CMB International Securities | Equity Research | Company Update

I-Mab BioPharma (IMAB US)

Strategic cooperation with Jumpcan accelerates commercialization for long-acting rhGH

- **I-Mab and Jumpcan reached a strategic commercial partnership on long-acting rhGH, Eftansomatropin Alfa.** Under the partnership agreement, Jumpcan will pay upfront payment of RMB224mn and milestone payments up to RMB1.792bn, making the total non-royalty payments up to RMB2.016bn. In addition, the parties will share profits on a 50/50 basis, or I-Mab will be entitled to receive tiered low double-digit royalties on net sales. I-Mab will continue to lead the ongoing registrational Ph3 trial (NCT04633057) of eftansomatropin alfa on pediatric growth hormone deficiency (PGHD). I-Mab will also be the marketing authorization holder (MAH) and supply the product to Jumpcan. Jumpcan will be responsible for commercializing the product and developing new indications in mainland China. We believe the deal laid a solid foundation for the successful commercialization of eftansomatropin alfa in China.
- **Jumpcan has a strong sales channel in pediatrics drugs**. With a focus in pediatric medicines, Jumpcan has a sizable sales force of 3,500+ employees, covering 23,000+ tiered hospitals in China. Jumpcan recorded RMB5.4bn revenue in 9M21, with pediatric drugs accounting for approximately 60% of total revenue. Although rhGH drugs require slightly different sales expertise with other pediatric drugs, Jumpcan's broad channel coverage will significantly accelerate the sales ramp-up of eftansomatropin alfa, in our view.
- **Limited regulatory concerns for long-acting rhGH drugs.** Off-label use of rhGH is common both in China and the US. We expect rhGH drugs to further expand their labels in China to include additional indications for adults and children, leading to higher market potential for rhGH drugs. Meanwhile, on 30th Sep, Guangdong province announced to align 10 provinces to initiate volume-based procurement for short-acting rhGH drugs. Given that there is only one approved long-acting rhGH drug in China and several candidates are in clinical development, we believe long-acting rhGH products will face mild competitions in coming years and will also be free from volume-based procurement risks. We believe long-acting rhGH products (weekly dosing) will substitute short-acting products (daily dosing) given their convenience of administration.
- **Maintain BUY.** The partnership with Jumpcan will accelerate the commercialization Eftansomatropin Alfa. We slightly revised up our DCF-based TP from US$101.37 to US$103.60 (WACC: 9.74%, terminal growth rate: 3.0%).

Earnings Summary

(YE 31 Dec)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue (RMB mn)	30	1,543	546	843	1,247
Net profit (RMB mn)	(1,485)	471	(1,340)	(981)	(772)
EPS (RMB per ADS)	N/A	8.07	(17.42)	(12.74)	(10.03)
Consensus EPS (RMB per ADS)	N/A	N/A	(11.58)	(8.73)	(8.07)
R&D expenses (RMB mn)	(840)	(985)	(1,200)	(1,260)	(1,323)
Admin expenses (RMB mn)	(655)	(402)	(650)	(550)	(578)
Capex (RMB mn)	(12)	(8)	(100)	(100)	(100)

Source: Company data, Bloomberg, CMBIS estimates

BUY (Maintain)

Target Price	**US$103.60**
(Previous TP	US$101.37)
Up/Downside	**+63.03%**
Current Price	**US$63.55**

China Healthcare Sector

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Mkt. Cap. (US$ mn)	4,960
Avg. 3mths t/o (US$ mn)	35.32
52W High/Low (US$)	85.40/37.00
Total Issued Shares (mn)	78

Source: Bloomberg

Shareholding Structure

Founders	6.7%
CBC Group	17.5%
Hillhouse Capital	10.8%
Other public shareholders	65.0%

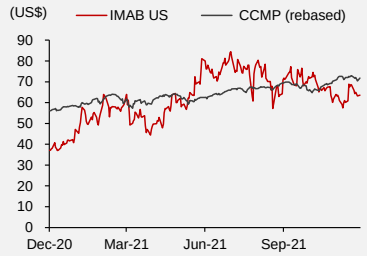
Source: Bloomberg

Share performance

	Absolute	Relative
1-mth	2.8%	1.0%
3-mth	-0.1%	-4.2%
6-mth	-21.6%	-31.7%

Source: Bloomberg

12-mth price performance



Source: Bloomberg

Auditor: PWC
Web-site: www.i-mabbiopharma.com

Related report:

