

BeiGene (BGNE US)

R&D Day takeaways: solidifying leadership in haematology with three synergistic BIC molecules

BGNE hosted its 2023 R&D Day on 18 Jul (slides [link](#)). The Company highlighted 3 major synergetic assets in haematology, Brukinsa (BTKi), sonrotoclax (BCL2i) and BGB11673 (BTK CDAC). With superior efficacy and safety shown in H2H and multiple pivotal trials, Brukinsa has been widely approved globally for multiple indications, including CLL/SLL, WM, MCL, MZL and potentially FL, and is the backbone of the Company's haematology franchise.

- **Ph3 trial of sonrotoclax to be initiated.** Sonrotoclax is a potential BIC BCL2 inhibitor with differentiated profiles. In the Ph1/2 study, in 56 efficacy evaluable treatment-naïve (TN) CLL/SLL patients receiving sonrotoclax + Brukinsa, the ORR reached 100% (CR 26.8%), and in the patients with at least 3 post-baseline response assessments (n=37), the CR reached 35%. In 20 patients with 7-month follow-up (320mg dose), 65% of patients showed uMRD. No lab or clinical TLS was reported during the combo treatment. Based on the promising data, BGNE is initiating a Ph3 study to test the PFS superiority of sonrotoclax + Brukinsa fixed duration (12 month) vs venetoclax + obinutuzumab in TN CLL, with FPI expected by end-2023. In a Ph3 study, with a median follow-up of 28.1 months, venetoclax + obinutuzumab showed 49.5% CR, 76% uMRD in peripheral blood and 57% uMRD in bone marrow 3 months after completion of treatment ([link](#)). Already approved in the EU, with a median follow up of 27.7 months, venetoclax + ibrutinib demonstrated 38.7% CR, 55% uMRD in peripheral blood and 52% uMRD in bone marrow ([link](#)). We think sonrotoclax + Brukinsa delivered promising efficacy in preliminary cross-trial comparisons with a short period of follow-up time. Besides TN CLL, sonrotoclax mono is assessed in potential pivotal Ph2 trials for post-BTKi CLL/SLL, MCL and WM, and the asset is also in Ph1/2 trials for AML/MDS and MM with t(11,14).
- **BTK-CDAC to first target BTKi-resistant patients.** BGB11673 (BTK-CDAC) is mutation agnostic and is positioned to overcome resistance to covalent and noncovalent BTKi. In a Ph1 study, for the 21 patients with B-cell malignancies pre-treated with BTKi/BCL2i, the ORR reached 62%, and no hypertension or atrial fibrillation was observed. The asset is currently at Ph1 dose escalation stage with enrolment in potential pivotal expansion cohorts starting in 2024.
- **Broad solid tumour pipelines with FIC/BIC potentials.** Tislezumab (PD-1) has become the best-selling PD-1 mAb in China with largest number of indication approved and wide NRDL coverage. BGNE has rich solid tumour pipelines in Ph2 trials including TIGIT, LAG3, TIM3, OX40, HPK1, and several innovative molecules to enter clinic in 2H23, including CCR8, DGKζ, PVRIG, and CDK4. Especially, the CDK4 inhibitor showed potent efficacy and improved tolerability in preclinical studies. 7 assets with FIC/BIC potentials in the lung cancer portfolio may enter clinic next year, including EGFR CDAC, PanKRAS inhibitor, B7-H3 ADC, Claudin6/CD3, etc.
- **Maintain BUY.** BGNE targets to bring 15+ molecules to clinic over the next 18 months. We like the innovation potential of BGNE. To factor in the changes in development plan of ociperlimab (TIGIT), we revised our DCF-based TP from US\$315.68 to US\$291.01 (WACC: 9.14%, terminal growth rate: 3.0%).

Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (US\$ mn)	1,176	1,416	2,370	3,024	4,390
Net profit (US\$ mn)	(1,413)	(2,004)	(1,284)	(885)	78
EPS (Reported) (US\$)	(15.23)	(19.43)	(12.17)	(8.39)	0.73
R&D expenses (US\$ mn)	(1,459)	(1,641)	(1,837)	(1,929)	(1,929)
CAPEX (US\$ mn)	(263)	(325)	(300)	(100)	(100)

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price	US\$291.01
(Previous TP)	US\$315.68)
Up/Downside	50.7%
Current Price	US\$193.15

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Stock Data

Mkt Cap (US\$ mn)	20,546
Avg 3 mths t/o (US\$ mn)	46.3
52w High/Low (US\$)	280.62/124.46
Total Issued Shares (mn)	97

Source: FactSet

Shareholding Structure

Amgen	19.4%
Baker Bros	12.1%

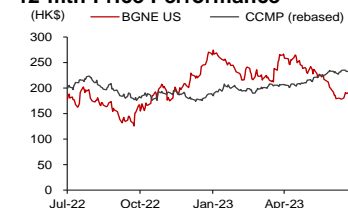
Source: FactSet

Share Performance

	Absolute	Relative
1-mth	-3.5%	-8.0%
3-mth	-25.3%	-36.7%
6-mth	-29.6%	-46.8%

Source: FactSet

12-mth Price Performance



Source: FactSet

Related report:

- Improving cost efficiency with rapid sales growth ([link](#)) – 8 May 2023
- Expect strong sales in 2023 driven by the US approval of zanubrutinib in CLL ([link](#)) – 1 Mar 2023
- Strong sales momentum maintained in 3Q22 ([link](#)) – 11 Nov 2022
- Superior PFS vs ibrutinib in r/r CLL further supports the best-in-class potential of zanubrutinib ([link](#)) – 14 Oct 2022
- Strong sales continued in 2Q22 ([link](#)) – 8 Aug 2022
- Positive on the US BLA approval of tislelizumab despite the deferral ([link](#)) – 18 Jul 2022
- Harvest season for a global leading biopharma company ([link](#)) – 17 Jun 2022

Figure 1: Cross-trial comparison of trials in treatment-naïve CLL

	sonrotoclast+Brukinsa	venetoclast+obinutuzumab vs chlorambucil+obinutuzumab	Ibrutinib+Venetoclast vs chlorambucil+obinutuzumab
Trial ID	BGB-11417-101, Ph1	NCT02242942, Ph3	NCT03462719, Ph3
Patient number	94	432	211
Follow up period (months)	8.5	28.1	27.7
CR	35% (n=37)	49.5% vs 23.1%	38.7% vs 11.4%
uMRD in peripheral blood		75.5% vs 35.2%	54.7% vs 39.0%
uMRD in bone marrow	65% (n=20)	56.9% vs 17.1%	51.9% vs 17.1%
AEs (grade≥3)	35% (n=79)	78.8% vs 76.6%	75.5% vs 69.5%
Source	Link	Link	Link

Source: Pubmed, CMBIGM. Notes: uMRD data for sonrotoclast+Brukinsa was at 7 months during the treatment, while for the other two trials above, the uMRD data were at 3 months after completion of treatment.

Figure 2: Risk-adjusted DCF valuation

DCF Valuation (US\$ mn)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
EBIT	(1,314)	(894)	92	776	1,805	1,942	2,845	3,494	3,984	4,114	4,200	4,238	4,372
Tax rate	0%	0%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
EBIT*(1-tax rate)	(1,314)	(894)	79	659	1,534	1,651	2,418	2,970	3,386	3,497	3,570	3,602	3,716
+ D&A	83	84	86	87	88	89	89	90	91	92	92	93	93
- Change in working capital	(291)	(196)	(297)	(202)	(285)	(24)	(222)	(152)	(107)	(14)	(3)	9	(17)
- Capex	(300)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
FCFF	(1,822)	(1,105)	(232)	444	1,236	1,615	2,185	2,808	3,270	3,474	3,558	3,604	3,692
Terminal value													61,949
PV of enterprise (US\$ mn)	28,489												
Net debt (US\$ mn)	(2,210)												
Equity value (US\$ mn)	30,700												
No. of ADS (mn)	105												
DCF per ADS (US\$)	291.01												
Terminal growth rate	3.0%												
WACC	9.14%												
Cost of Equity	12.0%												
Cost of Debt	4.5%												
Equity Beta	0.9												
Risk Free Rate	3.0%												
Market Risk Premium	10.0%												
Target Debt to Asset ratio	35.0%												
Effective Corporate Tax Rate	15.0%												

