

# 2021 Annual Results Investor Presentation

Shanghai Junshi Biosciences Co., Ltd.

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# 01 Company Overview

Our mission is to provide patients with treatment options that work better and cost less.



# Global Development of TUOYI®

+3 sNDA approved by NMPA

2 sNDA accepted by NMPA

+2 Indications included in NRDL

3 4 Orphan Drug Designation

+1 в

Breakthrough Therapy Designation

**NPC** BLA accepted by FDA and granted Priority Review

ASCO LBA at Plenary Session

Nature Medicine Cover Article

#### **COVID-19 Response**

**JS016**, **JS026**, **VV116**, **VV993** 

Combats COVID-19 with various drugs

**Treatment of mild to moderate COVID-19 and post-exposure prophylaxis in all age groups** FDA EUA approved for etesevimab (+bamlanivimab)

>15 Countries and regions approved the EUA for COVID-19 treatment

> **700,000** Patients received the dual antibody therapy or bamlanivimab alone

> 35.000 hospitalizations prevented

14,000 deaths prevented

etesevimab(JS016)

#### **Pipeline Expansion**

30 51+ Pipeline assets

**Commercialization** Toripalimab, etesevimab, adalimumab

Phase 3 Ongericimab, VV116, Bevacizumab, PARP

Phase 2 BTLA, IL-17A

17 Phase 1 TIGIT, Claudin 18.2, CD39, EGFR exon 20, XPO1, BLyS...

#### 25+ Early Stage (Pre-Clinical)

ZIKV, 3CLpro, IL-2, CD93, DKK1, EGFR 4<sup>th</sup> Gen, IDH1, SHP2, FGFR2, ATR



#### **Collaborations Worldwide**

#### Coherus

- Cooperation for toripalimab in the US and Canada
- Initiated the procedure to exercise the option of anti-TIGIT monoclonal antibody (JS006)

#### Eli Lilly

- Cooperation for etesevimab (JS016)
- Reached all the milestones agreed in the agreement regarding the overseas authorization of etesevimab to Eli Lilly

#### Immorna

Established a JV, expanded to the field of mRNA technology

#### Vigonvitato

 JunTop Biosciences partnered with Vigonvita to jointly develop VV116(JT001), VV993(JT003)

# Capital Structure Optimization, ESG Management Promotion

#### **Capital Markets**

- The Company's A shares and H shares were included in Northbound Trading under Shanghai-Hong Kong Stock Connect and the Stock Connect Southbound Trading
- The Company's A shares were included in the STAR 50 index and the FTSE Global Equity Index, the MSCI China A Onshore Index
- The Company's H shares were included in the HSCI, the Hang Seng SmallCap Index, the Hang Seng Healthcare Index, the Hang Seng Stock Connect Hong Kong Index, the Hang Seng Stock Connect Hong Kong MidCap & SmallCap Index
- Allotted and issued new H shares successfully, attracted many long-term institutional investors

#### **ESG** Rating

• Wind ESG and Sino-Securities Index granted the Company a rating of "A" and "AA" respectively

#### **Retained & Expanded Management**

- >2800 employees
- · Keep improving the development of various outstanding talents

#### **Participation in Charitable Activities**

- RMB82.56 million in charitable activities of 2021
- Held **public lectures**, participated in the **charity donation program**, e.g. **medicine donation program** of Beijing Bethune Charitable Foundation and CSWEF.

#### Weathering Hard Times Together

- During the pandemic, the Company rapidly developed drugs for COVID-19 treatment.
- In March 2022, employees volunteered to serve as front-line nucleic acid testing volunteers after COVID-19 outbreaks in Shanghai
- Won 2020 COVID-19 Outstanding Contribution Award for Enterprise, 2021 Corporate Social Responsibility Award and many other honors

#### 5



# **Financial Highlights**

	FY 2021 RMB million	FY 2020 RMB million	Changes
Revenue	4,025	1,595	152%
R&D expenses	2,069	1,778	16%
Total comprehensive expenses	719	1,688	-57%
Net cash from financing activities	2,666		
Cash and cash equivalents	3,505		

- The increase of total revenue was mainly due to the income from technology out-licensing, new royalty fee and toripalimab sales during the reporting period
- The increase of R&D expenses was mainly due to: (i) increasing R&D investment, continuous diversification and expansion of product pipelines through independent R&D, co-development/license-in and other means; (ii) the acceleration of existing clinical projects' development
- The decrease of total comprehensive expenses was mainly due to the increase of out-licensing revenue partially offset by the increasing R&D and SG&A expenses
- Net cash from financing activities was RMB2,666 million, which was mainly due to (i) the successful placing of new H shares on the Main Board of HKEX, with a net cash flow of RMB2,105 million, (ii) JunTop Biosciences, a subsidiary of the Company, implemented the series A financing, with a net cash flow of RMB895 million
- Cash and cash equivalents of approximately RMB3,505 million
- In March 2022, the Board passed a resolution and proposed to issue no more than 70 million A Shares, the proceeds are expected to be no more than RMB3,980 million

