XtalPi 2228.HK

2024 Investor Presentation

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This presentation may contain forward-looking statements relating to the forecasts, targets, outlook, estimates of financial performance, opportunities, challenges, business developments, business plans and growth strategies of XtalPi Holdings Limited (the "Company" or "XtalPi") and its group companies. These forward-looking statements are based on information currently available to XtalPi and are stated here on the basis of the outlook at the time that this presentation was produced. The Company undertakes no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise. The forward-looking statements are based on certain expectations, assumptions and premises, some of which are subjective or beyond our control. The forward-looking statements may prove to be incorrect and may not be realised in the future. Underlying the forward-looking statements are a large number of risks and uncertainties. Therefore you should not rely on any of these forward-looking statements. Please see our various other public disclosure documents for a detailed discussion of those risks and uncertainties.

This presentation also contains some unaudited non-IFRS financial measures which should be considered in addition to, but not as a substitute for, measures of the Company's financial performance prepared in accordance with IFRS. In addition, these non-IFRS financial measures may be defined differently from similar terms used by other companies. The Company's management believes that the non-IFRS financial measures provide investors with useful supplementary information to assess the performance of the Company's core operations by eliminating the potential impact of certain items. For further explanation of our non-IFRS measures and reconciliations between our IFRS and non-IFRS results, please refer to our results announcement.

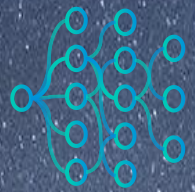
In addition, information relating to other companies and the market in general presented in these materials has been obtained from publicly available information and other sources. The accuracy and appropriateness of that information has not been verified by XtalPi and cannot be guaranteed. All materials contained within this presentation are protected by copyright law and may not be reproduced, distributed, transmitted, displayed, published or broadcast without the prior, express written consent of XtalPi.

XtalPi

Stock Code: 2228.HK

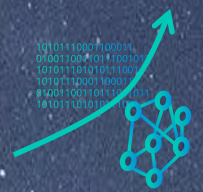
Building the ASI infrastructure for the life sciences and materials industries

Quantum physics



Artificial Intelligence

Robots



Computing Power

Shenzhen, China

Shenzhen International Biomedical Industrial Park

Shanghai, China

Shanghai Zhangjiang Innovation Park

Beijing, China

Beijing Zhongguancun

Boston, USA

100 Chestnut

800+
Employees

Over 10,000m²
Robotic Laboratory Space

500+
R&D Personnel

200+
Models

1M+ Cores
Global Computing Power

160+
Patents

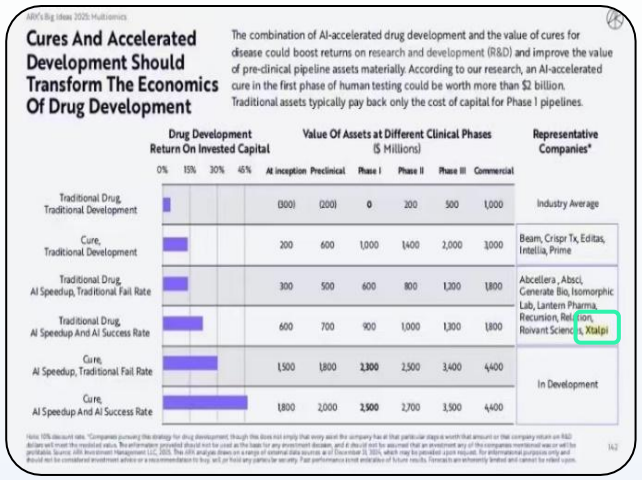
The first 18C stock listed on HKEX (XtalPi 2228.HK)

June 2024

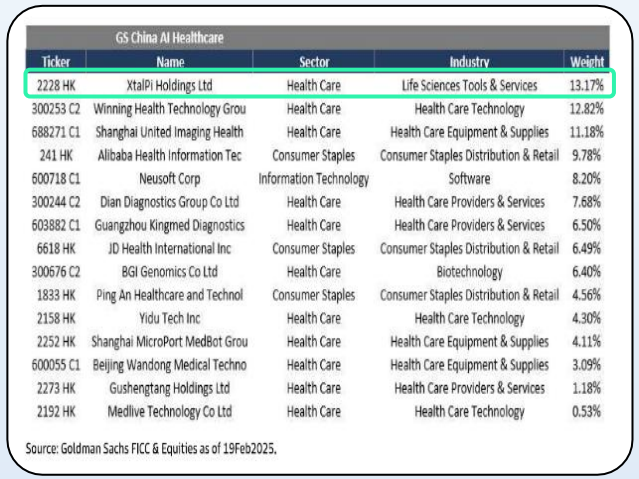
5

An Innovative Force Widely Recognized Globally

Top 10 pharma companies by 2023 revenue and their AI drug discovery activities

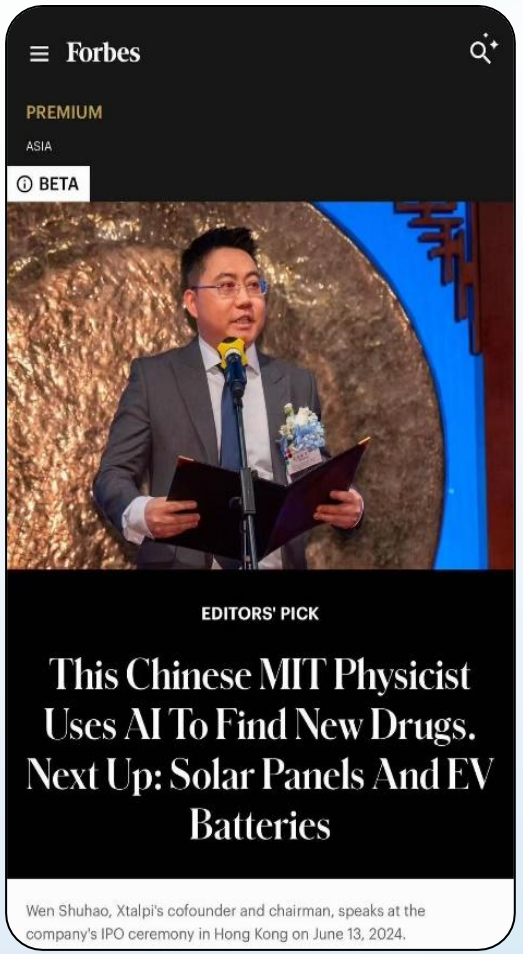


ARK Invest—BIG IDEAS 2025



Largest weighting in the GS China AI Healthcare Index

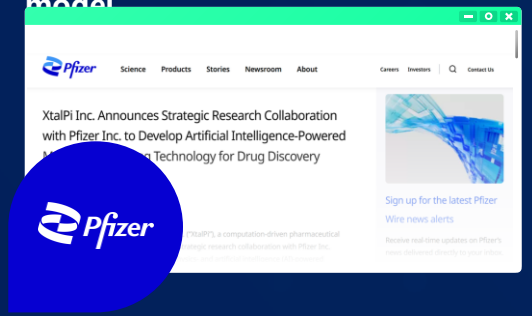
The WAIC Sail Award



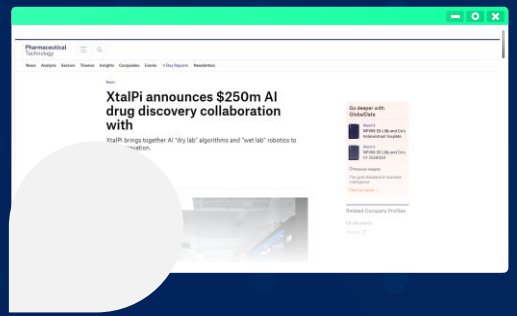
Forbes—The Chinese MIT Physicist Uses AI To Find New Drugs, Next Up: Solar Panels And EV Batteries

