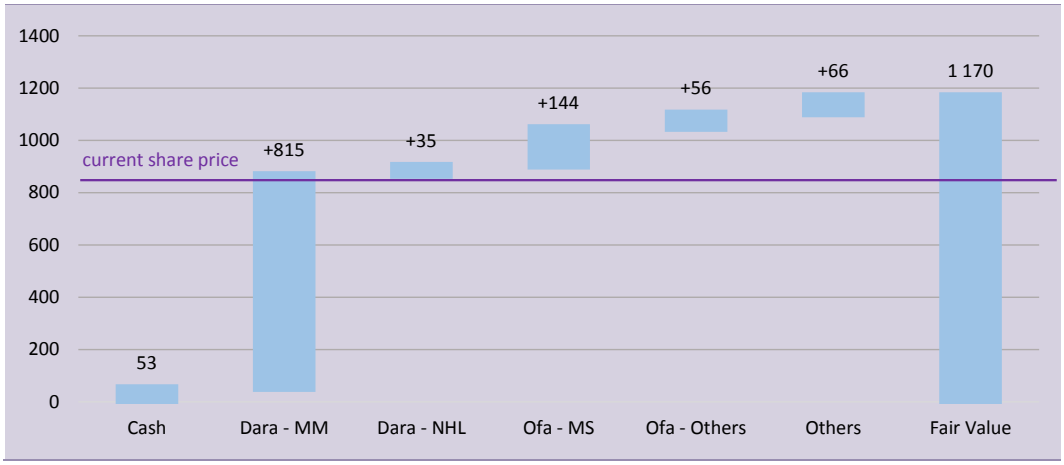
## 1.1. Genmab (BUY Top Pick – FV DKK1,170)

Genmab remains one of our top picks as we have identified several significant catalysts that could add +DKK350 to our FV: 1/ a positive read-across for ofatumumab with the granting of a fairly broad label for Roche's ocrelizumab (both compounds being anti-CD20) for the treatment of relapsing-remitting multiple sclerosis (potential positive impact: +DKK200); 2/ Phase III results for daratumumab (anti-CD38) in combination with the current standard of care in patients with MM who have received at least one prior therapy (+DKK150). Note that, daratumumab received its very first approval back in November 2015, but solely as a monotherapy and for the treatment of double-refractory or highly pre-treated patients (who have received at least 3 prior lines).

As the icing on the cake, we believe a deal between JNJ and another big pharma is very likely, the objective being to evaluate daratumumab along with a PD-1/PD-L1 checkpoint blocker such as Celgene/AZN's durvalumab or Merck's pembrolizumab. Note also that ibrutinib (BTK inhibitor) could be a pretty good candidate to be tested in chronic lymphocytic leukaemia or non-hodgkin lymphomas… Furthermore, this compound already belongs to JNJ.

At current levels, the street doesn't give any value to daratumumab outside multiple myeloma, or even ofatumumab as a therapeutic option in multiple sclerosis.

**Fig. 1: Genmab's valuation by project (in DKK)**




*Source: Bryan, Garnier & Co ests.*

Please see our latest research reports on Genmab

10-nov.-15 The Force Awakens!
17-nov.-15 Daratumumab gets its first FDA approval! But that's just the first part of a "trilogy"
20-nov.-15 Genmab receives a USD45m milestone payment from JNJ
24-nov.-15 Ofatumumab Phase III study in Follicular Lymphoma stopped for non-superiority. Limited impact to our FV
1-déc.-15 BMS' elotuzumab gets FDA approval… but have no fear, the force is strong with daratumumab
11-déc.-15 ASHtonishing. The force is strong with this one
20-janv.-16 Ofatumumab approved for the maintenance therapy of patients with CLL