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I-Mab and Jumpcan reached a strategic commercial partnership on long-acting rhGH

I-Mab and Jumpcan (600566 CH) reached a strategic partnership on long-acting rhGH, Eftansomatropin Alfa. Under the partnership agreement, Jumpcan will pay upfront payment of RMB224mn and milestone payments up to RMB1.792bn, making the total non-royalty payments up to RMB2.016bn. In addition, the parties will share profits on a 50/50 basis, or I-Mab will be entitled to receive tiered low double-digit royalties on net sales. I-Mab will continue to lead the ongoing registrational Ph3 trial (NCT04633057) of eftansomatropin alfa on pediatric growth hormone deficiency (PGHD). I-Mab will also be the marketing authorization holder (MAH) and supply the product to Jumpcan. Jumpcan will be responsible for commercializing the product and developing new indications in mainland China. We believe the deal laid a solid foundation for the successful commercialization of eftansomatropin alfa in China.

In China, rhGH drugs are usually initially prescribed at public hospitals' pediatric departments, while private clinics/hospitals account for the majority of sales. Thus, the first hospital visit plays an essential role in the promotion of rhGH drugs. Although rhGH drugs require slightly different sales expertise with other pediatric drugs, Jumpcan's broad channel coverage will significantly accelerate the sales ramp-up of eftansomatropin alfa, in our view. With a focus in pediatric medicines, Jumpcan has a sizable sales force of 3,500+ employees, covering 23,000+ tiered hospitals in China. Jumpcan recorded RMB5.4bn revenue in 9M21, with pediatric drugs accounting for approximately 60% of total revenue. We expect Jumpcan's existing strong commercial channels in pediatrics area will accelerate the rollout of eftansomatropin alfa in China.

Large unmet need in rhGH market

Growth hormone deficiency (GHD) is an endocrine disorder that occurs when the production of growth hormone, normally secreted by the pituitary gland, is disrupted. Since growth hormone plays a critical role in stimulating body growth and development, and is involved in the production of muscle protein and the breakdown of fats, deficiency in growth hormone affects numerous physiological processes, resulting in short stature in children and other physical ailments in both children (PGHD) and adults (AGHD). According to a literature review study exploring the cause of short stature, among the 13,499 short stature children, GHD is the top one factor causing the disease (32.7%), followed by idiopathic short stature (ISS, 18.9%). According to F&S, PGHD affected approximately 3.4mn patients in 2018 in Greater China.

The widely adopted treatment for PGHD is patient-specific growth hormone replacement therapy. According to the F&S, only 3.7% of all PGHD patients in China were receiving growth hormone replacement therapy in 2018. Currently, short-acting rhGH is commonly used for the long-term treatment of PGHD and AGHD. This dosing regimen puts a substantial burden on pediatric patients and their families because it requires drug preparation and needle injection every day, which is painful and extremely inconvenient, often resulting in poor patient compliance. More importantly, studies have shown that skipping just one or two doses in a week can significantly reduce the efficacy of the treatment. Therefore, there is a substantial medical need for long-acting growth hormone therapies that are similarly efficacious but with reduced injection frequency, and the market potential for such a long-acting rhGH in China is largely untapped.

Currently, Chinese rhGH market is mainly dominated with short-acting products, and mainly occupied by GeneScience, Anhui Anke, United Biotech and Novo Nordisk. Approved by the NMPA in 2014, Jintrolong (金赛增) developed by GeneScience is currently the only marketed long-acting rhGH in China.

Short-acting rhGH has been included in the National Reimbursement Drug List (NRDL) in China, leading to better affordability for the drug. Currently, the only marketed long-acting rhGH, Jinrolong, is not covered by the NRDL yet.