# **R&D Pipeline Covering a Wide Variety of Therapeutic Areas**





Tumors

# **R&D Progress of Toripalimab**



Therapeutic Area	Medicine Codes	Clinical Trial Number	Indications	Pre-Clinical	Phase I	Phase II	Phase III	NDA	Locations	Note	
	NCT0301310 NCT0291543 NCT0311326 NCT0358178 NCT0382996	NCT03013101	Melanoma (2L, mono)	NDA Approved by N	NMPA on 17 Dec	ember 2018			China		
		NCT02915432	Nasopharyngeal carcinoma (3L, mono)	NDA Approved by N	NDA Approved by NMPA in February 2021, BLA submitted to FDA Accepted					FDA BTD, ODD and Priority Review	
		NCT03113266	Urothelial carcinoma (2L, mono)	NDA Approved by N	NDA Approved by NMPA in April 2021						
		NCT03581786	Nasopharyngeal carcinoma (1L, combo with chemo)	NDA Approved by N	NMPA in Novemb	oer 2021, BLA su	bmitted to FDA	Accepted	Global	FDA BTD, Priority Review	
		NCT03829969	ESCC (1L, combo with chemo)		NDA Accepted				China	FDA ODD	
		NCT03856411	EGFR negative NSCLC (1L, combo with chemo)		NDA Accepted				China China		
		NCT03924050	EGFR mutated TKI failed NSCLC (combo with chemo)	Pivo	otal registered c	linical trial					
	JS001 Toripalimab	NCT04772287	NSCLC (neoadjuvant)	Pivo	Pivotal registered clinical trial						
		NCT04012606 NCT04848753		Pivo	otal registered c	linical trial			China	Completed subjects enrollment	
Oncology			ESCC (neoadjuvant)	Pivo	otal registered c	linical trial			China		
Oncology		JS001 Toripalimab NCT04085270 NCT04523493	NCT03430297	Melanoma (1L, mono)	Pivo	otal registered c	linical trial			China	
			NCT04085276	TNBC (combo with albumin-bound paclitaxel)	n-bound paclitaxel) Pivotal registered clinical trial		China				
			NCT04523493	HCC (1L, combo with lenvatinib)	Pivo	otal registered c	linical trial			Global	
		NCT04723004	HCC (1L, combo with bevacizumab)	Pivo	otal registered c	linical trial			Global China	Completed subjects enrollment	
		NCT03859128		Pivo	otal registered c	linical trial				Completed subjects enrollment	
		NCT02915432	Gastric carcinoma (3L, mono)	Pivo	otal registered c	linical trial			China		
		NCT04394975	Renal cell carcinoma (1L, combo with axitinib)	Pivo	otal registered c	linical trial			China		
		NCT04568304	Urothelial carcinoma (1L, PD-L1+)	cinoma (1L, PD-L1+) Pivotal registered clinical trial	Global						
			NCT05180734	Gastric carcinoma (adjuvant)	Pivo	otal registered c	linical trial			Global	
		1	Mucosal melanoma (combo with axitinib)						U.S.	FDA FTD ODD; NMPA BTD	
		NCT03474640	Sarcoma						U.S.	FDA ODD	

### Upgrading Production Capacity, Transforming into Intelligent Manufacturing Through Digitalization

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#### **Suzhou Wujiang**

**Production Base** 

- GMP certification
- Construction completed in 2016
- 4,500L fermentation capability



#### Shanghai Lingang

- Production Base
  - Under construction in accordance with

#### **CGMP** standard

- **30,000L** fermentation capability in the first phase of the project
- Passed the GMP compliance inspection
- Passed the on-site inspection conducted by Lilly and provided overseas clinical samples of JS016
- Digital "smart" factory



# O2China's innovation<br/>helps the global fight<br/>against COVID-19

Our mission is to provide patients with treatment options that work better and cost less.

#### Many firsts, China speed

- Compressing the normal pre-clinical research time of antibody from 18
  months to less than 4 months
- The **1st** report to evaluate the function of NAbs against SARS-CoV-2 in nonhuman primates
- The 1st clinical trial on a NAb for COVID-19 carried on healthy subjects
- The 1st NAb for COVID-19 to enter the clinical trial in China
- The **1st** Chinese-developed innovative biological drug approved for use in the U.S.
- The 1st Chinese innovative drug recommended by NIH
- The 1st Chinese-developed monoclonal antibody purchased by the U.S. government

#### Gained EUA in many countries and regions, purchased by many countries

- As of the end of the reporting period, more than **15** countries and regions have granted EUA for the JS016 and LY-CoV555 together
  - 2021/02, the therapy is authorized for treatment
  - 2021/09, the therapy is authorized for post-exposure prophylaxis
  - 2021/12, the EUA is expanded to include certain high-risk pediatric patients from birth to under 12 years old. The therapy has been the first and only authorized neutralizing antibody therapy for emergency use in COVID-19 individuals under the age of 12.
- 2021/09, The U.S. government has made an additional purchase for etesevimab with 388,000 doses; European Commission has agreed to purchase up to 220,000 therapy doses
- 2021/11, The U.S. government made additional purchase for the therapy with **614,000** doses
- Till December, over 700,000 patients have been treated with etesevimab and bamlanivimab or bamlanivimab alone, potentially preventing more than 35,000 hospitalizations and at least 14,000 deaths during the worst of the pandemic.
- ✓ Reached all the milestones agreed in the agreement regarding the overseas authorization of etesevimab to Eli Lilly

