

# 2024 J.P. Morgan Healthcare Conference Innovation-driven Leading Pharma Co. in China

Jan 2024

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- About Sino Biopharm
- Innovation 4 key TAs
- BD & Globalization invoX
- Why us

## Sino Biopharm: largest Rx pharma company in China by revenue





largest Rx Pharma in China

**RMB** 

29bn

2022 Revenue **RMB** 

5<sub>bn</sub>

2022 Total Profit



**Employee** 

26,000+



**R&D** personnel

4,300+



Sales personnel

14,000+



**Production** personnel

5,400+



**Products** 

200+



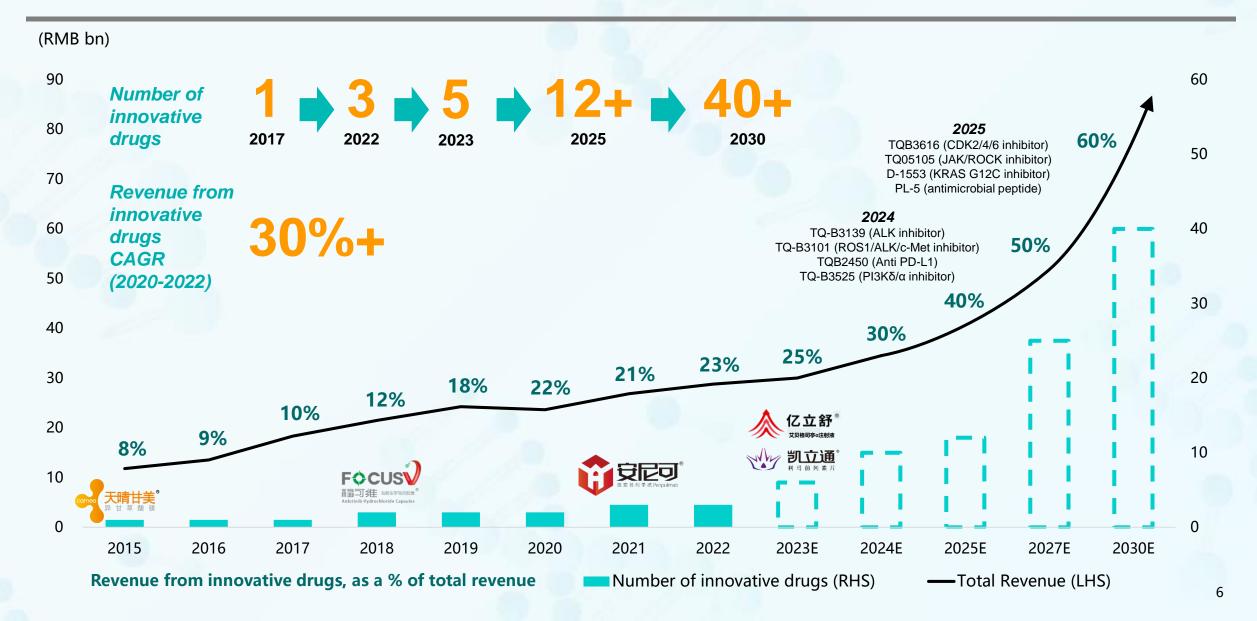
Innovative pipeline

60+

- About Sino Biopharm
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- Why us

## Innovation: driving revenue growth with newly launched drugs





## Innovation: focus on 4 TAs to strengthen market leadership in China



## Science for a healthier world

## Oncology Top 5

4mn new cases per year

# Liver diseases Top 1

100mn HBV and NASH patients

# Surgery/analgesic Top 3

100mn surgical patients

# Respiratory Top 2

**200mn** patients with interstitial, obstructive and infectious lung diseases

## **Cumulative number of patients treated**





**0.1mn** 

0.7mn







## Huge market potential, commercialization is key to win competition



## Large and fast growing market<sup>1)</sup>

• China: RMB278bn by 2022, RMB660bn by 2030 (CAGR: 11.4%)

## Fierce competition, commercialization is the key<sup>2)</sup>

• 3,000+ sales personnel (oncology), covering 27,000+ hospitals

#### Internal R&D + External BDs

• Acquired F-star (next generation bispecific immunotherapies) in 2023

**Next Focus** 

Expand existing drugs' indications and enrich drug combination therapies

Globalization through in-license & out-license More BDs with focus on bispecific antibodies and cutting-edge technologies

### **TOP 5 in China**

Fast-growing market share



2013-2022 Revenue of the Oncology TA



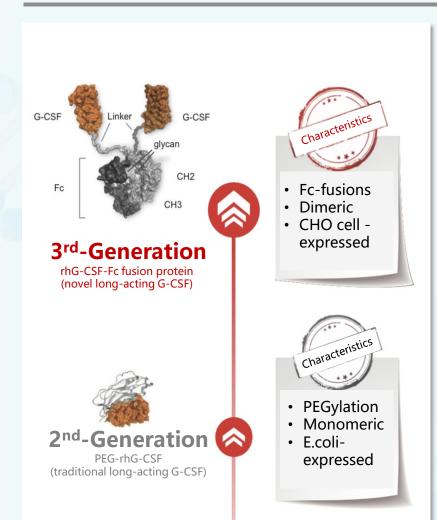
## Competitive portfolio with RMB10bn+ peak sales, blockbuster Anlotinib as the core

Approved Phase III/NDA			
	NSCLC (3rd line)		
	МТС	SCLC (3rd I	ine)
DTC	F		STS
RCC (1st line	Peak Sale		STS (1st line)
Endometrial cancer	TQB2450	1十	RAS-BRAF wild-type CRC (1st line)
SCLC (1st line)	Anti PD-L1	源安普利辛抗Perpulmab	Ovarian cancer (2nd line)
NSC (1st)	HSNOOLO (13t l	line) HCC (	(1st line)
	sNSCLC (1st line)	HCC (adjuvant)	

Indications	Anlotinib +	Expected NDA Approval
SCLC (1st-line)	PD-L1 chemo	2024 H1
HCC (1st-line)	PD-1	2025 H1
Endometrial cancer (2nd/3rd-line)	PD-L1	2025 H1
Stage III NSCLC (adjuvant therapy after chemoradiation)	PD-L1	2025 H2
RCC (1st-line)	PD-L1	2025 H2
NSCLC (1st-line) STS (1st-line) CRC (1st-line) glioma (1st-line) HCC (adjuvant) platinum-resistant ovarian cancer	PD-1 PD-L1 Chemo 	2025 H2 

## Yilishu®, FIC 3rd-gen G-CSF, provides better safety and efficacy





## First 3<sup>rd</sup>-gen: Yilishu®

# ✓ FDA approval✓ NCCN recommendation

#### **Novel Structure**

The world's **first dimeric G-CSF Fc fusion protein**.

