

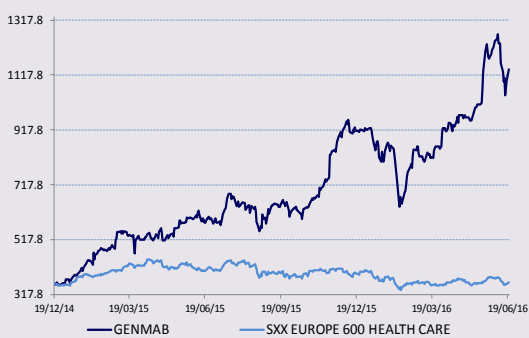
INDEPENDENT RESEARCH

21th June 2016

Healthcare

Bloomberg	GEN DC
Reuters	GEN.CO
12-month High / Low (DKK)	1,266 / 548.0
Market capitalisation (DKKm)	65,638
Enterprise Value (BG estimates DKKm)	62,022
Avg. 6m daily volume ('000 shares)	467.8
Free Float	84.0%
3y EPS CAGR	17.3%
Gearing (12/15)	-100%
Dividend yields (12/16e)	NM

YE December	12/15	12/16e	12/17e	12/18e
Revenue (DKKm)	1,133	1,175	1,680	2,213
EBIT(DKKm)	730.38	285.13	539.49	907.88
Basic EPS (DKK)	12.63	5.27	9.54	15.68
Diluted EPS (DKK)	9.71	5.27	9.54	15.68
EV/Sales	54.85x	52.79x	36.69x	27.51x
EV/EBITDA	112.1x	217.5x	114.2x	67.0x
EV/EBIT	85.1x	217.5x	114.2x	67.0x
P/E	NS	NS	NS	70.0x
ROCE	-15,400	166.0	150.4	166.5



Genmab


The saga goes on!

Fair Value DKK1600 vs. DKK1450 (price DKK1,097) **BUY**

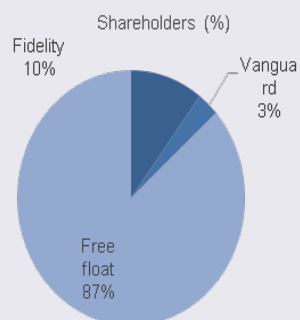
We raise our FV from DKK1,450 to DKK1,600 following a roadshow with Jan van de Winkel (CEO), and after increasing our peak sales for daratumumab in multiple myeloma from EUR6.5Bn to EUR8.9Bn. The compound is so potent that we now believe: 1/ it could be used for several years in earlier lines of treatment; 2/ the first Phase III data involving newly diagnosed patients could be available a year earlier (assuming the trial is stopped early due to strong benefits). Plus, we see potential for extension to other malignancies (including solid tumours) as significant free options.

- **Our peak sales estimate for daratumumab in myeloma has risen from EUR6.5Bn to EUR8.9Bn**, following integration of two new elements into our model: 1/ we now assume the compound will be used for several years in early lines of therapy, given the trends in progression-free survival observed in the POLLUX study; 2/ we also consider that Phase III results involving newly diagnosed patients should be published in 2017, a year earlier than previously expected.
- **Numerous free call options to be played by the end of the year.** “Dara” is pretty much seen as a myeloma therapy, but we think the street is overlooking its potential in other indications (particularly in non-Hodgkin lymphomas). At current levels, we believe such expansion in the addressable market is not priced in... And as such, a significant option could be played with an attractive risk-reward.
- **BUY rating reiterated with a FV of DKK1,600 (c.+40%) vs DKK1,450** following our adjustments... But this is clearly not the end of the story: should the different catalysts we have identified prove to be positive (“dara’s” label expanded to include second-line patients with myeloma, Phase III results involving first-line patients, favourable label for Roche’s ocrelizumab in relapsing multiple sclerosis), our FV could be further increased to DKK2,050 (c.+80%).



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Genmab



Company description

Genmab is a biotech company developing innovative monoclonal antibodies for the treatment of cancers and autoimmune diseases