Extensive Cooperation with Top Pharmaceutical and Material Sciences Companies, Research Giants and Government Agencies

Continuing our in-depth AIDD development cooperation with pharmaceutical giant Pfizer, jointly publishing the XtalPi Force Field model

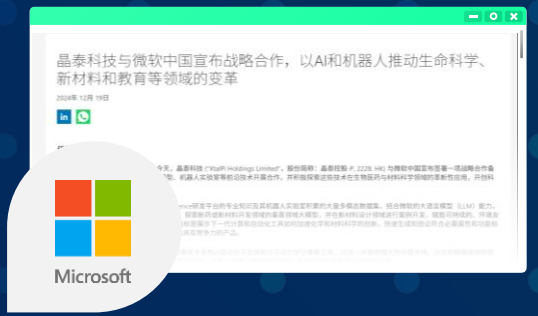


Signed a US$250 million AI drug discovery research agreement with an Indianapolis headquartered global pharma



Working with MIT to jointly build the MIT AI Future Lab and jointly drive scientific discovery

Strategic partnership with Microsoft China, promoting industrial research and educational reform using AI and Robotics tools



Jointly building an empowerment platform for SMEs with MIIT of China, focusing on cosmetics, medicines and new materials

Cooperating with UAE Sheik's Office to use AI + Robotics to empower the development of regional traditional medicines

Signed a cooperation agreement with Indonesia's Sinar Mas Group, to jointly promote and develop the AI industry in the APAC region

Collaborating with Hengjian Holdings, building out China’s GBA “AI+" technology and industry integration innovation consortium

Highly-Flexible and High-Precision Robotics

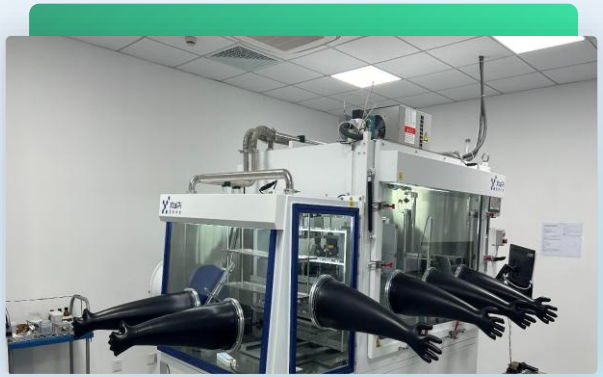
Traditional Chinese Medicine: Hengqin Lab in Guangdong
The Modernizations Platform for TCM

Pharma: Amgen Inc.
Automated Compound Library

Petrochemical Industry: Shanghai Research Institute of Sinopec
Catalyst Screening

New Energy: The State Key Laboratory of Peking University
Electrolyte R&D Solution

R&D Institutes: Department of Chemistry, Fudan University
Chemical Reaction Research




Highly-Flexible,
High-Precision
Robotic Scientists
Evolution
Scalability
High Data Quality
High Efficiency
24/7

2024
Business Update

AI + Robotics Reshapes the R&D Paradigm and Ushers in the Era of Intelligent Drug and Material Development

Opening the Era of Intelligent Molecular R&D

Traditional R&D Process

- Human-designed Molecules
- Human-designed Experiments
- Human-run Experiments

AI + Robotics

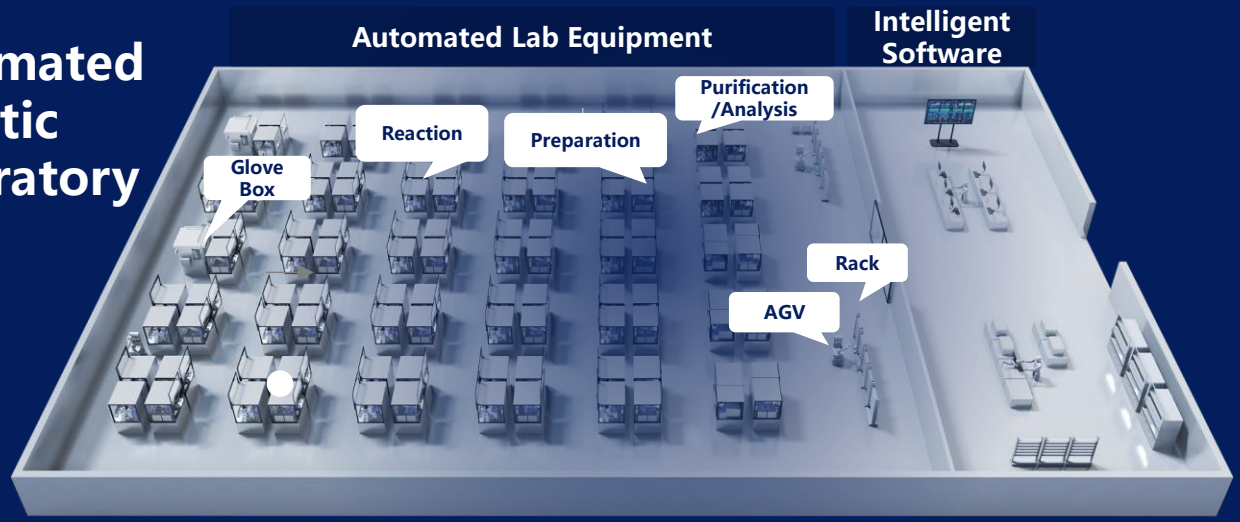
- AI-designed Molecules
- AI-designed Experiments
- Robotic Execution

- Data Moat Construction: Our automated robotic laboratory can cover over 80% of common medicinal chemistry reaction types, accumulating 200,000+ reaction process data points monthly.
- Outperforming Human Experts: We have developed 20+ new AI models for reactivity and experimental condition prediction, all with accuracy rates exceeding 80%. These models significantly outperform synthetic chemists, especially in identifying and predicting failed reactions.

Vertical AI Models

- Structural Prediction Model
- Molecule Generation + Screening Model
- Activity Prediction Model
- Pipeline Application Model
- Viability + Physicochemical Properties Model
- Solid-State Model
- Antibody Model
- Automation Model
- ...

Automated Robotic Laboratory



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AI Reaction Prediction Capabilities: AI Models Outperform Human Experts, Pioneering a Transformative Era

AI Prediction Models

AI Suzuki Prediction Model
AI SNAr Prediction Model

First Group of Chemists

Chemists with Ph.D.