The only innovative G-CSF product with generic name different from Filgrastim.

#### **Unique product features**

The unique MOA brings clinical benefits in many aspects: **continuous protection** & **less allergic** reactions & **earlier administration**.

#### **Comprehensive Clinical Evidence**

The only G-CSF product that has undergone headto-head clinical trials with both **short-acting** and **long-acting** competitive products.

#### **Professional marketing team**

2,000<sup>+</sup> sales personnel in oncology area, Yilishu<sup>®</sup> could be jointly promoted with anlotinib and penpulimab to create synergies.



## **Continuous Protection**

- Grade 4 neutropenia significantly less frequent in cycles 3-4 than other longacting G-CSF
- Superior performance in terms of ANC nadir level and recovery time



- 3 Charaterisctis
- No PEG-induced allergic reactions
- · No Tween 80 added to formula
- More natural, and lower incidence of AEs



#### 24h after Chemo

 Clinical trial results show that Yilishu® can be administered 24 hours after chemotherapy completion

## Garsorasib, D-1553 (KRAS G12C inhibitor), potential FIC in China



**Background**: Aug 2023, CTTQ was granted an **exclusive license** by **Inventisbio** to **develop**, **register**, **manufacture** and **commercialize** D-1553 in **Mainland China**. In addition, based on potential future cooperation in data sharing, CTTQ will be granted a certain percentage of rights outside Mainland China in due course.

#### D-1553 (KRAS G12C inhibitor)

#### **Features:**

- The first KRAS G12C inhibitor that is independently developed and has entered the clinical trial stage in Mainland China, and has been granted a Breakthrough Therapy Designation by CDE.
- Synergize with SHP2 inhibitor, MEK inhibitor and other inhibitors

#### **Development Stage:**

China: KRAS G12C+ NSCLC

2021.01: Phase I/II clinical trial

• 2022.05: Pivotal phase II clinical trial (KRAS G12C-mutated NSCLC)

2023.12: NDA submission

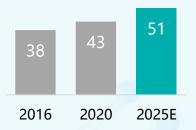
#### Global: Solid Tumor

- International multi-center clinical Phase II clinical trial ongoing
- monotherapy and combination therapy in the 1L treatment of NSCLC as well as other solid tumors such as colorectal cancer, pancreatic cancer

#### **Unmet Needs**

- KRAS G12C mutation was more commonly found in lung, colorectal, pancreatic and biliary cancers.
- No standard-of-care treatment options for solid tumors with KRAS G12C mutations in China.
- Chemotherapy and immunotherapy have limited efficacy.





#### D-1553 Phase I

#### **NSCLC – monotherapy** (Journal of Thoracic Oncology):

- ORR-40.5%, DCR-91.9%, mPFS-8.2mo
- Higher mPFS than other drugs (same target) approved by FDA previously
- ≥ **2L** advanced or metastatic **CRC** monotherapy (2023 ASCO):
- ORR-20.8%, DCR-95.8%
- Compared with drugs (same target) approved globally, efficacy and safety are among the best

## TQB3616 (CDK2/4/6 inhibitor), potential next-gen treatment for HR+/HER- BC



## **TQB3616**

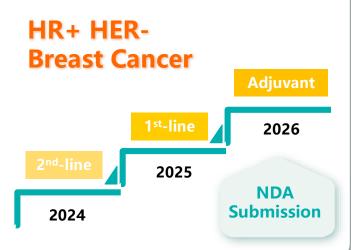
#### CDK2/4/6 inhibitor

#### Feature:

Potential me-better CDK2/4/6 inhibitor

- Good safety profile
- Better efficacy profile
- May reverse early CDK4/6 resistance
- Currently in Phase III

#### **Development plan:**



#### **Inhibition of CDK2**



- CDK2 activation drives CDK4/6 inhibitor resistance
- TQB3616 has better ability to inhibit CDK2 than Abemaciclib & Palbociclib, and may reverse early CDK4/6 resistance

#### **Better Efficacy**



According to Ph2 clinical data, TQB3616 has better ORR/CBR than Abemaciclib, Dalpiciclib, Ribociclib, Palbociclib.

#### **Sound Safety**

- Wider therapeutic window than Abemaciclib & Palbociclib
- Sound safety profile supports adjuvant therapy

#### **Superior efficacy of TQB3616 against other CDK4/6 inhibitors**

<b>Clinical Study</b>	Treatment	Criteria	Enrollment	ORR (%)	DCR (%)	CBR (%)
TQB3616-II-01	F + TQB3616	1 <sup>st</sup> -, 2 <sup>nd</sup> -line BC	2 <sup>nd</sup> -line: 64	59.4%	89.1%	75.0%
TQB3616-II-01	(single arm)	(100% Chinese)	1 <sup>st</sup> -line: 47	70.2%	95.7%	91.5%
MONARCH plus	F +Abemaciclib vs F	2 <sup>nd</sup> -line BC (85% Chinese)	104	50.0%	92.3%	77.9%
DAWNA-1	F + Dalpiciclib vs F	2 <sup>nd</sup> -line BC (100% Chinese)	241	27.0%	88.8%	61.0%
MONALEESA-3	F + Ribociclib vs F	1 <sup>st</sup> -, 2 <sup>nd</sup> -line BC	2nd-line: 345 1st-line: 367	41.0%	83.9%	70.2%
MONARCH 2	F + Abemaciclib vs F	2 <sup>nd</sup> -line BC	446	48.1%	82.4%	73.3%
PALOMA-3	F + Palbociclib vs F	2 <sup>nd</sup> -line BC	347	24.6%	83.3%	67.0%

## **Liver Disease:**

## No.1 in China for years, continuous investment in the future



## Large market size<sup>1)2)3)</sup>

- Global: 1,500mn CLD cases
- China: 450mn CLD cases, largest hepatitis B market

#### **Market leader in China**

• 25% liver diseases market share (No.1)

## **Comprehensive product portfolio**

· Hepatic steatosis, liver fibrosis, cirrhosis, liver cancer, etc.