Simplified Profit & Loss Account (EURm)	2013	2014	2015	2016e	2017e	2018e
Revenues	664	850	1,133	1,175	1,680	2,213
<i>Change (%)</i>	<i>36.9%</i>	<i>28.2%</i>	<i>33.2%</i>	<i>3.7%</i>	<i>43.0%</i>	<i>31.7%</i>
Adjusted EBITDA	69.3	265	554	285	539	908
EBIT	69.3	265	730	285	539	908
<i>Change (%)</i>	<i>-%</i>	<i>283%</i>	<i>175%</i>	<i>-61.0%</i>	<i>89.2%</i>	<i>68.3%</i>
Financial results	(3.9)	32.2	27.1	35.0	40.0	45.0
Pre-Tax profits	65.4	297	758	320	579	953
Exceptionals	0.0	0.0	176	0.0	0.0	0.0
Tax	(4.8)	(4.0)	(6.0)	0.0	0.0	0.0
Net profit	112	301	764	320	579	953
Restated net profit	112	301	587	320	579	953
<i>Change (%)</i>	<i>-%</i>	<i>168%</i>	<i>94.9%</i>	<i>-45.5%</i>	<i>81.0%</i>	<i>64.4%</i>
Cash Flow Statement (€m)						
Operating cash flows	(128)	133	312	242	507	886
Change in working capital	240	222	538	77.8	72.5	66.9
Capex, net	(42.2)	75.4	135	120	120	120
Financial investments, net	0.0	0.0	0.0	0.0	0.0	0.0
Dividends	0.0	0.0	0.0	0.0	0.0	0.0
Other	NM	NM	NM	NM	NM	NM
Net debt	(1,554)	(2,660)	(3,493)	(3,615)	(4,002)	(4,768)
Free Cash flow	0.0	0.0	0.0	0.0	0.0	0.0
Balance Sheet (€m)						
Tangible fixed assets	22.7	25.7	28.8	48.8	68.8	88.8
Intangibles assets	2.5	62.5	193	293	393	493
Cash & equivalents	1,557	2,661	3,493	3,616	4,003	4,769
current assets	1,693	2,766	3,669	3,790	4,177	4,943
Other assets	13.3	12.1	13.2	13.2	13.2	13.2
Total assets	1,732	2,867	3,904	4,145	4,652	5,538
L & ST Debt	2.5	0.36	0.12	0.12	0.12	0.12
Others liabilities	1,070	833	417	338	265	199
Shareholders' funds	660	2,033	3,487	3,807	4,386	5,339
Total Liabilities	1,732	2,867	3,904	4,145	4,652	5,538
Capital employed	(730)	(450)	(5.0)	193	385	572
Ratios						
Operating margin	10.44	31.18	64.46	24.27	32.12	41.03
Tax rate	(7.27)	(1.33)	0.0	0.0	0.0	0.0
Net margin	16.93	35.43	67.39	27.25	34.50	43.06
ROE (after tax)	17.04	14.82	21.90	8.41	13.21	17.85
ROCE (after tax)	(15.39)	(67.02)	(15,400)	166	150	167
Gearing	(236)	(131)	(100)	(94.97)	(91.25)	(89.31)
Pay out ratio	0.0	0.0	0.0	0.0	0.0	0.0
Number of shares, diluted	52.69	57.90	60.47	60.77	60.77	60.77
Data per Share (€)						
EPS	2.13	5.20	12.63	5.27	9.54	15.68
Restated EPS	2.13	5.20	9.71	5.27	9.54	15.68
<i>% change</i>	<i>-%</i>	<i>144%</i>	<i>86.7%</i>	<i>-45.8%</i>	<i>81.0%</i>	<i>64.4%</i>
BVPS	12.52	35.11	57.66	62.64	72.18	87.86
Operating cash flows	(2.43)	2.29	5.15	3.99	8.34	14.58
FCF	0.0	0.0	0.0	0.0	0.0	0.0
Net dividend	0.0	0.0	0.0	0.0	0.0	0.0

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

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1. Investment Case

Why the interest now?



The reason for writing now

All eyes are on the label expansion of daratumumab to the second-line of multiple myeloma, but most of us have overlooked its potential use as a maintenance therapy (meaning that each patient could be treated for several years). Plus, we anticipate several catalysts for which we are quite confident on the outcome (Phase III results involving newly diagnosed patients in 2017), or that can be seen as free call options (Phase II results in other liquid tumours).

Cheap or Expensive?



Valuation

We raise our Fair Value from DKK1,450 to DKK1,600 after updating our sales estimates. This points to an already substantial upside of 40%.... But in a best-case scenario, we see even greater upside (c. +80%).

When will I start making money?



Catalysts

We expect at least three significant catalysts in the very short term: 1/ the filing of a supplemental biologics license application for daratumumab as an alternative for patients with myeloma who received at least one prior therapy, followed by the granting of a Priority Review; 2/ the publication of Phase II results involving “dara” in non-Hodgkin lymphomas; 3/ the approval of Roche’s ocrelizumab in relapsing-remitting multiple sclerosis, leading to a read-across for ofatumumab.

What's the value added?



Difference from consensus

We believe that: 1/ Phase III data involving “dara” newly diagnosed patients with multiple myeloma could be published as of next year (whereas the majority of the consensus is still expecting a readout in 2018); 2/ its label could be expanded to the first-line as soon as 2018 (thus a year earlier than we and the consensus used to anticipate)... As such, our estimates now belong to the high-end of the consensus.

Could I lose money?



Risks to our investment case

Most of our FV is derived from daratumumab as a treatment for myeloma. Therefore, negative clinical results and/or non-approval of the product for the different lines of treatment would significantly and negatively affect our valuation.

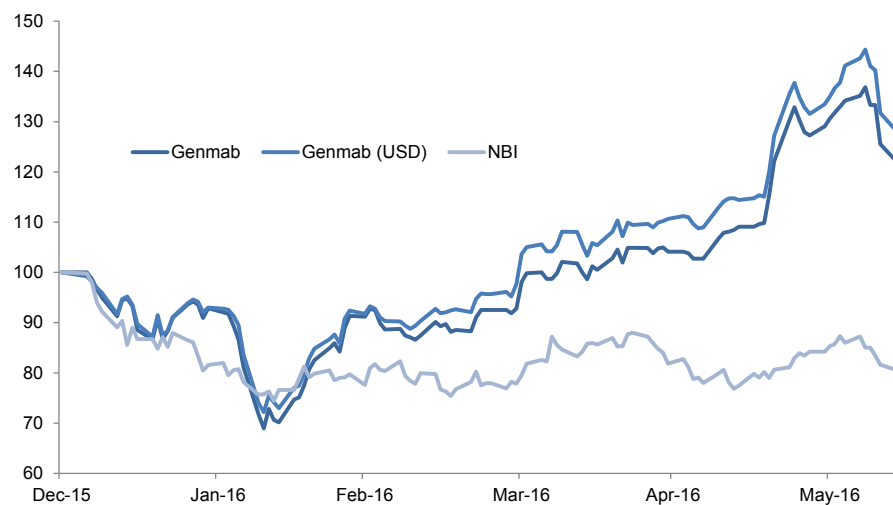
2. Why invest now?

