

# 2020 Interim Results Presentation

September 2020

Kintor Pharmaceutical Limited - The Leading Anti-Androgen Receptor (AR) Novel Drugs Developer in China

Confidential

### **Roadshow Team**



**Dr. Youzhi Tong** Chairman, CEO and Founding Member

- 17+ years of experience in biopharm R&D and management
- National innovative talent
- Former VP of Angion Biomedica in the U.S.
- Former Assistant professor of Albert Einstein College of Medicine
- Ph.D. in pharmacology from Cornell; MA and BA in Chemistry from PKU





**Lucy Lu** Chief Financial Officer

13+ years of experience in investment banking, former head of investment banking and managing director at GF Capital and executive director in the Asian healthcare group at UBS







#### **Mingming Yan**

Vice President Commecial

- 13+ years of sales & marketing experience
- Former sales team leader of 3SBio, AstraZeneca, XianJanssen Pharmaceutical, Hisun-Pfizer Pharmaceuticals and Roche





Roche



**Dr. Ruo Xu** Vice President R&D (Chemistry)

- 20+ years of experience in the pharmaceutical industry
- Former Chief Scientist of Schering-Plough, and worked in Merck for more than 15 years
- Responsible for the design and synthesis of more than 7 small molecule inhibitors











Dr. Jie Chen

Deputy General Manager Joint Company Secretary

- 10+years of experience in drug R&D
- Published nearly 20 papers and holds 4 patents

.

Working as guest researcher at Suzhou Research Institute of LICP











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Section 1

**Company Overview** 

### Kintor at a Glance



2009

Established as Suzhou Kintor by Dr. Tong and Dr. Guo



#### **AR-Focused**<sup>1</sup>

Strategically focused on AR-related diseases with substantial unmet medical needs



Five

Potential first- and/or best-in-class drugs in clinical stage



### Oncology

Targeting cancers (prostate, breast & liver) which are amongst the fastest growing cancers globally





Our lead product, expected to submit NDA in Q4 2020, and commence commercialisation in China by 2021

# Indication Expansion

And also expanding into other mass ARrelated indications such as androgenetic alopecia and acne vulgaris



1 AR refers to androgen receptor



#### **Geographic Expansion**

Potentially leveraging our global relationships to license-out select products for rapid global expansion in the future

# Pyrilutamide

Ph II patients enrolment to be initiated by 2H2020 which we believe has the potential to redefine the landscape for androgenetic alopecia and acne vulgaris

### **Our Mission**



### **Our mission**

To become a global leader in the R&D and commercialization of innovative therapies, **focusing on indications with substantial unmet medical needs**, in particular in the ARrelated field Focus on developing potential "**best-in-class**" and "**first-in-class**" **novel drugs** and commercialisation platform...

#### ...with the goal of becoming *a leading innovator* of drugs for:





### **Corporate Milestones**



### **Products Pipeline**

Our pipeline of drug candidates include a risk-balanced and diversified portfolio of products that strategically targets major cancer types and other AR-related indications with substantial market potential

Drug	g Candidate	Target / Mechanism	Indication	Country/ Region	Pre-Clinical	IND Filing (Filed) (Accepted)	Phase I	Phase II	Phase III	NDA
			mCRPC	China		Expected	to submit NDA	in 2020		
			Combination therapy with Abiraterone for mCRPC	China		Expected to cor	mplete phase III	in 2021		Asse III NDA
			mCRPC	US	Exp	ected to comple	te phase II in 20.	20		
	Proxalutamide (GT0918)	Second generation	Metastatic breast cancer*	China						
	(010510)	, in antagonise	Combination therapy with Exemestane, Letrozole and Fulvestrant for metastatic breast cancer*	China				hase I       Phase II       NDA         bmit NDA in 2020		
S			TNBC*	US						
l Stage Product			COVID-19	Brazil						
	Androgenetic alopecia* China Expected to commence patients enrolment for phase II in	t for phase II in Sep 2020	)							
	Pyrilutamide (KX-826)	AR antagonist (for external use)	Androgenetic alopecia*	US				Phase II       Phase III       N         submit NDA       in 2020		
linica			Acne vulgaris*	China/US						
σ			Combination therapy with a PD-1 for metastatic HCC*	Taiwan			ients enrolment for phase II in Sep 2020       ients enrolment for phase II			
	ALK-1 (GT90001)	Angiogenesis inhibitor	Liver cancer* (monotherapy or combination therapy)	Global MRCT						
			Combination therapy with KN046 (PD-L1/CTLA-4) for HCC	Global MRCT						
	Detorsertib (GT0486)	mTOR kinase inhibitor	Metastatic solid tumours*	China						
		Hedgehog/	Leukaemia and BCC	China						
	G11/08F	SMO inhibitor	ВСС	US						
inical	GT20029	AR degrader (PROTAC)	Prostate cancer and AR-related diseases^							
	GT90008	PD-L1 / TGF-β dual targeting antibody	Multiple types of solid tumours		Prepare for IND					
Pre-C		Other AR degraders (PROTAC)	Multiple indications							
_		c-Myc inhibitor	Blood cancer							

mCRPC = metastatic castration-resistant prostate cancer, TNBC = triple negative breast cancer, MRCT = Multi Regional Clinical Trial, HCC = hepatocellular carcinoma, BCC = basal-cell carcinoma, PROTAC = proteolysis targeting chimera

f Represents a potential first-in-class drug candidate for the relevant indication Accept to file IND in 4Q