Chemists with master's degree and more than five years of experience

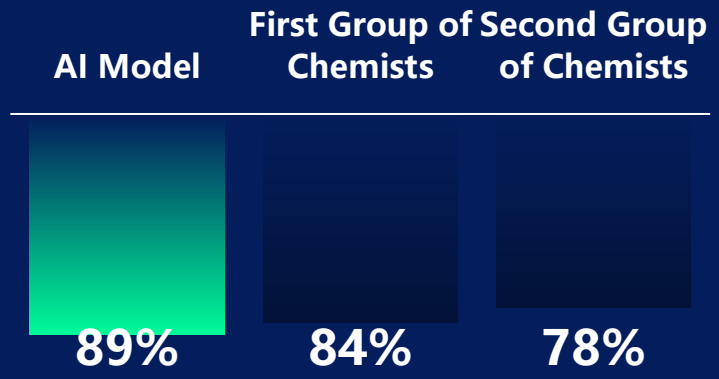
Second Group of Chemists

Chemists with master's degree and less than five years of experience

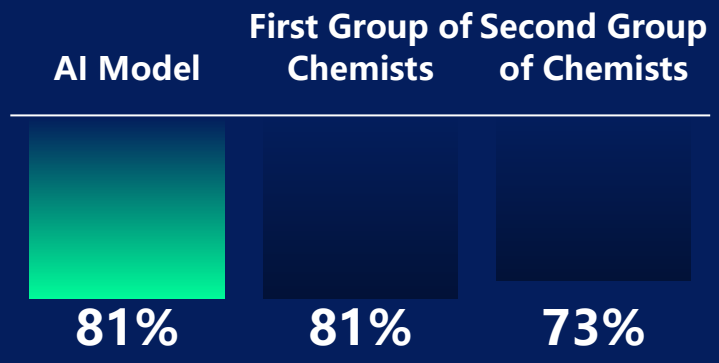
Successful Reaction Prediction

AI model significantly outperforms the second group of chemists

Suzuki Coupling (131 chemists)



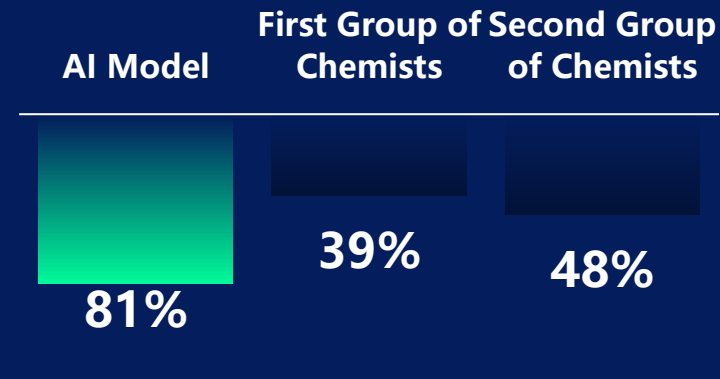
SNAr Reactions (137 chemists)



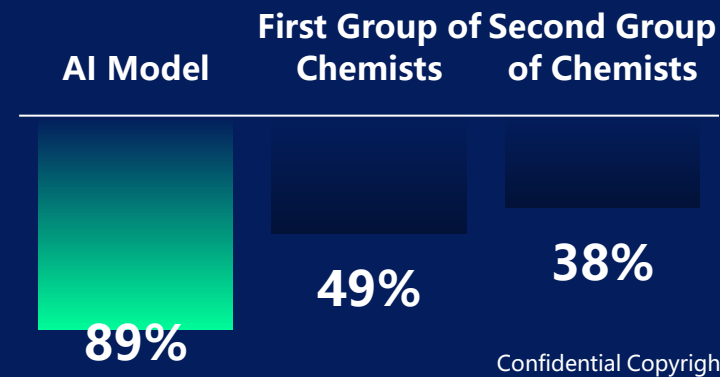
Failed Reaction Prediction

AI model significantly outperforms both groups of chemists

Suzuki Coupling (131 chemists)



SNAr Reactions (137 chemists)



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AI Agents Improve R&D Efficiency

Research Agent | **Analytical Agent** | **Quality Agent**

Base Large Language Model

Drug Discovery AI Models | Predictive Chemistry AI Models | ETL and Data Management Tools | Spectral Analysis AI Model | Robotic Controlling Tools

End-to-End Digitized System

Automated Robotic Laboratory

Molecular Design | Building Block Procurement | Reaction Design | Reaction Setup | Purification | Compound Management | Quality Control

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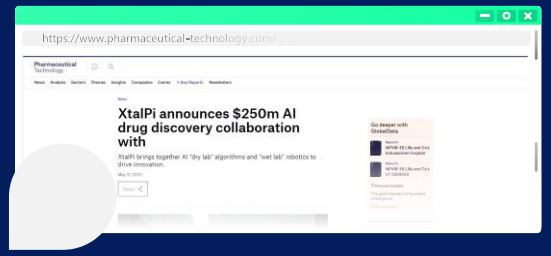
Latest Progress in Drug Development

More than 300 global partners
Recognized by globally-leading pharmaceutical companies

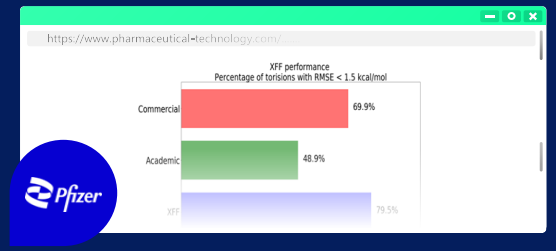
× Leading biotech companies in East Asia
XtalPi successfully cooperated with a few leading biotech companies in East Asia to efficiently design and discover lead compounds for difficult targets

× Leading biopharma company
After successfully advancing an innovative drug R&D project with a leading biopharma, the company and XtalPi have reached cooperation on two new AI-driven new drug R&D projects this year

Following the signing of a US$250 million drug discovery cooperation agreement between XtalPi and an Indianapolis headquartered global pharma, the two parties will further expand their cooperation to the field of solid-state research in 2024



The XtalPi Force Field model developed in collaboration with Pfizer was published in an academic journal, and we will continue to iterate the next generation of force field models in collaboration with Pfizer in 2025



AI for Science platform empowering incubation
Pipeline entering clinical stage

Signet Therapeutics
Pipeline Stage IND
Indications Diffuse Gastric Cancer

Target Hypothesis | Target to Hit | Hit-to-Lead | Lead Optimization | Preclinical | Phase I

- The world's first innovative targeted drug integrating AI + organoid basic model
- Obtained IND approval from the US FDA and IND clinical approval from NMPA in advance

Meta Pharmaceuticals
Pipeline Stage IND-ENABLING
Indications Primary Hyperoxaluria (PH)

Target Hypothesis | Target to Hit | Hit-to-Lead | Lead Optimization | Preclinical | Phase I

- FDA granted dual designation of pediatric rare disease and orphan drug (RPDD, ODD)
- The pipeline was discovered using XtalPi's AI + Robotics

ReviR Therapeutics
Continuing to advance preclinical and clinical development of our established Huntington's disease (HD) pipeline, as well as our pipeline for multiple neurological diseases, including Charcot-Marie-Tooth Disease (CMT), amyotrophic lateral sclerosis (ALS), and other diseases.

Continuing to Invest in Cutting-Edge Therapies

A breakthrough was made in collaboration with Leman, the first patient with systemic lupus erythematosus was dosed with the metabolically enhanced CD19 CAR-T, and AI algorithms allowed for the targeting of solid tumor targets

Leman Biotech

The tumor vaccine project in collaboration with a life science company was presented at the American Association for Cancer Research (AACR) meeting

Life Science Company

Established an AI peptide R&D platform with a well-known scientific research institution in Singapore to discover and design clinical candidate drugs for renal clear cell carcinoma

National Cancer Centre Singapore SingHealth

NCCS

Collaboration with N1 Life to create a non-invasive ophthalmic drug delivery platform for nucleic acid and macromolecular drugs

N1 Life

Cooperating with Gnosis Neurodynamics to explore the construction of a neurological drug screening platform based on cell platforms and digital brain modelling

Gnosis Neurodynamics

Independently developed an mRNA sequence pre-training model and mRNA property prediction platform, with the related papers being accepted by the 2025 AAAI Artificial Intelligence Conference

Association for the Advancement of Artificial Intelligence

AAAI

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XtalFold™: World-Leading Protein Complex Prediction Platform, Receives global recognition from leading pharmaceutical companies