#### Active against multiple variants

According to the paper *Tackling COVID-19 with neutralizing monoclonal antibodies* published in *CELL* in June 2021, as well as *the Reduced sensitivity of SARS-CoV-2 variant delta to antibody neutralization* published in *Nature* in June 2021, the combination therapy is effective against **B.1.1.7/Alpha variants** as well as **B.1.617.1/Kappa and B.1.617.2/Delta variants** 



# COVID-19 NAb

### **Remarkable Efficacy** in a Combination **Therapy Clinical Trial**



**Results** 

COVID-19 illness

**Clinical trial** 

March 10, 2021, the new data from BIAZE-1 Phase III study demonstrates that LY-CoV555 and JS016 together reduced COVID-19 related hospitalizations and deaths by 87%

A randomized, double-blind, placebo-controlled, phase II/III study to evaluate the efficacy and safety of LY-CoV555 and JS016 in participants with mild to moderate



opAlliance

# VV116: Promising oral Nucleoside drug Against COVID-19

- In October 2021, Junshi Biosciences announced that the company and Vigonvita Life Sciences, incubator of SUSIMM, has reached a cooperation and will jointly undertake the clinical development and industrialization of the oral nucleoside anti-SARS-CoV-2 drug candidate VV116 on a global scale<sup>1</sup>.
- In December 2021, VV116 was approved for the treatment of moderate to severe COVID-19 patients in Uzbekistan.
- > International multi-center clinical studies of VV116 are ongoing.



1. Cooperation territory: the whole world except for the following four territories, namely the five Central Asian countries, Russia, North Africa, and the Middle East.



RdRp: Responsible for viral RNA synthesis, highly conserved active-site region, an important target for anti-SARS-CoV-2



# **Cell Research : Positive Preclinical Results of VV116**



■ The positive preclinical results of VV116 were published in Cell Research.



VV116- and EIDD-2801-treated mice on day 2 and day 5

#### Recent preclinical results

- VV116 has a high barrier to drug resistance, which means it is effective against WT and various variants (eg Alpha, Beta, Delta, Omicron)
- VV116 shows excellent in vitro efficacy
- The results of in vitro bacterial reverse mutation test and chromosome aberration test are negative and there is no genetic toxicity

- VV116 significantly reduces the viral RNA copies and infectious virus titers in the lungs
  - Preclinical pharmacodynamics studies have shown that VV116 exhibits significant anti-coronavirus effects both in vivo and in vitro
  - In mouse models, VV116 can reduce the lung virus titer below the detection limit and show strong anti-coronavirus efficacy
- VV116 has high oral bioavailability
  - 80% and 90% in rats and dogs, respectively

# **Positive Three Phase I Clinical Study Results on VV116**

 In terms of safety, VV116 has shown satisfactory safety and tolerability. None of the three studies reported death, serious adverse events, grade three or higher adverse events, or adverse events leading to suspension or discontinuation of treatment. All adverse events were recovered without treatment or intervention. Compared with previously reported data for similar drugs, VV116 has a lower risk of hepatotoxicity.

Adverse events, n (%)	200 mg (n = 9)	400 mg (n = 9)	600 mg (n = 9)	Total VV116 ( <i>n</i> = 27)	Placebo (n = 9)
Overall	3 (33.3)	5 (55.6)	6 (66.7)	14 (51.9)	5 (55.6)
VV116/placebo related	3 (33.3)	5 (55.6)	6 (66.7)	14 (51.9)	5 (55.6)
Severity					
Grade 1	3 (33.3)	5 (55.6)	6 (66.7)	14 (51.9)	4 (44.4)
Grade 2	0	0	0	0	1 (11.1)
Grade 3	0	0	0	0	0
Grade 4	0	0	0	0	0
Grade 5	0	0	0	0	0

adverse events in multiple ascending-dose study



The mean plasma 116-N1 concentration-time curves in each dose group after a single dose of VV116



*The mean plasma 116-N1 concentration-time curves at Day 1 and Day 6 in multiple ascending-dose study* 

#### VV116 shows good pharmacokinetic characteristics

- Oral administration of VV116 is rapidly absorbed
- Repeated administration can maintain effective antiviral concentration
- Normal diet has no effect on the drug exposure of VV116





- A phase II clinical trial of VV116 was completed in subjects with moderate to severe COVID-19 in Uzbekistan, and the results of the study indicate that compared with standard therapy, the VV116 showed favorable safety and good efficacy.
- For moderate to severe COVID-19, an international multicenter phase III clinical trial has been initiated. The first patient has been enrolled and dosed in the trial.
- For mild to moderate COVID-19, an international multicenter phase II/III clinical study has been initiated. The first patient of the study has been enrolled and the study is being developed in multiple centers around the world.