2.1. Multiple upcoming catalysts leading to further upgrades

GEN shares have outperformed peers and we believe they will continue to do so

GEN shares have clearly outperformed peers since the beginning of the year (around +20% vs a negative 23% for the NBI) thanks to very positive clinical data involving its lead compound, Darzalex (daratumumab), but the recent decline has created an attractive entry point for investors... All the more so as the stock is likely to benefit from pretty dense newsflow in the coming weeks and months:

Fig. 1: GEN shares vs Nasdaq Biotech (YTD)



Source: Thomson Reuters; Bryan, Garnier & Co. ests

- **We assume the FDA will grant a priority review to “dara”,** as a treatment for patients with myeloma who received at least one prior therapy, in July or August (which would pave the way for a label expansion by the end of the year... and thus another increase to our FV).
- **The current sales guidance for the compound is highly conservative (USD400-450m), and we believe that management might raise it...** Probably when JNJ publishes its Q3 results (see our previous morning mails for further details).
- **Phase II results involving “dara” in Non-Hodgkin Lymphomas are expected in Q4 16,** and we currently view this catalyst as a free call option potentially offering further significant upside as: 1/ the consensus sees little value in these developments; 2/ the underlying market is far from insignificant (around USD5Bn by 2020).
- **Genmab and JNJ are likely to present some follow-up data from the POLLUX and CASTOR trials during the 2016 ASH meeting...** And we believe they will point to further improved hazard ratios for PFS (progression-free survival).
- **We believe the very first Phase III data (ALCYONE) involving daratumumab in newly-diagnosed myeloma patients should be available next year.**

Fig. 2: Daratumumab – Upcoming newsflow (2016)

Compound	Timing	✓ Targeted milestone
Darzalex (daratumumab)	Q1 16	✓ - Launch in the US and other approved territories
	Q2 16	✓ - CHMP decision on monotherapy application
	Q2 16	✓ - Phase III multiple myeloma (MM) interim efficacy analysis in relapsed/refractory MM settings (POLLUX & CASTOR)
	Q3 16	- File for label in relapsed/refractory settings (July-August?)
	H2 16	- Start multiple clinical trials in MM and non-MM indications
	H2 16	- Report initial clinical data in non-MM indications
	Q4 16	- Follow-up data from CASTOR and POLLUX at the 2016 ASH meeting

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

2.2. A new FV of DKK1,600 implying 40% upside

An attractive risk-reward

We have raised our FV from DKK1,450 to DKK1,600 following a roadshow with Jan van de Winkel (CEO), and after increasing our peak sales for daratumumab in myeloma from EUR6.5Bn to EUR8.9Bn. The compound is so potent that we now believe: 1/ it could be used for several years in earlier lines of treatment; 2/ the first Phase III data involving newly diagnosed patients could be available a year earlier (assuming the trial is stopped early due to strong benefits).

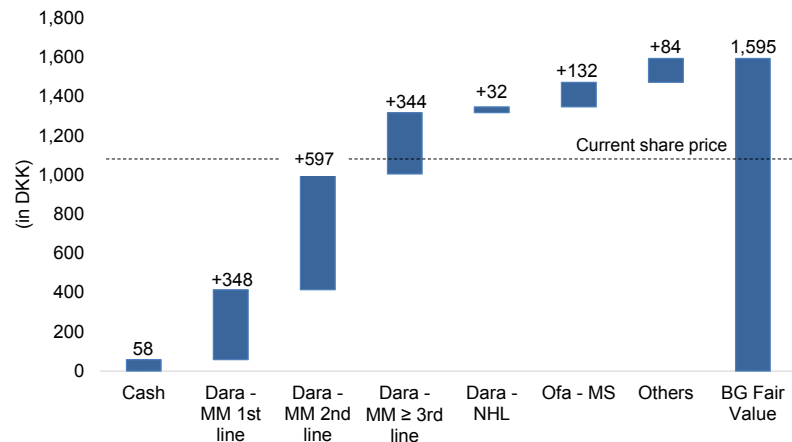
Apart from that, we view the current risk-reward as pretty attractive. Based upon our estimates, the market attaches absolutely no value to daratumumab outside multiple myeloma, or even to ofatumumab in multiple sclerosis. However, we believe the recent data have significantly de-risked the business plan and Novartis seems to be very optimistic about its prospects in light of its dual advantage – safety and convenience – over Roche’s ocrelizumab.

Fig. 3: Genmab - BG valuation

Drug candidates	Indications	Clinical stage	NPV (DKKkM)	PoS (%)	r-NPV (DKKkM)	Per share (DKK)
Daratumumab	Multiple Myeloma (1st line)	Phase III	35,573	60%	21,344	357
Daratumumab	Multiple Myeloma (2nd line)	MAA	44,167	80%	35,334	591
Daratumumab	Multiple Myeloma (≥ 3rd line)	Sales	18,700	100%	18,700	313
Daratumumab	Non-Hodgkin Lymphomas (DLBCL, FL)	Phase II	5,154	35%	1,804	30
Ofatumumab	Chronic Lymphocytic Leukaemia	Sales	684	100%	684	11
Ofatumumab	Multiple Sclerosis (PPMS)	Phase III	6,538	60%	3,923	66
Ofatumumab	Multiple Sclerosis (RRMS)	Phase III	5,932	60%	3,559	59
HuMax-TF ADC	Solid tumours	Phase I/II	18,356	35%	6,425	107
Duobody, Hexabody	Undisclosed	Preclinical	1,508	10%	151	3
= Enterprise Value (DKKkM)			136,613	67%	91,923	1,536
(+ Net cash (DKKkM))			3,491	100%	3,491	58
= Equity value (DKKkM)			140,104	68%	95,414	1,595

Source: Bryan, Garnier & Co ests.