XtalFold™ Antibody Drug Discovery Platform

Authorized External Users J&J UCB • • •

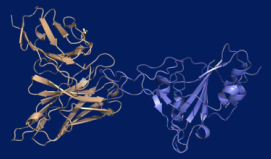
Input

M G N S C Y
Antigen sequence

E V Q L L E
Antibody sequence

XtalFold™ AI

Output



Predicted Ab-Ag structure

- 1 step

Bypassing separate Ab/Ag modeling + docking

= 1 day

From sequences to Ab-Ag complex structure

Downstream Applications

- Epitope Identification
- Lead Optimization
- Function Elucidation
- Bispecific Design

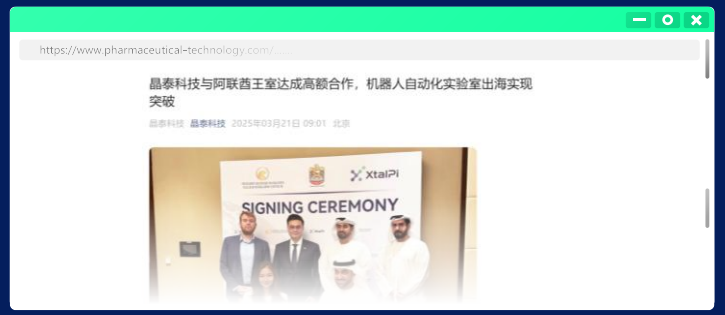
Infinite Possibilities for Drugs & Biomaterials

- Infectious disease drug (eg. COVID-19)
- Cancer drug
- Protein drug
- Multi-specific drug
- CAR-T drug
- Bio sensors
- Bio materials

Intelligent Automated Robotic Solutions Open Markets Globally

Guangzhou University of Chinese Medicine Hengqin Laboratory
The Modernizations Platform for TCM

UAE
The first automated modern R&D laboratory for traditional medicines in the Middle East



JW Pharma
Automated drug synthesis processes

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Top Placement at the Global Material Structure Prediction Competition; Expanding Application Exploration Throughout the New Materials Industry

Year-Round Service

85 Clients

Continuing to cooperate with dozens of the world's leading multinational pharmaceutical companies.

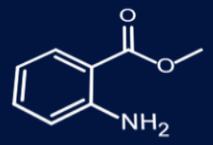
Expanding the application of solid-state research technology capabilities in regards to the new materials industry, including but not limited to: electrochemical materials, polymer materials, ceramic oxide materials

XtalPi was a top placer at the 7th CCDC Crystalline Structure Prediction Blind Test Competition

- 28 international teams participated, challenged with predicting the experimental polymorphs and their relative stability of 7 complex systems using first-principles calculation methods
- We were able to predict the experimental polymorphs of all 7 target systems during the blind test
- One of the few teams able to accurately predict the relative stability between different systems

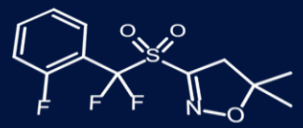
Target XXIX

PXRD analysis based Z' =3 study



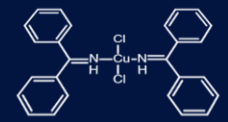
Target XXXI

Drug like molecule
Static disorder



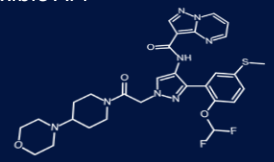
Target XXVIII

Inorganic element



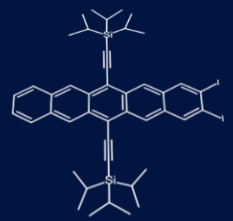
Target XXXII

Drug like molecule
Flexible API



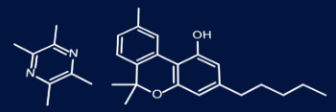
Target XXVII

Optoelectronic Material



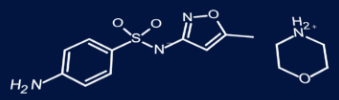
Target XXX

Predict the likelihood stoichiometry (1:1, 2:1 or 1:2)



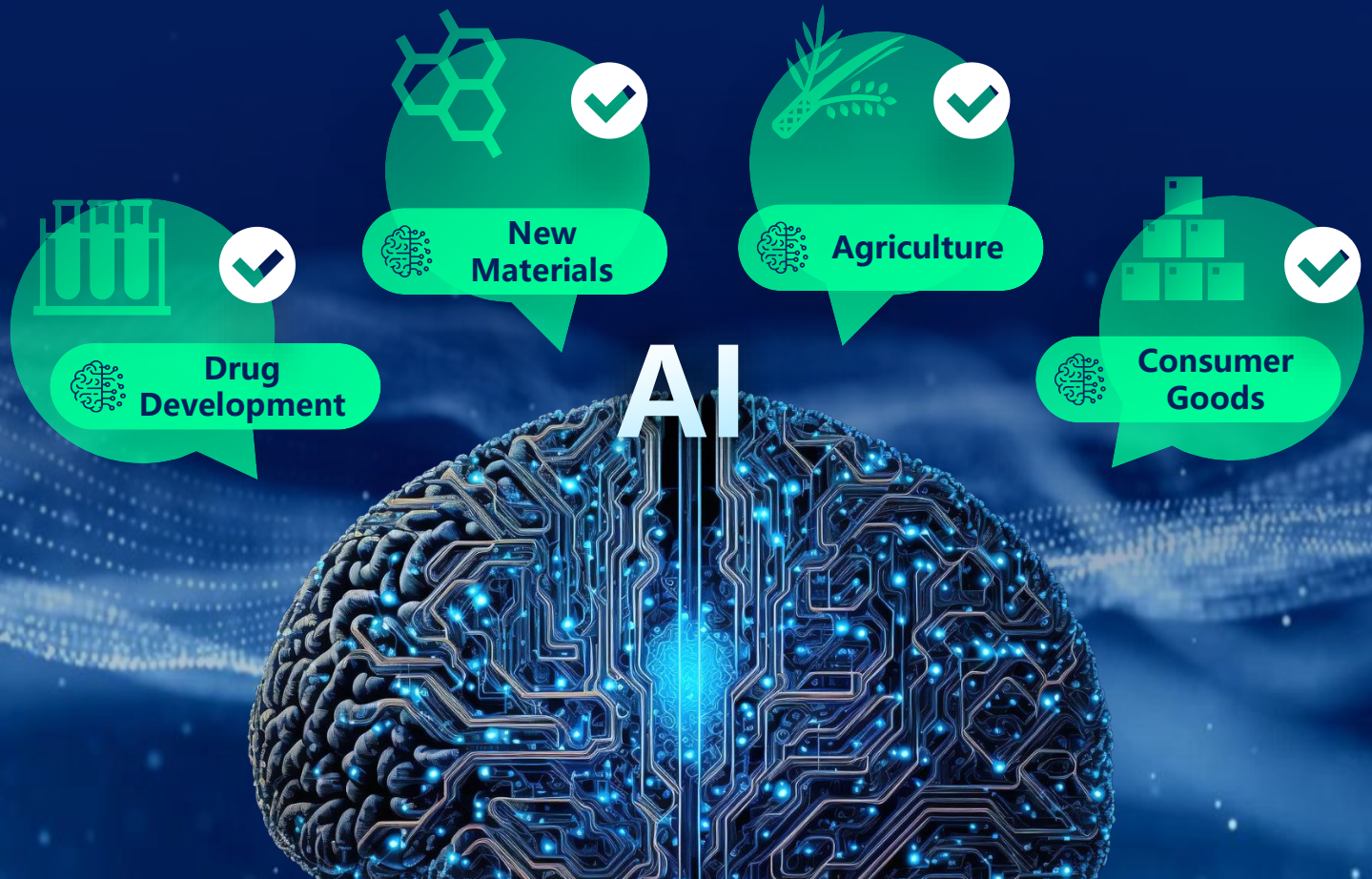
Target XXXII

Drug like molecule
Salt



AI Empowering Industries Globally

A New Generation of Industry-Specific Scientific Research Infrastructure



XtalPi
晶 泰 科 技

A highly flexible and high-precision robot scientist cluster tailored for AI for Science