# Two near-term products developed based on industry-leading AR platform



# Our Drug Candidates

ALK-1 antibody	<ul> <li>Received the exclusive global license from Pfizer to develop a novel antibody drug for cancers, and is expected to be the world's first fully human therapeutic monoclonal antibody targeting ALK-1</li> <li>Plan to initiate Ph. II clinical trials for liver cancer in global MRCT</li> <li>Combo therapy with PD-1 antibody: clinical trials for metastatic HCC approved by Taiwan FDA, Ph. II clinical trial is ongoing in Taiwan</li> <li>Combo therapy with PD-L1/CTLA-4 bispecific antibody in HCC and other indications globally</li> </ul>
Detorsertib	<ul> <li>Detorsertib is currently undergoing phase I clinical trials in China for metastatic solid tumors</li> <li>An inhibitor of the PI3K/mTOR signalling pathway and a second generation mTOR inhibitor</li> <li>IND approval obtained from the NMPA in China in August 2019 and expect to commence patient enrolment in the third quarter of 2020</li> <li>No mTORC1 / mTORC2 dual inhibitor has been approved for marketing globally yet</li> </ul>
Hedgehog/ SMO Inhibitor	<ul> <li>Obtained IND approval to commence clinical trials in China</li> <li>The Hedgehog signal pathway controls the development of embryos and is vital to the development and differentiation of cells post embryonic development and embryogenesis</li> <li>Early studies have demonstrated that its anti-tumor activity is higher than Vismodegib, currently marketed globally</li> </ul>
AR-Degrader	<ul> <li>AR degrader is considered to be a natural progression from AR inhibitors such as Proxalutamide</li> <li>AR degraders have the potential to become a new generation treatment for prostate cancer</li> <li>Expect to file IND application in 4Q 2020</li> </ul>
C-Myc inhibitor	<ul> <li>C-Myc promotes cell proliferation and division, and is involved in the development and progression of tumor</li> </ul>
PD-L1 / TGF-β dual targeting antibody	<ul> <li>A PD-L1 and TGF-β dual-targeting antibody, with a high activity in inhibiting both PD-L1 and TGF-β. Genetic engineering modification could reduce its degradation or fragmentation in CHO cell expression proteins, which makes it easier to be commercially produced and becomes a potential best-in-class drug</li> </ul>



### Accomplishments in R&D

#### Small molecule Compounds

### Proxalutamide

In July, phase II mCRPC patients enrolment was completed in the US

In July, clinical research as a treatment for COVID-19 with Applied Biology was conducted in Brazil, and first patient was enrolled on Aug 20

In August, phase III mCRPC patients enrolment was completed in China



### Pyrilutamide

In August, phase Ib clinical trial against androgenetic alopecia was completed in the United States

### GT1708F (Hedgehog/ SMO)

In February, obtained IND approval to commence clinical trials in China

### - Biological Compounds -

### ALK-1 antibody

In July, conducted the combination therapy with PD-L1 / CTLA-4 bispecific antibody in HCC and other indications with Alphamab globally



### **PD-L1/TGF-**β dual targeting antibody

In August, obtained an exclusive right from Gensun, a US company with business in research and development of innovative antibody drugs, to promote the clinical development and commercialization of dual targeting antibody in Greater China



Gensun



# Make A Breakthrough in Biological Compounds and Speed up Combo Therapies for A Variety of Tumours





## **GMP** Facilities and Commercialization

### Manufacturing and R&D base



- c. 20,000 m2 factory in Suzhou
- Put into operation at the end of Aug 2020
- Will receive production permit in Sep, and obtain China GMP certification, as well as **FDA GMP and EU GMP** subsequently
- To meet the commercialization needs of Proxalutamide, and clinical needs of Pyrilutamide



### Strategic Cooperation Agreement

#### **GloriousMed and HM Healthcare**

In Aug, signed a strategic cooperation framework agreement with GloriousMed and HM Healthcare to build a precise cancer treatment platform for patients of prostate cancer, breast cancer and other tumors



#### **JD Pharmacy**

*In June, signed a strategic cooperation framework agreement with JD Pharmacy in the marketing and sales of Pyrilutamide* 



#### Sinopharm

*In March, signed the strategic cooperation agreement with Sinopharm in the market development of Pyrilutamide* 







### COVID-19 Study of Proxalutamide

**Kintor** and **Applied Biology**, a biotechnology company committed to the development of breakthrough drugs and medical devices for the treatment of androgen and hair disorders, entered into a clinical trial research agreement to conduct research for Proxalutamide (GT0918) as a treatment for the novel coronavirus disease(COVID-19). First patient was enrolled on Aug 20.



"While research institutes and pharmaceutical companies are actively pursuing therapies to prevent or treat coronavirus, **it is critical to find a treatment that helps COVID-19 patients slow the progression**. By doing so, the human immune system may have sufficient time to generate antibodies to fight against the novel coronavirus. We believe this research study demonstrates the possible therapeutic effect of Proxalutamide as an anti-androgen therapy to treat COVID-19. Moreover, it is a testament to our commitment to social responsibility as a biotech company."

-----Dr. Youzhi Tong

"We are excited to partner with Kintor Pharma to study, what we believe is, **the first novel molecule that reduces the expresions of both TMPRSS2 and ACE2**, the two molecules implicated in SARS-CoV-2 infectivity. Provided our study demonstrates efficacy and safety, Proxalutamide could potentially be used as a first line treatment for COVID-19 male patients at the early stage of infection."

-----Dr. Andy Goren



Kintor's recent pre-clinical research collaboration with **Soochow University** in exploring the potential mechanism of COVID-19 gender disparity revealed that the blockage of AR signaling with AR antagonist Proxalutamide (GT0918) reduced the expression of ACE-2 and TMPRSS2 in normal lung cells and cancer derived from prostate and lung cancer. cells Proxalutamide (GT0918) also inhibited the expression of inducible nitric oxide synthase (iNOS) and tumour necrosis factor-alpha (TNF  $\alpha$ ), the macrophageactivation markers, in mouse macrophage cells. These results support the role of androgen-AR signalling in the disease progression and mortality in male patients with COVID-19 and were published on the SSRN on 23 April 2020.



Source: https://ssrn.com/abstract=3580526

This paper ranked **top ten** downloads in two topics (Mechanisms of Human Disease and Anti-Infective Therapy) two weeks after publication.



# **Corporate and Shareholding Structure**

#### **Corporate and Shareholder Structure**



#### Note:

- 1. Origin VC refers to Suzhou Industrial Park Origin Venture Capital Co., Ltd. (原点创投)
- Real Able Limited is ultimately controlled by Legend Holdings Corporation (联想控股) 2.
- Sungent Venture Limited is ultimately controlled by BioVenture Investment (新建元) 3.
- Highlight Medical Limited is wholly owned by Highlight Capital (弘晖资本) 4.
- The Shares are issued as the Company acquired control of Suzhou Koshine through share swap 5.
- 6. Gree Financial Investment Management, Honghui Equity Investment Management, and Foresight Fund Management invested USD 115 million in





### Section 2

# Investment Highlights

## Investment Highlights





Risk-balanced Pipeline of Potential First- and Best-In-Class Products...