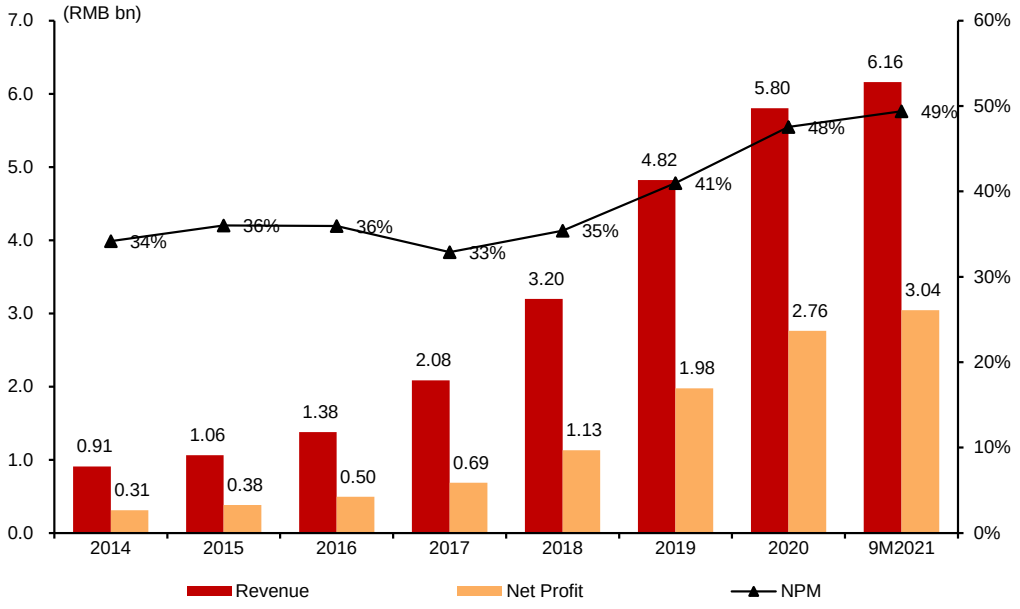
Figure 1: Treatment costs of marketed short-acting and long-acting rhGH products

Brand name	Jintrolong (金賽增)	Jintropin (賽增)
Generic name	PEG-rhGH injection (long-acting)	rhGH liquid injection (short-acting)
Dosing	0.2mg/kg per week, subcutaneous injection	0.1-0.15IU/kg daily, subcutaneous injection
Retail price	RMB5,600/54IU/9.0mg (latest tender price)	RMB1,031/30IU/10mg
Monthly cost (assuming average weight of 30kg)	RMB16,178 per month	RMB4,704 per month
NRDL reimbursement	No	Yes

Source: NMPA, Yaozh.com, CMBIS

GeneScience is a core subsidiary and the major source of profit for Changchun High & New Technology Industry (000661 CH). GeneScience has majority of its revenue from rhGH products, including Jintropin, Jintrolong, etc. As the largest player in China's rhGH market, GeneScience has recorded a strong 43% revenue growth CAGR in 2016-2020. For the first three quarters of 2021, rhGH products recorded RMB5.8bn sales, contributing more than 94% of GeneScience's total revenue, while the number of new customers adopting rhGH has increased by 60% YoY in 9M21, reflecting fast rising demand of rhGH therapies in China.

Figure 2: Strong growth in GeneScience's revenue and net profit



Source: WIND, CMBIS

Other companies in China currently developing long-acting rhGH include I-Mab, Anhui Anke, Visen Pharmaceuticals, Novo Nordisk, etc. According to clinical studies, there are certain safety concerns related to long-term use of pegylated drugs, such as potential renal toxicity, cellular vacuolation and formation of anti-polyethylene glycol antibodies (*source*). Eftansomatropin Alfa (also called TJ101) is the only Fc-based long-acting rhGH under Phase 3 clinical trial in China with superior safety potential.

Because of its convenience as a weekly regimen with similar efficacy, long-acting rhGH will gradually take shares from the short-acting products. With only one approved product in the market, we view the competition of China's long-acting rhGH market as less severe. We also believe long-acting rhGH products are free from volume-based procurement risks in coming years due to their good competition landscape.