	Status						
Region	Preclinical	IND	Phase 1	Phase 2/3			
China *:							
Global (MRCT)							

#### **Clinical Trials in Junshi Territory**

# VV993: Oral Anti-SARS-CoV-2 3CLpro inhibitor candidate



- In January 2022, Junshi Biosciences announced the cooperation with Vigonvita Life Sciences to jointly undertake the clinical development and commercialization of the Oral Anti-SARS-CoV-2 Treatment CandidateVV993 on a global scale (excl. the five Central Asian countries)
- The discovery and early development are conducted by Shanghai Institute of Materia Medica (SIMM), Chinese Academy of Sciences (CAS) and Wuhan Institute of Virology (WIV), CAS

**3C-like protease (3CLpro)** is an essential protease that hydrolyses the viral polyproteins to produce functional proteins during SARS-CoV-2 replication. Based on nearly 100% sequence identity across current variants of concern (VOCs), it is considered as a highly conserved and very important Anti-SARS-CoV-2 therapeutic target.

#### VV993 is a Safe Orally Bioavailable and Effective Anti-SARS-CoV-2 3CLpro inhibitor candidate

- > VV993 has potent antiviral activity in the SARS-CoV-2 infected cells
- VV993 not only efficively reduce virus replication, but also significantly improve pathological changes caused by SARS-CoV-2 infection in mouse models
- > VV993 has good orally bioavaiablity and safety without cardiotoxicity and neurotoxicity

Both of VV116 and VV993 are drug candidates developed against targets which are critical and conserved during the SARS-CoV-2 lifecycle. They can not only be used alone to exert distinct clinical activity, but also have combination potential with synergy effect.



# Core Commercialized D3 Product

Our mission is to provide patients with treatment options that work better and cost less.

#### 「 <sup> 書実生物</sup> International Recognition and Overseas Progress of Toripalimab



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# **Toripalimab in Nasopharyngeal Carcinoma (NPC)**



- In Feb 2021, the supplemental NDA application of toripalimab in combination with chemotherapy for the first-line treatment of patients with advanced, r/m NPC was accepted by the NMPA. In Nov 2021, it was approved by the NMPA.
- The data of toripalimab in 1L NPC was featured at ASCO 2021 in the plenary session on Sunday, June 6, 2021.
- JUPITER-02 is the first international multi-center Phase III trial to prove the addition of toripalimab to GP as a first-line treatment for r/m NPC patients provided superior PFS and OS than GP alone.
- US FDA has accepted for review the BLAs for toripalimab in combination with gemcitabine and cisplatin for the first-line treatment for patients with advanced recurrent or metastatic nasopharyngeal carcinoma (NPC) and toripalimab monotherapy for the second-line or above treatment of recurrent or metastatic NPC after platinum-containing chemotherapy.
- The FDA has granted Priority Review Designation for the toripalimab BLAs and set a Prescription Drug User Fee Act (PDUFA) action date for April 2022.
- The FDA is not currently planning to hold an advisory committee meeting to discuss the application.



ASCO 2021

arm

# CHOICE-01: Toripalimab in Combination with Chemotherapy as 1L Treatment for NSCLC

- CHOICE-01 (NCT03856411) is the first randomized, double-blind, placebo-controlled, multicenter Phase III study to enroll patients with advanced squamous and non-squamous NSCLC, as well as adding anti-PD-1 mAb to 1L chemotherapy in China
- Updated results and biomarker analyses were announced in an oral presentation at March ASCO Plenary Series



- Final PFS analysis in the ITT population: median PFS of 8.4 vs. 5.6 months, a 51% reduction in the risk of disease progression; The 1-year PFS rate in toripalimab arm was more than twice as high as that in placebo arm
- The PFS benefits were observed in toripalimab arm regardless of PD-L1/TMB expression



- A statistically significant improvement in OS was detected (HR 0.69, 95% CI [0.52, 0.92]; P =0.0099) with a 31% reduction in the risk of death
- A trend for improved OS was observed in toripalimab arm regardless of PD-L1 expression

# Toripalimab in ESCC: Results from JUPITER-06 Published in Cancer Cell



- JUPITER-06: A randomized, double-blind, Phase 3 clinical trial comparing the efficacy and safety of toripalimab versus placebo in combination with TP as a first-line treatment for patients with advanced or metastatic ESCC.
- In Sep 2021, the study results were first presented in the ESMO 2021. In Mar 2022, the study
  was published in *Cancer Cell* (IF: 31.734): Toripalimab + TP chemotherapy showed superior
  PFS and OS over chemotherapy alone with a manageable safety profile. And these benefits
  can be observed across all PD-L1 expression subgroups.

#### **Positive Results**

 A statistically significant improvement in PFS (mPFS 5.7 vs. 5.5 months), reduced the risk of progression or deaths by 42% (HR=0.58, 95% CI: 0.46-0.74, P < 0.0001)</li>

PD-L1 expression subgroups:

- CPS ≥ 1: 5.7 vs. 5.5 months (HR=0.58, 95% CI: 0.44-0.75)
- CPS < 1: 5.7 vs. 5.6 months (HR=0.66, 95% CI: 0.37-1.19)
- A significant improvement in OS (mOS 17.0 vs. 11.0 months), reduced the risk of deaths by 42% (HR=0.58, 95% CI: 0.43-0.78, P=0.0004)
- An outperformed ORR (69.3% vs 52.1%), increased by 17.2%.