Kintor has designed a two-pronged strategy for its **Risk-balanced and Diversified** product pipeline



Source: Company Prospectus, Frost & Sullivan analysis

...That Strategically Targets Indications With Large Potential
 Markets



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# <sup>2</sup> Proxalutamide: A Potential Best-in-Class Drug for mCRPC...

#### **Evolution of AR antagonists**



#### Improved molecular design



Enzalutamide

Apalutamide



Proxalutamide

#### Dual-acting mechanism



In addition to inhibiting AR activity by binding to AR, Proxalutamide can **reduce AR expression** in vivo and in vitro due to its novel binding pose



#### Favorable safety profile

**No** incidence of triggering seizure among over **800** users



#### Unique dual-acting mechanism

Not only effectively inhibits ARs, but also exhibits the biological effect of reducing AR expression

#### Suitable for combination therapy

- Higher AR antagonist binding affinity
- No induction effect on enzyme CYP1A2, CYP2B6 and CYP3A4



Source: Company Prospectus, Frost & Sullivan analysis

...With the Potential to Become the Backbone of Future **Combination Therapies for AR-related Cancers** 





Source: Company Prospectus, Frost & Sullivan analysis



# Proxalutamide – mCRPC

#### **Overview of the mCRPC Market**



#### **Key Growth Drivers**



**Growth in diagnosed patients** from increased use of PSA screening technology



**Inclusion of existing drugs into the NDRL** (*i.e. Abiraterone*), which *is expected to boost drug sales* 



**Continuous launch of new drugs** (i.e. Enzalutamide and Proxalutamide) into the market



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**Key Growth Drivers** 

**Higher overall prevalence of prostate cancer** relative to China, coupled with higher affordability of drugs

**Increasing patient pool** due to

improvements in cancer detection

Improved treatment options as

disease progression by months

*current therapies can only postpone* 

an ageing population and

#### **Competitive Landscape**

### Treatment options are currently limited for mCRPC patients, with most drugs only slowing, rather than preventing the progression of the disease

AR antagonist drug candidates for mCRPC globally

Drug	Company	Status	Milestone	
China				
Proxalutamide (mono and combo therapy)	Kintor	mCRPC 2 <sup>nd</sup> line: Ph. III	Jul 2018 / Dec 2018	
Enzalutamide	Pfizer/Astellas	mCRPC 1 <sup>st</sup> line: NDA approved	Nov 2019	
HC-1119	Haisco	mCRPC 2 <sup>nd</sup> line: Ph. III	Mar 2019	
SHR-3680	Hengrui	mCRPC 2 <sup>nd</sup> line: Ph. I/II	2 Feb 2016	
Apalutamide	ાજા	mCRPC: Ph. I	Jun 2018 Oct 2019	
US				
Proxalutamide	Kintor	mCRPC 2 <sup>nd</sup> line: Ph. II	Apr 2019	
Enzalutamide	Pfizer/Astellas	mCRPC 1 <sup>st</sup> line: NDA app.	Aug 2012	
Apalutamide (combo)	Aragon/J&J	mCRPC 1 <sup>st</sup> line: Phase III	Oct 2014	
Darolutamide	Bayer/Orion	mCRPC 1 <sup>st</sup> line: Phase I/II	Oct 2016	
TRC253	Tracon/J&J	mCRPC: Phase I/IIa	Dec 2016	
TAS3681	Taiho	mCRPC 2 <sup>nd</sup> line: Phase I	Oct 2015	
ONC1-0013B	Avionco	mCRPC: Phase I	Mar 2017	



Proxalutamide: Leveraging our AR Expertise to Expand into ) Treating AR-relevant Cancer Types



#### **Broad Clinical Program Demonstrates Promising Results**



Indication	Pre- Clinical	IND	Phase I	Phase II	Phase III	NDA
mBC (mono & combo therapy)					$\geq$	*
ТЛВС						



Well tolerated and no treatment-related DLT in MTD

- Favorable PK profile showing fast absorption
- Clinically proven therapeutic effect on advanced m AR+ TNBC
- Avoid the risk of inducing epilepsy



**Trial Under Planning** 



#### **Expected Timetable**

Expected to commence Phase III clinical trials in 2021



#### **Clinical Progress**

Completed Phase I/Ib trials in China and will commence Phase III trials for a combination therapy with Fulvestrant for the treatment of mBC in China and for mono- and combo therapies for the treatment of TNBC in the US



#### Efficacy

5/10 patients in the phase 1b monotherapy trials were treated with more than 6 treatment cycles



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### Proxalutamide – Metastatic Breast Cancer



**Overview of the Metastatic Breast Cancer Market** 

#### Key Growth Drivers



**Increasing patient pool**, driven by deteriorating environmental conditions, unhealthy lifestyles and high levels of stress from women

**Rising demand for therapies** as patients have increased access to breast cancer screening, as detection and therapeutic technologies have improved

**Support from insurance schemes** (*i.e.* the recent inclusion of new cancer drugs in the NDRL and removal of imported cancer drug tariffs in China

#### AR Expression Rate From Different Breast Cancers

	AR (%)	Treatment Regimen	
Luminal A	91.0%	Hormones	
Luminal B	67.5%	Hormones +/- anti-HER2	
HER2	58.7%	Anti-HER2	
Basal-like	31.7%	Cytotoxic agents	
Unclassified	46.1%	Cytotoxic agents	



Source: Frost & Sullivan Report

#### **Competitive Landscape**

Breast cancer is a disease that can take on many different forms. There are currently 5 major types of breast cancer and 4 main treatment types