Fig. 4: BG valuation vs current share price



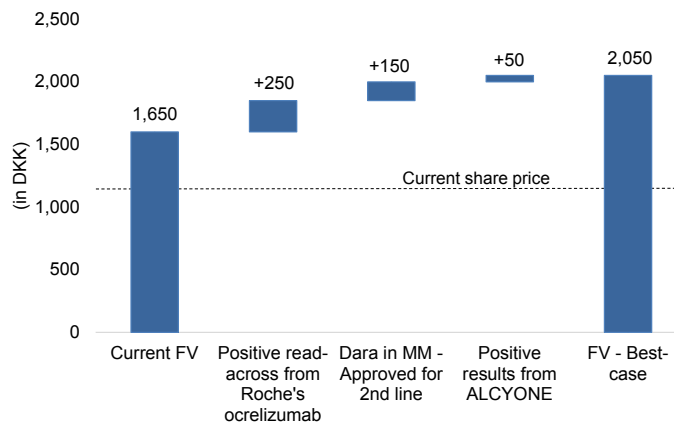
Source: Bryan, Garnier & Co. ests

2.1. Our best-case scenario: FV of DKK2,050 (c.+80%)

At least three positive catalysts potentially leading to a new FV of DKK2,050

Our Fair Value could be further increased to DKK2,050 (+DKK450) by the end of this year, even without taking into account the “dara’s” development potential in solid tumours:

Fig. 5: BG valuation in a best-case scenario



Source: Bryan, Garnier & Co. ests

- We might add +DKK150 to our valuation should “dara’s” label indeed be expanded 1/ to patients with myeloma who previously received at least one prior therapy, and 2/ as part of a combination regime with a bort/dex or len/dex. And more precisely, we would increase its probability of success (PoS) from 80% to 100% for the second-line.
- We still await the likely approval of Roche’s orelizumab (an anti-CD20) as a treatment for relapsing-remitting multiple sclerosis. In case of a quite broad label, we would probably raise our sales forecasts in this setting... leading to the addition of +DKK250.
- Last but not least, we would raise our PoS for “dara” as a first-line option from 60% to 70% should the ALCYONE trial be positive; and this would add a further +DKK50.

3. Shining stars at the ASCO and EHA meetings

The recent presentations of Phase III results at key scientific conferences were outstanding, and notably the one involving the POLLUX trial (which showed an impressive 18-month PFS of 78%). And we believe such data once again demonstrated how superior “dara” is compared to its competitors.

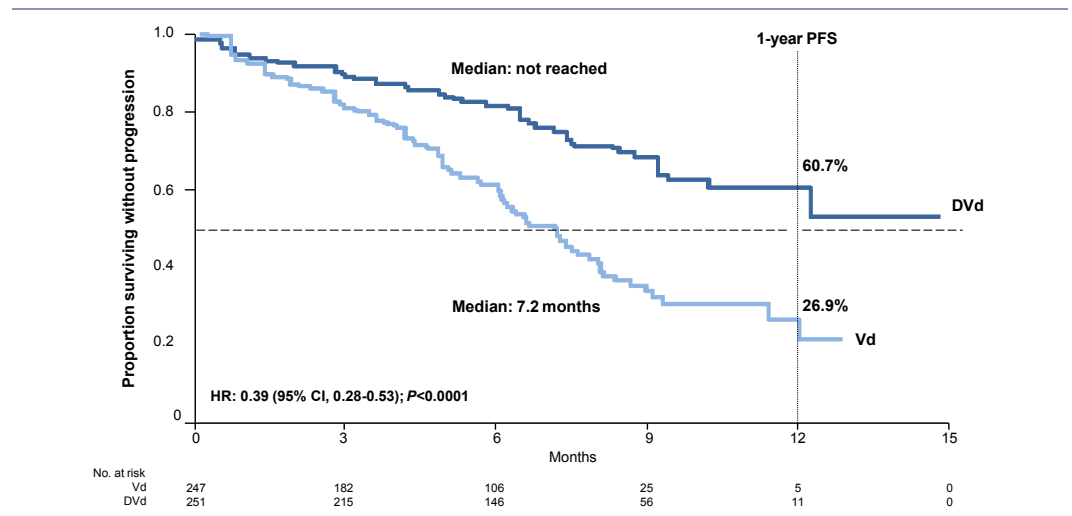
3.1. CASTOR: a very good surprise

The data from CASTOR far exceeded our expectations

CASTOR is a Phase III trial evaluating daratumumab: 1/ in combination with bortezomib (a proteasome inhibitor) and low-dose dexamethasone, and 2/ in patients with multiple myeloma who received at least one prior therapy. We were rather optimistic about the outcome of this study, and the primary endpoint of improving progression-free survival was indeed met... But two elements far exceeded our expectations: 1/ the hazard ratio, which stood at 0.39 ($p < 0.0001$) while these data are far from being mature; and 2/ one-year PFS rate (60.7% vs 26.9%).

Safety-wise, we note that the addition of “dara” to bortezomib/dexamethasone had a very limited impact on the number of adverse events... thus confirming its quite benign toxicity profile (see Fig. 7 for further details).

Fig. 6: CASTOR – PFS in patients who received ≥ 1 prior therapy



Source: Genmab; Bryan, Garnier & Co. ests

Fig. 7: Daratumumab – CASTOR – Safety profile

Patients	DVd (n=243)	Vd (n=237)
<u>Patients with treatment-emergent adverse events</u>		
Thrombocytopenia	59%	44%
Sensory peripheral neuropathy	47%	38%
Diarrhea	32%	22%
Anaemia	26%	31%
Upper respiratory tract infection	25%	18%
Cough	24%	13%
Fatigue	21%	25%
Constipation	20%	16%
<u>Discontinued treatment</u>	31%	44%
Reasons for discontinuation		
Progressive disease	19%	25%
Adverse event	8%	10%
Non-compliance with study drug	1%	3%
Withdrawal by patient	0%	4%
Death	2%	2%

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

We believe the HR might improve over time

Should we limit our analysis to second-line patients, the trends in PFS (77.5% vs 29.4%, HR: 0.31, $p < 0.00001$) are even more impressive, all the more so as the active arm's curve has been completely flat between months 9 and 15. We will see how far it might go, but we would not be surprised to see an even better HR thanks to "dara's" immune-modulating properties and ability to generate very deep and durable tumour responses.

