

BeiGene, Ltd. (BGNE US) Pharmaceuticals

September 11, 2019

Terms of Service

By viewing this material you agree to the following Terms of Service. You agree that use of J Capital Research USA LLC's research is at your own risk. In no event will you hold J Capital Research USA LLC or any affiliated party liable for any direct or indirect trading losses caused by any information on this site. You further agree to do your own research and due diligence before making any investment decision with respect to securities covered herein. You represent to J Capital Research USA LLC that you have sufficient investment sophistication to critically assess the information, analysis and opinion on this site. You further agree that you will not communicate the contents of this report to any other person unless that person has agreed to be bound by these same terms of service. If you download or receive the contents of this report as an agent for any other person, you are binding your principal to these same Terms of Service. You should assume that as of the publication date of our reports and research, J Capital Research USA LLC may benefit from short positions a client has in all stocks (and/or options, swaps, and other derivatives related to the stock) and bonds covered herein, and therefore stands to realize significant gains in the event that the price of either declines. This is not an offer to sell or a solicitation of an offer to buy any security, nor shall J Capital Research offer, sell or buy any security to or from any person through this site or reports on this site. J Capital Research USA LLC is registered as an investment advisor with the SEC. If you are in the United Kingdom, you confirm that you are accessing research and materials as or on behalf of: (a) an investment professional falling within Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "FPO"); or (b) high net worth entity falling within Article 49 of the FPO. Our research and reports express our opinions, which we have based upon generally available information, field research, inferences and deductions through our due diligence and analytical process. To the best of our ability and belief, all information contained herein is accurate and reliable, and has been obtained from public sources we believe to be accurate and reliable, and who are not insiders or connected persons of the stock covered herein or who may otherwise owe any fiduciary duty or duty of confidentiality to the issuer. However, such information is presented "as is," without warranty of any kind, whether express or implied. J Capital Research USA LLC makes no representation, express or implied, as to the accuracy, timeliness, or completeness of any such information or with regard to the results to be obtained from its use. Further, any report on this site contains a very large measure of analysis and opinion. All expressions of opinion are subject to change without notice, and J Capital Research USA LLC does not undertake to update or supplement any reports or any of the information, analysis and opinion contained in them. You agree that the information on this website is copyrighted, and you therefore agree not to distribute this information (whether the downloaded file, copies / images / reproductions, or the link to these files) in any manner other than by providing the following link: https://www.jcapitalresearch.com/. If you have obtained the research of J Capital Research USA LLC in any manner other than by downloading from that link, you may not read such research without going to that link and agreeing to the Terms of Service. You further agree that any dispute arising from your use of this report and / or the J Capital Research USA LLC website or viewing the material hereon shall be governed by the laws of the State of New York, without regard to any conflict of law provisions. You knowingly and independently agree to submit to the personal and exclusive jurisdiction of the superior courts located within the State of New York and waive your right to any other jurisdiction or applicable law. The failure of J Capital Research USA LLC to exercise or enforce any right or provision of these Terms of Service shall not constitute a waiver of this right or provision. If any provision of these Terms of Service is found by a court of competent jurisdiction to be invalid, the parties nevertheless agree that the court should endeavor to give effect to the parties' intentions as reflected in the provision and rule that the other provisions of these Terms of Service remain in full force and effect, in particular as to this governing law and jurisdiction provision. You agree that regardless of any statute or law to the contrary, any claim or cause of action arising out of or related to use of this website or the material herein must be filed within one (1) year after such claim or cause of action arose or be forever barred.



Tim Murray

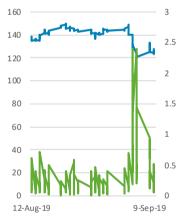
tim@jcapitalresearch.com

+61 411 046 476

BeiGene Ltd. (BGNE US)

Share Price	\$ 127.45
Market Cap (mln)	\$ 7.683.1

BeiGene (BGNE US) last share price in USD (blue, left) and volume (green, right, mln shares)



Source: Bloomberg September 11, 2019

BeiGene, Ltd. (BGNE US)

Digging a Deeper Hole

BeiGene's September 8 investor call was heavy on declarations of the company's integrity and light on facts.

In attempting to rebut our findings, BeiGene made a number of statements that are provably false. On several occasions they failed to refute our core assertions. In fact, they confirmed some of them.