#### AR Antagonists Currently Undergoing Clinical Trials for Metastatic Breast Cancer

Drug	Indication	Company	Status
China			
Proxalutamide	AR+ breast cancer	Kintor	Phase I
US			
Enzalutamide	Advanced, AR+ TNBC	Pfizer/Astellas	Phase II
Enzalutamide/Trastuzumab	HER2+, AR+ metastatic/ advanced breast cancer	Astellas	Phase II
Enzalutamide/Taxol	Stage I-III AR+ TNBC	Astellas	Phase II
Enzalutamide	Early Stage AR+ TNBC	Astellas	Phase II
Bicalutamide	AR+,ER-, PR- metastatic breast cancer	AstraZeneca	Phase II
Palbociclib/ Bicalutamide	AR+ metastatic breast cancer	Pfizer	Phase I/II
Taselisib/Enzalutamide	AR+ metastatic TNBC	Genentech	Phase I/II
Alpelisib/Enzalutamide	AR+ and PTEN+ metastatic breast cancer	Novartis/ Astellas	Phase I

# Pyrilutamide: Utilizing our Proprietary AR Capabilities to Address Androgenic Alopecia and Acne Vulgaris

**Pyrilutamide** 

#### Underpenetrated market lack of novel treatment

# Androgenetic alopecia is a common form of scalp hair loss that affects both men and women





**Only two products\*** available in the market for androgenic alopecia, and no novel treatment approved in the last **22 years** 

#### Significant limitations and side effects in current treatments

#### Finasteride

#### Minoxidil

- Severe sexual adverse effects
- Fragmented market after patent expiry in 1998

- Orally taken drug
- Only approved and found effective for use in men
- No clear MoA

### Acne vulgaris is a chronic inflammatory dermatosis notable for open or closed comedones and inflammatory lesions

Hormonal agents, topical therapies, systemic antibiotics and isotretinoin are the prescribed treatment options



150+ million

Total patients globally aging 10 to 25 in 2018

#### **Robust Clinical Profile Target to Redefine the Market**

Pyrilutamide is an AR antagonist developed as a topical drug for the treatment of androgenic alopecia and acne vulgaris



 $\bigcirc$ 

Phase I Clinical Trials in China and U.S.

- Administered locally with low systematic drug exposure
- $\bigcirc$  Significantly improved safety and tolerability
  - No adverse event of sexual dysfunctions

#### Trial Under Planning

- Commence first patient enrolment for Phase II clinical trials in the 2H 2020 in China
- Phase Ib clinical trials in US for androgenetic alopecia completed, data analysis, cleaning and summarisation are underway
- Conduct MRCT phase III clinical trials in China and U.S. in 2021
- Pyrilutamide is the only treatment in late-stage clinical development in China
- Compared to oral administration, **topical application** acts directly on the target treatment areas of the scalp with **low systematic drug exposure**
- Pyrilutamide **does not affect androgen levels** in human bodies, and is not expected to cause impotence

\* Dutasteride was approved for the treatment of AGA by South Korea and Japan in 2009 and 2015 separately, but was approved by FDA only for the treatment of benign prostatic hyperplasia (BPH) in 2001



Source: Company Prospectus, Frost & Sullivan analysis

# China Androgenic Alopecia Market

Significant unmet need for effective and safe medical option to treat androgenic alopecia, as many patients choose clinically unproven OTC remedies and consumer products

Androgenic alopecia – A growing concern globally







### Mechanism of AR Inhibitors for AGA and Acne Treatment Proven



### Case Study - Cassiopea

27 Aug 2020, Cassiopea announced that the US FDA has approved a new drug application for its Clascoterone (1% concentration) cream for the treatment of **acne**.

This is the first new mechanism drug for acne treatment approved by FDA in the past 40 years.









Clascoterone is a "first-in-class" androgen receptor (AR) inhibitor for external use. The chemical **competes with androgens**, particularly DHT, and with the sebaceous glands and androgen receptors within the hair follicles. Clascoterone **inhibits lipid production** in cultured sebocytes and **reduces pro-inflammatory cytokines** affected by androgens.

### Indication of AGA

Cassiopea is conducting clinical trials for treatment of **AGA** with Clascoterone, which are in Phase II.







#### **Mechanism of Action**

Androgenetic alopecia occurs when androgen binds to the AR in hair follicle cells and an enzymatic reaction occurs, which ultimately causes hair follicles to shrink



An AR complex forms after the androgen binds to the AR and a complex enzymatic reaction occurs

The AR complex undergoes a series of processes that causes the hair to prematurely enter into a resting period and shrink hair follicles

DHT formation catalysed by  $5\alpha$  reductase is an important process that leads to androgenetic alopecia. Finasteride promotes hair growth by inhibiting synthesis of androgen DHT

Pyrilutamide addresses androgenetic alopecia by locally blocking the androgen mediated signalling by competing with androgen to bind to AR in the targeted tissues

Pyrilutamide is designed for topical application, and it acts directly on the target treatment areas of the scalp with low systematic drug exposure

#### **Key Advantages**

Pyrilutamide has the potential to redefine the market given its treatment avoids notable side effects that have deterred users from accepting the treatment



#### Vs. Minoxidil

- Despite being an approved product, Minoxidil lacks clear evidence of mechanism of action on androgenetic alopecia
- Minoxidil also lacks specific targeted therapy and the coverage and response of androgenetic alopecia patients are also limited

#### Vs. Finasteride

- Finasteride has shown to cause adverse sexual side effects such as decreased libido and ejaculation disorder
- Additionally, Finasteride is only approved for use in men, and found to be ineffective for treating androgenetic alopecia in women



#### Pyrilutamide

- Pyrilutamide is anticipated to be topical administered with limited systematic drug exposure
- As Pyrilutamide does not affect androgen levels in human bodies, Pyrilutamide is not expected to cause impotence, which has been a large deterring factor for patients

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# **Other Pipeline Products: ALK-1** Potential First-in-class Fully Human Mab For The ALK-1 Target

#### Addressing Limitations in Existing VEGF Inhibitors with the Potential to Become a Complementary Combo Drug for Solid Tumours

ALK-1 is a fully humanised IgG2 neutralising monoclonal antibody for vascular endothelial cells ALK-1 and can both inhibit the growth of tumour vessels / reduce their blood flow and vascularisation by blocking its receptors and alter the tumour microenvironment

Anti-angiogenic Drugs: The **Current Backbone Therapy** 

Due to its efficacy & milder side effects, antiangiogenic drugs (i.e. VEGF inhibitors) have become a key treatment for liver cancer



