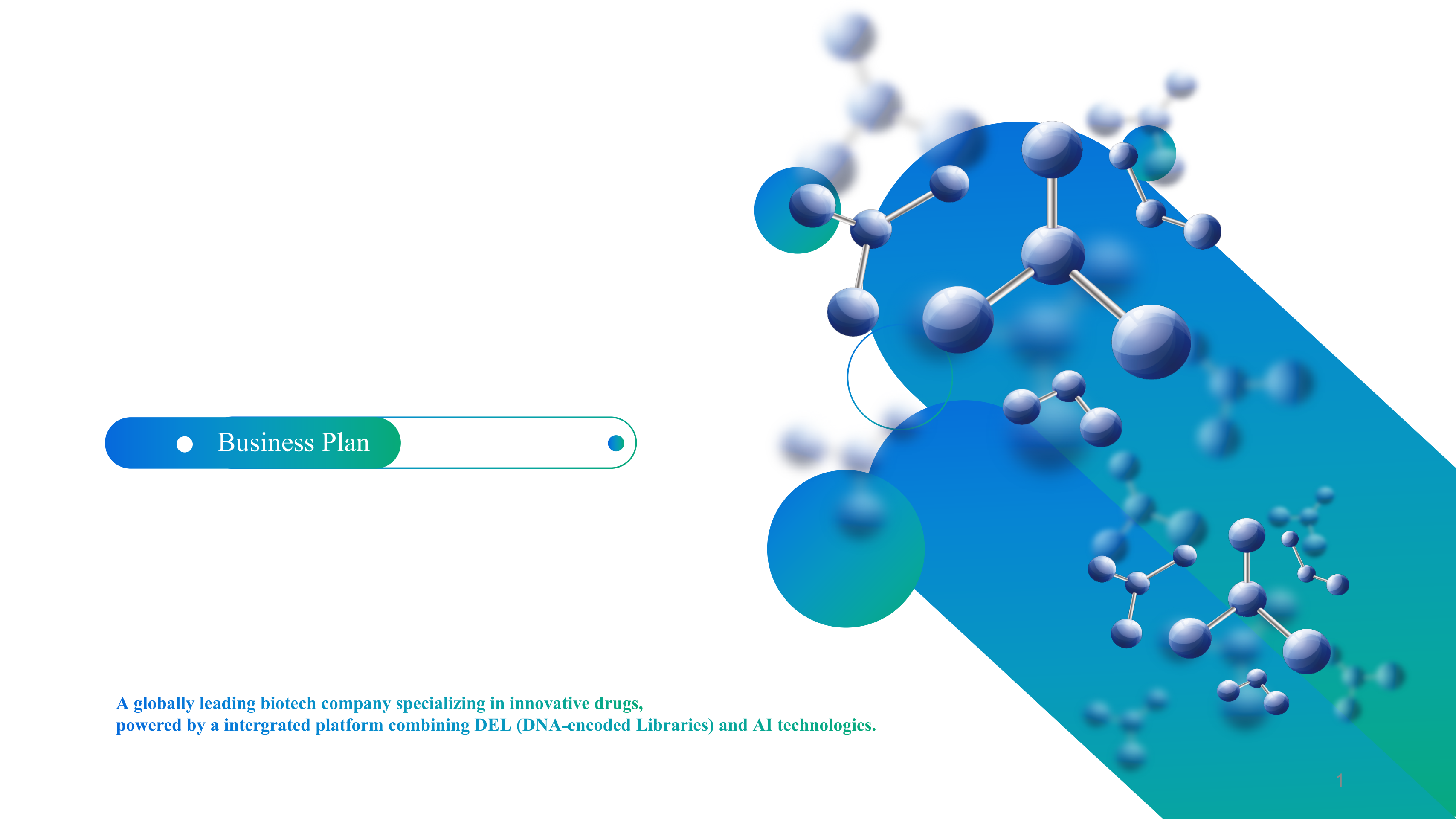




● Business Plan

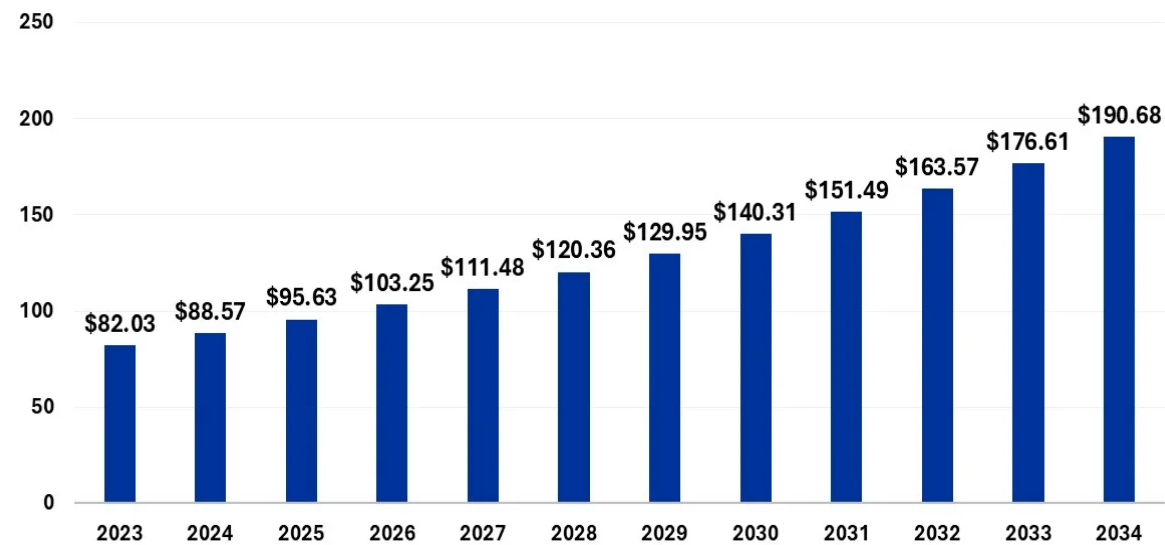
A globally leading biotech company specializing in innovative drugs, powered by a integrated platform combining DEL (DNA-encoded Libraries) and AI technologies.

Project
Background

Global Trend | Small-Molecule

Opportunities and Challenges