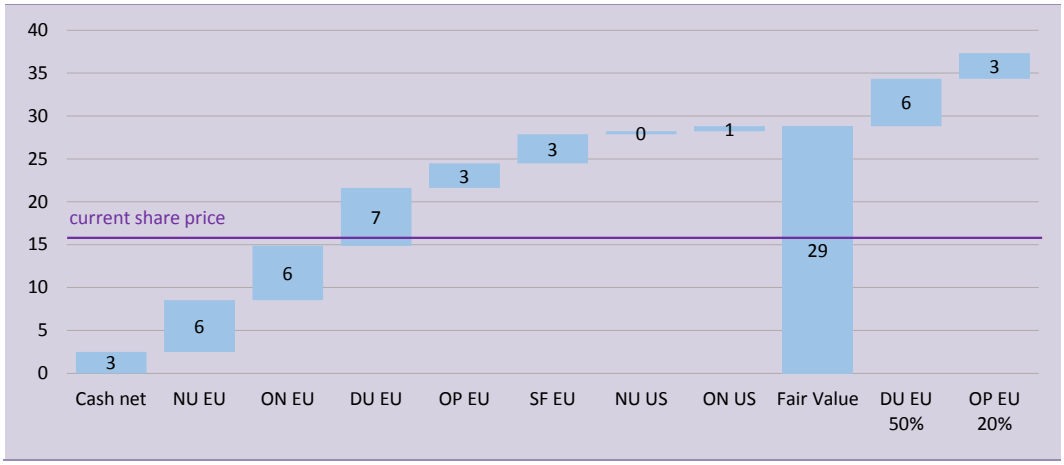
## 1.2. Bone Therapeutics (BUY Top Pick – FV EUR29)

Since its IPO in February 215, Bone Therapeutics' management has successfully delivered on the anticipated news flow. H1 2016 should be the cornerstone of the company's development with readouts from two major trials potentially triggering a significant revision in our estimates.

We expect strong news flow in Q1/early Q2 with (i) the results from the second patient cohort in the delayed union trial (phase IIa/III). Note that, were the interim results expected in H1 2016 to show a 75% responder rate in the first 16 patients treated (12/16), the study could be prematurely stopped and phase III initiated. PoS of 50% vs. 30% at the moment would add ~EUR6 to our fair value. In Osteoporotic patients, the IV route has been proven safe. Although cautious at this stage (EUR3 of our fair value), BD opportunities might arise should the efficacy results from the first 8 patients prove positive.

At current levels, the price reflects the phase III assets but does not value the ongoing phase II trials in delayed-union patients and in spine fusion.

**Fig. 2: Bone Therapeutics' valuation by project (in EUR)**




*Source: Bryan, Garnier & Co ests.*

Please see our latest research reports on Bone Therapeutics

| | |
|---|---|
| 22-sept.-15 | H1 newsflow delivered on time is a good sign when we look towards H2 |
| 9-oct.-15 | Next 6 months should be decisive |
| 18-nov.-15 | Q3 results |
| 18-janv.-16 | Initiation of a Phase IIa in multiple delayed-union fractures |