However, certain patients develop VEGF resistance, rendering VEGF inhibitors ineffective in pathway may allow tumours to escape from the treating the cancer

**Potential Escape Path** Research has hypothesized that the ALK-1

ALK-1 Pathway as a



As such, ALK-1 signalling may also be a complementary angiogenesis pathway to be activated upon VEGF resistance



Avastin Axitinib Sorafenib



ALK-1 overexpression in human breast and colon tumours

effects of VEGF inhibitors







ALK-1 antibody received the first exclusive global license from Pfizer to develop, produce and commercialize a novel antibody drug for cancers. It received grants from the National Science and Technology Major Project of the Thirteenth Five-Year plan. Latest Clinical Progress of GT90001:





#### **Overview of the Metastatic HCC Market**



#### **Key Characteristics**



**Prevalence is higher amongst individuals from East Asia**, with the most common being HCC



Liver cancer represents the 4<sup>th</sup> most frequent cancer and the 2<sup>nd</sup> leading cause of death *in China in 2018* 

#### Key Growth Drivers



**Multiple risk factors that can lead to primary liver cancer**, including but not limited to hepatitis B virus and hepatitis C virus infections, cirrhosis, alcohol, aflatoxins and tobacco

#### **Competitive Landscape**

Anti-angiogenic drugs have increasingly become the key treatment for liver cancers as they exhibit milder side effects than conventional cytotoxic drugs



#### **VEGF Inhibitors (Monoclonal Antibodies)**

- Notable drugs: Avastin
- Avastin binds to vascular endothelial growth factor, preventing or reducing micro-vascular formation and growth and inhibiting metastatic disease progression

#### VEGF Inhibitors (Small Molecule Drugs)

- Notable Drugs: Sorafenib and Lenvatinib
- Sorafenib interacts with multiple intracellular and cell surface kinases, that inhibit angiogenesis
- Lenvatinib is a receptor tyrosine kinase (RTK) inhibitor and also inhibits other RTKs that have been implicated in pathogenic angiogenesis, tumour growth, and cancer progression

### ALK-1's signaling pathway may be one of the mechanisms that allow tumours to escape from the inhibitory effects of VEGF inhibitors

#### ALK-1

- There are currently no approved drug using the same mechanism of action or the same target as ALK-1
- As such, ALK-1 has the potential to fill a gap in the liver cancer market for patients with HCC who were intolerant to VEGF inhibitor Sorafenib or are experiencing disease progression after treatment with Sorafenib



# Integrated R&D Platform Spearheaded By Top Scientists



**Dr. Youzhi Tong (Ph.D.)** Chairman, CEO & Founding Member

- 17+ years of experience in biopharm R&D and management
- National innovative talent
- Former VP of Angion Biomedica in the U.S.
- Former Assistant professor of Albert Einstein College of Medicine
- Ph.D. in pharmacology from Cornell; MA and BA in Chemistry from PKU





Lucy Lu Chief Financial Officer

- 13+ years of experience in investment banking
- Former head of investment banking and managing director at GF Capital
- Executive director in the Asian healthcare group at UBS





Dr. Xunwei Dong (M.D.) Chief Medical Officer

- 18+ years medical related experience in Novartis, Pfizer and GSK
- Previous Clinical Development Medical director of Novartis
- 10 years experience as an attending surgeon
- M.D. from Peking Union Medical College





**Mingming Yan** Vice President Commercial

- 13+ years of sales & marketing experience,
- Former sales team leader of 3SBio, AstraZeneca, XianJanssen
   Pharmaceutical, Hisun-Pfizer
   Pharmaceuticals and Roche





**Dr. Karl Zhou (M.D.)** US Chief Medical Officer

- US trained oncologist and clinical scientist
- 20+ years of experience in global pharma and CRO companies
- Ph.D. from Baylor College of Medicine





#### **Dr. Jie Chen (Ph.D.)** Deputy General Manager, Joint Company Secretary

- 10+years of experience in drug R&D
- Published nearly 20 papers and holds 4 patents
- Working as guest researcher at Suzhou Research Institute of LICP





# Integrated R&D Platform Spearheaded By Top Scientists(Cont'd)



**Liandong Ma** Vice President, Head of R&D

- Senior scientist of Eli Lilly and Company
- 20+ years of experience in the development of new oncology drugs, leading and participating in more than 10 oncology drug R&D projects, and bringing 4 drugs to the clinical stage

Lill



**Dr. Ruo Xu (Ph.D.)** Vice President R&D (Chemistry)

- 20+ years of experience in the pharmaceutical industry
- Former Chief Scientist of Schering-Plough, and worked in Merck for more than 15 years
- Responsible for the design and synthesis of more than 7 small molecule inhibitors
- Published 50 papers and holds 15 patents





**Dr. Jianfei Yang (Ph.D.)** Vice President R&D (Biologics)

- 17+ years of experience in Boehringer-Ingelheim and GSK in immune-related drug R&D
- Published 12 papers as corresponding authors and holds 4 patents





**Juping Shen** Vice President Production

- 30+ years of experience in the pharmaceutical industry
- Main drafter of Chinese GMP and related rules





**Dr. Jianhua Shen (Ph.D.)** Analytical Development Senior Director

- 20+ years of experience in analytical R&D management in pharmaceutical industry
- Worked for Synta and Inotek in US
- Former Senior R&D Director at WuXi
   PharmaTech





# Integrated R&D Platform Spearheaded By Top Scientists(Cont'd)



**Fang Liu** Government Affairs Senior Director

- 19 years of experience in sales, government affairs, and market access
- Served in Double Crane Pharmaceutical and Yabao Pharmaceutical





**Jian Cui** Regulatory Affairs Senior Director

- Licensed Pharmacist
- 10 years of Eli Lilly and 10 years of AstraZeneca work experience in drug registration
- Experience in NDA/LE application and approval of more than 4 pharmaceutical products





#### **Dr. Phoebe Zhang (Ph.D.)** US Clinical Operations Director

- Rich experience in clinical development and medical affairs in the in vitro diagnostics and precision cancer medicine
- Worked as Medical Affairs Manager at Relia
  Harvard Medical School M.D.