Figure 3: Long-acting growth hormone candidates under development

Long-acting rhGH	Company	Drug Form	China Status	Global Status
Jintrolong	GeneScience	PEGylated GH	Approved (2014)	N/A
PEG-rhGH	Anhui Anke	PEGylated GH	Phase 2/3, CTR20170043, enrolment completed in Nov 2017	N/A
Eftansomatropin (TJ101)	I-Mab / Genexine	Fusion protein	Phase 3, NCT04633057, FPI in Feb 2021, to complete patient enrolment by early 2022	Phase 2
ACP-011 (Skytrofa)	Ascendis / Visen	TransCon hGH	Phase 3, NCT04326374, enrolment completed in Apr 2021	First Approved in the US for PGHD in Aug 2021, NCT02781727
Somapacitan (Sogroya)	Novo Nordisk	PEGylated hGH	Phase 3, NCT04970654, FPI in Aug 2021	First Approved in the US for AGHD in Sep 2020, NCT02229851
Y-shaped pegylated somatropin	Xiamen Amoytop	PEGylated hGH	Phase 2/3, NCT04513171, FPI in May 2019	N/A
Somatrogon	OPKO / Pfizer	hGH-CTP	N/A	BLA filled, to US FDA, PDUFA date in Jan 2022, NCT03831880
rHSA/GH	Uniongene	rHSA/GH	Phase 1, CTR20201721	N/A
Efpegsomatropin	Hanmi Pharma	LAPS-hGH	N/A	Phase 2, NCT01822340
JR-142	JCR Pharma	Fusion protein	N/A	Phase 2, jRCT2031200372

Source: PharmaGo, Clinicaltrials.gov, Company Data, CMBIS

TJ101 showed comparable efficacy and satisfying safety

TJ101 (eftansomatropin alfa) is a long-acting recombinant human growth hormone (rhGH) for growth hormone deficiency (GHD). I-Mab is positioning TJ101 as a highly differentiated growth hormone replacement therapy because of its advantages over a daily regimen in terms of injection frequency (weekly vs. daily) and safety profile (natural protein-based vs. pegylated long-acting rhGH), especially in pediatric patients.

In Oct 2015, I-Mab entered into an intellectual property assignment and license agreement with Genexine (095700 KS) with respect to four licensed products, namely GX-H9 (TJ101), GX-G3 (TJ102), GX-G8 and GX-P2.

I-MAB initiated a Phase 3 pivotal trial for TJ101 in Pediatric Patients with Growth Hormone Deficiency (PGHD) in China in Feb 2021. The primary objective is to demonstrate non-inferiority of 1.2 mg/kg/week of TJ101 administered SC, based on aHV after 52 weeks of treatment, compared to the active control Norditropin (somatropin), a daily rhGH made by Novo Nordisk. I-MAB aims to complete the enrolment of 165 patients by early 2022E and to file BLA to the NMPA in 2023E.

Genexine has completed three clinical trials with TJ101, including one Phase 1 trial in healthy adult volunteers, one Phase 1b/2 multi-regional trial in adults with GHD, and one Phase 2 multi-regional trial in PGHD in Europe, altogether involving 32 healthy subjects and 99 patients with GHD and PGHD. Overall, TJ101 was shown to be well-tolerated, and clinical efficacy endpoint achieved by weekly or twice-monthly TJ101 administration was comparable to that of daily administration of Genotropin.

The Phase 2 trial in PGHD was a randomized, open-label, active-controlled study to assess the safety, tolerability, efficacy, pharmacokinetics, and pharmacodynamics of weekly and twice-monthly doses of TJ101, as compared to a daily injection of Genotropin, which is currently the standard of care for PGHD. Subjects were randomly assigned to receive one of three doses of TJ101 (0.8 mg/kg/weekly, 1.2

mg/kg/weekly or 2.4 mg/kg/twice monthly) or 0.03 mg/kg/daily of Genotropin for up to 24 months. The primary clinical endpoint was annualized height velocity (aHV) in centimeters (cm) per year (equivalent to annual growth rate), measured at six months.

A total of 56 subjects were randomized at 27 centers in nine European countries and South Korea. 52 subjects completed the six-month treatment, meeting the primary endpoint. Two subjects withdrew from the study before first drug administration, and two subjects discontinued due to treatment-related adverse events (AEs).

No study drug-related serious adverse events (SAEs) or death were observed. A total of two (14.3%), three (23.1%), two (15.4%), and zero subjects experienced treatment-related AEs in the 0.8 mg/kg/week, 1.2 mg/kg/week, and 2.4 mg/kg/twice monthly TJ101 groups, and the 0.03 mg/kg/daily Genotropin group, respectively. Half-life of TJ101 was 77.75–141.95 hours after a single dose and 43.92–55.66 hours (compared to 5.27 hours for Genotropin) after three months of multiple-dose administration.

