

BeiGene (BGNE US)

ASH takeaways: Three synergistic haematology BIC/FIC molecules showing promising data

- **Zanubrutinib continued to show PFS superiority vs ibrutinib with longer follow-up.** In the ALPINE study, the 36-month PFS rate of zanu reached 64.9% vs ibrutinib's 54.8% (HR=0.68, p=0.001, remained statistically significant). The CR/CRi rate continued to improve with longer follow-up and reached 10.4% in the zanu arm at month 48 (vs 7.1% with ibrutinib). The 36-month OS rates were 82.5% vs 79.6% in the two arms (HR=0.75, p=0.098, not statistically significant). Since CLL patients usually survive for a long time (up to 20 years), it is hard to achieve an OS significance in a short follow-up period, while the numerically better OS rate of zanu represents its superiority vs ibrutinib. Moreover, additional studies presented at ASH indicated that zanu provided meaningful benefits for acalabrutinib-intolerant patients and for patients switching from ibrutinib, which could lead to zanu's global market share gain, in our view.
- **Sonrotoclax (BCL2i) could be a game changer.** Sonrotoclax is a potential BCL2 inhibitor for TN CLL/SLL. In a Ph1/2 study, for the 32 TN CLL patients receiving sonrotoclax (320mg, Ph3 dose) + zanu (S+Z) (ASH [link](#)), the blood uMRD rate reached 78% by week 24 (n=32), and increased to 100% (n=3) by week 48. In comparison, venetoclax + ibrutinib (V+I) achieved 55%/57% blood uMRD at month 15 for unfit/fit pts in GLOW study ([link](#))/CAPTIVATE study ([link](#)). Venetoclax + obinutuzumab (V+O) achieved 87%/76% blood uMRD at month 15 for fit/unfit pts in CLL13 study ([link](#))/CLL14 study ([link](#)). The PFS benefits of V+O and V+I are largely at the same level (see table below). We think the higher uMRD rate of V+O was mainly contributed by obinutuzumab (CD20 mAb). In cross-trial comparison, we think it is more appropriate to compare the results of S+Z with V+I due to the same MoA. S+Z's higher blood uMRD rate (78% by week 24, 100% by week 48) vs V+I's 55%/57% at month 15 could lead to better PFS benefit, in our view. The CR rate of S (320mg)+Z by week 24 was 25%, which was immature due to the incompleteness of the invasive bone marrow tests at 9.7 months of follow up. On the safety side, S+Z was well-tolerated, with no TLS and no cardiac toxicity observed. The SAE rate of S+Z (n=107) was 14%, which was much lower than that of 45% in V+O's CLL13 trial. The Gr≥3 AE rate was 40% for S+Z, much better than that of 79% in V+O's CLL14 trial and 52% in V+I's GLOW trial. BeiGene has initiated a global Ph3 study to evaluate the PFS superiority of S+Z vs V+O in TN CLL with the FPI starting shortly. Once successful, the oral combo of S+Z could be a game changer for the CLL first-line treatment, in our view. With full global rights in the S+Z combo, BeiGene could maximize its income from the two blockbuster drugs.
- **BTK-CDAC to solve the BTKi-resistant issues.** BGB11673 (BTK-CDAC) has the potential to overcome covalent/noncovalent BTK resistance mutations such as C481, T474, and L528W. In a Ph1 study, for the 28 evaluable patients with B-cell malignancies pre-treated with BTKi/BCL2i, the ORR reached 57% (1 patient had CR), demonstrating good clinical responses in the heavily pre-treated patients. No hypertension or atrial fibrillation was observed. BeiGene will start potentially pivotal Ph2 trial of BTK-CDAC in 1H24E for post-BTKi R/R MCL and pivotal Ph3 studies for post-BTKi MCL and CLL in 2024E.
- **Maintain BUY.** We maintain our DCF-based TP unchanged at US\$295.67 (WACC: 10.4%, terminal growth rate: 2.0%).

Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (US\$ mn)	1,176	1,416	2,506	3,236	4,778
Net profit (US\$ mn)	(1,413)	(2,004)	(749)	(741)	393
EPS (Reported) (US\$)	(15.23)	(19.43)	(7.27)	(7.19)	3.82
Consensus EPS (US\$)	na	na	(6.74)	(6.53)	(1.78)
R&D expenses (US\$ mn)	(1,459)	(1,641)	(1,755)	(1,843)	(1,843)
CAPEX (US\$ mn)	(263)	(325)	(500)	(200)	(100)

Source: Company data, Bloomberg, CMBIGM estimates

BUY (Maintain)

Target Price US\$295.67
 (Previous TP) US\$295.67)
Up/Downside 64.6%
Current Price US\$179.58

China Healthcare

Jill WU, CFA

(852) 3900 0842

jillwu@cmbi.com.hk

Andy WANG

(852) 3657 6288

andywang@cmbi.com.hk

Stock Data

Mkt Cap (US\$ mn)	18,502.0
Avg 3 mths t/o (US\$ mn)	25.1
52w High/Low (US\$)	274.50/158.67
Total Issued Shares (mn)	103.0

Source: FactSet

Shareholding Structure

Amgen	17.7%
Baker Bros	11.0%

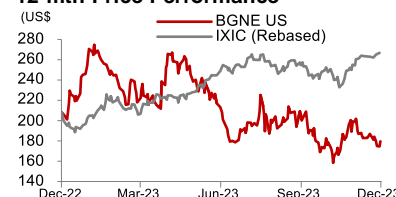
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Share Performance