Blinded Independent Central Review-Assessed

<sup>1.</sup> Source: Wang, Z. X., Cui, C., Yao, J., Zhang, Y., Li, M., Feng, J., ... & Wang, F. (2022). Toripalimab plus chemotherapy in treatment-naïve, advanced esophageal squamous cell carcinoma (JUPITER-06): A multi-center phase 3 trial. Cancer Cell.

# **Exclusive Rights to Toripalimab in the U.S. and Canada Granted to Coherus**





Junshi Biosciences grants Coherus the exclusive license to **toripalimab** and two option programs in the U.S. and Canada. Junshi also grants certain negotiation rights to Coherus for two additional checkpoint inhibitor antibodies.

In Jan 2022, Coherus has also initiated the process to exercise its option to license **TAB006/JS006** (**TIGIT-targeted antibody**), in the US and Canada.

# Data-driven sales— the core of overseas market

- An aggregate of US\$1.11 billion of upfront payments, exercise fees and milestone payments
- Key Contents of the Agreement
  - [¥] €0
- Exclusive rights of toripalimab in US and Canada (20% royalty on annual net sales)
- Exclusive rights of JS006 in US and Canada (18% royalty on annual net sales)
- Negotiation rights for two additional checkpoint inhibitor antibodies
- Establishing a joint development committee
- A maximum of US\$25 million R&D expenses per project per year

• **Clinical Data:** Data from toripalimab pivotal clinical program, TIGIT/PD-1 combination and other potential combination trials



• **Publications:** Abstracts in medical conferences such as ASCO and SITC, 5-year publication plan in both mono and combo settings



- **FDA Filings:** BLA filing of NPC with BTD, multiple additional filings and PDUFA actions in rare and prevalent indications
- **Commercial Launches:** Multiple U.S. launches expected between 2022 and 2026

# Promote the Use of Toripalimab in Frontline Treatment: the Strongest Adjuvant/Neoadjuvant Deployment in China

- The data from the China National Central Cancer Registry<sup>1</sup> shows that, 56.5% of the cancer patients were diagnosed at stage II or III (when adjuvant/ neoadjuvant therapy can be better applied) among top 5 cancers China. Therefore, with the improvement of cancer prevention awareness and early cancer detection, target group will continue to grow, leading to a market with large potential.
- Junshi has promoted the use of toripalimab in frontline treatment, with focus on adjuvant/neo-adjuvant therapy. The clinical trials cover most common cancer types in China, including gastric cancer, liver cancer, lung cancer, and esophageal squamous cell carcinoma, all of which are currently in Phase 3.



#### **Stage distribution for Top 5 cancers in China**

#### Adjuvant/Neoadjuvant Pipeline of Toripalimab



1. Zeng, H., Ran, X., An, L., Zheng, R., Zhang, S., Ji, J.S., Zhang, Y., Chen, W., Wei, W., He, J. and HBCR Working Group, 2021. Disparities in stage at diagnosis for five common cancers in China: a multicentre, hospital-based, observational study. *The Lancet Public Health*, *6*(12), pp.e877-e887.



# **Toripalimab Pivotal Trials Layout**





 Adjuvant/Neoadjuvant
 First Line
 ≥ Second Line

### **Well-Structured PD-1 Combo Solution**







# 04 Robust Portfolio in Core Therapeutic Areas

Our mission is to provide patients with treatment options that work better and cost less.



# **A Broad Modalities Portfolio Across Therapeutic Areas**

51+

6+

5



		Approved/ under review	Toripalimab PD-1	Etesevimab* S protein	Adalimumab TNF-α		
)	Candidates	Phase 3	<b>JS109</b> Parp	Bevacizumab VEGF	Ongericimab PCSK9	<b>JT001(VV116)</b> Oral RdRp	
		Phase 2	<b>JS004(TAB004)</b> BTLA	<b>JS005</b> IL-17A			
) ) )	Modalities Monoclonal antibodies, small molecules, polypeptide drugs, ADCs, bi-specific or multi-specific antibodies, nucleic acid drugs		<b>JS001SC</b> PD-1	<b>JS003</b> PD-L1	<b>JS006(TAB006)</b> TIGIT	<b>JS012</b> Claudin 18.2	<b>JS019</b> CD39
			JS108 TROP2 ADC	<b>JS014</b> IL-21	<b>JS007</b> CTLA-4	<b>JS101</b> Pan-CDK	<b>JS110</b> XPO1
		Phase 1	<b>JS111</b> EGFR exon 20	<b>JS201</b> PD-1/TGF-β	<b>JS112</b> Aurora A	<b>JS107</b> Claudin18.2 ADC	
			<b>JS103</b> Uricase	<b>JS026</b> S protein	UBP1213 BLyS		
			<b>JS203</b> CD3+CD20	<b>JS114</b> Nectin4 ADC	<b>JS013</b> CD93	<b>JS104</b> Pan-CDK	<b>JS209</b> CD112R+TIGIT
	Therapeutic areas		<b>JS015</b> DKK1	<b>JS105</b> ΡΙ3Κ-α	<b>JS207</b> PD1+ Undisclosed	JS115 BCMA ADC	<b>JS211</b> PD-L1+ Undisclosed
	Oncology Metabolism Immunology	Pre- clinical	<b>JS018</b> IL-2	<b>JS116</b> KRAS	<b>JS206</b> IL2+PD-1	<b>JS011</b> 未予披露	<b>JS113</b> EGFR 4th Gen
	Infectious         Neuroscience		JS120 IDH1	<b>JS121</b> SHP2	<b>JS122</b> FGFR2	JS123 ATR	<b>JS009(TAB009)</b> CD112R/PVRIG
			<b>JS401</b> Undisclosed (RNAi)	<b>JS008</b> Undisclosed	<b>JT109</b> Vaccine ZIKV	<b>JT003(VV993)</b> Oral 3CLpro	JS010 CGRP