Small Molecule Drug Discovery Market Size 2023 to 2034 (USD Billion)



Source: <https://www.precedenceresearch.com/small-molecule-drug-discovery-market>

AstraZeneca Inks Licensing Deal With China's CSPC for Early Stage Lipid-Lowering Therapy

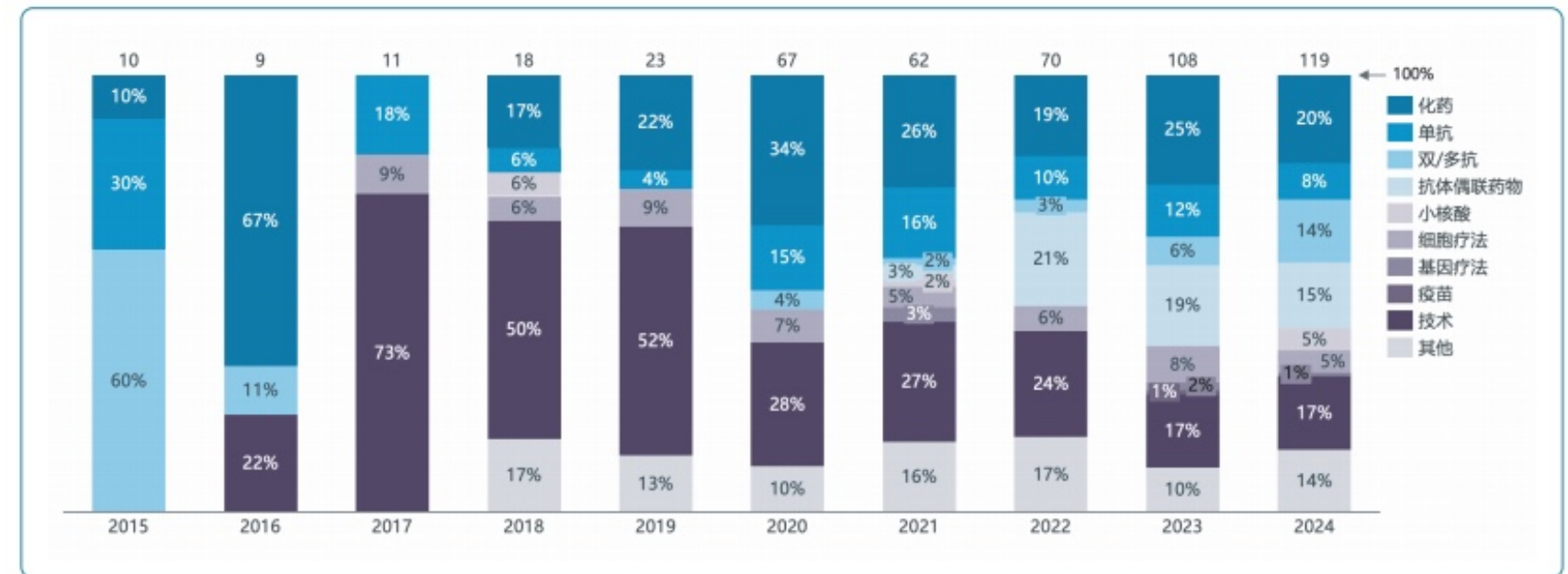
TANG SHIHUA X
DATE: OCT 08 2024 / SOURCE: YICAI