	Absolute	Relative
1-mth	-9.7%	-13.9%
3-mth	-10.2%	-14.1%
6-mth	-15.4%	-20.4%

Source: FactSet

12-mth Price Performance



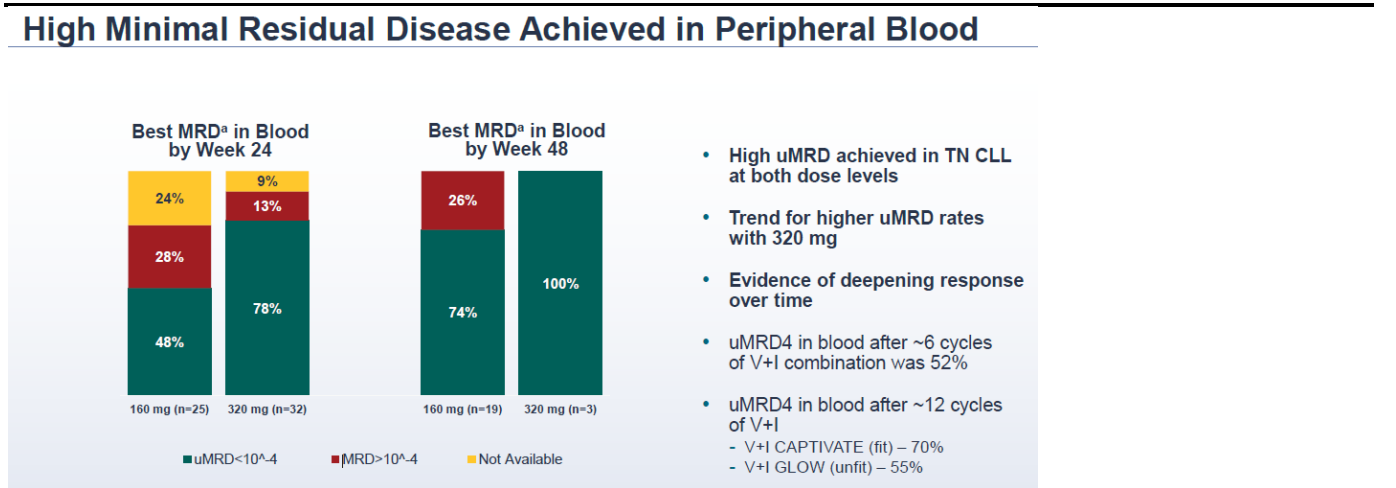
Source: FactSet

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

Trial ID	BGB-11417-101, Ph1	CLL13, Ph3	CLL14, Ph3	CAPTIVATE, Ph2	GLOW, Ph3
Base line (1L CLL)	fit and unfit; 26% pts with del(17p) and/or TP53mut; median age 62	fit pts without TP53 aberrations; median age 62	13.8% pts with TP53 deletion; median age 72	fit/young; median age 60	unfit; median age 71
Regimen	sonrotoclax+ zanubrutinib (S+Z)	venetoclax+ obinutuzumab (V+O, n=229); (V+O arm: 12 cycles)	venetoclax+ obinutuzumab vs chlorambucil+ obinutuzumab; (V+O vs C+O) (both arms: 12 cycles)	ibrutinib+ venetoclax (V+I) (3 cycles ibrutinib lead-in, then 12 cycles I+V)	ibrutinib+ venetoclax vs chlorambucil+ obinutuzumab (V+I vs C+O); (IV arm: 3 cycles ibrutinib lead-in, then 12 cycles I+V)
Primary endpoint	Safety	uMRD in blood at month 15, PFS	PFS	CR rate	PFS
Patient number	56 (320mg), 51 (160mg)	229	216 vs 216	159	105 vs 106
PFS rate	9.7-month PFS rate: 100%	36-month PFS rate: 87.7% (HR=0.42) 48-month PFS rate: 81.8%	24-month PFS rate: 88.2% vs 64.1% 48-month PFS rate: 74.0% vs 35.4%	24-month PFS rate: 95% 36-month PFS rate: 88% 48-month PFS rate: 79%	24-month PFS rate: 84.4% vs 44.1%; 30-month PFS rate: 80.5% vs 35.8%; 42-month PFS rate: 74.6% vs 24.8%
Follow up period (for uMRD, CR below)	9.7 months	38.8 months	28.1 months	27.9 months	27.7 months
uMRD in peripheral blood	320mg: 78% (month 6, n=32); 100% (month 12, n=3) 160mg: 48% (month 6, n=25); 74% (month 12, n=19)	86.5% (month 15) 84.3% (month 12) 88.6% (month 9)	75.5% vs 35.2% (month 15)	57% (month 15)	54.7% vs 39.0% (month 15)
uMRD in bone marrow	NA	72.5% (month 15)	56.9% vs 17.1% (month 15)	52% (month 15)	51.9% vs 17.1% (month 15)
CR*	320mg: 25% (month 6, n=32); 33% (month 12, n=3) 160mg: 16% (month 6, n=25); 42% (month 12, n=19)	56.8% (month 15)	49.5% vs 23.1% (month 15)	48% (month 15)	38.7% vs 11.4% (month 15)
Adverse events grade 3 or greater	40%		78.8% vs 76.6%		75.5% vs 69.5%
Grade 3 infection		13.2%	17.5% vs 15.0%		17.0% vs 11.5%
Serious AE	14%	44.7%			
Source	Link	Link	Link	Link	Link

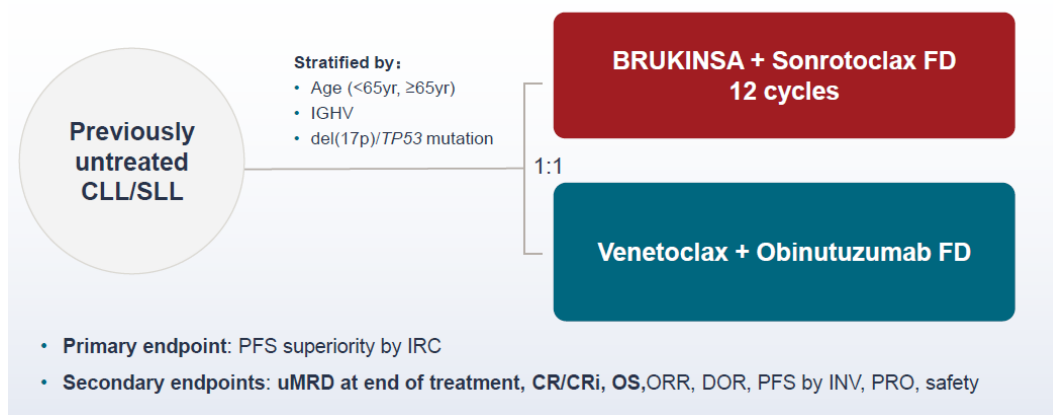
Source: ASH meeting, Pubmed, CMBIGM

Note: *BeiGene's CR rate was not mature at 9.7 months of follow up, as the invasive bone marrow tests to confirm uMRD in bone marrow and CR were not completed.