# JS004/TAB004: the World's First-in-human Anti-BTLA Monoclonal Antibody against tumor



- PD-1 like molecule expressed on activated T and B cells
- BTLA is co-expressed on the surface of activated lymphocytes (B and T cells) with PD-1
- HVEM (ligand on tumor cell) suppresses T-cell proliferation and cytokine release – *Negative Signaling*
- Tumor expression of HVEM has been associated with poor prognosis and immune escape
- BTLA blockade promotes antigen-specific T cell response and works synergistically with toripalimab (anti-PD-1)
- TAB004/JS004 is the world's first-in-human anti-tumor recombinant humanized anti-BTLA monoclonal antibody specific to
   BTLA independently developed by Junshi Biociences
- The combination of TAB004/JS004 and Toripalimab is a promising antitumor treatment strategy, which is expected to increase patients' response to immunotherapy and expand the range of potential beneficiaries

#### 君实生物 TopAlliance

### JS004/TAB004: Clinical Trial Progress in China and Overseas

- TAB004/JS004 has completed the dose-escalation stage in Phase Ia and entered the dose expansion stage in Phase Ib/II
- The combination clinical trials of TAB004/JS004 and Toripalimab are underway
- Conduct further clinical studies on the safety and efficacy of TAB004/JS004 against multiple types of tumors (relapsed/refractory lymphoma, melanoma, squamous cell carcinoma of the head and neck, NPC, lung cancer, etc.) in China and the United States

Region	Study	Ongoing Clinical Trial	Indication	Design	Ν	2020 Q4	2021 Q1	2021 Q2	2021 Q3
US	TAB004	1	Advanced Solid Malignancies and Lymphoma	Dose Escalation and Expansion TAB004 Monotherapy	Complet	e dose ation			
				Dose Escalation and Expansion TAB004+ Toripalimab Combination	~500			Start dose escalation	
China	Mal <b>JS004</b> 6 M	Advanced Solid Malignancies (Including:	Dose Escalation and Expansion TAB004 Monotherapy	622	Complete	e dose tion			
		J5004	J5004	<b>UU4</b> 6	NPC, LC) and Lymphoma	Dose Escalation and Expansion TAB004+ Toripalimab Combination	~032		

# **New Immune Checkpoint Inhibitor: Anti-CD112R & Anti-TIGIT**



SJEM - (20) JEM Brief Defini Identification of CD112R as a novel checkpoint for human T cells Yuwen Zhu,<sup>1</sup> Alessandro Paniccia,<sup>1</sup> Alexander C. Schulick,<sup>1</sup> Wei Chen,<sup>1,3</sup> Michelle R. Koenig,<sup>1</sup> Joshua T. Byers,<sup>1</sup> Sheng Yao,<sup>4</sup> Shaun Bevers,<sup>2</sup> and Barish H. Edil<sup>1</sup> <sup>1</sup>Department of Surgery and <sup>2</sup>Department of Biochemistry and Molecular Genetics, Anschutz Medical Campus, University of Colorado, Aurora, CO 80045 <sup>3</sup>Department of Hepatobiliary and Pancreatic Surgery, Second Affiliated Hospital, Zhejiang University, 310027 Hangzhou, China <sup>4</sup>TopAlliance Biosciences, Inc., Rockville, MD 20850 T cell immunoglobulin and ITIM domain (TIGIT) and CD226 emerge as a novel T cell cosignaling pathway in which CD226 and TIGIT serve as costimulatory and coinhibitory receptors, respectively, for the ligands CD155 and CD112. In this study, we describe CD112R, a member of poliovirus receptor-like proteins, as a new coinhibitory receptor for human T cells. CD112R is preferentially expressed on T cells and inhibits T cell receptor-mediated signals. We further identify that CD112, widely expressed on antigen-presenting cells and tumor cells, is the ligand for CD112R with high affinity. CD112R competes with CD226 to bind to CD112. Disrupting the CD112R-CD112 interaction enhances human T cell response. Our experiments identify



CD112R as a novel checkpoint for human T cells via interaction with CD112.