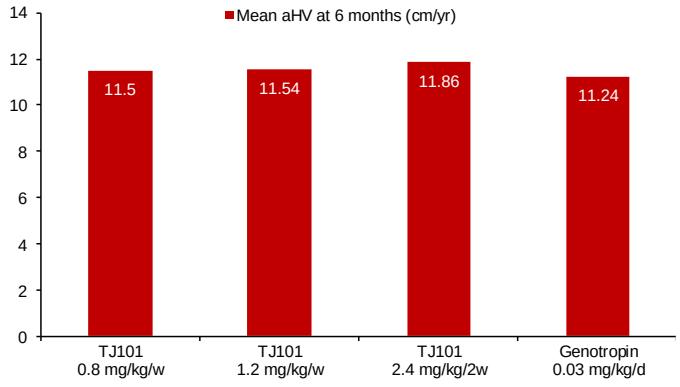
Figure 4: Good safety profile of TJ101

Drug	TJ101 / Eftansomatropin Alfa	Genotropin
Phase	2	2
Patients	40 (14, 13, 13)	14
Dose	0.8 mg/kg/w, 1.2 mg/kg/w, or 2.4 mg/kg/2w	0.03 mg/kg/d
AEs	69.2%-84.6%	57.1% (8/14)
TRAEs	17.5% (7/40) (14.3%, 23.1%, 15.4%)	0% (0/14)
Injection site reactions (ISRs)	32.5% (13/40)	78.5% (11/14)
Discontinue rate due to AE	5% (2/40)	0% (0/14)

Source: Genexine, CMBIS

Subcutaneous administration of TJ101 over the dose range of 0.8 mg/kg/week – 2.4 mg/kg/twice monthly resulted in an increase in aHV over the six-month study period. Subjects who received TJ101 at 0.8 mg/kg weekly, 1.2 mg/kg weekly, and 2.4 mg/kg twice monthly showed growth rates of 11.50, 11.54, and 11.86 cm/year, respectively, while the growth rate in the control group treated with Genotropin was approximately 11.24 cm/year.

Figure 5: The aHV at six months indicated comparable growth rates between all doses of TJ101 (both weekly and twice-monthly treatment) and Genotropin



Source: Genexine, CMBIS

Figure 6: Clinical data comparison of long-acting growth hormone candidates

Long-acting rhGH	Jintrolong		Eftansomatropin alfa (TJ101)		Skytrofa (ACP-011)	
Company	GeneScience		I-Mab / Genexine		Ascendis / Visen	
Drug Form	PEGylated GH		Fusion protein		TransCon hGH	
Trial registration No.	NCT01495468		NCT03309891		NCT02781727	
Trial phase	Phase 3		Phase 2		Phase 3	
Indication	PGHD		PGHD		PGHD	
Enrolled patient No.	343		54		161	
	Treatment	**Control**	**Treatment**	**Control**	**Treatment**	**Control**
Patient No.	228	115	40 (14, 13, 13)	14	105	56
Regimen	Weekly Jintrolong (0.2mg/kg/week), 25 weeks	Daily rhGH (0.25 mg/kg/week), 25 weeks	TJ101 0.8 mg/kg/w, 1.2 mg/kg/w, or 2.4 mg/kg/2w	Genotropin 0.03 mg/kg/d	0.24 mg hGH/kg/week	Daily somatropin
Mean HVs	13.41 ± 3.72 cm/year	12.55 ± 2.99 cm/year	11.50, 11.54, and 11.86 cm/year	11.24 cm/year	11.2 (0.2) cm/year	10.3 (0.3) cm/year
Adverse Events	37.32%	36.52%	69.2%-84.6%	57.1% (8/14)	77.1% (81/105)	69.6% (39/56)
TRAEs			17.5% (7/40) (14.3%, 23.1%, 15.4%)	0% (0/14)	11.40%	17.90%
Safety Others/Overall	Adverse events (AEs) were comparable between the two groups; No severe adverse event occurred during the study; No subject in either group developed anti-GH antibodies during treatment when assessed at weeks 13 and 25.		No study drug related serious adverse events or death were observed. The AE incidence rate was generally similar across the TJ101 cohorts treated with three different dose levels (ranging between 69.2% and 84.6%) and the Genotropin cohort (57.1%). A total of two (14.3%), three (23.1%), and two (15.4%) experienced treatment related AEs in the TJ101 groups, respectively.		There were no serious AEs related to the study drug and no AE led to treatment discontinuation or death. Rates of SAEs and AEs were similar between groups. A low titer of anti-hGH binding antibodies were detected in 7/105 (6.7%) and 2/56 (3.6%) patients administered Skytrofa and daily somatropin. No neutralizing antibodies were detected; detected antibodies did not appear to affect safety or efficacy.	
Reference	https://pubmed.ncbi.nlm.nih.gov/28566441/		https://www.sec.gov/Archives/edgar/data/1778016/000119312519277698/d713200df1.htm		https://academic.oup.com/jcem/article/106/11/3184/6323258	