0:00 / 2:37



AstraZeneca Inks Licensing Deal With China's CSPC for Early Stage Lipid-Lowering Therapy

图4-3 License-out交易项目类型分析, 2015-2024



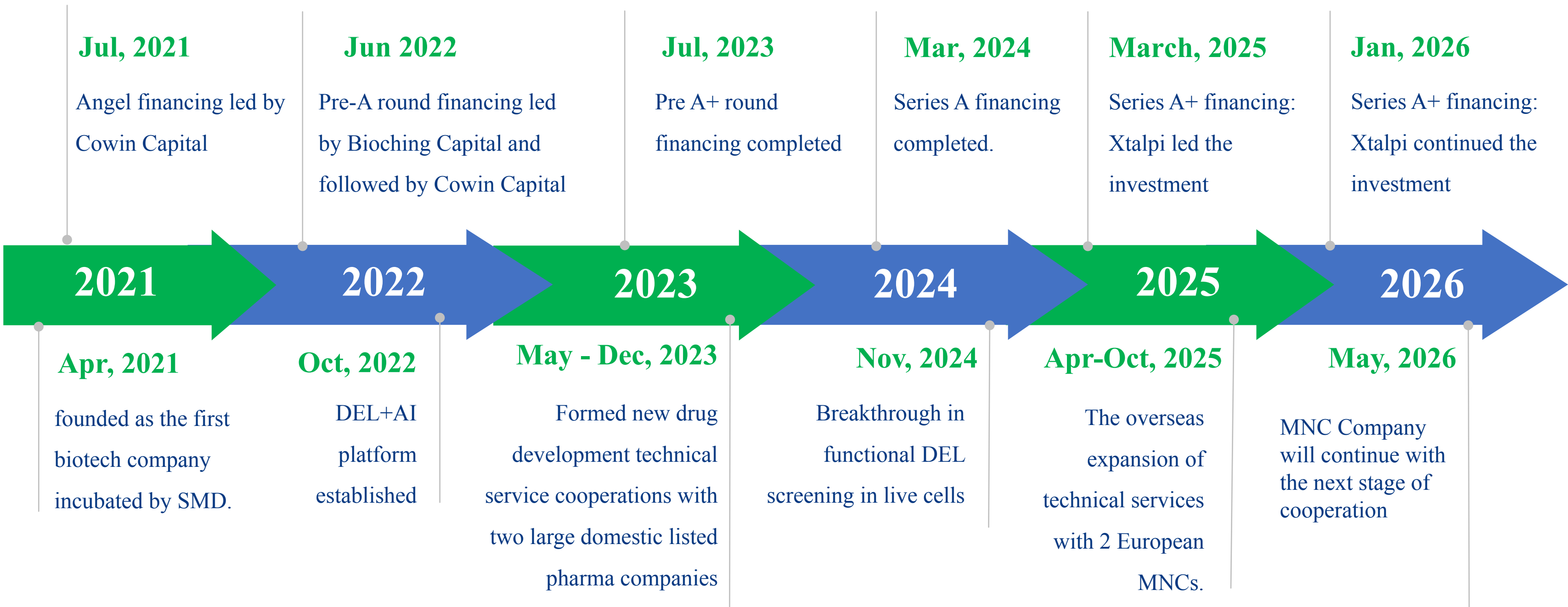
- The global small molecule drug discovery market is estimated to reach \$88.57 billion in 2024 and is projected to grow to approximately \$190.68 billion by 2034, with a compound annual growth rate (CAGR) of 7.97% during the period from 2024 to 2034.
- In recent years, the license-out of China's innovative drug pipelines has become the mainstream approach for overseas expansion, with small-molecule chemical drugs still accounting for the largest share (20–25%).