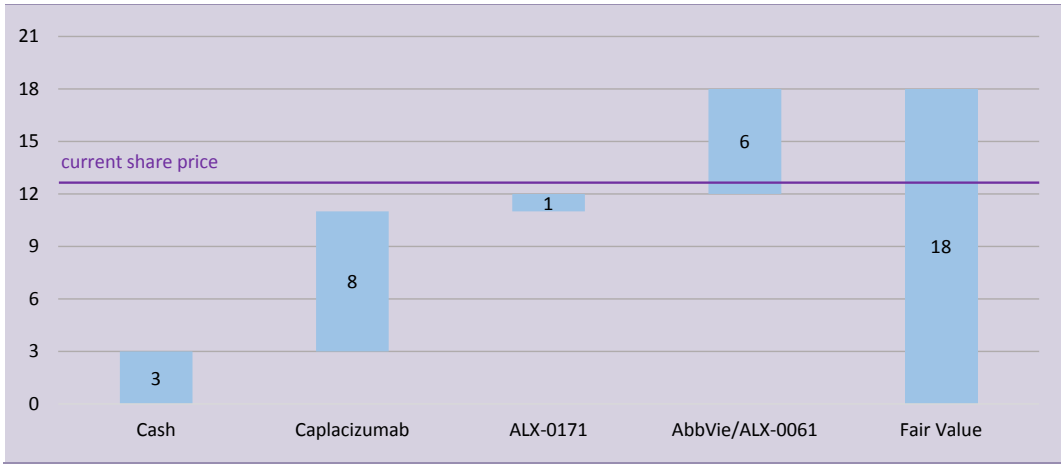
# 2. "De-risked" long-term stories

## 2.1. Ablynx (BUY – FVEUR18)

Ablynx (BUY – FV EUR18) has already attracted nine pharma companies through partnerships or collaboration agreements. Amongst these, AbbVie and Merck & Co are of the most interest, in our view. Following the phase IIb readout from ALX-0061 in Rheumatoid Arthritis (BGe EUR1.5bn peak sales) expected by mid-2016, AbbVie would have a 60-day opt-in window for the product which we deem to be the best-in-class IL-6(R). Merck & Co has expanded its immune-oncology collaboration agreement with Ablynx which now includes to up to 17 targets (bi- to penta-specifics nanobodies). We expect the US Pharma to give an update on the collaboration by the year-end and potentially disclose the first targets. Not only is Ablynx's business model based on partnerships but it is also poised to evolve towards a biopharmaceutical model with caplacizumab (studied in acquired-TTP, a rare blood disorder) that could potentially reach the European market in 2018e (conditional approval). In the short term, an ALX-0171 indication in respiratory syncytial virus (BGe EUR1bn peak sales) should report phase IIa results in H1.

As shown below, the stock is not currently pricing in the late-stage collaboration agreements with AbbVie in our view.

**Fig. 3: ABLYNX' valuation by project (in EUR)**




*Source: Bryan, Garnier & Co ests.*

Please see our latest research reports on Ablynx

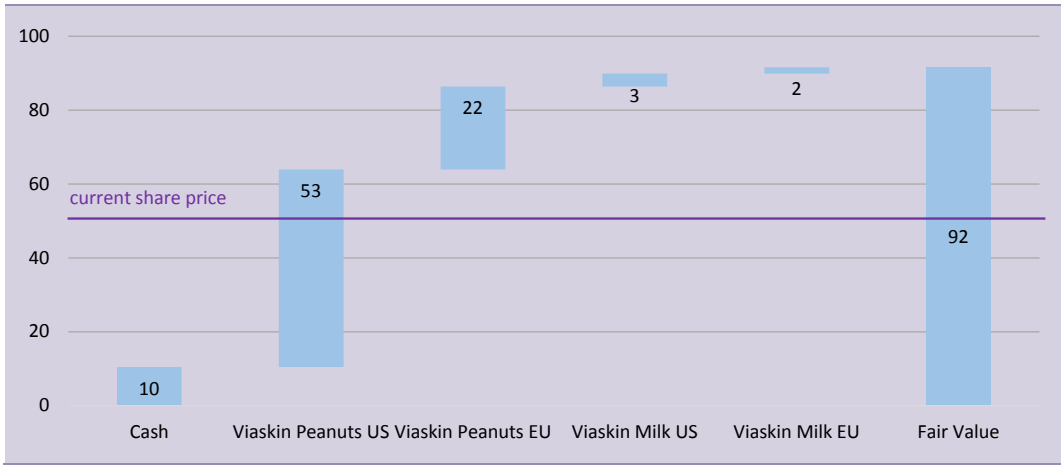
| | |
|---|---|
| 27-oct.-15 | Pharmas lining up around the block |
| 18-nov.-15 | Progressing well on all fronts |
| 18-nov.-15 | FY 2015 cash burn guidance now expected at low-end of guidance |
| 30-nov.-15 | Ablynx appoints CMO |

## 2.2. DBV Technologies (BUY – FV EUR92)

Although the FDA's discussion from the Allergenic Product Advisory Committee on the development of food allergy immunotherapies was not company specific, it clearly pinpointed the safety issues potentially arising from sublingual, oral and subcutaneous immunotherapy approaches to desensitize patients. Hence, the DBV Epicutaneous Immunotherapy Technology (EPIT) platform which features an unrivalled safety profile should benefit from an increased adoption rate, the targeted population in Peanut and Milk allergy being mainly composed of infants.