**Ying Guan** *Marketing Director* 

- 15 years of experience in marketing, new product launch, portfolio management
- Former Marketing Associate Director in Astrazeneca. Served in Tsumura, Santen, Baxter China





Enle Chen BD Director

- 10 years of experience in BD. Served in Bayer, Hanhui Pharmaceutical, and Springfield.
- Graduated from the Law School of Fudan University, passed China Bar Qualification, and was CFA Chart holder





#### Dr. Xue Zhong (Ph.D.) BD Director

- More than 5 years of work experiences in R&D and BD
- Ph.D. from Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
- Worked at HEC Research Center





## Well-Developed Commercialisation Plan for Rapid Expansion

#### **Drug Discovery**

- Proprietary laboratory research to identify and select best-in-class and firstin-class compound
- Explore potential global strategic partnerships with top global pharmaceutical companies
- Supported by renowned experts served as senior advisors from top institutions





#### Commercialization

- Well placed to achieve speed-to-market and market penetration
- The sales team is led by Michael Yan, who has significant experience in marketing prostate cancer drugs
- Current clinical trials covering 48 hospitals with prostate cancer specialists
- Strong foundation for pre-launch market education
- Medical collaboration with influential KOLs and oncologists
- Obtained China's First MAH approval for a novel drug developer from the NMPA



Business model propelled by robust R&D engine, with developing manufacturing and commercial capabilities



#### **Clinical Development**

- Led by US returnees with strong US and China R&D track record
- Local R&D team supporting project developments
- Comprehensive US and China clinical trial management and monitoring

#### Manufacturing

- c. 20,000 m<sup>2</sup> of land for building modern innovative drug manufacturing and R&D base in Suzhou, and put into operation in the end of Aug 2020
- Expect to acquire c.40,000 m<sup>2</sup> of land in Pinghu for the establishment of manufacturing facilities for APIs
- Tablet production line with an expected production capacity of **c.4.0 million** tablets for Proxalutamide per annum after factory (





Source: Company Prospectus



Section 3

**Our Strategies** 

### Our Strategies

![](_page_39_Picture_1.jpeg)

![](_page_39_Picture_2.jpeg)

### Commercialisation Strategy – Proxalutamide & Pyrilutamide

![](_page_40_Picture_1.jpeg)

![](_page_40_Picture_2.jpeg)

Mingming Yan, Vice President of Commercial

- Extensive experience in pharmaceutical industry, leading the launching or marketing of Zytiga (Abiraterone), Tarceva, Bydureon
- Specializing in marketing and management of Pharmas with prior experience in Xian Janssen, AstraZeneca, Roche, 3SBio and Hisun-Pfizer

	Strategies for Proxalutamide	Strategies for Pyrilutamide
Market Access	<ul> <li>Securing NRDL listing through negotiation with stakeholders involved in NRDL, building KOL advocacy and endorsement</li> <li>Provincial tendering as contingency plan before NRDL</li> <li>Hospital listing: Initial targeting the top tier hospitals before expanding into other hospitals nation-wide;</li> <li>Pharmacy coverage</li> <li>Charity and assistance programs</li> </ul>	<ul> <li>Distributor partnership: Partner with quality distributors, such as Sinopharm, Shanghai Pharma, and CR Pharma to promote nation-wide coverage of pharmacies <ul> <li>Signed strategic framework agreement with Sinopharm on 26 March, 2020</li> </ul> </li> <li>Hospital and pharmacy coverage: In-house sales team to cover key regions and areas first, before expanding to hospitals and ~50,000 pharmacies thereafter</li> <li>Online pharmacies collaboration: Collaborate with web based pharmacies, such as Alibaba and JD to educate prescribed patients</li> </ul>
Judication &	<ul> <li>From post-chemo therapy to 1L mCRPC, to even an earlier indication to secure a larger patient base and a longer administration window</li> <li>Evolving our therapeutic indications from prostate cancer to</li> </ul>	<ul> <li>Expand indication into acne vulgaris</li> <li>Licensing-in new dermatological products that would be complementary to Kintor's portfolio</li> </ul>
Pipeline Expansion	breast cancer	<ul> <li>R&amp;D collaboration &amp; partnership in dermatology in China to enrich Kintor's dermatological product line</li> </ul>
€S £¥	• Maintaining consistent price levels of Proxalutamide before patent expiration on 8 Mar 2032	<ul> <li>Maintaining consistent price levels of Pyrilutamide before patent expiration in 8 Sep 2030</li> </ul>
Patent expiration Dat	te	

![](_page_40_Picture_7.jpeg)

# R&D and Manufacturing Capabilities

#### Fully-integrated R&D Platform Sophisticated R&D Process Small-molecule **Biologics** Pharmaco Biology Chemistrv Antibodv kinetics Clinical Clinical Analytical Formulation Operation Medicine Research 4.100m<sup>2</sup> Pre-clinical stage Total gross floor **Clinical stage** area globally

![](_page_41_Picture_2.jpeg)

#### **Experienced R&D Team**

- Our core R&D personnel includes leading scientists and researchers with drug discovery experience from U.S. biotech companies and global pharmaceutical companies
- Our core R&D personnel have accumulated extensive experience from research institutions, universities and pharmaceutical companies in the relevant therapeutic areas
- Majority of R&D personnel have obtained master's or Ph.D. degrees

#### **Global Supply Manufacturing Facility**

To meet commercial scale production with GMP requirements, and will receive production permit in Sep 2020

![](_page_41_Picture_9.jpeg)

![](_page_41_Picture_10.jpeg)

20,000m<sup>2</sup> Industrial land owned in Suzhou Completed construction Production permit ready in Sep 2020 III

40,000 m<sup>2</sup>

**MAH** approval from NMPA

First in China for a

novel drug developer

Expected to be acquired for **APIs production** 

00

![](_page_41_Picture_15.jpeg)

4 million tablets (Proxalutamide) annual capacity after Suzhou factory construction

![](_page_41_Picture_17.jpeg)

# Modern Innovative Drug Manufacturing and R&D Base

![](_page_42_Picture_1.jpeg)

![](_page_42_Picture_2.jpeg)

![](_page_42_Picture_3.jpeg)

Reception

Discussion corner

Office

![](_page_42_Picture_7.jpeg)

![](_page_42_Picture_8.jpeg)