Opportunities and Challenges

Field	Limitations	Solutions
New Drug Development (Small Molecule)	- Long duration, high risk, high capital invest - Me too — Fast follow — FIC? - Lack of effective high-throughput screening tools for challenging targets (PPI, membrane proteins) and novel modalities (molecular glues, radiopharmaceuticals).	Compared to other screening methods, DEL achieves higher success rates in identifying active compounds, particularly advantageous for drug discovery targeting FIC sites , challenging targets, and novel therapeutic modalities, while significantly reducing both costs and time requirements .
AIDD	Lack of high-quality real-world experimental training data	The DEL selection generates a large volume of high-quality real-world experimental datasets for model training, particularly those containing a substantial number of negative samples.
DEL	- The filtered data exhibits high noise levels (particularly in cell screening), and data analysis is time-consuming. - Capable of rapidly and efficiently obtaining lead compounds, but lacks sufficient structural optimization capabilities.	AI-assisted data analysis significantly enhances efficiency in the DEL screening process by employing noise reduction algorithms to extract valid data and leveraging conventional AIDD techniques to accelerate continuous optimization from hits to leads .

The NewDEL platform employs integrated technologies centered on DEL+AI to address key challenges in new drug discovery.

The Development History



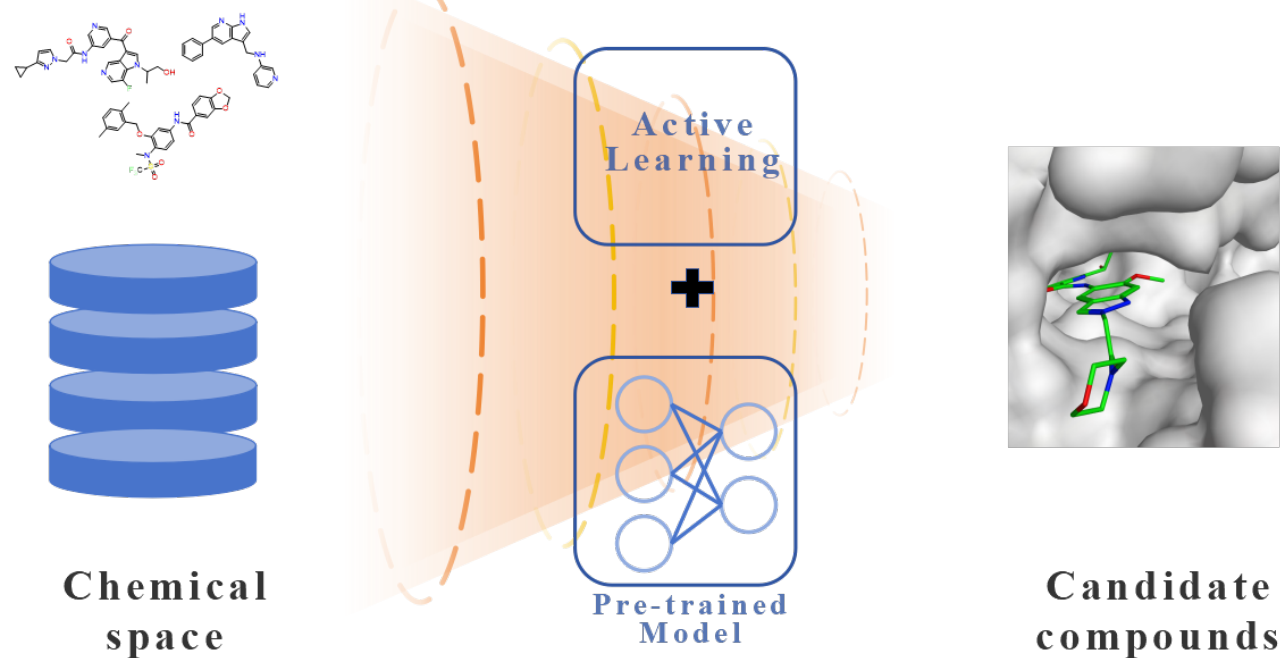
A diagram consisting of three concentric circles. The innermost circle is solid white and contains the text 'Platform Overview'. The middle circle is dashed white and contains two small white dots. The outermost circle is solid white and contains eight small white dots. The background is a gradient from blue on the left to green on the right.