#### TAB009 (JS009)

- CD112R (PVRIG) is a new immune checkpoint pathway discovered by Junshi from the origin
- Treatment of T cells with anti-CD112R in combination with PD-1 or TIGIT inhibitors further increased T cell activation and improved the efficacy of clinical treatment
- JS009 is a recombinant humanized anti-CD112R monoclonal antibody injection independently developed by Junshi Biosciences, mainly for the treatment of advanced malignant tumors
- In December 2021, the IND application for the JS009 has been accepted by the NMPA
   TAB006 (JS006)
- **TIGIT** is another immunosuppressive target of the PVR family. Its ligands include PVR and CD112, and its binding site for CD112 is different from that of CD112R
- JS006 is a specific anti-TIGIT monoclonal antibody injection developed independently by Junshi Biosciences, JS006 can specifically block the TIGIT-PVR inhibitory pathway and stimulate the activation of killing immune cell to secrete tumor-killing factors
- In January 2021, the IND application for the JS006 has been approved by the NMPA; In February, the IND application for the JS006 has been approved by the FDA
- In January 2022, Coherus has also initiated the process to exercise its option to license JS006 (TIGIT-targeted antibody), in the US and Canada.

# *Pre-clinical data showed that JS009 in combination with JS006 exhibits significant synergistic anti-tumor effects*

# A Comprehensive Landscape of Immuno-oncology





**T** cell activation



- Significantly increased half-life and exposure
- Improved stability and developability
- Single agent antitumor activity & synergistic with other therapeutic antibodies
- In September 2021, the IND application for the JS014 has been approved by the NMPA

#### JS019 Anti-CD39 with Special MoA TME regulation

- CD39 is the enzyme responsible for the initial steps in the conversion of immune stimulatory extracellular adenosine triphosphate (ATP) to immune suppressive adenosine (ADO) in the tumor microenvironment, and plays an important role in the immune suppressive response in the tumor microenvironment.
- JS019 can achieve high drug efficacy while reducing potential systemic side effects by highly selectively targeting the high expression of CD39 in the tumor microenvironment.
- In December 2021, the IND application for the JS019 has been approved by the NMPA



#### JS107 Anti-Claudin18.2 Monoclonal Antibody-MMAE Conjugate



- JS107 is an antibody-drug conjugate (ADCs) targeting tumor-related protein Claudin18.2, and is intended to be used for the treatment of advanced malignant tumors, such as gastric cancer and pancreatic cancer
- The pre-clinical in vivo pharmacodynamics showed that JS107 exhibits significant anti-tumor effect. In addition, animals have a good tolerance to JS107 and JS107 exhibits good safety
- In March 2022, the IND application for the JS107 has been approved by the NMPA

# The Next-generation of T-cell Engaging Cancer Immunotherapies: PrecisionGATE<sup>™</sup>



Junshi and Revitope collaborate in the research and development of the next-generation of T-cell engaging cancer immunotherapies. Revitope will be responsible for designing up to 5 unique T-cell immunotherapeutic drugs against targets selected by the Company.



Because conventional bispecific antibody therapeutics can generate unwanted and substantial **"on-target, off-tumor"** toxicity, Revitope's two-component Tcell engaging antibody circuits are designed to permit specific recruitment and activation of T-cells exclusively by **tumor cells**, thereby reducing systemic toxicity. **PrecisionGATE<sup>™</sup>** therapies **split** the CD3 paratope (the T-cell recognition domain) into two halves.. Only when the two molecules come together through **binding to their different tumor targets on the same tumor cell** can the two halves of the CD3 binding domain **recombine and create** a fully functional anti-CD3 domain.

# **Small Molecule Inhibitor for Cancer Therapy**



#### JS109: PARP inhibitor

- Senaparib (JS109) is a novel agent targeting PARP.
- Junshi and IMPACT entered into the JV Agreement for the R&D and commercialization of the drug.
- We are conducting a Phase II pivotal study of JS109 monotherapy in treating advanced ovarian cancer patients with BRCA mutation, and a Phase III study of JS109 as the 1L maintenance treatment in platinum-sensitive advanced ovarian cancer patients.
- Enrollment has been completed in the Phase III study.



Senaparib(JS109) has been well-tolerated with significant anti-tumor activity in both Chinese and Australian patients

#### JS110: XPO1 inhibitor

- **JS110** is a small molecule inhibitor of the nuclear export protein XPO1, which is clinically intended to treat patients with advanced tumors.
- According to the results of pre-clinical studies, JS110 specifically blocks the function of XPO1, and JS110 monotherapy or combination therapy can inhibit the growth of a variety of blood and solid tumors. Due to its unique mechanism of action, the development of JS110 is expected to bring new treatments to patients with advanced tumors.
- In September 2021, the first patient has been dosed in the clinical trial of JS110.