While we see no major readouts in H1 2016 with the exception of the results from the CoFAR6 trial, which should give in-depth knowledge on the mechanistic and biomarkers, the recent pull-back offers an opportunity to invest in DBV which we see as a future leader in the untapped food allergy market.

**Fig. 4: DBV's valuation by project (in EUR)**




*Source: Bryan, Garnier & Co ests.*

Please see our latest research reports on DBV Technologies

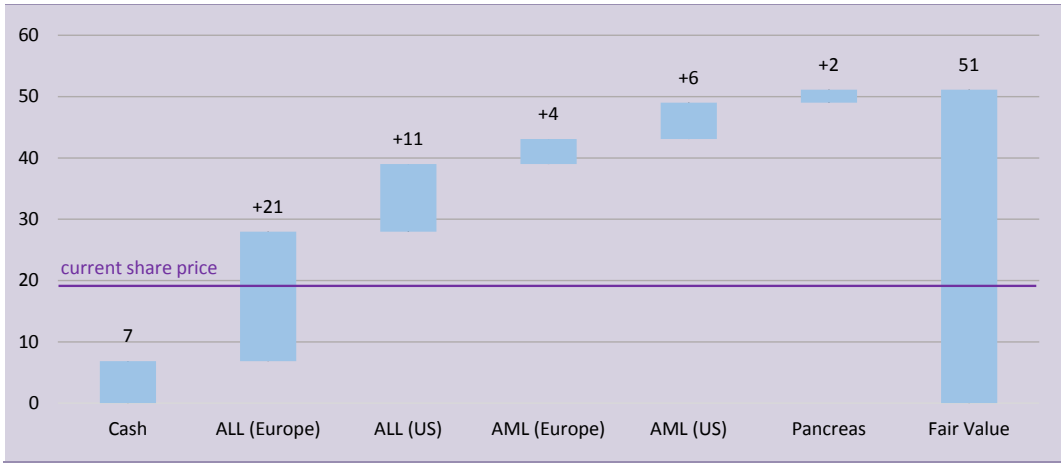
| | |
|---|---|
| 5-oct.-15 | Efficacy improved in OLFUS, phase III to be initiated before year end |
| 3-nov.-15 | Q3 results, Eyes on Viaskin Peanuts Phase III trial |
| 24-nov.-15 | Could we also find PEPITES beyond allergies? |
| 12-janv.-16 | DBV not lagging behind Aimmune Therapeutics |
| 20-janv.-16 | FDA's briefing documents favouring EPIT |

## 2.3. ERYTech (BUY – FV EUR51)

The company's share price has suffered badly over the past few months, while 1/ we expect European approval for GRASPA as a treatment in refractory/relapsed patients with acute lymphoblastic leukaemia (ALL); 2/ the company has announced plans to initiate several new trials to expand its addressable market. On the latter point, note that a Phase III should be initiated to evaluate the potential of GRASPA in newly-diagnosed patients with ALL (thus leading to a multiplication by five of the addressable market for this particular indication). And, following this announcement, we raised our peak sales estimate from EUR110m to EUR230m.

The market implicitly values a fairly broad pipeline at only c.EUR100m… which looks a bit unfair when you compare it to the USD900m Baxalta paid to acquire Oncaspar). Based on our estimates, GRASPA ALL in Europe is partially priced in, while all the other developments are completely ignored. Finally, just to give a quick historical basis of comparison, such a valuation would be very similar to the level seen before the Phase III results of GRASPA in ALL (i.e. back in 2014).