**Next Focus** 

Non-alcoholic steatohepatitis (NASH) 80mn patients

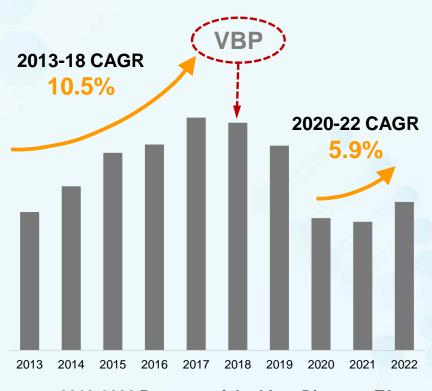
Cure treatment for Hepatitis B 30mn patients

Cirrhosis 7mn patients Acute Hepatitis 2mn cases per year

Market Size: RMB100bn+

### **TOP 1 in China**

25% hepatitis market share



2013-2022 Revenue of the Liver Diseases TA

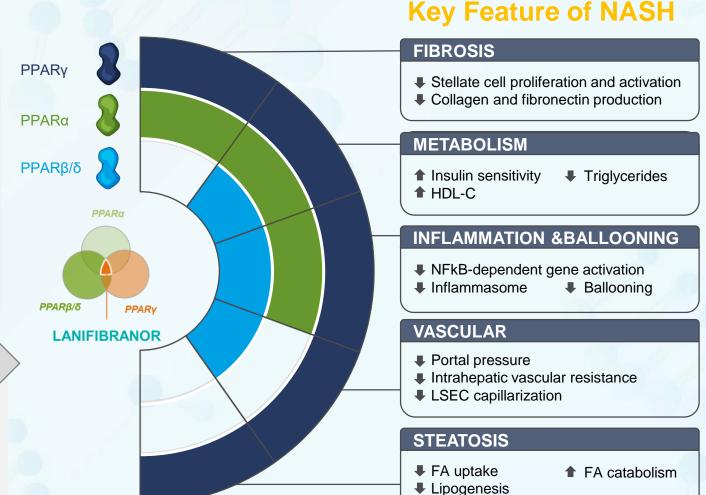
## **Liver Disease:**

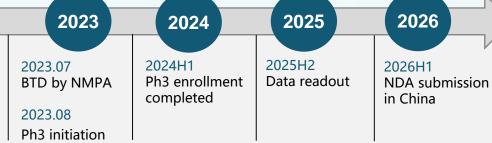
## Lanifibranor (pan-PPAR agonist) first oral drug for NASH that has entered Ph3 in China

# Lanifibranor Pan-PPAR agonist

#### Feature:

- Activation of the three PPAR isoforms addresses the key features of NASH
- Moderate and balanced pan-PPAR agonist activity
- Improved safety and efficacy in other single and dual PPAR agonists
- Once-daily oral administration





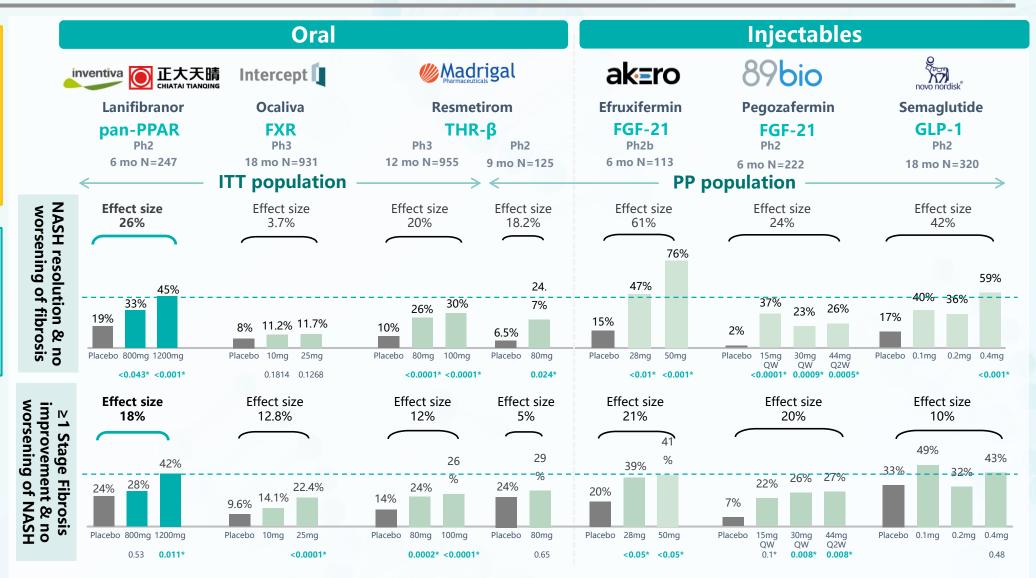
China Ph3: 100+ patients, 60 centers, F2-F3 fibrosis stage