# JS111: EGFR exon 20 insertion and other uncommon mutation inhibitor

- **JS111** is a small molecule inhibitor that effectively inhibits uncommon EGFR mutations.
- Pre-clinical data showed that JS111 maintains the activity of inhibition for the common EGFR mutations such as T790M and selection of wild-type EGFR, while overcoming the insensitivity of the third-generation EGFR inhibitor for exon 20 insertion and other uncommon EGFR mutations.
- In July 2021, the first patient has been dosed in the clinical trial of JS111.

# Immunology: JS005 & UBP1211



#### JS005: anti-IL-17A mAb



- JS005 is a recombinant humanized anti-IL-17A monoclonal antibody injection that targets autoimmune diseases including psoriasis
- In preclinical studies, JS005 has shown efficacy and safety comparable to those of marketed anti-IL-17 monoclonal antibodies
- · Phase II study is underway

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#### **Junmaikang<sup>®</sup> (UBP1211)** : anti-TNF-α-mAb

- UBP1211, a biosimilar of Humira (adalimumab), is used to treat autoimmune diseases
- The clinical study results show that UBP1211 has similar efficacy, pharmacokinetics, safety and immunogenicity to Humira
- In March 2022, UBP1211 for the treatment of rheumatoid arthritis, ankylosing spondylitis and psoriasis received marketing approval from the NMPA



ACR20/50/70 response rates are similar for UBP1211and Humira in patients with moderately to severely active rheumatoid arthritis

# Metabolism: JS002 & JS103



#### **JS103:** Hyperuricemia with or without Gout



- JS103 is a pegylated uricase derivative developed independently by the Company that is mainly used for the treatment of hyperuricemia with or without gout. JS103 catalyzes the oxidation of uric acid to form an allantoin with significantly higher solubility than that of uric acid, thereby achieving the effect of reducing blood uric acid
- In May 2021, the IND application for the JS103 has been approved by the NMPA

#### Ongericimab (JS002): Hyperlipidemia

- JS002 is a recombinant humanized anti-PCSK9 mAb for injection independently developed by Junshi for the treatment of cardiovascular diseases. Junshi is the first PRC company to obtain clinical trial approval for the target drug
- · Phase III study is underway with a larger patient population
- After a single dose of 15-450mg in healthy subjects, JS002 was shown to be effective in lowering LDL-C levels (50-70% reduction from baseline) at 150/300/450mg
- After multiple dosing of 150-450mg in patients with hyperlipidemia, the results showed that 150mg Q2W or 300/450mg Q4W dosing regimens can achieve maximum and stable LDL-lowering efficacy over the long term (55-75% reduction from baseline, comparable to imported drugs)



Notes: This is the primary analysis data, the final result is subject to the publication



# 05 Commercialization

Our mission is to provide patients with treatment options that work better and cost less.

# **TUOYI® Continuing Steady Commercial Execution**





#### **Product Sales**

- TUOYI® achieved sales revenue of RMB412 million throughout the year in 2021
- TUOYI® sold 240,000 doses in 2021, which rose 18% year-over-year
- The terminal pricing of TUOYI<sup>®</sup> dropped by over 60% compared to the initial pricing in 2020





- · Complete the adjustment to the commercialization team
- Complete the establishment and restoration of the marketing regional team
- Supplement the core market personnel



# Domestic Commercialization

We are confident that Junshi can gain over 50% market share in those tumor fields that had included in NRDL indications. With indications for other types of tumor being approved gradually, we would be able to gain the market share we deserve. Fill the gaps in immunotherapy for patients with advanced NPC and non-selective patients with advanced UC in the NRDL

The **only** anti-PD-1 mAb used in the treatment of melanoma and NPC in the NRDL

All approved indications of TUOYI<sup>®</sup> included in the NRDL

For the burden on patients

The indications of TUOYI<sup>®</sup> that has been included in the NRDL were entitled to supplementary reimbursement under the NRDL in **102** cities

1L treatment for NPC has entered the medical insurance catalogues in **11** cities, for which supplementary medical insurance could be obtained in **51** cities

More large indications of TUOYI<sup>®</sup> will enter the commercial approval stage

The prospective layout of multi-indication perioperative clinical research is showing a strong advantage

Promising competitiveness in commercialization





# 06 2022 Outlook

Our mission is to provide patients with treatment options that work better and cost less.

### 2022 Catalysts & Milestones

#### Anti-SARS-CoV-2 Drugs

Speed up commercialization of our anti-SARS-CoV-2 Drugs such as VV116, broaden the COVID-19 drugs pipeline and contribute to the world's anti-pandemic efforts with domestic innovation

#### Innovation

Accelerate clinical trials of TAB004/JS004, the world's first-in-human anti-BTLA mAb, in China and the United States, announce the readout of Phase I/II clinical data and expand the range of beneficiaries of immunotherapy through origin innovation

#### Internationalization

Promote marketing approval of TUOYI<sup>®</sup> in overseas market, establish the market position in the Coherus Territory and continue to expand the global commercialization network

### Commercialization

With more large indications of TUOYI<sup>®</sup> enter the commercial approval stage, the gradual realization of the prospective layout advantages of multi-indication perioperative clinical research and the upgrade of production capacity of commercial production batches, the domestic sales of TUOYI<sup>®</sup> would begin to enter a positive cycle

# THANK YOU