The call wasn't all bad. We want to praise the company for finally disclosing that it uses an exclusive distributor for all drug sales in China, a fact that had been hidden from investors for the three and a half years the company has been listed. We also want to commend BeiGene for admitting that it has inventory of Celgene drugs in China. Since BeiGene buys from Celgene then sells all the drugs to its distributor, China Resources, offshore, any inventory in China has to have been repurchased from China Resources. That is round-tripping, plain and simple.

7. Inventories

The Company's inventory balance of \$16,242 and \$10,930 as of December 31, 2018 and 2017, respectively, consisted entirely of finished goods product purchased from Celeene for distribution in the PRC.

Source: Page F-29, 2018 10-K

There's a lot of product in inventory. The company claimed on the call that it orders several times a month. But it holds nine months of inventory. Which is it?

		As of		
	Note	June 30, 2019	December 31, 2018 5 (audited)	
		5		
		(unaudited)		
Assets				
Current assets:				
Cash and cash equivalents		918,948	712,937	
Short-term restricted cash	5	14,567	14,544	
Short-term investments	5	618,803	1,068,509	
Accounts receivable		58,108	41,056	
Unbilled receivable		_	8,612	
Inventories	6	49,048	16,242	
Propaid expenses and other current assets	12	96,206	81,942	
Total current assets		1,755,680	1,943,842	
		C	D.:C 201	

Source: BeiGene 2018 10-K

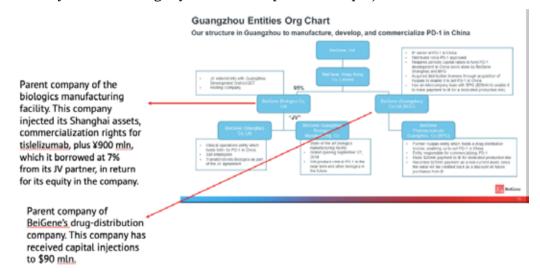
© 2019 J Capital Research Limited. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of J Capital. Use of this publication by authorized users is subject to the J Capital Authorized User Content Agreement available here. Use of this publication by non-authorized individuals is subject to the J Capital Non-Authorized User Content Agreement available here.



If we add the \$21 mln minimum purchase commitment for Celgene drugs to the \$49 mln inventory already in stock, that's over a year's supply of inventory in stock or on order.

The Shell Company: An Outright Lie

To explain heavy capital injections, CFO Howard Liang claimed that BeiGene's Guangzhou-based shell company, registered to a non-existent address, is funding construction of BeiGene's biologics factory. This is simply untrue. BeiGene Guangzhou, the company that has received heavy capital injections from its BeiGene parent, is the owner of BPG, the pharmaceutical distribution company, as is clearly shown in the company's own slide presentation. It is NOT the owner of the biologics factory and cannot legally contribute capital to that project.



Source: BeiGene investor presentation September 8, 2019, with J Capital comments

Furthermore, on the slide above, BeiGene says it lent money to BeiGene Guangzhou for a manufacturing line. On the call, they specified: "It is actually a payment for production capacity expansion at our manufacturing partner Boehringer Ingelheim."

Boehringer is BeiGene's manufacturing partner. But if the loan is for manufacturing capacity, why push the money through a drug distributor?

Tim Murray
See <u>final page</u> for disclaimers.

^{1 &}lt;a href="https://www.boehringer-ingelheim.com/BeiGene-and-Boehringer-Ingelheim-Announce-Commercial-Supply-Agreement">https://www.boehringer-ingelheim.com/BeiGene-and-Boehringer-Ingelheim-Announce-Commercial-Supply-Agreement



Misplaced IP

The slide also says that this subsidiary, BeiGene Guangzhou, is the IP owner of BeiGene's PD-1 drug, tislelizumab.

- IP owner of PD-1 in China
- Distributor once PD-1 approved
- Requires periodic capital raises to fund PD-1 development in China (work done by BeiGene Shanghai) and BPG
- Acquired distribution licenses through acquisition of Huajian to enable it to sell PD-1 in China
- Has an intercompany loan with BPG (\$25mln to enable it to make payment to BI for a dedicated production line)

Source: BeiGene presentation slide caption describing BeiGene Guangzhou Co. Ltd.

That is simply not true. Tislelizumab patents are registered to BeiGene Ltd. in the Caymans.



Copy of BeiGene's patent registration for tislelizumab. Source: China Patent Office



Chinese government websites² confirm that development rights for tislelizumab, BeiGene's PD-1 drug, are registered to BeiGene (Shanghai) Co., Ltd.