Meeting room

R&D equipment

![](_page_42_Picture_11.jpeg)

![](_page_43_Picture_0.jpeg)

Section 4

**Financial Performance** 

![](_page_44_Figure_1.jpeg)

- R&D costs increased by 65.9% in the first half of 2020: (I) an increase of RMB 29.2 million in materials and consumables expenses; ii) an increase of RMB 15.9 million in employee benefit expenses, including RMB 6.5 million in equity incentive plan expenditures; (III) an increase of RMB 7.3 million in third-party contracting fees; (IV) an increase of RMB 6.8 million in clinical research expenses
- The increase in cash and cash equivalents in the first half of 2020 is mainly due to IPO proceeds and bank borrowings
- The company has been listed in May 2020 with net proceeds of an amount of about HK \$1.7billion
- As of 30 June 2020, we had bank loans of RMB 208.2 million and unutilised bank facilities of RMB 146.9 million

![](_page_44_Picture_6.jpeg)

![](_page_45_Figure_1.jpeg)

In the first half of 2020, the administrative expenses increased by 271.6% over the same period last year, mainly due to: (I) an increase of RMB 10.7 million in employee benefit expenses; ii) an increase of RMB 2.3 million in utilities and office expenses as we expand office space; (III) an increase of RMB 17.7 million in listing expenses; and (IV) an increase of RMB 2.2 million in other administrative expenses

of 2019 to RMB 3.6 million in the first half of 2020, which consisted of

employee benefit expenses of RMB 3.4 million (including equity incentive plan expenditure of RMB 0.6 million), mainly due to the

establishment and expansion of sales and marketing team in preparation

for Proxalutamide

![](_page_46_Figure_1.jpeg)

#### **Net Cash Flows Used in Operating Activities**

- The net cash outflow from operating activities mainly includes R&D expenses and administrative expenses
- In the first half of 2020, the increase of R&D expenditure is mainly due to the increase of material cost brought by the project in clinical phase III and the increase of salary and welfare expenses brought by the expansion of R&D team size; the increase of administrative expenditure is mainly due to the increase of non R&D employees, and the increase of IPO expenses (one-time)

#### **Net Cash Flows Generated from Financing Activities**

![](_page_46_Figure_6.jpeg)

- In the first half of 2020, the net cash inflow from financing activities mainly includes IPO proceeds and bank loans
- In the first half of 2019, the net cash inflow from financing activities mainly came from bank loans

![](_page_46_Picture_9.jpeg)

#### **Capital Expenditure**

![](_page_47_Figure_2.jpeg)

- In the first half of 2019 and the first half of 2020, our capital expenditure amounts are RMB 25.7 million and 33.0 million respectively, which are mainly used for Suzhou factory construction (including civil engineering, electromechanical, etc.) and equipment procurement, as well as intangible assets (including authorized introduction and software purchase)
- We expect capital expenditure in the second half of 2020 and 2021 to be mainly land acquisition, design construction and engineering of the Pinghu plant

![](_page_47_Picture_5.jpeg)

### **Income Statement**

	Six months ended 30 June		
	2019	2020	
RMB'000			
Revenues	-	-	
Cost of sales		_	
Gross profit	-	-	
Other income	4,064	4,497	
Distribution and marketing costs	-	(3,595)	
Administrative expenses	(12,113)	(45,016)	
Research and development costs	(89,427)	(148,375)	
Other(losses)/gains-net	117	(973)	
Operating loss	(97,359)	(193,462)	
Finance costs-net	(1,146)	(1,985)	
Loss before income tax	(98,505)	(195,447)	
Income tax expense		_	
Loss and total comprehensive loss for the period	(98,505)	(195,447)	
Listing expenses (one-time)	3,043	20,761	
Share-based compensation expenses		10,998	
Adjusted loss and total comprehensive loss for the period	(95,462)	(163,688)	

• In the first half of 2020, our other income came from interest income and government subsidies, and our main expenditure was R&D and administrative expenses

• In the administrative expenses, IPO related expenses and staff wages and benefits increased significantly, while in R&D costs, material expenses and staff wages and benefits increased significantly

• Excluding one-time expenses and non cash items (listing expenses and equity incentive plan expenditures)

• The listing expenses in the first half of 2019 was RMB 3.0 million; in the first half of 2020, the listing expenses is RMB 20.8 million, and the equity incentive plan is RMB 11.0 million

![](_page_48_Picture_6.jpeg)

### Income Statement

	2018	2019
RMB'000		
Revenues	698	-
Cost of sales	(689)	-
Gross profit	9	-
Other income	12,298	19,018
Distribution and marketing costs	-	(336)
Administrative expenses	(24,104)	(32,763)
Research and development costs	(93,198)	(214,019)
Other(losses)/gains-net	518	587
Operating loss	(104,477)	(228,687)
Finance costs-net	(4,007)	(3,890)
Loss before income tax	(108,484)	(232,577)
Income tax expense	-	-
Loss and total comprehensive loss for the period	(108,484)	(232,577)

• We generated revenue in 2018 from the provision of technology services to Suzhou Koshine in relation to the pre-clinical development of KX-826 prior to our acquisition of Suzhou Koshine in November 2018. We did not generate any revenue in 2019

• We also generated revenue of RMB9,000 from an independent third party in 2018 for the provision of technology services on an ad hoc basis

• We target to submit NDA for Proxalutamide in 2020 and our own manufacturing facilities in Suzhou will be ready for GMP manufacturing in Q3 2020. We expect sequenced product launches commencing in 2021

![](_page_49_Picture_5.jpeg)

# Balance Sheet

	As of Dec 31, 2019 (Audited)	As of Jun 30, 2020 (Unaudited)
RMB'000		
Assets		
Non-current assets		
Property, plant and equipment	98,369	140,422
Intangible assets	179,299	179,270
Right-of-use assets	14,412	12,811
Other non-current assets	40,683	37,417
	332,763	369,920
Current assets		
Other receivables, deposits and prepayments	25,081	15,044
Cash and cash equivalents	195,532	1,792,159
	220,613	1,807,203
Total assets	553,376	2,177,123
Liabilities		
Non-Current Liabilities		
Borrowings	-	98,500
Lease liabilities	2,311	936
Deferred income tax liabilities	38,818	38,818
	41,129	138,254