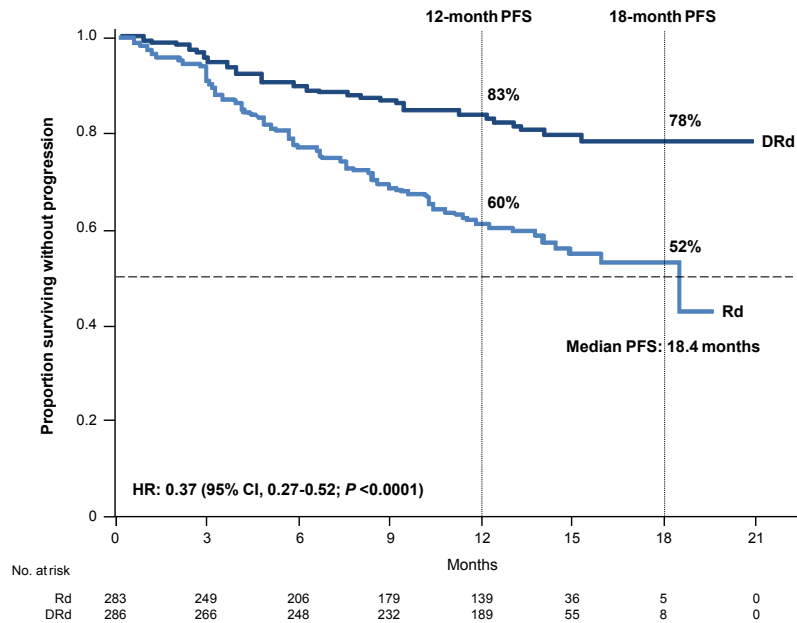
3.2. Divine POLLUX

POLLUX was even more outstanding

The POLLUX study was certainly the most important one, as it involved a combination with what has become and will remain the backbone treatment of multiple myeloma in the US (Celgene's Revlimid or lenalidomide). We already knew that: 1/ the HR (0.37) was really outstanding and way better than what we saw in other lenalidomide-based studies; 2/ the trends in PFS were certainly even more positive than what we saw with CASTOR (as lenalidomide is more potent than bortezomib, but also because there are far more synergies with such combo). But we needed more details to further reinforce our conviction...

And we were not disappointed; on the contrary: 1/ nearly 80% of the patients who received "dara" were progression-free at 21 months, compared with 40-45% for those in the placebo group; 2/ the active arm's curve has remained flat between months 15 and 21, where the control's has declined relentlessly... And given the depth and durability of the responses (CR and stringent CR: 43% vs 19%, $p < 0.0001$), we are pretty sure this differential will widen over time; 3/ and here again, the addition of "dara" has not led to an unreasonable increase in the observed adverse events.

Fig. 8: Daratumumab – POLLUX – PFS in patients who received ≥ 1 prior therapy



Source: Genmab; Bryan, Garnier & Co. ests

Fig. 9: Daratumumab – POLLUX – Safety profile

	DRd (n=283)		Rd (n=283)	
	All grade (%)	Grade 3-4 (%)	All grade (%)	Grade 3-4 (%)
Haematological AEs				
Neutropenia	59%	52%	43%	37%
Febrile neutropenia	6%	6%	3%	3%
Anaemia	31%	12%	35%	20%
Thrombocytopenia	27%	13%	27%	14%
Lymphopenia	6%	5%	5%	4%
Non-haematological AEs				
Diarrhea	43%	5%	25%	3%
Fatigue	35%	6%	28%	3%
Upper respiratory tract infection	32%	1%	21%	1%
Constipation	29%	1%	25%	1%
Cough	29%	0%	13%	0%
Muscle spasms	26%	1%	19%	2%
Pneumonia	14%	8%	13%	8%

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

3.3. How does this impact our vision?

Overall, these data clearly confirmed “dara’s” best-in-class status. But, importantly, they allow us to say that a **high proportion of second/third-line patients could be treated for at least 2 years with such a regimen...** While so far, we (and most of the consensus) made the assumption they would be for just 1 year on average. And of course, this is far from insignificant in terms of sales modelling...

4. Approaching the USD10Bn threshold

Peak sales raised from EUR6.5Bn to EUR8.9Bn

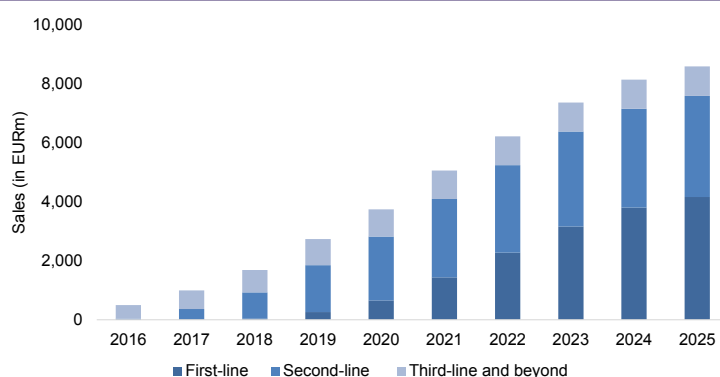
We have raised our peak sales estimates for Darzalex from EUR6.5Bn to EUR8.9Bn, while adopting a more aggressive ramp-up scenario, as we now believe that 1/ each early-line patient will be treated for several years, due its potency and quite benign safety profile; 2/ the first-line should be addressed by 2018, and thus one year earlier than expected. And we understand this has not (yet) been integrated by the consensus...