Screenshot from Ministry of Science and Technology website showing trials of BeiGene's PD-1 drug, tislelizumab, run by the drug's legal owner, BeiGene Shanghai

In 2017, BeiGene injected all the equity interests of BeiGene Shanghai into BeiGene Biologics, the company that is a joint venture with the Guangzhou government. The development rights to tislelizumab went to BeiGene Guangzhou Biologics with the rest of the Shanghai assets.

In the fourth quarter of 2017, BeiGene HK and BeiGene Biologics entered into an Equity Transfer Agreement to transfer 100% of the equity interest of BeiGene Shanghai into BeiGene Biologics. The transfer consideration for the purchased interests under this Equity Transfer Agreement is the fair value of the 100% equity of BeiGene Shanghai appraised by a qualified Chinese valuation firm under the laws of the PRC. Upon the transfer of equity in BeiGene Shanghai BeiGene HK's equity interest in BeiGene Shanghai became 95%. As of December 31, 2018, the Company and GET held 95% and 5% equity interests in BeiGene Biologics, respectively.

Source: Page F-30, BeiGene's 2018 10-K

This is not only a legal consequence of the asset transfer but is also the reason BeiGene Shanghai was valued at ¥1 bln when the assets were injected. Those development rights are what BeiGene's partner, GET, valued highly in forming the joint venture.

Auditors: Another Lie

An analyst on the September 8 call asked CFO Liang to confirm that the same Ernst & Young team audits European, U.S., and Chinese operations. Liang said yes. This is patently untrue. The Chinese auditor is an affiliate of Ernst & Young called E&Y Hua Ming. The audit team cannot legally or organizationally be the same audit team for all territories. BeiGene warns in its 10-K that its Chinese auditor, unlike its auditor in other territories, is not subject to PCAOB inspection:

Tim Murray
See <u>final page</u> for disclaimers.

² For example, MOST from 2019: http://www.most.gov.cn/bszn/new/rlyc/jgcx/201903/
t20190308 145464.htm The Guangzhou Bureau of Personnel in May 2018: https://rencai.gov.cn/lndex/detail/14157



The audit report included in our Annual Report on Form 10-K filed with the SEC is prepared by auditors who are not inspected fully by the Public Company Accounting Oversight Board, or the PCAOB, and, as such, investors are deprived of the benefits of such inspection.

As an auditor of companies that are publicly traded in the United States and a firm registered with the PCAOB, Ernst & Young Hua Ming LLP is required under the laws of the United States to undergo regular inspections by the PCAOB. However, because we have substantial operations within the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese government authorities, our auditor and its audit work is not currently inspected fully by the PCAOB.

Source: Page 81, 2018 10-K

"Everyone accounts for R&D that way"

BeiGene claimed that budgeting R&D (including spending on clinical trials—which the company says is 75% of the cost) on a company-wide basis rather than by drug program is "industry practice." This is completely untrue, and in fact ludicrous. We refer BeiGene management to the many Google results for "clinical trial budgeting," which offer highly detailed templates for costs by drug program. There are many pieces of software commercially available that BeiGene might want to look into. Oracle's ClearTrial and IBM's Clinical Trial Management System might be a good start; each offers detailed budgeting by drug program.