Source: CMBIGM estimates

Figure 3: Sensitivity analysis (US\$)

Terminal growth rate	WACC				
	8.14%	8.64%	9.14%	9.64%	10.14%
4.0%	429.76	374.28	329.86	293.54	263.33
3.5%	394.11	347.12	308.71	276.78	249.85
3.0%	365.41	324.78	291.01	262.55	238.27
2.5%	341.79	306.07	275.97	250.31	228.19
2.0%	322.02	290.19	263.05	239.67	219.36

Source: CMBIGM estimates

Figure 4: CMBIGM estimates revision

US\$ mn	New			Old			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	2,370	3,024	4,390	2,383	3,333	4,480	-1%	-9%	-2%
Gross Profit	1,955	2,439	3,550	1,966	2,746	3,635	-1%	-11%	-2%
Operating Profit	(1,314)	(994)	42	(1,304)	(687)	127	NA	NA	-67%
Net profit	(1,284)	(885)	78	(1,273)	(575)	154	NA	NA	-50%
EPS (US\$ per ADS)	(12.17)	(8.39)	0.73	(12.18)	(5.50)	1.47	NA	NA	-50%
Gross Margin	82.49%	80.65%	80.88%	82.48%	82.39%	81.14%	+0.01 ppt	-1.74 ppt	-0.26 ppt

Source: Company data, CMBIGM estimates

Figure 5: CMBIGM estimate vs consensus

US\$ mn	CMBIGM			Consensus			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	2,370	3,024	4,390	2,169	2,906	3,847	9%	4%	14%
Gross Profit	1,955	2,439	3,550	1,777	2,399	3,237	10%	2%	10%
Operating Profit	(1,314)	(994)	42	(1,340)	(914)	(200)	N/A	N/A	N/A
Net Profit	(1,284)	(885)	78	(1,302)	(894)	(236)	N/A	N/A	N/A
EPS (US\$ per ADS)	(12.17)	(8.39)	0.73	(12.5)	(8.5)	(2.6)	N/A	N/A	N/A
Gross Margin	82.49%	80.65%	80.88%	81.95%	82.54%	84.14%	+0.84 ppt	+0.56 ppt	-1.69 ppt

Source: Company data, Bloomberg, CMBIGM estimates

Financial Summary

INCOME STATEMENT	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (US\$ mn)						
Revenue	309	1,176	1,416	2,370	3,024	4,390
Cost of goods sold	(71)	(165)	(286)	(415)	(585)	(839)
Gross profit	238	1,011	1,129	1,955	2,439	3,550
Operating expenses	(1,896)	(2,450)	(2,919)	(3,269)	(3,433)	(3,508)
SG&A expense	(600)	(990)	(1,278)	(1,431)	(1,503)	(1,578)
R&D expense	(1,295)	(1,459)	(1,641)	(1,837)	(1,929)	(1,929)
Others	(1)	(1)	(1)	(1)	(1)	(1)
Other income	39	0	(171)	30	109	49
Pre-tax profit	(1,618)	(1,439)	(1,961)	(1,284)	(885)	91
Income tax	18	25	(43)	0	0	(14)
Minority interest	(4)	0	0	0	0	0
Net profit	(1,601)	(1,413)	(2,004)	(1,284)	(885)	78
Adjusted net profit	(1,597)	(1,413)	(2,004)	(1,284)	(885)	78

BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (US\$ mn)						
Current assets	4,961	7,614	5,207	3,820	3,077	3,373
Cash & equivalents	1,382	4,376	3,870	2,083	1,487	1,254
Account receivables	60	483	173	481	688	1,003
Inventories	89	243	282	375	520	735
Financial assets at FVTPL	3,269	2,242	665	665	165	165
Other current assets	160	271	217	217	217	217
Non-current assets	640	1,032	1,172	1,384	1,399	1,414
PP&E	358	588	846	1,063	1,078	1,093
Deferred income tax	66	110	0	0	0	0
Intangibles	5	47	41	41	41	41
Other non-current assets	211	287	286	280	280	280
Total assets	5,601	8,646	6,379	5,204	4,477	4,786
Current liabilities	1,075	1,600	1,469	1,577	1,735	1,967
Short-term borrowings	335	428	329	329	329	329
Account payables	232	262	295	404	561	793
Tax payable	20	21	25	25	25	25
Other current liabilities	488	888	820	820	820	820
Non-current liabilities	656	803	527	527	527	527
Long-term borrowings	184	202	209	209	209	209
Deferred income	0	220	42	42	42	42
Other non-current liabilities	473	381	276	276	276	276
Total liabilities	1,732	2,403	1,996	2,105	2,262	2,494
Share capital	7,415	11,191	11,541	11,541	11,541	11,541
Retained earnings	(3,553)	(4,966)	(7,080)	(8,364)	(9,249)	(9,172)
Other reserves	7	18	(77)	(77)	(77)	(77)
Total shareholders equity	3,869	6,243	4,383	3,099	2,214	2,292
Minority interest	0	0	0	0	0	0
Total equity and liabilities	5,601	8,646	6,379	5,204	4,477	4,786

CASH FLOW	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (US\$ mn)						
Operating						
Profit before taxation	(1,618)	(1,439)	(1,961)	(1,284)	(885)	91
Depreciation & amortization	32	46	66	83	84	86
Tax paid	18	25	(43)	0	0	(14)
Others	285	68	441	(291)	(196)	(297)
Net cash from operations	(1,283)	(1,299)	(1,497)	(1,492)	(996)	(133)
Investing						
Capital expenditure	(118)	(263)	(325)	(300)	(100)	(100)
Acquisition of subsidiaries/ investments	(5,690)	(2,191)	(17)	0	0	0
Net proceeds from disposal of short-term investments	2,751	3,147	1,564	0	500	0
Others	(112)	(52)	(144)	0	0	0
Net cash from investing	(3,168)	641	1,077	(300)	400	(100)
Financing						
Net borrowings	434	423	351	0	0	0
Proceeds from share issues	4,232	3,443	0	0	0	0
Others	537	(229)	(370)	0	0	0
Net cash from financing	5,203	3,637	(19)	0	0	0
Net change in cash						
Cash at the beginning of the year	621	1,390	4,383	3,875	2,083	1,487
Exchange difference	18	14	(69)	0	0	0
Cash at the end of the year	1,390	4,383	3,875	2,083	1,487	1,254
GROWTH	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Revenue	(27.9%)	280.8%	20.4%	67.4%	27.6%	45.1%
Gross profit	na	324.6%	11.7%	73.1%	24.8%	45.6%
PROFITABILITY	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Gross profit margin	77.1%	86.0%	79.8%	82.5%	80.7%	80.9%
Adj. net profit margin	(517.0%)	(120.2%)	(141.5%)	(54.2%)	(29.3%)	1.8%
Return on equity (ROE)	(66.3%)	(28.0%)	(37.7%)	(34.3%)	(33.3%)	3.4%
GEARING/LIQUIDITY/ACTIVITIES	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Net debt to equity (x)	(1.1)	(1.0)	(0.9)	(0.7)	(0.5)	(0.4)
Current ratio (x)	4.6	4.8	3.5	2.4	1.8	1.7
Receivable turnover days	77.6	84.3	84.6	84.6	84.6	84.6
Inventory turnover days	304.4	367.3	334.4	329.4	324.4	319.4
Payable turnover days	915.5	547.1	355.0	355.0	350.0	345.0
VALUATION	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
P/E	na	na	na	na	na	265.0
P/E (diluted)	na	na	na	na	na	265.0
P/B	58.3	64.1	55.3	86.2	120.6	116.5

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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