## **Liver Disease:**



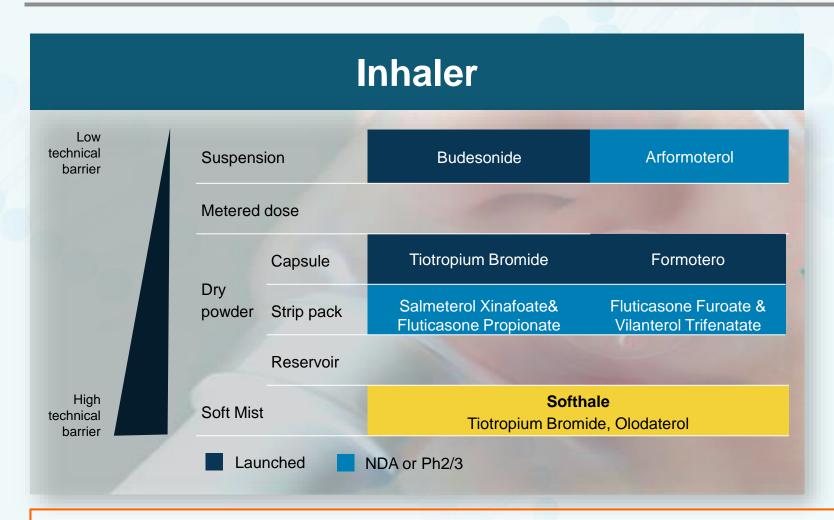
## Lanifibranor (pan-PPAR agonist) potential BIC oral drug for NASH globally, China FIC

- Ph3 clinical trials in US and China
- In Ph2 clinical trials, Lanifibranor demonstrated statistical significance on all histological endpoints in both ITT and PP populations
- Superior to other oral drugs, comparable to injections
- One of the drugs that achieves statistically significant efficacy
- ITT population all subjects
- PP population a subgroup of subjects who were compliant with the protocol strictly



## Cover all delivery platforms and have a strong innovative pipeline





## **Innovative Drug**

#### FIC & BIC respiratory pipeline:

• P2X3

- TSLP
- · ROCK2
- PDE3/4

#### Advanced tech involved:

- Small molecule
- Antibody

Vision: build the most competitive respiratory pipeline to address the unmet clinical needs globally in 5-10 years

Note: 1) Selected exhibitions

## TDI01 (ROCK2 inhibitor), Ph2 study for IPF has initiated in China



#### **TDI01**

## ROCK2 inhibitor (highly selective)

#### MOA:

Exert anti-fibrotic and anti-fibrotic effects by inhibiting ROCK2

#### **Indications:**

• **IPF**: Ph2

GvHD: Ph2

• **COVID-19**: Ph2

Pneumoconiosis: Ph1

Out-licensed development and commercialization rights in all territories excl. China to Graviton Biosciences, with consideration of up to US\$0.52 bn, and additional royalties

## Ph2 study for IPF has initiated in China in April 2023

(led by **Wang Chen**, vice president of Chinese Academy of Engineering, president of Chinese Academy of Medical Sciences, headmaster of Peking Union Medical College and expert in Respiratory and Critical Care Medicine)

#### **Unique MOA**



- ROCK2-mediated signaling pathway plays an important role in regulating inflammatory & fibrotic responses
- Unlike JAK and BTK, inhibition of ROCK2 can achieve immune homeostasis rebalance

## Long Half-life



 Suspension ensures good absorption, long half-life supports QD, improving patient compliance

### **Strong Antifibrotic Effects**



 Trials have demonstrated that TDI01 can reduce hydroxyproline and gene expression markers for fibrosis, collagen deposition (dosedependent), pro-fibrotic inflammatory markers, and repair fibrotic tissue (dose-dependent)

### **Good Safety**



 Ph1 clinical results in healthy Chinese and American subjects showed that TDI01 is safe and well tolerated

#### **COVID-19 Treatment**



- Prevents SAR-CoV-2 cell entry and works for all variants
- Reduces lung fibrosis, an additional benefit for long COVID



## **Multi-indication Potential**

 Over 10 exploratory trials have been conducted, positive preliminary efficacy has been observed in CNS disease and pancreatic cancer

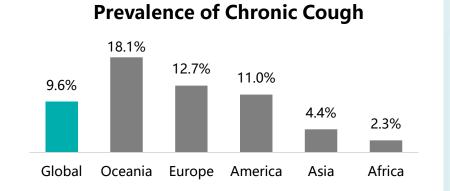
## TCR1672(P2X3 antagonist), potential China FIC and Global Top 3



## TCR1672 (P2X3 antagonist)

#### MOA:

- Hyperactivation of P2X3 is associated with hypersensitivity of sensory neurons. Activation of P2X3 receptors increases the excitability of airway sensory nerve fibers, contributing to the excessive coughing.
- TCR1672, as a P2X3 antagonist, can normalize the overactive cough reflex and result in the reduction of cough frequency. It also has analgesic effects such as the treatment of visceral pain.



Company	Program	Stage	Indication	Note
Merck & Co	Gefapixant Citrate	Approved (Japan)	Chronic cough	<ul> <li>Japan: NDA approved in January 2022</li> <li>USA: NDA rejected by FDA, due to AEs</li> <li>China: Ph3 clinical trial completed in Sep 2022</li> <li>Dysgeusia is the most common AEs in Ph3 clinical trial</li> </ul>
Bellus Health (acquired by GSK with consideration of US\$2.0 bn)	BLU-5937	Ph2	Chronic cough	<ul> <li>Ph2a did not meet the primary endpoint</li> <li>In Ph2b study, 0 mg and 200 mg BID met the primary endpoint with no significant taste interference, but there was no dose-dependency</li> </ul>
Beijing Tide (Sino Biopharm)	TCR1672	Ph2 (Initiation expected in 2023Q3)	Chronic cough	<ul> <li>Preclinical in vitro and in vivo potency 10-fold higher than Gefapixant</li> <li>TCR1672 has better selectivity for P2X3 and P2X2/3 and is expected to have less taste interference than Gefapixant</li> </ul>

#### 2021 Q4

IND approval from FDA and NMPA

#### 2023 07

Ph1 clinical trial complement

#### 2023 Q3

Ph2 clinical trial initiation

#### 2025 Q2

Ph3 clinical trial initiation

#### 2027 Q1

NDA submission

## TQC2731 (TSLP mAb), ranks 2<sup>nd</sup> in China for Asthma



## **TQC2731**

#### **TSLP mAb**

#### MOA:

- TSLP drives the release of downstream T2 cytokines, including IL-4, IL-5, and IL-13, leading to inflammation and asthma symptoms
- TSLP can also activate many types of cells involved in non-T2 driven inflammation
- A potential target for treating a broad population of asthma patients