BO	TEN	Clinical Trial Office Billing Grid Template											
	Shady Title: Phane: Sponsor: Protocol Varsion Date: Shady Duration:						Trial	Inform	sation				
Ende	Name	CPT Codes	the Q6/Q1 modifiers if the items or services to the right will be charged to SOC	Screen	CIVI	CZVI	CIVI	ONI	cava	CEVE	вот	PVI	comments
1904	Adverse Events Assessment	N/A		w	W	-	-	w	50	N.	W	w	This will be past for by the sporeur.
99200	Initial Volt w Hot, Phys & Vitals	99200		107		-	-	-	-	_	-	_	This will be past for by the sponsor. This will be past for by the sponsor.
*260	Informed Consent Process Inclusion/Exclusion Orboria	N/A N/A		10	10	-	-	-	-	_	-	-	This will be past for by the sporture
	Follow-Up York or Phys./Yitals	99212	QS for the SOC procedures		NO.	w	100		100	50*	900		for the D.C. reads, polytical examp at that engages, appear reaconable and reseasously for the contact triumagement of the patient and its reunities for polential complications, related to the clusty drugs.
9460	Kandonisation	M/A	F		100								Coverage automated in INCO 218.1 This will be part for by the opposite.
	Urine Prognamy Test, Qualitative	84763		60	10		- 44		68		60		This will be paid for by the oponeur.
99213	Brief Violt w/ Vitals	99215									15		This will be past for by the sponsor
10000	EOS w/ Interpret, & Report	93000		100	100	-	-	57	57	57	100		This will be past for by the openion. If young plug his violent contents and accounty to the content corn page are provided with
8627	Ronogram (CRC) w/ Flats. & No Deff	89827	QE for the SOC procedures	59	900	900	900	900	900	900	900		ploof sells, readrophil and publish levels during on-breakment. Therefore, for the visits behind DCC, for look appear resounded and recoverage to detect, recenter and tred potential business associated and objects constructed that had been also also as one company.
80053	Comprehensive Hatabolic Fanali Gluccos, Sodium, Potassium, BUR, Creatinina, AST, ALT, y-GT,	80053	Qs for the SOC procedures	u	soc	900	900	500	soc	soc	soc		The door dog that include Science is the Selecting to an extension on one garge 1, the extension is businessed in their entrytonic science 37.4, Act, p. of the Selection Selection is senting to the selection of the selection o
80615	Lactures Dehydrogenase (LD, LDH)	83615	QL for the SOC procedures	SP.	900	P	SOC		800	P	soc		For the risks labeled EOC, the facts appear resoundate and necessary to defect, receiver and lead potential toxolines associated with study drugso. Coverage appeared by MCD STL 1.
NEA	Spec Handling (simple), Dry Ice-Leb Supplier 18th Pack, Shipping	N/A		50	10	100							This will be paid for by the oponeur.
8006	1006	N/A		SP .	10°	W	- 9	9	50	50	SP	W	This will be paid for by the sponsor.
	Tumor Assessment:	$\overline{}$		_									PARTICIPATION AND A TOP BY AN IN PROPERTY OF THE PARTY TO
70651	MRC- Brain	70551	QE for the SOC procedures	900							INV	INV	per total publiches, page — Sean Mit can be performed at pro-treatment. Therefore, if it is measurable to these the publiches hearance per for the lowering old and involve the operator for the bases, at 0.07 and 0.07. Coverage approved by MCO (0.01). New MCON (publiches, page — Seal of the PMT of the previously about can be performed at pre-
71250	CT- chest	71250	QE for the SOC procedures	900							INV	INV	and extend published, page then for the PFF first previously done on the performer if pre- partners. The manufacture to be not be patients, required any first because any first because and and performing required for the energy of SFF, post Fig. Component accounts to SFC SSE have at the
75470	CT- brain	70470	QE for the SOC procedures	900							IMV	200V	we work glastics, page, body of a Met through position distinct as patients of per redirect. Therefore, it is resounded to have the patient's requiring pay for the foresting stall and receive the assessor the the soons of ECT and ECI. Occurring approved to MCC 211.
878	Tumor Response Critoria, RECIST WHO	N/A		57							SP	57	This will be paid for by the sponsor.
	Tumor Biopsy (Fesh))			100									This will be past for by the sponsor.
	Tumor Activing			10"									This will be part for by the oponeur.
Medication Dispensing	Medication Dispensing	N/A		10"	10	100		-	87	97			This will be paid for by the oponeur.
10,60	Collection of Unused Study Drug	N/A			100	- 100	- 10	-	57	- 50	37		This will be paid for by the uponeur
190/80	gos.	N/A		S.P		LP.	- 10	- 10	SP	5.0	SP	SP.	This will be past for by the oponeur.
	Study Key Codes property and property of the con- model to be white will be compare Francial Analyst Signature CTO Director Signature	IP BIOS Mo											

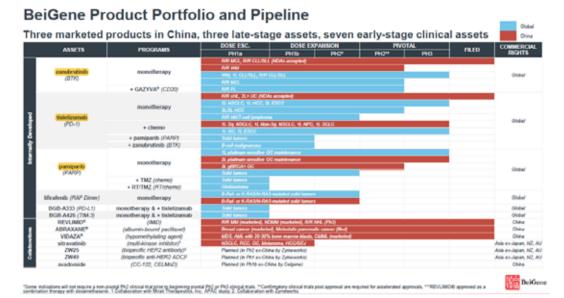
Source: "Clinical Trial Budgeting and Negotiation March 2018," Boston Medical

The components of income (loss) before income taxes are as follows:

	Year Ended December 31,			
2018	2017	2016		
s	s	s		
(130,552)	(59,590)	(7,352)		
15,036	6,928	678		
(574,313)	(38,402)	(112,489)		
(689,829)	(91,064)	(119,163)		



What about the chart displayed in the BGNE call presentation showing the company's R&D spend vs the number of Phase 3 clinical trials?