Vertical AI and proprietary data building industry-specific "artificial super intelligence"

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Future AI-Powered Molecules Boost Materials, Agricultural, and Consumer Goods

Future Materials

Industry

Sinopec Research Institute
Catalysts

GCL Group
New Energy Materials

Fangda Carbon
Carbon-Based Materials

Shenzhen Yanyi New Materials
Battery Materials

Academia

Peking University
Electrolyte Formulation

MIT
Material Sciences

NUS
Material Sciences

Incubation

Deep Principle
Material Micro-mechanisms

Future Bio
Bioplastics

Future Agriculture

Shougang Vegetable
AI Seed Improvement

GTB
Desert Remediation

Kula Bio
Biofertilizers

CyberPlantX
"Super Crops"

Future Consumer Goods

MIIT
Consumer Goods

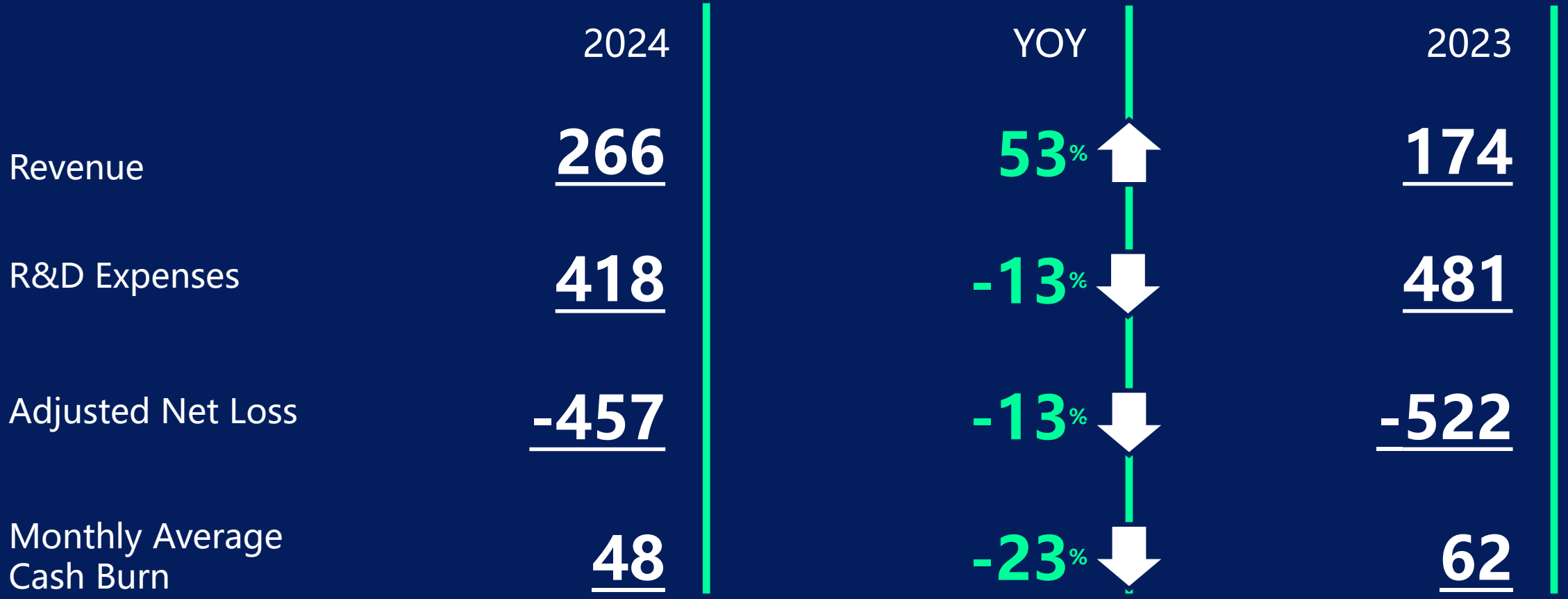
Launching the "AI+ Initiative", empowering industries ranging from cosmetics and biopharma to advanced materials and agritech, thereby driving AI adoption across broader industrial ecosystems.

2024
Financial Results

2024 Financial Highlights

In 2024，comparing to 2023, the Company’s revenue increased by 53%，the adjusted net loss narrowed by 13%，and the monthly average cash burn decreased by 23%