#### **Indication:**

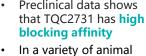
- Moderate-to-severe asthma: Ph2
   (enrollment completed, ranks 1<sup>st</sup> among domestic players in China as for R&D; surrogate endpoint has demonstrated significant efficacy)
- Chronic sinusitis with nasal polyps: Ph2

#### **Broad Application**



- Blocking TSLP can relieve both type 2 inflammation and non-type 2 inflammation, providing more safeguard for asthmatic patients with low T2 inflammatory phenotype
- Broader application than products targeting IL-4, IL-5 and IL-13

## Strong BlockagePreclinical data shows



In a variety of animal models, disease-related parameters can be inhibited in a dosedependent manner



## High Stability

- IgG1 Fc, with more controllable quality
- Better molecular stability

#### **Prevalence of Asthma in China (ppl mn)**



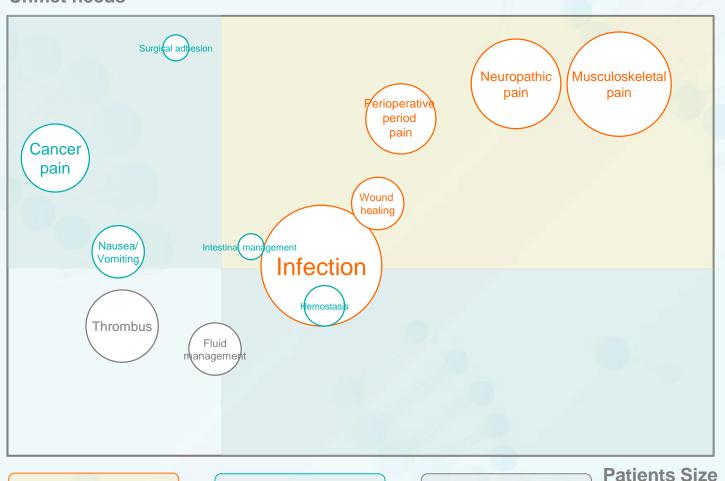
Note: source: Frost & Sullivan.

## **Surgery/analgesic:**

## On the way to strengthen the product layout in surgery/analgesic area



#### **Unmet needs**



**Current layout ✓** Musculoskeletal pain

-> Patches

**✓** Infection

-> PL-5

A comprehensive pipeline built through

Internal R&D + External BD

Next Focus

**High & Middle Priority Areas** 

High priority

Middle priority

Low priority

\*the larger the circle, the more pipelines

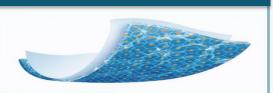
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## Surgery/analgesic - musculoskeletal pain



## Patches: No.1 in China with leading technology platform and modified preparations

#### Cataplasm



#### **Technology:**

The drug is mixed with a hydrophilic polymer gel matrix and coated on the backing material.

#### **Advantage:**

- Promote skin hydration, good breathability, less prone to allergies
- Not hair-sticky, no odor
- · High elasticity, no sense of restraint

## Hot-melt Pressure-sensitive Adhesive Plaster



#### **Technology:**

Oily drugs with low melting points are mixed with polymers under high temperature, coated on the backing, condensed and solidified into a patch.

#### **Advantage:**

- Thin, highly adhesive, not easily detached
- Good penetration, available for systemic administration

#### **Solvent transdermal patch**



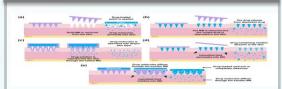
#### **Technology:**

The drug is dissolved in the polymer glue, coated on the backing, heated to remove the solvent to form a patch.

#### **Advantage:**

- Very thin, long duration
- Strong penetration, high release rate, systemic effect achieved by local administrations

#### Microneedles



#### **Technology:**

Continuous drug delivery is achieved by applying the drug to the tip of the microneedle or loading it inside a hollow microneedle, which pierces the human stratum corneum.

#### Advantage:

- Active delivery systems to improve efficiency
- A wider selection of drugs, available for large molecule delivery



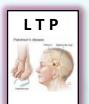
2023

KBP LSC FBP TTP FBC

TTP

TTP

LTP TRD81



T R D

To have the largest pipeline of topical/transdermal medicines in China in 2027, and 13 new products are expected to be marketed in 10 years.

## **Surgery/analgesic - infection**

## 中國生物製藥有限公司 SINO BIOPHARMACEUTICAL LIMITED

## PL-5 (antimicrobial peptide): address the unmet needs for "drug-resistant bacteria"

Background: Jan 2023, CTTQ entered into an exclusive commercial cooperation agreement with ProteLight for PL-5 in China.

**Completed Phase Innovation** III clinical study **Broad-spectrum** for the treatment The first antimicrobial of secondary G+, G- bacteria, and drugpeptide in China wound infections resistant bacteria The first non-antibiotic Aim to submit antimicrobial **NDA in 2024** Low drug resistance Safety Key Low risk of drug resistance and no Topical application, no blood cross-resistance penetration, better safety **Features Good competitive Convenience** environment Spray is easy to use, and can evenly No competitors and no VBP risk in the short term spray the wound surface Topical medication, generics need to go through clinical trials

## Large unmet market

~30mn patients with burn wound infection, diabetic foot wound infection, traumatic wound infection, etc.