![](_page_50_Picture_2.jpeg)

# Balance Sheet

	As of Dec 31, 2019 (Audited)	As of Jun 30, 2020 (Unaudited)
RMB'000		
Current liabilities		
Trade and other payables	79,999	124,810
Borrowings	58,700	109,700
Lease liabilities	3,086	3,048
Deferred income	798	517
	142,583	238,075
Total liabilities	183,712	376,329
Equity		
Equity attributable to the equity holders of the company		
Share capital	17	261
Shares held for the Employee Incentive Scheme	-	(17)
Reserves	369,647	1,800,550
Total equity	369,664	1,800,794
Total equity and liabilities	553,376	2,177,123

![](_page_51_Picture_2.jpeg)

# Cash Flow Statement

	Six months ended 30 June	
	2019	2020
RMB'000		
Net cash used in operating activities	(89,643)	(162,225)
Net cash (used in)/generated from investing activities	7,386	(33,032)
Net cash generated from financing activities	7,109	1,792,803
Net increase/(decrease) in cash and cash equivalents	(75,148)	1,597,546
Cash and cash equivalents at the beginning of the period	137,513	195,532
Exchange gains on cash and cash equivalents	-	(919)
Cash and cash equivalents at the end of the period	62,365	1,792,159

![](_page_52_Picture_2.jpeg)

![](_page_53_Picture_0.jpeg)

![](_page_53_Picture_1.jpeg)

### Near-term outlook

### The U.S.

#### 2020

#### • Proxalutamide o mCRPC

- Obtain preliminary data of Ph. II in 4Q

#### Pyrilutamide

Androgenetic alopecia
 Publish result of Ph. Ib in 4Q

- Obtain preliminary data in 4Q

Brazil

Proxalutamide

o COVID-19

2020

#### • ALK-1

Proxalutamide

o mCRPC

2021

- HCC
  - Publish result of Ph. II in Taiwan

- Commercialization

### **Greater China**

#### 2020

1 to 1

- Proxalutamide
  - o mCRPC
    - Apply for NDA in 4Q

#### Pyrilutamide

- ∘ AGA
  - Commence patients enrolment in September

.....

- ALK-1
  - HCC
    - Commence combo therapy successively

#### AR degrader

- Prostate cancer and AR-related diseases
   Apply for IND in 4Q
- PD-L1 / TGF-β dual targeting antibody
  - Multiple types of solid tumours
     Expect to apply for IND

![](_page_54_Picture_26.jpeg)

![](_page_55_Picture_0.jpeg)

Appendix A

# Introduction to Prostate Cancer and the AR Pathway

### **Overview of Prostate Cancer**

#### **Overview of Prostate Cancer**

As one of the most common cancer types in the male population, prostate cancer begins when healthy cells in the prostate change and grow out of control, before eventually developing into a tumor

![](_page_56_Picture_3.jpeg)

#### **Key Risk Factors**

- Hereditary Breast and Ovarian Cancer (HBOC) syndrome(DNArepair mutations to the BRCA1 and/or BRCA2 genes)
- Genetic Changes (HPC1, HPC2, HPCX, CAPB, ATM, and FANCA)
- Family History
- Agent Orange Exposure
- Eating Habits

![](_page_56_Picture_10.jpeg)

#### Hormone Sensitive Prostate Cancer (HSPC)

 Form of prostate cancer that remains responsive to testosterone suppression therapy

#### Standard of Care

Type

Non-metastatic

Metastatic

- Androgen Deprivation Therapy (ADT) has been the traditional backbone treatment
- Recent treatment trends have incorporated a greater use of AR antagonists, androgen biosynthesis inhibitor or cytotoxic agents

#### Standard of Care

 Combo therapies combining ADT with AR antagonists, androgen biosynthesis inhibitor or cytotoxic agents is the most common form of treatment

![](_page_56_Picture_18.jpeg)

#### **Castration-Resistant Prostate Cancer (CRPC)**

• Form of advanced prostate cancer that has progressed despite treatments to lower testosterone to castration levels

#### Standard of Care

- AR antagonists is the typical treatment according to CRPC AUA Guidelines
- Patients can also opt for other treatments including surgery, endocrine therapy and chemotherapy

![](_page_56_Picture_24.jpeg)

#### Standard of Care

• Depending on the severity and stage, patients are recommended with AR antagonists, androgen biosynthesis inhibitors and/or chemotherapy

![](_page_56_Picture_27.jpeg)

Source: Frost & Sullivan Report, Prime Oncology, Uro Today

### Overview of Prostate Cancer (cont'd)

#### Recommended Treatment Guideline for CRPC in China

*Historically, CRPC patients have had poor survival rates due to the shortage of effective treatments in China.* 2<sup>nd</sup> generation AR antagonists including Proxalutamide and Enzalutamide have the potential to overhaul current CRPC treatment plans and efficacy

![](_page_57_Figure_3.jpeg)

![](_page_57_Picture_4.jpeg)

### Overview of Prostate Cancer (cont'd)

### Recommended Treatment Guideline for CRPC in the US

Comparatively, 2<sup>nd</sup> generation AR antagonists have been part of the standard US CRPC treatment for a longer period of time, in addition to androgen biosynthesis inhibitors, chemotherapies and immunotherapies

![](_page_58_Figure_3.jpeg)

![](_page_58_Picture_4.jpeg)

### Introduction to the Androgen Receptor Signaling Pathway

![](_page_59_Figure_1.jpeg)

• The androgen receptor (AR) belongs to the steroid hormone group of nuclear receptors. The AR is a **ligand-dependent** transcription factor that controls the expression of specific genes

 The prostate is an androgen-dependent organ, and the androgen receptor (AR), which execute androgen hormones are the key regulator and driver of PCa and CRPC development

- AR inhibitor **inhibits androgen binding** to its receptor, androgen receptor nuclear translocation, and subsequent interaction with DNA
- Therefore, HSPs (Heat shock proteins) represent **ideal** therapeutic targets in case of castrationresistant prostate cancer (CRPC) where the AR pathway is **persistently active**

![](_page_59_Picture_6.jpeg)

Source: Frost & Sullivan analysis, National Center for Biotechnology Information