Platform Overview

DELCELLIX | DELNEXUS

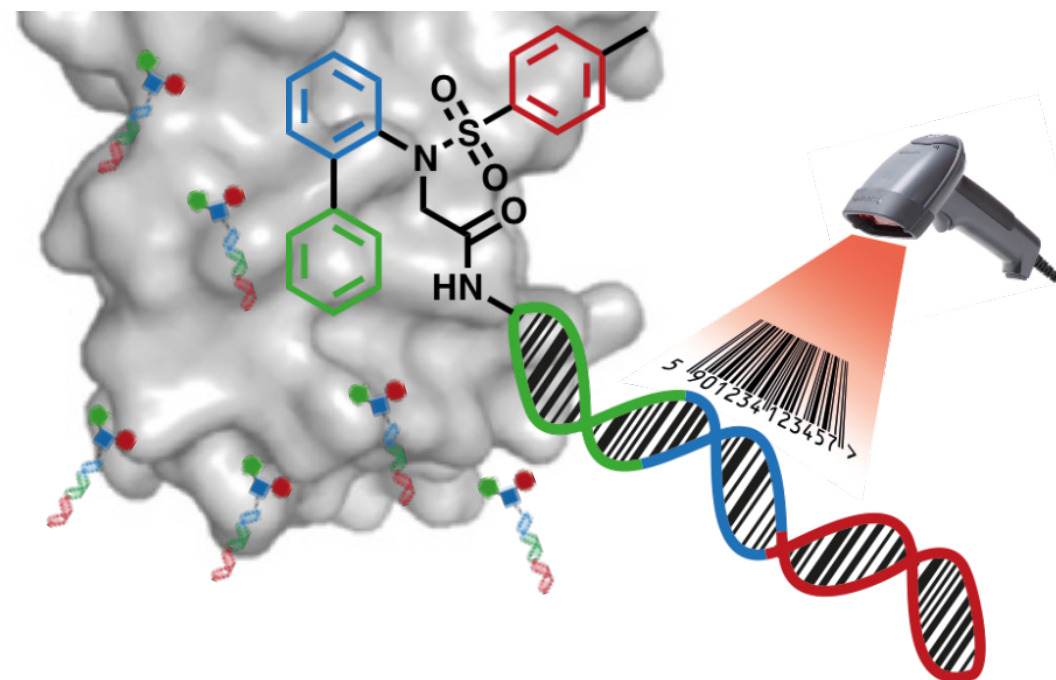
Drug Discovery Technology Platform

Artificial Intelligence in Drug Development and Design (AIDD)



- **Speed:** Screen billions of compounds in a matter of hours, accelerating drug discovery;
- **Chemical Space:** The generative model transcends known compound libraries to explore a more diverse chemical space.
- **Accuracy:** Data-driven approaches overcome computational bottlenecks and enhance prediction accuracy.

DNA-encoded Library Technology (DEL)



- 10 ~ 200 μ L
- fmol compound

- Large molecular library scale: > 1 trillion compound libraries;
- Short screening period: 4–8 weeks;
- Comprehensive information: Preliminary SAR results can be obtained through filtered data analysis.

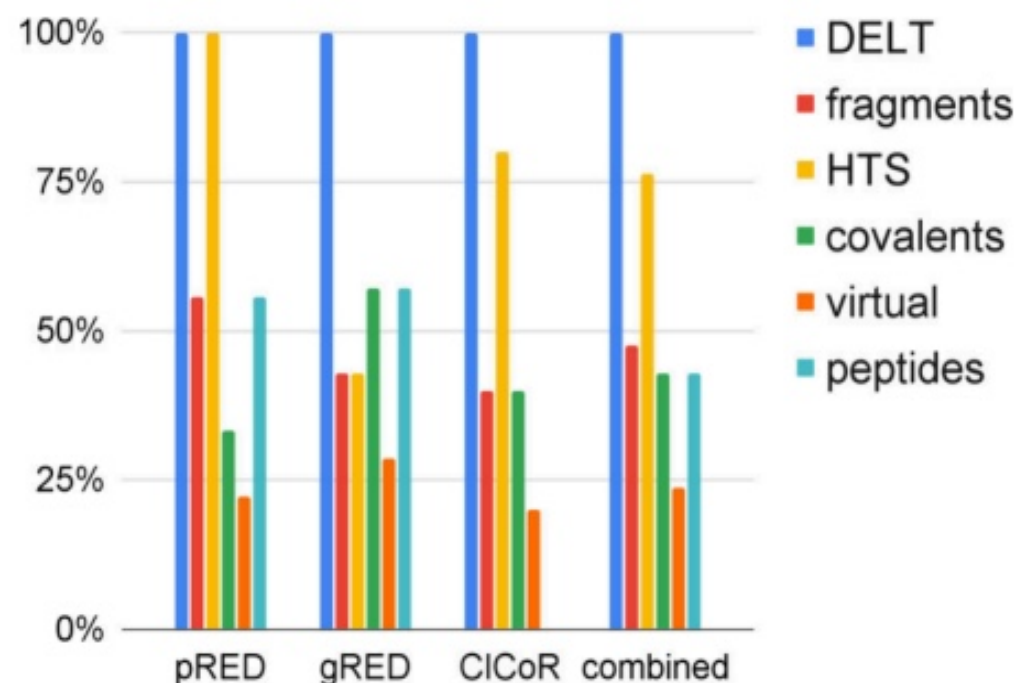
Nat. Chem. Biol. **2009**, 5, 647.
Nat. Rev. Drug Discov. **2017**, 16, 131.
Nat. Rev. Methods Primers. **2022**, 2(1), 3.
Nat. Rev. Drug. Discov. **2023**, 22, 699.