**Fig. 5: ERYTech's valuation by project (in EUR)**




*Source: Company Data; Bryan, Garnier & Co ests.*

Please see our latest research note on ERYTech

| | |
|---|---|
| 7-sept.-15 | How to win the West |
| 15-sept.-15 | MAA submitted for GRASPA ALL in Europe |
| 20-oct.-15 | Pfizer's inotuzumab gets breakthrough therapy designation in ALL. Read-across for Erytech |
| 30-oct.-15 | Stronger penetration of Oncaspar in the US. Positive read-across for GRASPA |
| 4-déc.-15 | Let's "de-encapsulate" more upside! |
| 8-déc.-15 | Presentation of additional data for GRASPA ALL at the ASH meeting |
| 5-janv.-16 | Yann Godfrin is leaving the company to pursue new opportunities |
| 7-janv.-16 | GRASPA AML: third DSMB… So far so good |

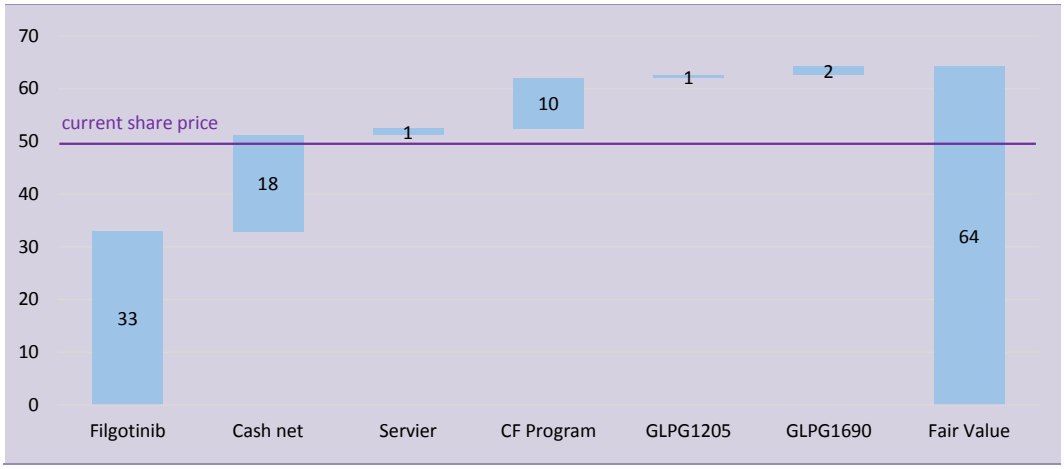
## 2.4. Galapagos (BUY – FV EUR64)

We do not expect the company's news flow to be less intense than last year, especially in H2. Note that Phase III in RA for filgotinib (BGe EUR2bn peak sales), now partnered to Gilead, should start in Q1 2016 and the 20-week phase IIb readout in Crohn's is expected in late Q1.

Galapagos and AbbVie have developed a broad Cystic Fibrosis alliance with 8 compounds expected to be in clinics towards the year-end and yet not reflected in the current valuation in our view. In its race against Vertex for the development of the triple combination which could address 90% of the CF population, Galapagos has superior compounds to Vertex. Phase II for the triple combination is expected to be initiated in early-2017. Before that, we should have several phase I readouts maintain which are expected to underpin positive share price positive momentum.

Based on our estimates, the stock is not currently pricing in the AbbVies partnership in Cystic Fibrosis. Note that a recent update from the latter underlines the strong commitment on both sides to developing breakthrough therapies in this indication.