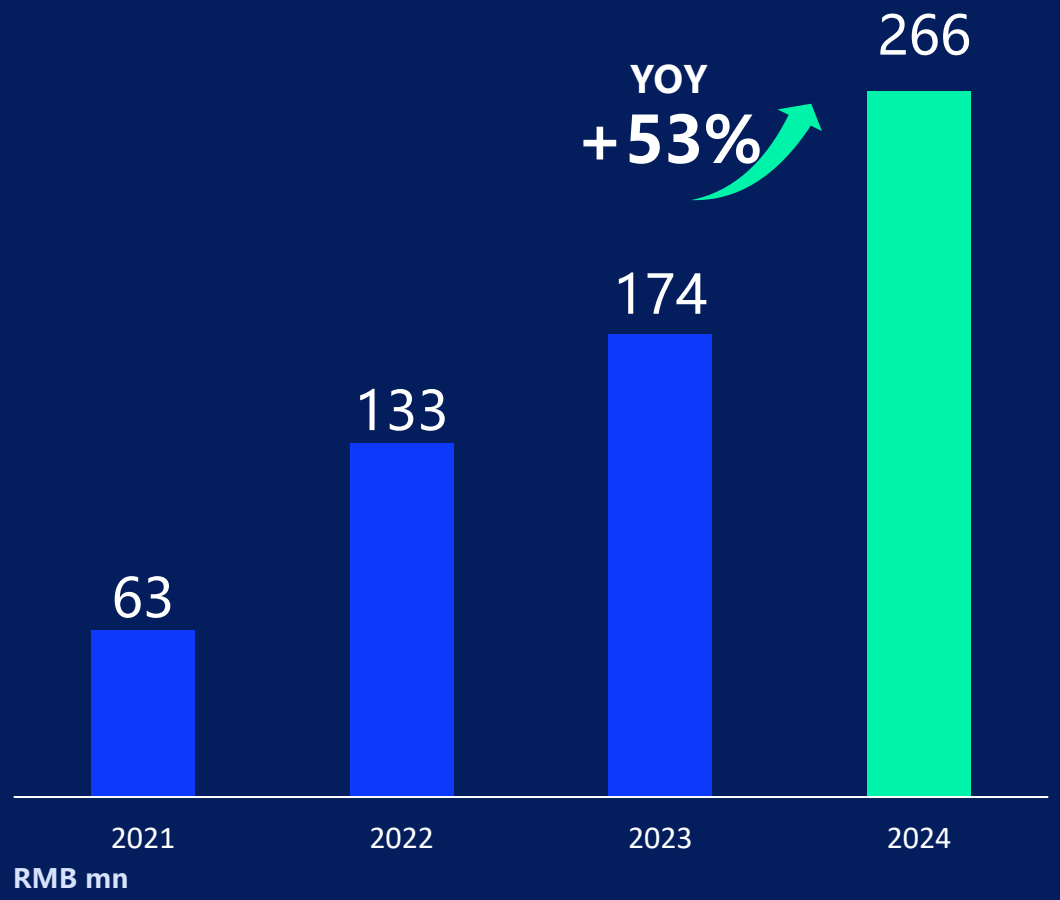
RMB mn



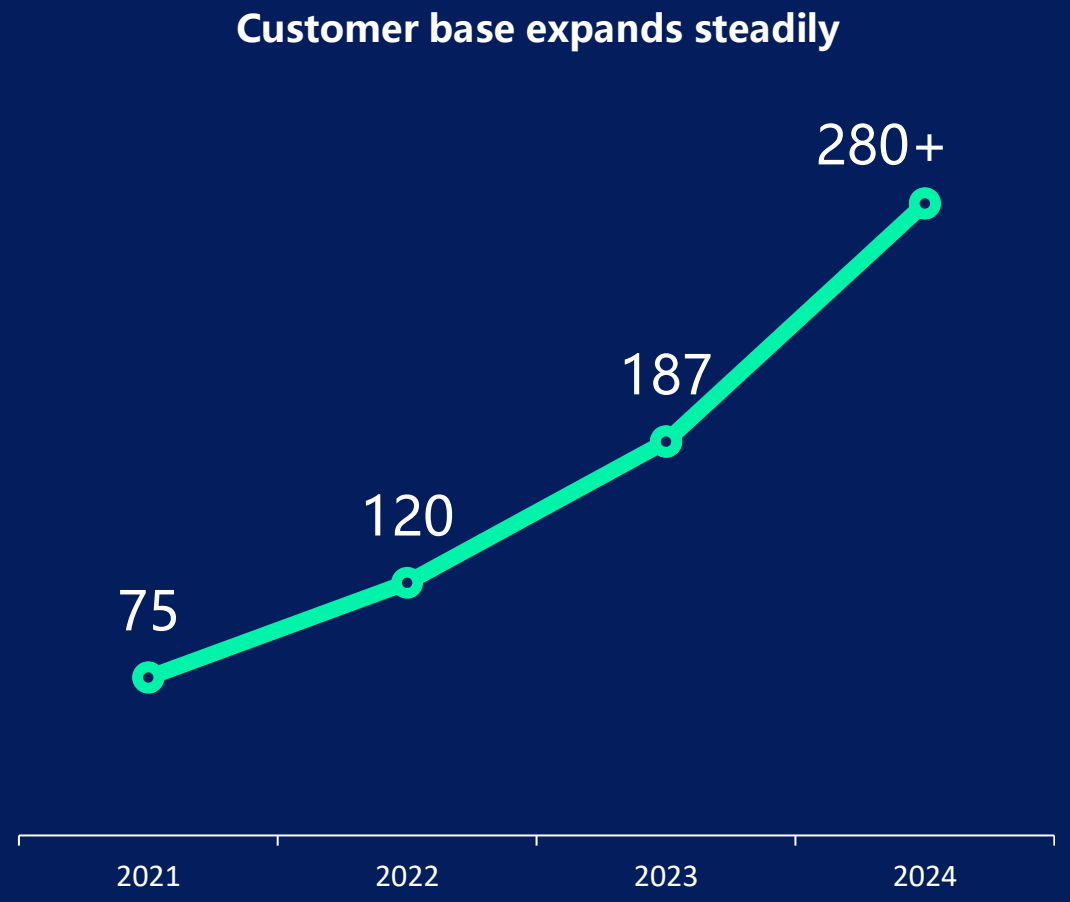
Strong Revenue Growth with Expanding Customer Base

Total Revenue

2H 2024 YOY +73%

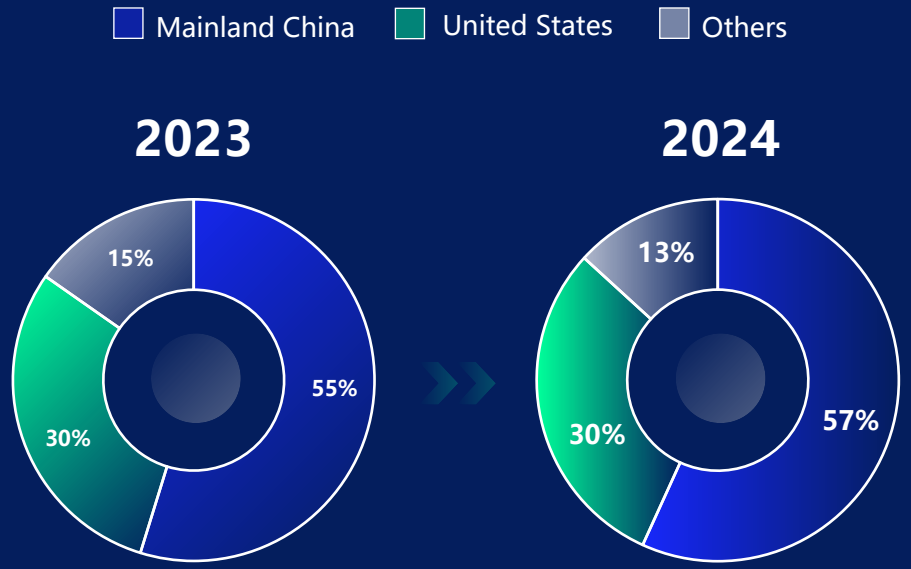


High-Quality Customer Base

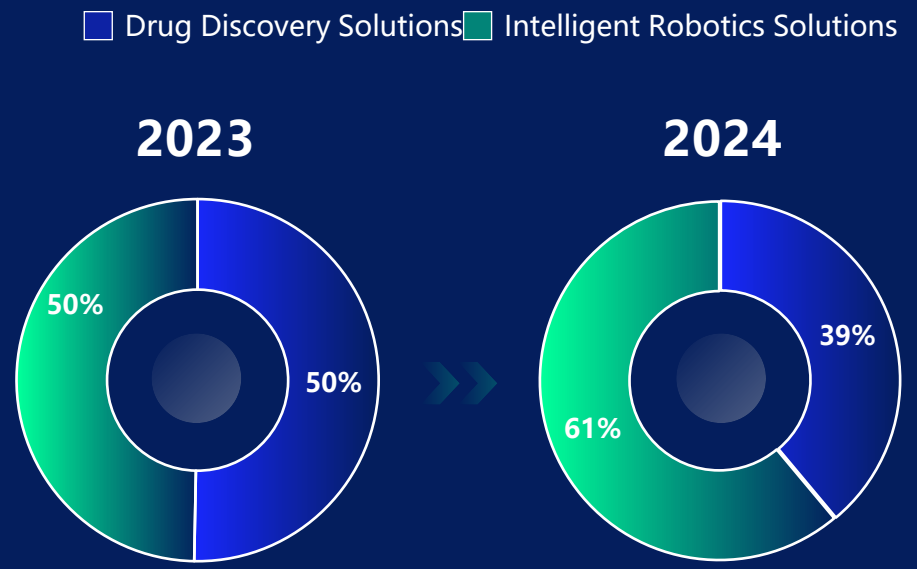


Revenue Breakdown by Geography and Business Segment

Revenue by Geographical Location (%)