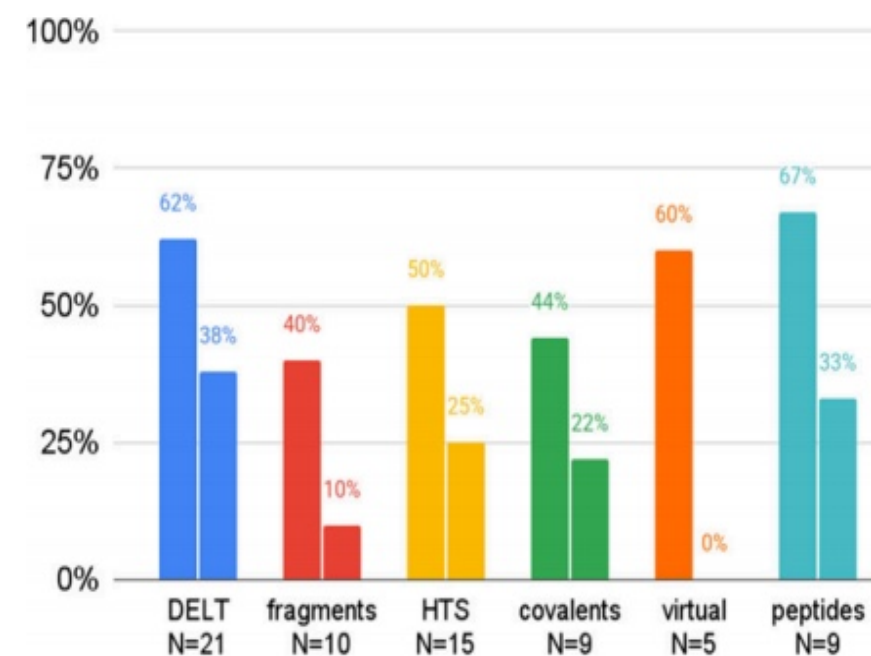
high efficiency
low cost
High compatibility

DEL as a Key Platform for Difficult Target Hit Discovery

Roche: Only DEL is used in 100% of projects and shows the highest lead conversion (~38%)



DEL is Universally Applied

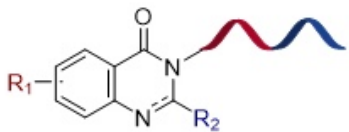


DEL Shows Highest Conversion

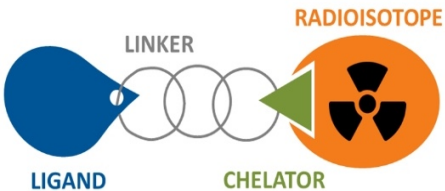
- **Platform Dominance:** DEL is the only method applied across all projects (100% usage)
- **Superior Efficiency:** DEL delivers the highest hit-to-lead conversion (~38%)
- **Strategic Role:** DEL enables early ligandability assessment and guides downstream screening