**Fig. 6: Galapagos' valuation by project (in EUR)**




*Source: Bryan, Garnier & Co ests.*

Please see our latest research note on Galapagos

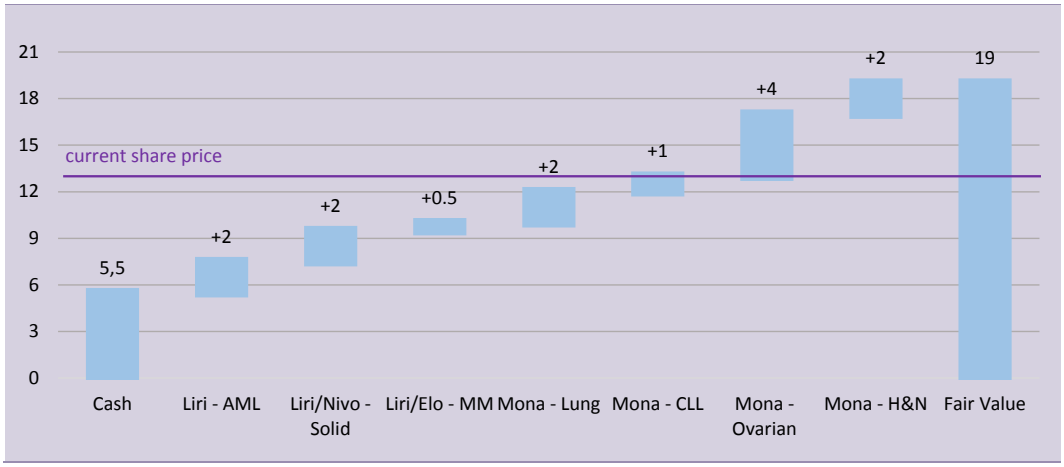
| | |
|---|---|
| 17-nov.-15 | We should have a gift under the tree |
| 8-déc.-15 | Crohn's 10w data out, deal should be next |
| 17-déc.-15 | and the winner is...Galapagos! |
| 18-déc.-15 | Face B: Long-term value creation with the Gilead deal and CF opportunity |
| 12-janv.-16 | Read-across from AZN/INCY co-dev. agreement and ABBV's ABT-494 phase III programme |
| 19-janv.-16 | It is now "all" about CF: review of progress made with the CF portfolio |

## 2.5. Innate Pharma (BUY – FV EUR19)

Innate Pharma is also a stock that investors should look at starting from this H1 16. Three catalysts are important in the very short term: 1/ a clinical update regarding monalizumab (anti-NKG2A) in a set of different cancers, thus leading to a fairly big upwards revision in consensus' estimates; 2/ results from the Phase II involving lirilumab (anti-KIR) as a maintenance therapy for elderly patients with acute myeloid leukaemia. We are pretty optimistic on the outcome of this study given that a small phase I trial with dose escalation showed very promising efficacy results in 32 patients (PFS: 9.5 months within the high-dose group vs 2.3 months for the low-dose one); and 3/ potentially, Phase Ib results for the lirilumab/nivolumab combination therapy in various solid tumours. In a best-case scenario, this could add +EUR3 to our FV.

Based on our figures, the market is currently ignoring the potential value arising from monalizumab (whereas this compound could potentially become a major asset for AstraZeneca).

**Fig. 7: Innate Pharma's valuation by project (in EUR)**




*Source: Bryan, Garnier & Co ests.*

Please see our latest research note on Innate Pharma

| | |
|---|---|
| 29-sept.-15 | Brace yourselves… AZN is coming (back)! |
| 7-oct.-15 | AZN should come back… and it may be better than expected |
| 14-oct.-15 | IPH receives a USD5m milestone payment from BMS |
| 12-nov.-15 | Initiation of another trial testing lirilumab with BMS's blockbuster, nivolumab |
| 1-déc.-15 | Elotuzumab got its first approval in multiple myeloma. Lirilumab will be key for this new BMS' franchise |
| 3-déc.-15 | Feedback lunch meeting with management. Should we expect a deal with Celgene? |
| 17-déc.-15 | Opening of a fourth trial evaluating IPH2201 |
| 11-janv.-16 | Out-licensing deal with Sanofi and in-licensing with OREGA Biotech |

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**Stock rating**

BUY — Positive opinion for a stock where we expect a favourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential upside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

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