Source: Company data, Pubmed, CMBIS

Expect RMB2.7bn risk-adjusted peak sales from TJ101 by 2035E

We forecast TJ101 to receive NMPA's approval for treatment of PGHD in 2024E. We expect TJ101 to realize RMB2.7bn risk-adjusted peak sales by 2035E, assuming 85% probability of success (PoS).

Figure 7: Sales forecasts of TJ101

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
TJ101 for Short Stature Children in China												
No. of short stature children in China ('000 people)	6,590	6,524	6,459	6,395	6,331	6,267	6,205	6,143	6,081	6,020	5,960	5,901
% of eligible for rhGH treatment	*56.4%*	*60.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*	*66.5%*
No. of patients eligible for rhGH treatment ('000 people)	3,714	3,946	4,294	4,251	4,209	4,167	4,125	4,084	4,043	4,002	3,962	3,923
Treatment rate	*5.0%*	*5.3%*	*5.6%*	*5.9%*	*6.2%*	*6.5%*	*6.8%*	*7.1%*	*7.4%*	*7.7%*	*8.0%*	*8.3%*
No. of patients adopting rhGH treatment ('000 people)	186	209	240	251	261	271	280	290	299	308	317	326
Penetration of long-acting rhGH	*23.0%*	*26.0%*	*29.0%*	*32.0%*	*35.0%*	*38.0%*	*41.0%*	*44.0%*	*47.0%*	*50.0%*	*53.0%*	*56.0%*
TJ101's market share in long-acting rhGH in China	*10.0%*	*15.0%*	*20.0%*	*25.0%*	*30.0%*	*29.5%*	*29.0%*	*28.5%*	*28.0%*	*27.5%*	*27.0%*	*26.5%*
Patients treated with TJ101 ('000 people)	4	8	14	20	27	30	33	36	39	42	45	48
Monthly cost of TJ101 in China (RMB per month, after PAP)	10,000	8,000	8,000	8,000	8,000	6,400	6,080	5,776	5,487	5,213	4,952	4,705
Price change YoY		*-20%*	*0%*	*0%*	*0%*	*-20%*	*-5%*	*-5%*	*-5%*	*-5%*	*-5%*	*-5%*
Average period of treatment (month)	16	16	16	16	16	16	16	16	16	16	16	16
TJ101 sales (hospital level，RMBmn)	513	920	1,600	2,373	3,272	3,033	3,172	3,291	3,390	3,472	3,535	3,581
Distributor markup	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*
VAT	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*
TJ101 Sales (exfactory, RMB mn)	**452**	**812**	**1,412**	**2,094**	**2,888**	**2,677**	**2,799**	**2,904**	**2,992**	**3,064**	**3,120**	**3,161**

Source: CMBIS estimates

Figure 8: Risk-adjusted sales forecasts of TJ101

	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
TJ101 sales from short stature(RMB mn)	**452**	**812**	**1,412**	**2,094**	**2,888**	**2,677**	**2,799**	**2,904**	**2,992**	**3,064**	**3,120**	**3,161**
Probability of success	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*	*85%*
Risk-adj China TJ101 sales (RMB mn)	**385**	**690**	**1,200**	**1,780**	**2,455**	**2,275**	**2,379**	**2,469**	**2,544**	**2,605**	**2,652**	**2,687**

Source: CMBIS estimates

Figure 9: Risk-adjusted DCF valuation

DCF Valuation (in Rmb mn)	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E
EBIT	(1,340)	(981)	(772)	(309)	1,813	3,313	5,304	6,038	6,668	7,368	8,267	8,533	8,983	9,114	8,942
Tax rate	0%	0%	0%	0%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
EBIT*(1-tax rate)	(1,340)	(981)	(772)	(309)	1,541	2,816	4,509	5,132	5,668	6,262	7,027	7,253	7,635	7,746	7,601
+ D&A	29	45	58	68	75	81	85	89	91	93	95	96	97	98	98
- Change in working capital	(330)	(109)	(39)	(166)	(807)	(555)	(370)	(278)	(195)	(178)	(144)	(121)	(104)	(87)	237
- Capex	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
FCFF	**(1,742)**	**(1,144)**	**(853)**	**(508)**	**709**	**2,242**	**4,124**	**4,843**	**5,465**	**6,078**	**6,877**	**7,129**	**7,528**	**7,657**	**7,835**
Terminal value															**119,830**
FCF + Terminal value	**(1,742)**	**(1,144)**	**(853)**	**(508)**	**709**	**2,242**	**4,124**	**4,843**	**5,465**	**6,078**	**6,877**	**7,129**	**7,528**	**7,657**	**127,665**