Source: BeiGene call presentation September 9, 2019

Showing R&D spend versus the number of clinical trials is a complete joke. Just to choose a few issues, the company's chart failed to differentiate critical areas:

- ► The size of comparative peer-group trials. Hey, why not double the number of trials and halve the number of patients per trial, which will make BGNE look even more favorable in its peer-group chart?
- ► The cumulative costs from previous periods the data were only for H1 2019
- ► The figures used are for R&D spend, not just for Phase 3 trials. This may not necessarily be an appropriate comparable for other pharmaceutical companies.
- ► The effectiveness of the clinical trials what is BGNE's commercialization history from clinical trials vs its peer-group clinical trials?
- ► Some R&D expenses are front-loaded, for example, in collaboration arrangements. This can distort peer comparatives in any period.
- ▶ The type of drug trialed.
- ► Trial costs per drug some peers may conduct different numbers of trials per drug. From the company's own presentation, its trials are for three late-stage drugs only, whereas the chart it shows are for numerous trials.

It seems that the best BeiGene can do in its half-hearted effort to be transparent is the table. This provides a lot of information, but none of it is very meaningful.

Independent survey supports J Capital's sales estimates

Before the company was able to rush out a response to our report, a sell-side ana-



lyst published a report citing data that it had somehow never mentioned before in its coverage of BeiGene. The data came from the Chinese Pharmaceutical Association (CPA).

The analyst used a survey from the CPA in an attempt to refute our estimate that BeiGene overstates sales of Celgene drugs by 133%. While the headline numbers in the survey seem supportive of the company's narrative, once you review the detail, you find that the survey supports our conclusion.

The survey covers just 3.5% of China's roughly 29,500³ hospitals,⁴ critically, it covers nearly all of the Category 3 (the biggest) hospitals in Tier 1 and Tier 2 cities, where most of the specialist facilities for cancer treatment that use foreign drugs are located. Celgene drugs are sold almost exclusively in Class 3 hospitals, so the survey dramatically over-represents Celgene drug sales. Our understanding is backed up by interviews we conducted with BeiGene's distributors and Chinese oncologists. We featured the following distributor's comment on page 7 of our report: "Only Tier 1 city top hospitals will buy these medicines [Celgene's]."

The analyst report says that foreign drug company sales are typically 2 to 5x the reported CPA survey sales data of drugs from companies like Pfizer, Sanofi and AstraZenica, which are selling mass-market drugs distributed in all level of hospital in all cities. For Celgene drugs, the analyst estimates an "amplifying factor" of up to 8.23x (for Revlimid). There is no basis for this; it's plucking a number out of the sky to back-solve for an answer. In fact, since the Celgene drugs are selling to a highly specialized channel, the survey should capture around 60% of BeiGene's sales of the drugs.

CPA data indicate that Celgene drug sales in 2018 were \$62 mln. With the "amplifying factor," that would mean about \$100 mln in sales. That supports our contention that BeiGene's sales of Celgene products were in the range of \$90-100 mln, with around \$42.7 mln potentially sold to themselves.

We wonder what BeiGene is asking that investors invest in. The company says its China R&D is more expensive than that of Chinese companies, because it is high-quality, then it claims a cost advantage in China. Yet most costs are outside of China. What's the story? Is BeiGene principally competing in the China market or internationally? What's the strategy?

Tim Murray
See <u>final page</u> for disclaimers.

³ https://www.dbs.com/aics/pdfController.page?pdfpath=/content/article/pdf/AIO/012019/190114 insights china pharma distribution sector.pdf

⁴ https://www.mckinsev.com.cn/wp-content/uploads/2018/11/2018-CPA-report_EN.pdf



We are frankly shocked that BeiGene management, while proclaiming its integrity, is flat-out lying to investors. We remain short BeiGene.

Disclaimer

This publication is prepared by J Capital Research USA LLC ("J Capital"), a US registered company. J Capital is registered as an investment adviser with the U.S. SEC (CRD# 290086). This publication is distributed solely to authorized recipients and clients of J Capital for their general use in accordance with the terms and conditions of a Services Agreement and the J Capital Authorized User Content Agreement available <a href="https://example.com/here.com/he