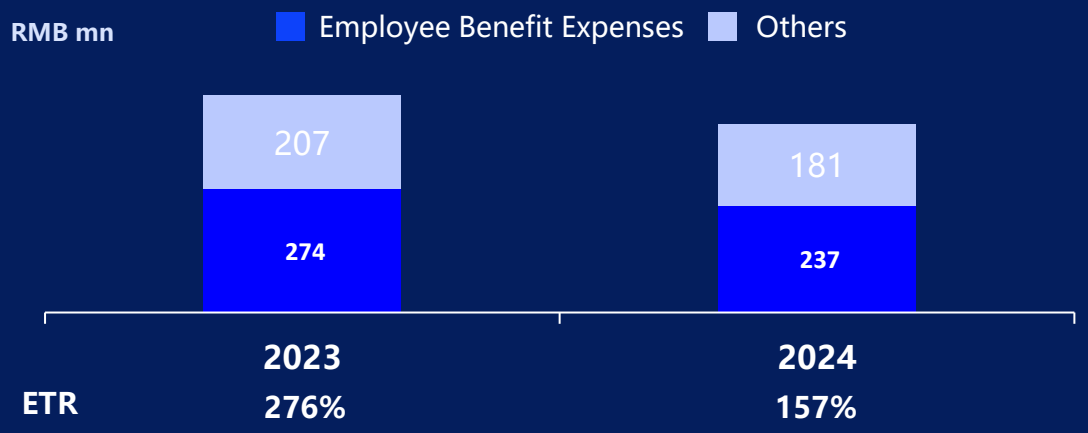
Revenue by Business Segment (%)



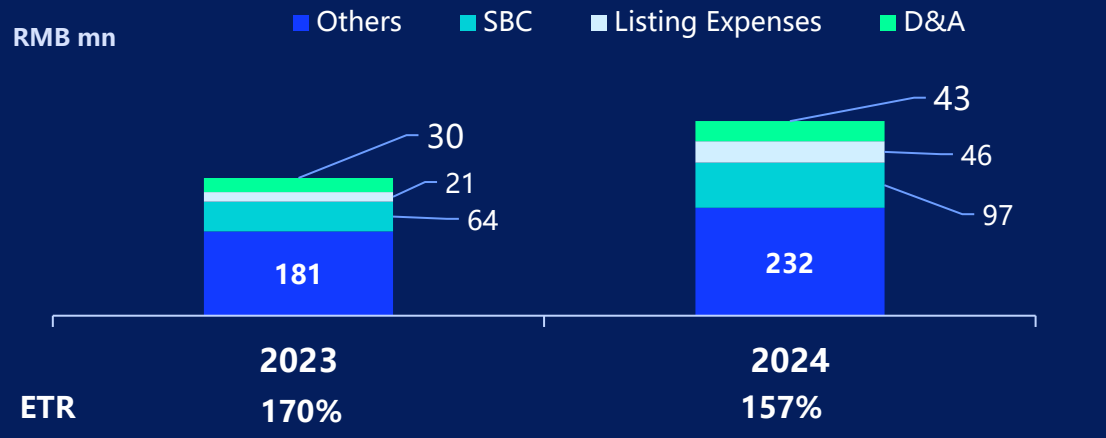
In 2024, the company's comprehensive AI and robotics solutions were commercialized in various materials science fields (including traditional Chinese medicines, petrochemical catalysts, new energy materials, agriculture, etc.), leading to an 88% year-on-year growth in revenue from Intelligent Robotics Solutions.