PV of enterprise (RMB mn)	48,258
Net debt (RMB mn)	(3,012)
Equity value (RMB mn)	51,270
Equity value (US$ mn)	7,974
No. of ADS	76,962,633
DCF per share (US$)	103.60
Terminal growth rate	**3.0%**
WACC	**9.74%**
Cost of Equity	12.5%
Cost of Debt	4.0%
Equity Beta	0.90
Risk Free Rate	3.0%
Market Risk Premium	10.5%
Target Debt to Asset ratio	30.0%
Effective Corporate Tax Rate	15.0%

Source: CMBIS estimates

Figure 10: Sensitivity analysis (US$)

		WACC				
		8.74%	**9.24%**	**9.74%**	**10.24%**	**10.74%**
	2.0%	116.17	104.97	95.33	86.96	79.64
	2.5%	122.00	109.68	99.18	90.13	82.28
Terminal growth rate	**3.0%**	128.86	115.16	103.60	93.75	85.26
	3.5%	137.02	121.59	108.74	97.90	88.66
	4.0%	146.91	129.24	114.77	102.72	92.55

Source: Company data, CMBIS estimates

Figure 11: CMBIS estimates revision

	New			Old			Diff (%)		
RMB mn	**FY21E**	**FY22E**	**FY23E**	**FY21E**	**FY22E**	**FY23E**	**FY21E**	**FY22E**	**FY23E**
Revenue	546	843	1,247	322	1,874	1,518	69.67%	-55.05%	-17.81%
Gross Profit	546	837	1,218	322	1,714	1,426	69.67%	-51.18%	-14.61%
Operating Profit	(1,360)	(993)	(778)	(1,479)	(527)	(713)	NA	NA	NA
Net profit	(1,340)	(981)	(772)	(1,405)	(515)	(706)	NA	NA	NA
EPS (RMB)	(17.42)	(12.74)	(10.03)	(19.70)	(6.70)	(9.17)	NA	NA	NA
Gross Margin	100.00%	99.31%	97.61%	100.00%	91.44%	93.96%	0.00 ppt	+7.87 ppt	+3.66 ppt

Source: Company data, Bloomberg, CMBIS estimates

Figure 12: CMBIS estimates vs consensus

	CMBIS			Consensus			Diff (%)		
RMB mn	**FY21E**	**FY22E**	**FY23E**	**FY21E**	**FY22E**	**FY23E**	**FY21E**	**FY22E**	**FY23E**
Revenue	546	843	1,247	457	1,167	1,204	19.25%	-27.77%	3.59%
Gross Profit	546	837	1,218	448	1,102	1,083	21.86%	-24.08%	12.44%
Operating Profit	(1,360)	(993)	(778)	(1,223)	(941)	(1,048)	N/A	N/A	N/A
Net profit	(1,340)	(981)	(772)	(1,092)	(842)	(952)	N/A	N/A	N/A
EPS (RMB)	(17.42)	(12.74)	(10.03)	(11.58)	(8.73)	(8.07)	N/A	N/A	N/A
Gross Margin	100.00%	99.31%	97.61%	97.86%	94.48%	89.93%	+3.00 ppt	-4.35 ppt	+2.33 ppt

Source: Company data, Bloomberg, CMBIS estimates

Financial Statements

Income statement

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Revenue	**30**	**1,543**	**546**	**843**	**1,247**
Cost of sales	0	0	0	(6)	(30)
Gross profit	**30**	**1,543**	**546**	**837**	**1,218**
Administrative expenses	(655)	(402)	(650)	(550)	(578)
R&D expenses	(840)	(985)	(1,200)	(1,260)	(1,323)
Selling expenses	0	0	0	(19)	(96)
Other gains/losses	(15)	304	(55)	0	0
Operating profit	**(1,480)**	**460**	**(1,360)**	**(993)**	**(778)**
Finance costs, net	28	23	19	12	7
Pre-tax profit	**(1,452)**	**483**	**(1,340)**	**(981)**	**(772)**
Income tax	0	(12)	0	0	0
Minority interests and others	(33)	0	0	0	0
Attributable net profit (Net loss)	**(1,485)**	**471**	**(1,340)**	**(981)**	**(772)**