Fig. 10: Daratumumab - BG peak sales

	USA	Europe	RoW	TOTAL
First-line patients				
Incidence	27,400	25,200	15,000	67,600
Annual cost of treatment (EUR) - 1st year	81,818	70,000	70,000	
Annual cost of treatment (EUR) - 2nd year and beyond	54,545	40,000	40,000	
Market shares at peak (%)	35.0%	30.0%	25.0%	
Peak year	2024	2025	2025	2025
Peak sales (EURBn)	2.0	1.6	0.8	4.4
Second-line patients				
Incidence	13,700	12,600	7,500	33,800
Annual cost of treatment (EUR) - 1st year	81,818	70,000	70,000	
Annual cost of treatment (EUR) - 2nd year and beyond	68,182	40,000	40,000	
Market shares at peak (%)	50%	50%	50%	
Peak year	2021	2022	2024	2024
Peak sales (EURBn)	1.7	1.1	0.6	3.5
Third-line and beyond				
Incidence	6,850	6,300	3,750	16,900
Annual cost of treatment (EUR) - 1st year	104,545	80,000	80,000	
Market shares at peak (%)	65%	60%	50%	
Peak year	2019	2019	2021	2021
Peak sales (EURBn)	0.5	0.3	0.2	1.0

Source: Bryan, Garnier & Co ests.

Fig. 11: BG estimates – Daratumumab sales (2016-2023e)



Source: Bryan, Garnier & Co. ests.

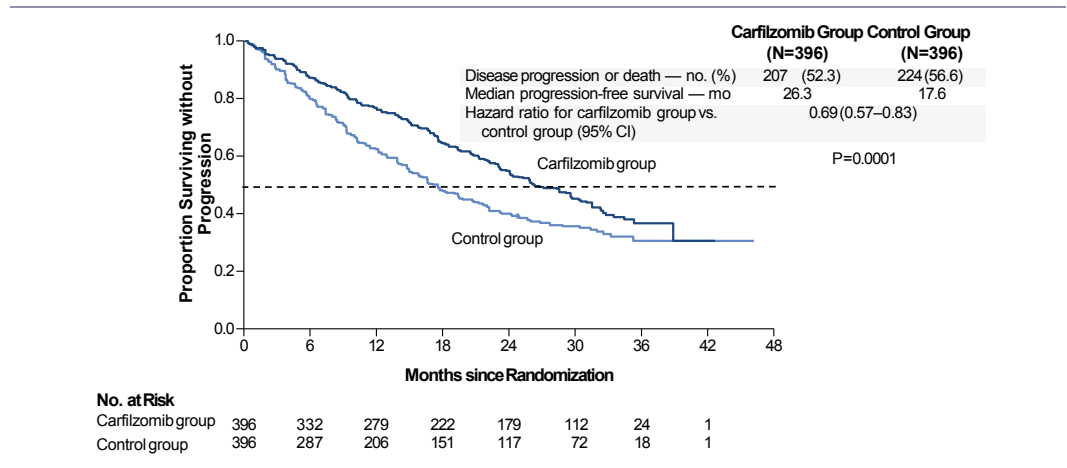
4.1. “Dara” to be used for more than a year in earlier lines of treatment

We are now assuming that each early-line patient will be treated for several years

We now consider that daratumumab could be used for several years in earlier lines of treatment of multiple myeloma when combined with Celgene’s Revlimid (lenalidomide) and dexamethaonse, given the time to progression seen in the POLLUX study. From there, **we assume the median PFS for the dara/len/dex arm will be in the 30-40 months range...** Of course this remains theoretical, but let’s underline the following points:

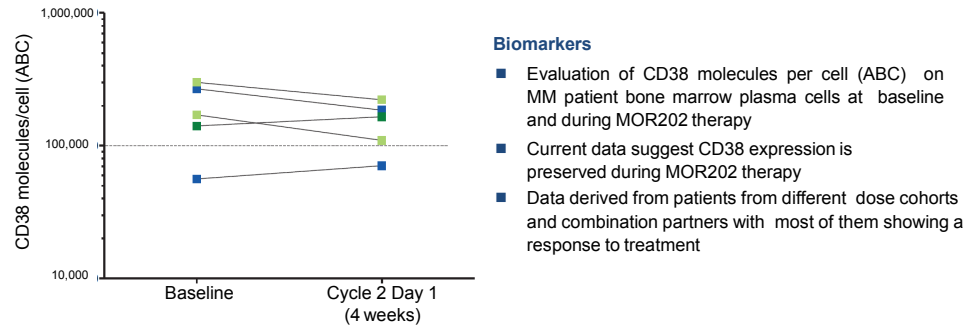
- It is always tricky to compare two different studies due to the differences in the patients’ characteristics at baseline (number of prior lines, proportion of refractory patients to a specific regimen, etc.)... But the ASPIRE study is certainly the one with the most similarities to POLLUX. Starting from there, **we note that Amgen’s Kyprolis (carfilzomib) managed to reach a mPFS of 26.3 months in relapse patients who received at least one prior therapy**, while its hazard ratio was way less impressive than what we saw in POLLUX (0.69 vs 0.37).
- **CD38 expression on the cancer cells’ surface remains quite stable in spite of repeated exposure to an anti-CD38 like “dara”** (and apparently, Morphosys is experiencing similar results with MOR202)... And this point is far from being insignificant as the loss of an antigen expression being one of the very reasons why a mAb-treated patient becomes refractory (Bellesso et al, 2011).