Operational Expenses

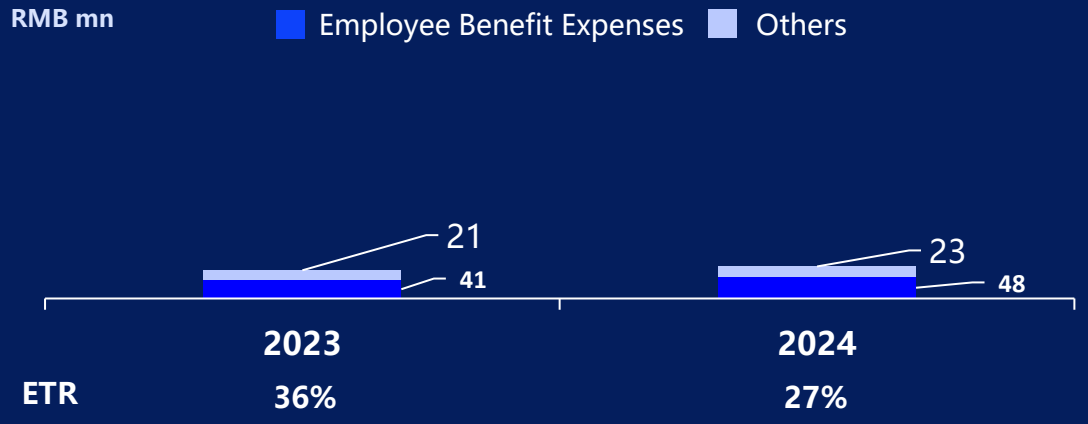
R&D Expenses



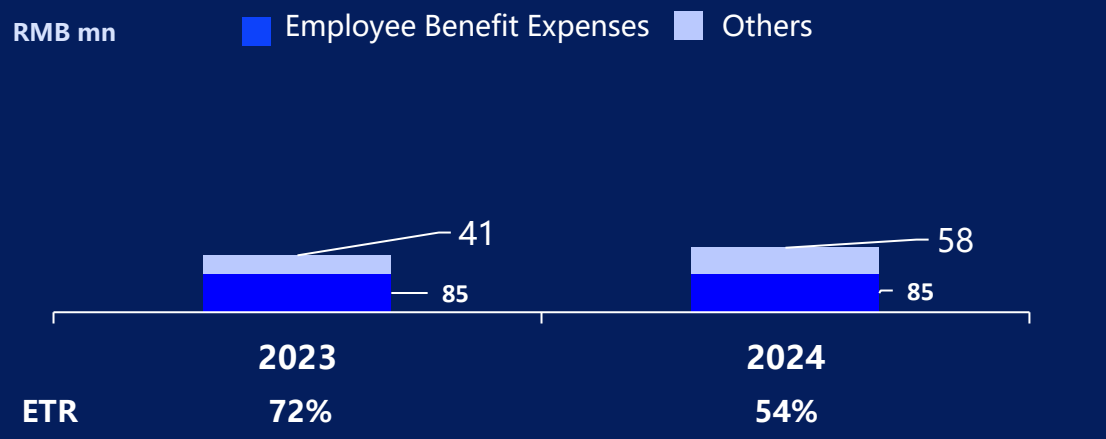
G&A Expenses



S&M Expenses

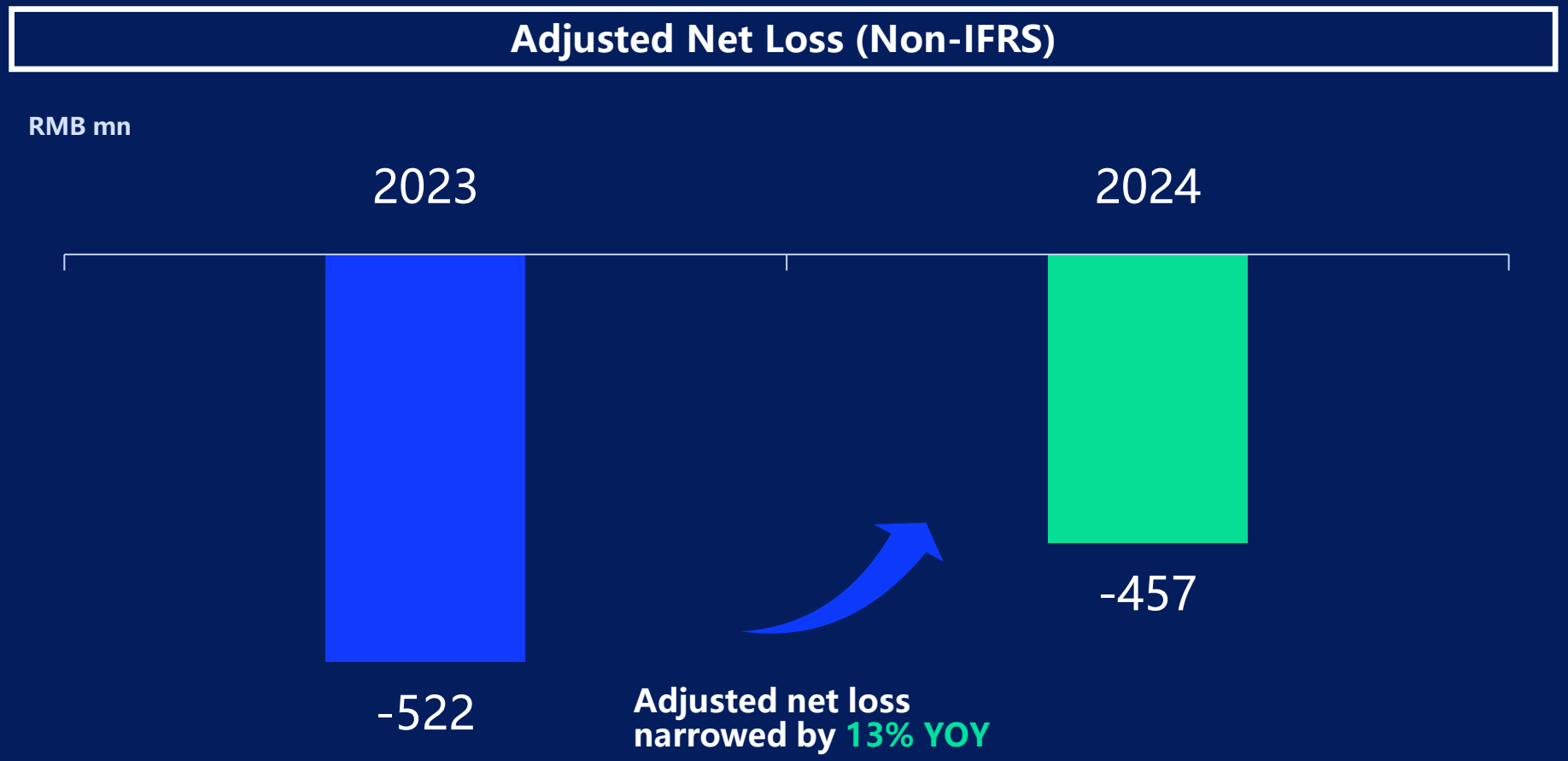


Contract Fulfillment Costs



Note: ETR = Expense to Total Revenue Ratio

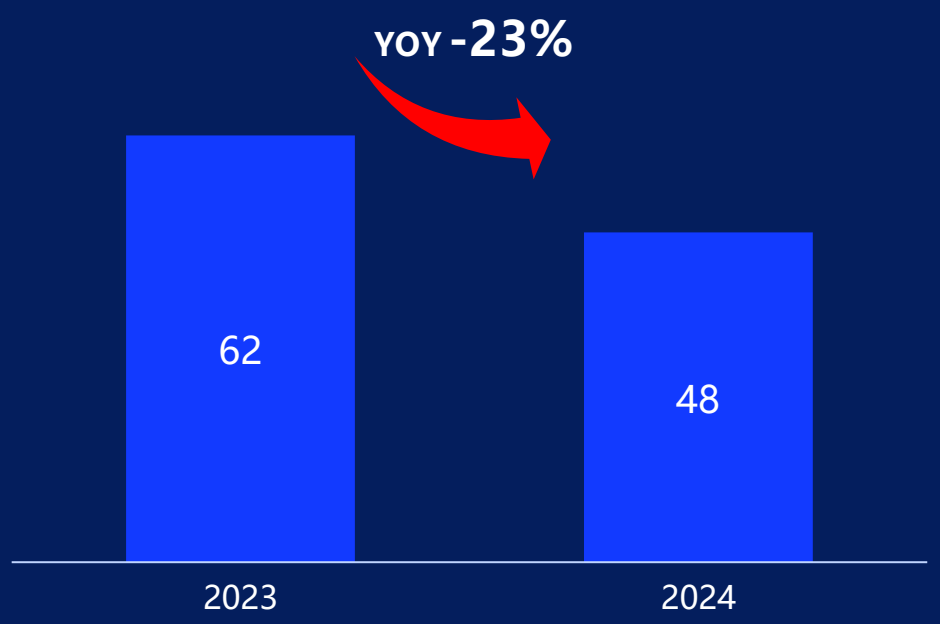
Improved Operating Results - Narrowed Adjusted Net Loss



Cash Burn and Cash Balance

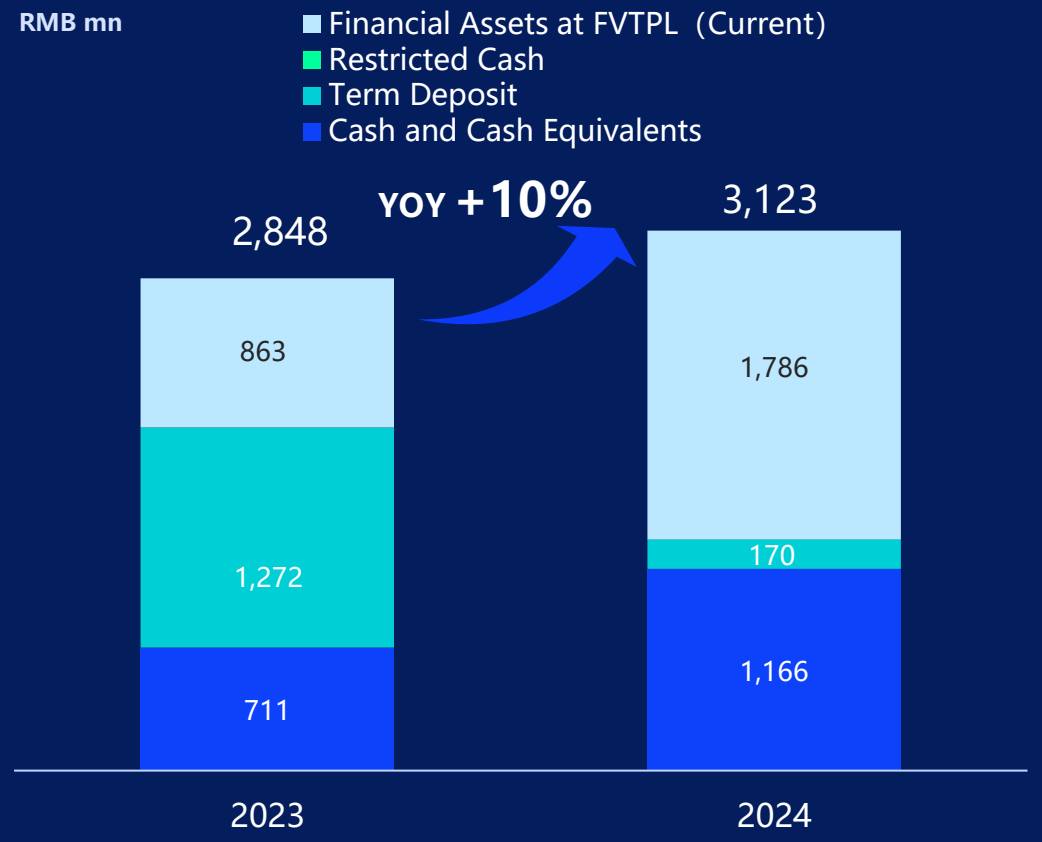
Monthly Average Cash Burn

RMB mn



Cash Balance

RMB mn



XtalPi
晶泰科技

Q&A

Thanks!