DEL+AI Integration: A Next-Generation Engine for New Drug Discovery

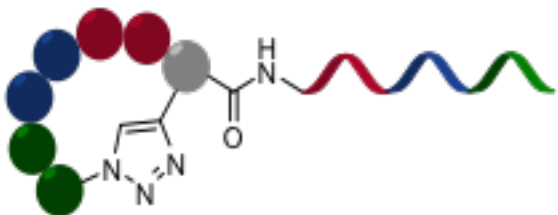
Application



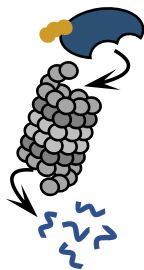
novel small-molecule drugs
DEL@SMD



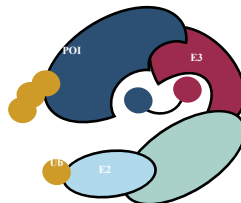
New Radiopharmaceuticals
DEL@RDC



New Cyclopeptide Drugs
DEL@MCP



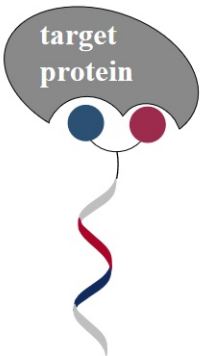
Novel Protein Degraders
DEL@TPD



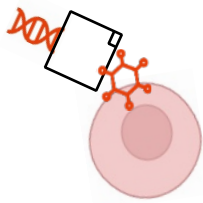
New Agrochemicals
DEL@ACD

o o o

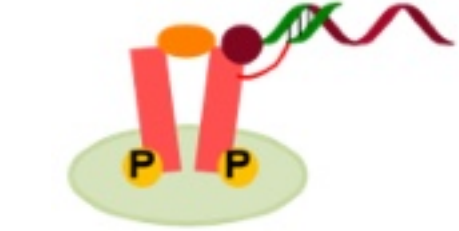
Technology



Single-stranded DNA
labeling



Live Cell Screening
DELCELLIX®-V1



Functional Screening of Live Cells
DELCELLIX®-V2

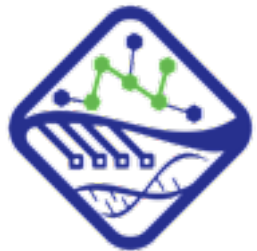
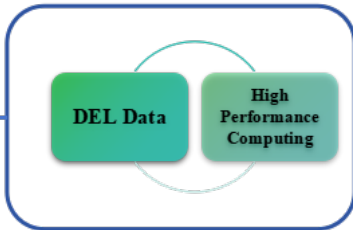


Organoid Screening

o o o

Foundation

100Bn+ DNA-encoded compound library
(physical library)



NewDEL Technology: ssDEL + live-cell screening

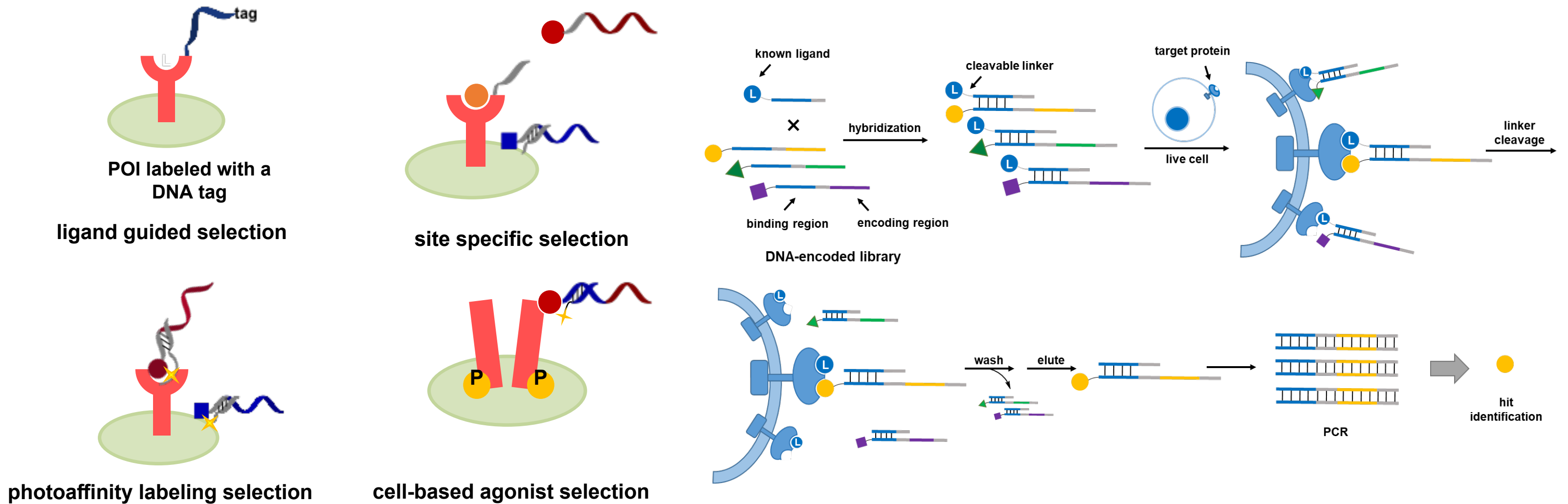
Field	Technology	HitGen	Wuxi	X-chem	Vipergen	We
Library Generation	DNA Tag	Double stranded	Double stranded	Double stranded	Double stranded	Single Stranded
Screening	Target Protein	√	√	√	√	√
	Cell-line	×	×	×	√ (in cell)	√ (on cell)
	Functional	×	×	×	×	√ (on cell/PROTAC)
Combo Tech	AI+	√ (w/ partner)	√ (in-house)	√ (in-house)	×	√ (in-house)