Fig. 12: ASPIRE trial – Carfilzomib/len/dex in relapse patients – PFS analysis



Source: Adapted from NJEM

Fig. 13: Data suggest CD38 preservation during anti-CD38 therapy



Source: Morphosys, ASCO 2016 presentation

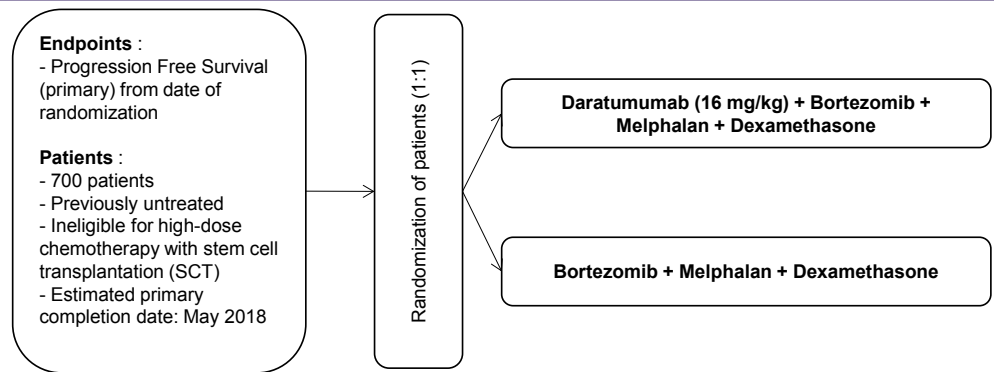
4.2. Addressing first-line one year earlier

We now believe that Phase III data involving newly-diagnosed patients will be published next year (vs 2018 previously)

Most analysts are currently assuming the very first data involving newly-diagnosed patients would be published in 2018, and this is certainly because of the estimated primary completion date pointed by clinicaltrials.gov (May 2018). We now believe the street and ourselves were a bit too cautious there, as even the trials involving relapse/refractory patients have been stopped early due to the strong benefit in terms of progression-free survival (as seen with both CASTOR and POLLUX).

And as such, we are now assuming that ALCYONE will be stopped early for the very same reasons, especially as this trial is evaluating “dara” in combination with bortezomib, melphalan and low-dose dexamethasone (a similar combination regimen that what was used in CASTOR). And in a best-case scenario, we would say the publication of the top-line results could occur as soon as H1 17.

Fig. 14: Design of the ALCYONE study



Source: ClinicalTrials.gov; Bryan, Garnier & Co. ests.

5. Numerous free call options to play

5.1. Expanding the addressable to other haematological malignancies...

Phase II data and initiation of several new trials in other haematological indications are expected in H2 16

Darzalex (daratumumab) is pretty much seen as a myeloma therapy in the light of the recent newsflow (light-speed approval as an option for double-refractory patients, stellar data in less advanced settings), and admittedly our valuation of this compound is largely derived from this specific type of blood cancer. And so, little attention has so far been given to the prospects in other haematological malignancies, and especially to Non-Hodgkin Lymphomas (NHL)...

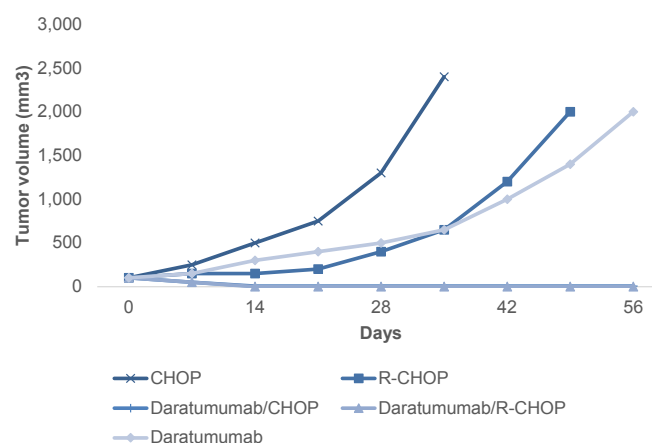
And yet, “dara” has numerous other cards to play in other haematological malignancies. CD38 is indeed known to be overexpressed by NHL, and notably in diffuse large B cell lymphomas (DLBCL), while exhibiting a low variability... Now that we have less doubts regarding its potential in myeloma, **we believe that JNJ will aggressively expand its clinical pipeline in the haematology space** by initiating several new trials.

Fig. 15: Expression of CD38 in different haematological malignancies

Indication	% Expression
Non-Hodgkin Lymphomas (NHL), including Diffuse Large B Cell Lymphoma (DLBCL)	30-80%
Multiple Myeloma	80-100%
B Chronic Lymphocytic Leukaemia (CLL)	20-55%
B and T-Acute Lymphoblastic Leukaemia (ALL)	90-100%
Acute Myeloid Leukaemia (AML)	50-60%

Source: Genmab; Morphosys; Bryan, Garnier & Co ests.

Fig. 16: Daratumumab – Preclinical results in DLBCL

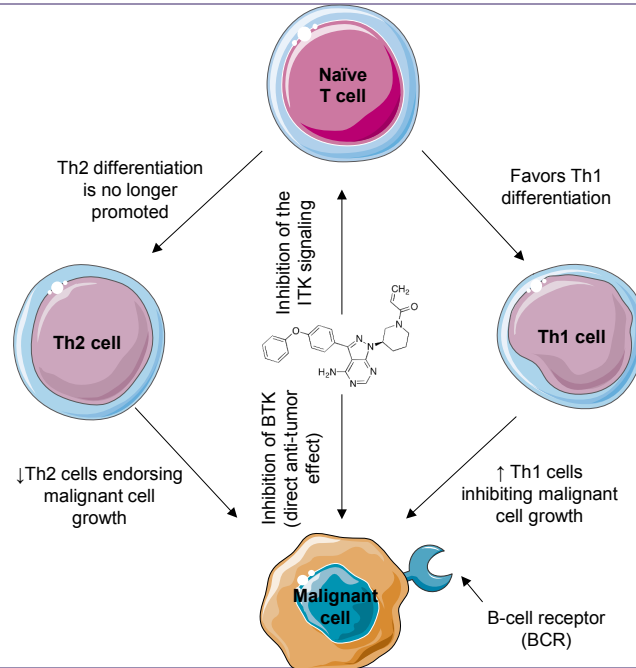


Source: Bryan, Garnier & Co. ests. Adapted from Genmab R&D day (Dec 2014)

Note that we see ibrutinib as a perfect candidate to be evaluated with, as this BTK inhibitor: 1/ already proved to be quite a potent alternative in several blood cancers, including CLL and certain types of NHL; 2/ is known to favour a Th1 immune response while inhibiting the differentiation/activation of Th2 cells [and this is certainly why so many combos with many checkpoint blockers (e.g. nivolumab, monalizumab, etc.) are ongoing].