Peak sales: RMB2bn+

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## BD: the best partner for domestic and global companies in China



### **Excellent clinical R&D capabilities**

R&D personnel 4,300+

Technology platform 10+

Patent 1,500+

Significant clinical R&D efficiency and cost advantages

### **Large-scale & low-cost production capacity**

Chemical drug capacity (m<sup>2</sup>) 1,000,000+

Biological drug capacity (L) 42,000+

Significant lower-than average cost for biologics

## **Comprehensive sales & marketing network**

Largest sales team in China 14,000+

Hospital coverage 90%+

Largest commercialization team with best efficiency



## BD: proven record of collaborations with domestic and global companies



2021.11 [Collaboration] COUNTY MSI test to identify tumors	2022.12 [In-licensing]	NOGI 2023.08 [In-licensing] InventisBio 基分生物 China FIC KRAS G12C
2021.08 [In-licensing] EVIVE To BIOTECH  BIC 3 <sup>rd</sup> -gen G-CSF	2022.09 [In-licensing] China FIC/Global BIC pan-PPAR	ntiva 2023.06 [In-licensing] GMAXBiC pi运华宁生物医药 BIC GIP/GLP-1
2021.06 [M&A] PHIEN World-leading mRNA Delivery Platform	2022.05 [In-licensing] Serv LAG3 mAb	2023.03 & 07 [Out-licensing] Takeda  Bispecific & multi-specific antibodies
2021.03 [M&A] S®FT One of the only 2 HALE Soft Mist Inhalation Platforms in the world	2022.04 [In-licensing] FIC FGF21, BIC FGF21/GLP-1	2023.03 [M&A]  World-leading Bispecific Abs Platform  **THERAPEUTICS**  **THERAPEUTI
2021.02 [Out-licensing] GRAVITON BIC ROCK2 inhibitor	2022.04 [Collaboration] 新竹 Yuanzhu PD-1 mAb+ AXL inhibitor	生物 2023.01 [In-licensing] Boan Biotect 的
	2022.03 & 12 [Collaboration]   New small molecule drugs (oncology & liver disease)	talPi # 料 版
	2022.03 [Collaboration]  Fully human antibody drugs	<b>知義包</b> YTOGEN

## Globalization: "in China for global" and "in global for global"

and Road Initiatives





## invoX at a Glance

## Mission

We aspire to improve people's lives by creating access to innovative medicines

180+

Full-time employees

4

Clinical-stage assets

8

Global MNC partnerships

3

Core next-generation technology platforms

2

Therapeutic focus areas

#### Locations

- · HQ in London, UK
- Regional office in Cambridge, UK
- Antibody research laboratory in Cambridge, UK
- Respiratory research laboratory near Brussels

### **Leadership Team**

- Experienced leadership team, previously held senior positions at Novartis, Pfizer and AstraZeneca
- World-class scientists with expertise in drug discovery and development in oncology and respiratory
- Established global clinical and regulatory capabilities

## Technology Platforms



Soft Mist Inhalation



Bispecific Antibodies

Therapeutic Focus Areas



Oncology

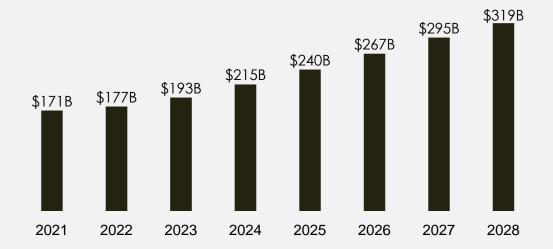


Respiratory

## invoX's Key Areas of Focus: Oncology & Respiratory



#### **GLOBAL ONCOLOGY MARKET**



9% CAGR\* over next 5 years (2023-2028) invoX's proprietary Technology Platforms in oncology are developing **therapies to** address unmet needs

Therapies are based on **novel approaches** to immuno-oncology that can be applied to a **wide range of cancers** 

#### **GLOBAL RESPIRATORY MARKET**



3% CAGR over next 5 years (2023-2028) invoX's Respiratory R&D Platform has developed a highly effective **soft mist inhalation device** 

Soft mist inhalation delivers medication to the lungs more effectively than powder or spray inhalers

## **Bispecific Antibodies: Next-Generation Oncology Platform**

Potential market opportunity for bispecific antibodies



Potential to transform the oncology market as the future backbone of I-O therapy

- 1 Immuno-oncology (I-O) has transformed the treatment of cancer
- High response rates and longer duration of response
  - Monospecific mAb targeting single immune checkpoint
  - Resistance to first-gen I-O therapies limits effectiveness
- 2 Multi-target approach has higher efficacy and treats r/r cancer
- Proven improvement in efficacy from two different antibodies targeting different checkpoints at once e.g. PD1+CTLA4 or PD1+LAG3
- 3 Bispecific antibodies are the future backbone of I-O therapy
- Single molecule targeting multiple complementary immune mechanisms at once
  - Versatile with ability to turn the immune system against cancer cells, block key cancer signalling pathways, and deliver toxic drugs specifically to cancer cells
  - Investment from all major biopharma companies

Long-term opportunities in chronic diseases outside oncology

Neurology



Haematology



**Immunology** 



**Ophthalmology** 



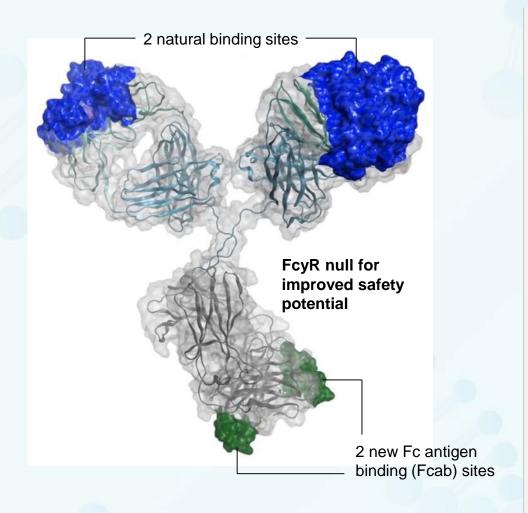
Respiratory



Infectious disease



## Bispecific Antibody Platform using F-star technology



### Tetravalency Drives Differentiated MoA

- · Crosslinking: Potent tetravalent binding (avidity) bringing cells together
- Clustering: Fcabs drive potent immune cell activation
- Conditionality: Strong localized antitumor effect

## Unique Bispecific Structure

- Natural human IgG antibody format with only 15-20 amino acid substitutions
- Retains Fc functions
- Reduced potential for immunogenicity
- · Simplified manufacturing

### Benefits for Patients and Healthcare Systems

- Combining two target sites in the same molecule offers biological advantages over combining two separate antibodies
- Manufacturing and cost advantages deliver value to patients and healthcare systems