Figure 2: Sonrotoclax + zanubrutinib achieved high blood uMRD in TN CLL patients

Source: Company data, CMBIGM

Figure 3: Study design of global Ph3 trial of Sonrotoclax + zanubrutinib in TN CLL



Source: Company data, clinicaltrials.gov (NCT06073821), CMBIGM

Figure 4: Risk-adjusted DCF valuation

DCF Valuation (US\$ mn)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
EBIT	(807)	(779)	441	1,467	2,818	2,771	3,763	4,495	5,085	5,309	5,378	5,451	5,578
Tax rate	0%	0%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
EBIT*(1-tax rate)	(807)	(779)	375	1,247	2,395	2,355	3,198	3,820	4,323	4,513	4,571	4,633	4,742
+ D&A	98	105	105	104	104	104	104	103	103	103	103	102	102
- Change in working capital	(325)	(222)	(328)	(272)	(349)	25	(242)	(173)	(135)	(39)	1	(0)	(15)
- Capex	(500)	(200)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
FCFF	(1,533)	(1,096)	52	979	2,051	2,384	2,960	3,651	4,191	4,477	4,575	4,636	4,729
Terminal value													57,398
PV of enterprise (US\$ mn)	27,606												
Net debt (US\$ mn)	(2,856)												
Equity value (US\$ mn)	30,463												
No. of ADS (mn)	103												
DCF per ADS (US\$)	295.67												
Terminal growth rate	2.0%												
WACC	10.40%												
Cost of Equity	13.5%												
Cost of Debt	4.5%												
Equity Beta	1.00												
Risk Free Rate	3.5%												
Market Risk Premium	10.0%												
Target Debt to Asset ratio	32.0%												
Effective Corporate Tax Rate	15.0%												

Source: CMBIGM estimates

Figure 5: Sensitivity analysis (US\$)

Terminal growth rate	WACC				
	9.40%	9.90%	10.40%	10.90%	11.40%
3.0%	382.42	347.85	318.16	292.42	269.92
2.5%	364.77	333.40	306.21	282.44	261.52
2.0%	349.50	320.77	295.67	273.59	254.02
1.5%	336.16	309.64	286.32	265.67	247.28
1.0%	324.41	299.77	277.96	258.55	241.19

Source: CMBIGM estimates

Figure 6: CMBIGM estimate vs consensus

US\$ mn	CMBIGM			Consensus			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	2,506	3,236	4,778	2,461	3,020	3,938	2%	7%	21%
Gross Profit	2,119	2,682	3,982	2,011	2,534	3,326	5%	6%	20%
Operating Profit	(1,107)	(779)	441	(1,125)	(733)	(264)	NA	NA	NA
Net Profit	(749)	(741)	393	(828)	(759)	(189)	NA	NA	NA
EPS (US\$ per ADS)	(7.27)	(7.19)	3.82	(6.74)	(6.53)	(1.78)	NA	NA	NA
Gross Margin	84.56%	82.88%	83.35%	81.73%	83.90%	84.47%	+2.83 ppt	-1.02 ppt	-1.12 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	2,506	3,236	4,778
Cost of goods sold	(71)	(165)	(286)	(387)	(554)	(795)
Gross profit	238	1,011	1,129	2,119	2,682	3,982
Operating expenses	(1,896)	(2,450)	(2,919)	(3,226)	(3,460)	(3,541)
SG&A expense	(600)	(990)	(1,278)	(1,470)	(1,616)	(1,697)
R&D expense	(1,295)	(1,459)	(1,641)	(1,755)	(1,843)	(1,843)
Others	(1)	(1)	(1)	(1)	(1)	(1)
Other income	39	0	(171)	358	38	21
Pre-tax profit	(1,618)	(1,439)	(1,961)	(749)	(741)	462
Income tax	18	25	(43)	0	0	(69)
Minority interest	(4)	0	0	0	0	0
Net profit	(1,601)	(1,413)	(2,004)	(749)	(741)	393
Adjusted net profit	(1,597)	(1,413)	(2,004)	(749)	(741)	393

BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (US\$ mn)						
Current assets	4,961	7,614	5,207	4,473	3,992	4,811
Cash & equivalents	1,382	4,376	3,870	3,279	2,421	2,692
Account receivables	60	483	173	512	746	1,091
Inventories	89	243	282	349	492	696
Financial assets at FVTPL	3,269	2,242	665	115	115	115
Other current assets	160	271	217	217	217	217
Non-current assets	640	1,032	1,172	1,569	1,664	1,659
PP&E	358	588	846	1,248	1,343	1,338
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	6,042	5,656	6,470
Current liabilities	1,075	1,600	1,469	1,550	1,705	1,926
Short-term borrowings	335	428	329	329	329	329
Account payables	232	262	295	376	531	752
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	2,077	2,232	2,453
Share capital	7,415	11,191	11,541	11,871	12,071	12,271
Retained earnings	(3,553)	(4,966)	(7,080)	(7,829)	(8,570)	(8,177)
Other reserves	7	18	(77)	(77)	(77)	(77)
Total shareholders equity	3,869	6,243	4,383	3,964	3,423	4,017
Minority interest	0	0	0	0	0	0
Total equity and liabilities	5,601	8,646	6,379	6,042	5,656	6,469

CASH FLOW	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (US\$ mn)						
Operating						
Profit before taxation	(1,618)	(1,439)	(1,961)	(749)	(741)	462
Depreciation & amortization	32	46	66	98	105	105
Tax paid	18	25	(43)	0	0	(69)
Others	285	68	441	5	(22)	(128)
Net cash from operations	(1,283)	(1,299)	(1,497)	(646)	(658)	370
Investing						
Capital expenditure	(118)	(263)	(325)	(500)	(200)	(100)
Acquisition of subsidiaries/ investments	(5,690)	(2,191)	(17)	(50)	0	0
Net proceeds from disposal of short-term investments	2,751	3,147	1,564	600	0	0
Others	(112)	(52)	(144)	0	0	0
Net cash from investing	(3,168)	641	1,077	50	(200)	(100)
Financing						
Net borrowings	434	423	351	150	0	0
Proceeds from share issues	4,232	3,443	0	0	0	0
Others	537	(229)	(370)	(150)	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	3,279	2,421
Exchange difference	18	14	(69)	0	0	0
Cash at the end of the year	1,390	4,383	3,875	3,279	2,421	2,692
GROWTH	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Revenue	(27.9%)	280.8%	20.4%	77.0%	29.1%	47.7%
Gross profit	na	324.6%	11.7%	87.6%	26.6%	48.5%
PROFITABILITY	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec						
Gross profit margin	77.1%	86.0%	79.8%	84.6%	82.9%	83.4%
Adj. net profit margin	(517.0%)	(120.2%)	(141.5%)	(29.9%)	(22.9%)	8.2%
Return on equity (ROE)	(66.3%)	(28.0%)	(37.7%)	(17.9%)	(20.1%)	10.6%
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)	(0.6)	(0.6)
Current ratio (x)	4.6	4.8	3.5	2.9	2.3	2.5
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	47.1
P/E (diluted)	na	na	na	na	na	47.1
P/B	58.3	64.1	55.3	60.7	70.3	59.9

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

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CMB International Global Markets Limited

Address: 45/F, Champion Tower, 3 Garden Road, Hong Kong. Tel: (852) 3900 0888 Fax: (852) 3900 0800

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