Please see the section headed “Important information” on the back page of this report.

Fig. 17: Ibrutinib – Mechanism of action



Source: Ansell et al; Bryan, Garnier & Co. ests.

5.2. ... And potentially solid tumours

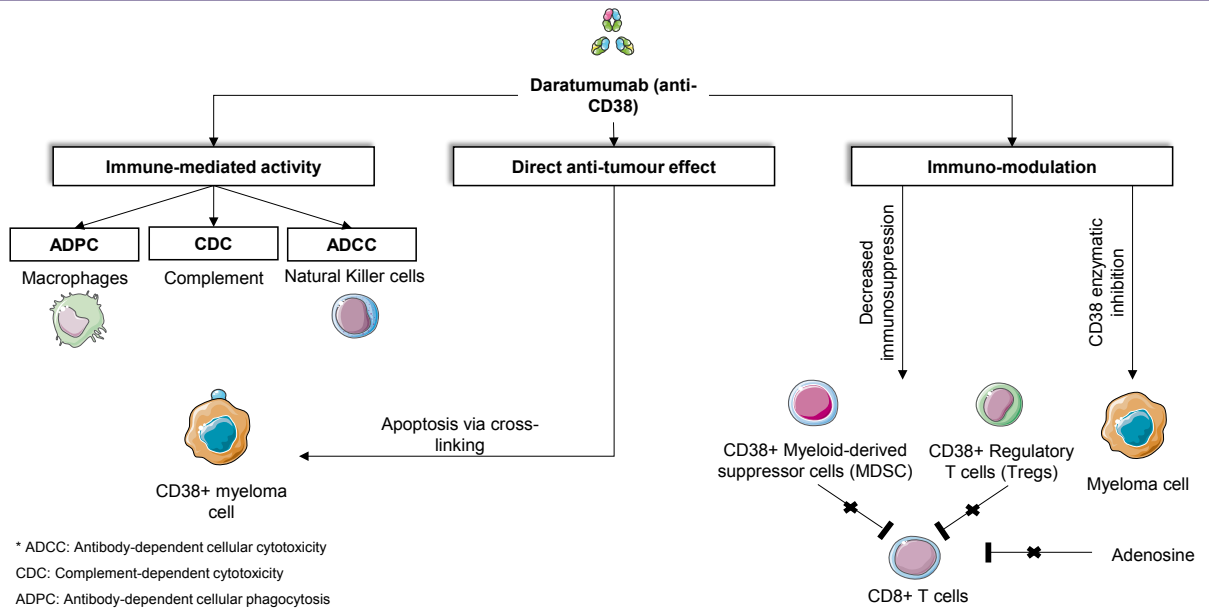
Roche is pretty excited about dara/atezo combination

Given its exhaustive mechanism of action, we consider daratumumab’s addressable market could even be enlarged to solid tumours. Its ability to induce a strong immune-modulation (increase in the CD8+/CD4+ T cells ratio, augmented production of IFN-gamma, downregulation of CD38+ T/Bregs and MDSCs – which, by the way, are apparently more immunosuppressive than CD38-ones) makes it a very good candidate for a combination with other immune-oncology agents; be it with PD-1/PD-L1 blockers or more exotic ones... And that’s why a (first) collaboration agreement has been inked between Roche and JNJ to evaluate “dara” in a given solid tumour, and as part of a combination with atezolizumab (anti-PD-L1). Apart from that, we note that the company’s excitement about this combo at our recent Oncology Day in Paris is encouraging. So far, the potential indication has not been disclosed yet, but we believe that Roche’s choice will depend on the type of tumour microenvironment (are these CD38+ immunosuppressive cells highly expressed as well as PD-L1?).

We believe AZN might be interested in testing “dara” in combination with monalizumab

Going forward, we do think other big pharmas might interested in testing their I-O agents (excluding PD-1/PD-L1 ones) along with this first/best-in-class CD38 antibody. Among others, AstraZeneca is a name that particularly stands out as: 1/ we see strong synergies between daratumumab and a novel compound like monalizumab (an anti-NKG2A co-developed with Innate Pharma – See [here](#) for further details) which, by the way, are pretty much the same as we could anticipate with PD-1 inhibitors; 2/ we believe that “mona” could be an interesting candidate both in solid and liquid tumours.

Fig. 18: Daratumumab – Mechanism of action



Source: Genmab; Bryan, Garnier & Co. ests.

Price Chart and Rating History

Genmab



Ratings

Date	Ratings	Price
10/11/15	BUY	DKK711.5

Target Price

Date	Target price
13/06/16	Under review
19/05/16	DKK1450
20/04/16	DKK1350
05/04/16	DKK1225
31/03/16	DKK1300
11/12/15	DKK1170
24/11/15	DKK1090
17/11/15	DKK1100
10/11/15	DKK870

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Stock rating

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NEUTRAL	Opinion recommending not to trade in a stock short-term, neither as a BUYER or a SELLER, due to a specific set of factors. This view is intended to be temporary. It may reflect different situations, but in particular those where a fair value shows no significant potential or where an upcoming binary event constitutes a high-risk that is difficult to quantify. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.
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Distribution of stock ratings

BUY ratings 56.5%

NEUTRAL ratings 34%

SELL ratings 9.5%

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