Cash flow summary

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Profit before tax	**(1,452)**	**471**	**(1,340)**	**(981)**	**(772)**
Depreciation and amortization, etc.	16	22	29	45	58
Change in working capital	185	(241)	(330)	(109)	(39)
Tax paid	0	0	0	0	0
Others	384	182	0	0	0
Net cash from operating activities	**(868)**	**434**	**(1,642)**	**(1,044)**	**(753)**
Capex	(12)	(8)	(100)	(100)	(100)
Net proceeds from disposal of short-term investments	(32)	12	0	0	0
Other investing activities	257	(206)	0	0	0
Net cash from investing activities	**212**	**(202)**	**(100)**	**(100)**	**(100)**
Net proceeds from shares	184	3,518	0	0	0
Net bank borrowing	(30)	(50)	0	0	0
Proceeds from issuance of convertible promissory notes	0	0	0	0	0
Other financing activities	(1)	(28)	0	0	0
Net cash from financing activities	**153**	**3,440**	**0**	**0**	**0**
FX changes	15	(107)	0	0	0
Net change in cash	**(503)**	**3,672**	**(1,742)**	**(1,144)**	**(853)**
Cash at the beginning of the year	1,681	1,193	4,759	3,017	1,873
Cash at the end of the year	**1,193**	**4,759**	**3,017**	**1,873**	**1,020**

Balance sheet

YE 31 Dec (RMB mn)	FY19A	FY20A	FY21E	FY22E	FY23E
Non-current assets	**376**	**990**	**1,061**	**1,116**	**1,158**
PP&E	30	25	96	151	193
Operating lease right of use assets	16	15	15	15	15
Intangible assets	149	120	120	120	120
Goodwill	163	163	163	163	163
Other non-current assets	18	667	667	667	667
Current assets	**1,361**	**5,344**	**3,472**	**2,339**	**1,537**
Inventories	0	0	0	2	10
Trade and bills receivables	0	130	0	10	52
Prepayments, other receivables	136	195	195	195	195
Other financial assets	88	259	259	259	259
Cash and bank balances	1,137	4,759	3,017	1,873	1,020
Current liabilities	**588**	**576**	**116**	**18**	**30**
Short-term borrowings	50	0	0	0	0
Advance from customers	0	0	0	0	0
Other payables and accruals	274	561	100	3	15
Operating lease liabilities, current	7	8	8	8	8
Other current liabilities	258	8	8	8	8
Non-current liabilities	**80**	**131**	**131**	**131**	**131**
Convertible promissory notes	68	0	0	0	0
Onshore convertible loans	7	6	6	6	6
Deferred subsidy income	4	125	125	125	125
Total net assets	**1,069**	**5,627**	**4,287**	**3,306**	**2,534**
Minority interest	0	0	0	0	0
Shareholders' equity	**1,069**	**5,627**	**4,287**	**3,306**	**2,534**

Key ratios

YE 31 Dec	FY19A	FY20A	FY21E	FY22E	FY23E
Profit & loss ratios (%)					
Gross margin	100	100	100	85	86
EBITDA margin	N/A	N/A	N/A	N/A	N/A
Net margin	N/A	N/A	N/A	N/A	N/A
Effective tax rate (%)	N/A	N/A	N/A	N/A	N/A
Balance sheet ratios					
Current ratio (x)	2	9	30	128	52
Trade receivables turnover	N/A	N/A	90	90	90
Trade payables turnover days	N/A	N/A	180	180	180
Total debt to asset ratio (%)	38	11	5	4	6
Returns (%)					
ROE	(136)	8	(31)	(30)	(30)
ROA	(84)	7	(30)	(28)	(29)
Per share data					
EPS (RMB)	N/A	8.07	(17.42)	(12.75)	(10.03)
DPS (RMB)	0.00	0.00	0.00	0.00	0.00
BVPS (RMB)	N/A	96.47	55.70	42.95	32.93

Source: Company data, CMBIS estimates

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