## Bispecific Antibody Platform using F-star technology



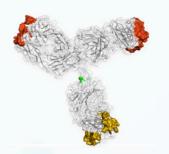
#### **Tetravalent Bispecific mAb**

#### **FS118**

Rescuing CPI-treatment failures & improving outcomes in CPI naïve

#### LAG-3/PD-L1 DUAL INHIBITOR

- PoC trial in head & neck PD-1 acquired resistance patients
- CPI-naïve NSCLC & DLBCL trial
- Differentiated patient selection biomarker strategy

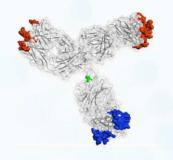


#### **FS222**

Improving outcomes in PD-L1 low tumors

#### CD137(4-1BB) STIMULATOR/ PDL1 INHIBITOR

- Target PD-L1 low expression indications in solid tumors e.g. colorectal cancer, ovarian cancer, NSCLC, etc.
- Phase 1 trial with differentiated patient selection biomarker strategy

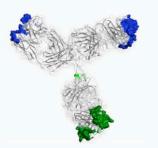


#### **FS120**

Improving CPI and chemotherapy outcomes

#### CONDITIONAL OX40/CD137 (4-1BB) DUAL STIMULATOR

- Phase 1 trial in solid tumors
- MSD clinical supply agreement in place for pembrolizumab



#### **Cyclic Dinucleotide**

#### SB 11285

Improving CPI outcomes

## 2ND GENERATION STING AGONIST

- Monotherapy and PD-L1 (atezo) combination trial
- Dose escalation and pursuing strategic business development opportunities



Note: CPI = Checkpoint Inhibitor

## invoX's Leadership Team



CHIEF EXECUTIVE OFFICER

Ben Toogood

25+ years' experience in the industry and 16+ years leading business development roles globally

Formerly Novartis, Aspen, and Pharmathen



Robert Haria Jr., MD

20 years pharmaceutical industry experience in clinical and medical affairs

35+ years as a practicing physician in oncology

Formerly at Bristol-Myers Squibb, Celgene, and Lilly



**CHIEF SCIENTIST** 

#### **George Orphanides, PhD**

20+ years of experience in small molecule and biological drug development

12 years in senior leadership roles at AstraZeneca



Jo Hume, PhD

13+ years' experience in the biotech/pharmaceutical industry

Formerly at F-star Therapeutics, AstraZeneca and MedImmune



CHIEF DEVELOPMENT OFFICER

**James Sandy** 

35+ years' experience

Formerly CDO at Ellipses Pharma, Immunocore and Creabilis

Formerly at AstraZeneca and Pfizer



**BUSINESS DEVELOPMENT** 

**Chris Price, PhD** 

15+ years' experience in the biopharmaceutical industry, last 10 years in BD

Formerly at BMS, BioMarin, Gruenenthal, and Novartis/Sandoz



RESPIRATORY INNOVATION CENTER

Juergen Rawert, Dr. rer. nat.

30+ years' experience in the pharmaceutical, cosmetic/F&F, consumer goods industry

Formerly at Wyeth Pharma, Asta Medica AG



PORTFOLIO MANAGEMENT

Jing Shao, PhD

9+ years' experience

Previously worked at Sandoz and IQVIA



**REGULATORY & QUALITY** 

Patricia Hurley, PhD

20+ years' experience

Formerly at F-star Therapeutics, PPD, Epistem



Tyron Hussey

13+ years' experience

Formerly at Syneos Health, National Physical Laboratory, UBC



Rebekah Fryer

20+ years' experience

Formerly at Vifor Pharma, British Gas, Sanofi



## **Business Development: Approach and Capabilities**

#### **BUSINESS DEVELOPMENT**

Flexible approach accelerates delivery of innovative medicines to patients



#### **M&A** and Management

Create a diverse R&D pipeline through disciplined M&A

Future M&A focused on bolt-on acquisitions to complement our capabilities and therapy areas



#### **Technology Platform Partnering**

Out-licensing and partnerships to maximize the value of our assets and ensure patients have access to these medicines



#### **Licensing Agreements**

Though in-licensing we aim to gain access to innovation complimentary to our platforms

#### PARTNER OF CHOICE

Deep expertise and experience



#### **Integration Experience**

Successfully integrated three acquired entities into a fully integrated pharma



#### **Regulatory Clearance**

Ability to partner with key government regulators including CFIUS and NSIA



#### **Clinical Development**

Clinical development and regulatory expertise to get products approved

# invoX's Technology Platforms have a Track Record of Attracting Top Tier MNCs with Substantial Upfront Payments with Material Future Milestones

Partner	Collaboration description / Date	Financial Terms	Products / Indications
Bristol Myers Squibb F-star Alpha	<ul> <li>In 2014, BMS gained an exclusive option to acquire F-star Alpha – HER2 Fcab FS102</li> <li>In 2017, BMS dropped the option to acquire FS102, following a strategic reprioritization – HER2 landscape was too competitive</li> </ul>	Up to \$475mm (\$50mm upfront) total	• FS102 – HER2
<b>DENALI</b> F-star Gamma	<ul> <li>In 2016, F-star Gamma entered into a collaboration agreement with Denali to develop Fcabs designed to enhance delivery of therapeutics across the blood-brain barrier</li> </ul>	Up to \$1bn + royalties	<ul> <li>DNL301 (iduronate 2-sulfatase)</li> <li>Phase I Hunter syndrome</li> <li>10 additional pre-clinical programs</li> </ul>
Merck KGaA, Darmstadt, Germany F-star Beta / Delta	<ul> <li>In 2017, Merck KGaA and F-star entered into a collaboration agreement for five bispecific oncology antibodies, at the time including F-star's lead asset, FS118</li> </ul>	• Up to €1bn (€115mm upfront)	4 pre-clinical immuno-oncology programs
abbvie	<ul> <li>In 2016, F-star entered into a collaboration agreement with AbbVie to develop Fcabs</li> <li>F-star provided AbbVie with the assets as part of the agreement, which is now complete, with future decisions on development now in the hands of AbbVie</li> </ul>	Undisclosed	2 immuno-oncology targets
AstraZeneca	<ul> <li>In 2021, AstraZeneca entered into an exclusive license agreement for F-star's novel STING inhibitor compounds</li> <li>AstraZeneca received global rights to research and commercialization of the compounds</li> </ul>	Up to \$300mm of development and sales milestones + single digit royalties	STING antagonist
Janssen )	<ul> <li>In 2021, F-star entered into a collaboration and license agreement with Janssen to research, development and commercialization for up to five novel bispecific antibodies directed to Janssen therapeutic targets</li> </ul>	<ul> <li>Up to \$1.35bn (\$17.5mm upfront) with tiered mid-single digit royalties</li> </ul>	5 undisclosed targets
Takeda	<ul> <li>In 2018, Denali and Takeda entered into a collaboration agreement, pursuant to which Takeda was granted an option for three programs comprising F-star's Fcab</li> </ul>	<ul> <li>\$150mm through a combination of cash upfront + equity</li> <li>Additional \$90mm in pre-clinical milestones + opt-in payments</li> </ul>	3 programs targeted for CNS
Takeda	<ul> <li>In 2022, F-star announced a license agreement with Takeda for a novel next-generation immuno-oncology bispecific antibody</li> </ul>	Up to \$40mm in development and commercialization milestones	Bispecific antibody against an immuno- oncology target
Takeda	In 2023, F-star announced license agreement with Takeda for second novel next-generation immuno-oncology bispecific antibody	\$1bn+ in technical and sales milestones; tiered mid-single digit royalties	Collaboration and license agreement to discover and develop two new Fcabs

- About Sino Biopharm
- Innovation 4 key TAs
- BD & Globalization invoX
- Why us

## Why us: largest commercialization team in China



**Value-Based Purchasing (VBP):** 

Average price cut of **58%** for the 9th national-wide VBP.<sup>1)</sup>



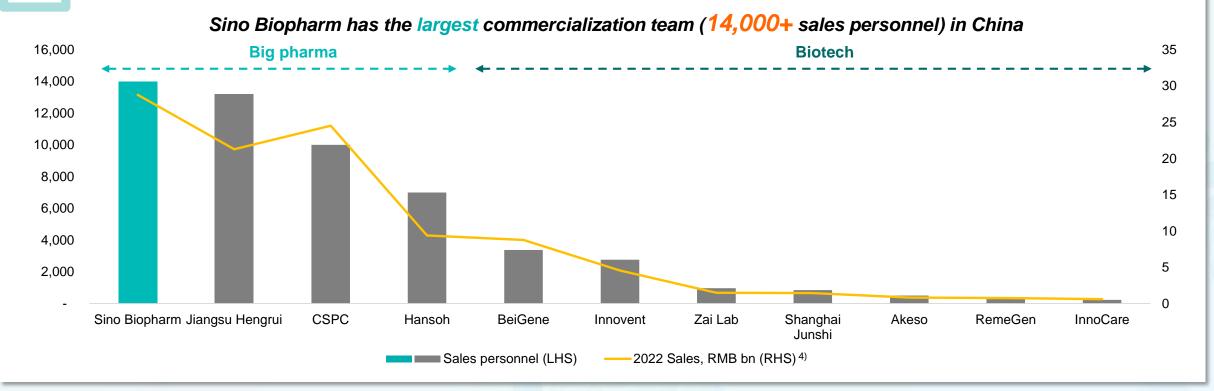
National Reimbursement Drug List (NRDL):

Average price cut of 61.7% for 2023.2)



Increasing bargaining power of buyers
Shortening product life-cycle

#### Powerful commercialization team<sup>3)</sup>



## Why us: robust cash flow and financial position with continuous dividends



#### Net cash flows from operating activities (RMB mn)



# Cash reserves<sup>1)</sup> RMB20bn

Investment in core competencies

Payout to shareholders

Strategic growth

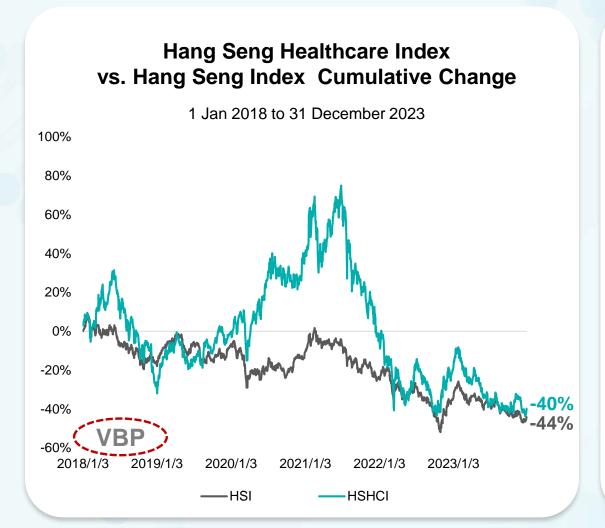
HKD1bn share purchase plan announced

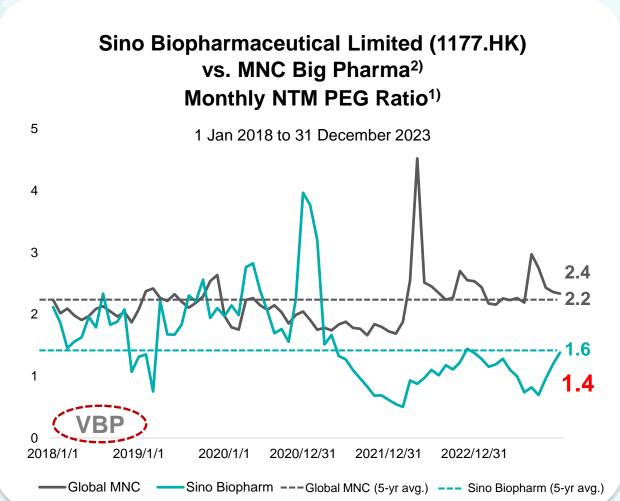
#### Dividends declared (RMB bn)



## Why us: attractive valuation as compared to global peers









# 健康科技,温暖更多生命 Science for a healthier world