Property	Single-stranded (ss) DEL	Double-stranded (ds) DEL
Physical size	Smaller hydrodynamic radius (~2 nm); more flexible	Larger (~4 nm); stiffer double helix
DNA lengths	~50-80bp for 2-3 cycles	~80-90bp for 2-3 cycles
Steric hindrance to target	Minimal; ligand often behaves like a free small molecule	Greater; dsDNA rod can clash with binding pockets
Hybridization handles	Free bases allow hybridization	Limited accessibility
Encoding methods for DEL constructions	OBOC, DTS, YactorReactor, DNA routing, ESAC, PNA encode library, DEDL	Headpiece, DNA polymerization
Targets	Purified targets, cell lysate, live cell	Purified targets, live cell with protein overexpression
Application	hit discovery, lead extension of hit compounds	hit discovery

DEL libraries can be screened in both single- and double-stranded DNA formats, while single-stranded DEL could give **better enrichment performance and **enable versatile applications**.**

Angew. Chem. Int. Ed. 2025, 64, e202511839.
 Nat Rev Drug Discov. 2023, 22, 699-722.
 Angew. Chem. Int. Ed. 2023, 62, e202215542.
 ChemBioChem. 2022, 23, e202200025.

Global leader – DEL Live Cell Screening Technology



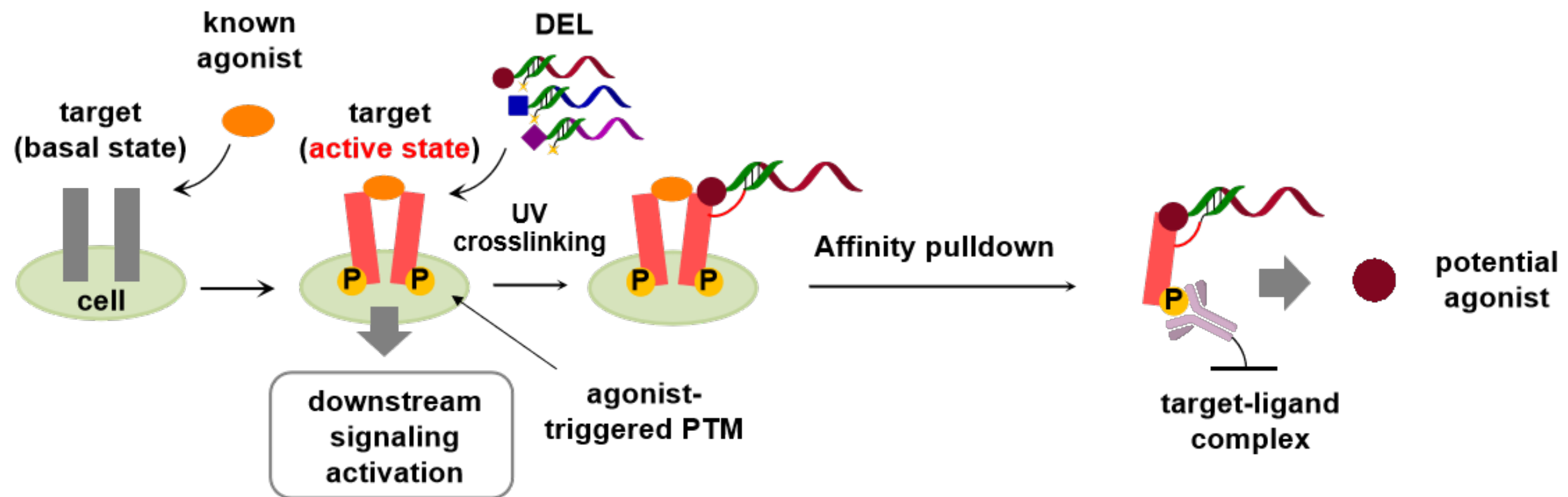
The right figure proposed a representative cell-based selection method. With a guiding DNA bearing a known ligand, single-stranded DELs are guided to selectively interrogate POI with an elevated local concentration, after which the ligand is cleaved to facilitate removal of non-binders from the cell surface. After washing steps, the hit compounds were eluted, decoded with PCR amplification and DNA sequencing.

- Paper on Live-Cell Screening with DEL Technology: [Nat. Chem.](#), **2021**, 13(1):77;
- Patent on Live-Cell Screening with DEL Technology: [CN202010213128](#);
- Additional patents are publicly available ([CN202410693265.8](#), [CN202410848793.6](#)).
- Representative projects for DEL live cell screening: ND-002, ND-013

Global leader – DEL Live Cell Screening Technology - V2.0

V2.0 Evolution: From affinity to functionality

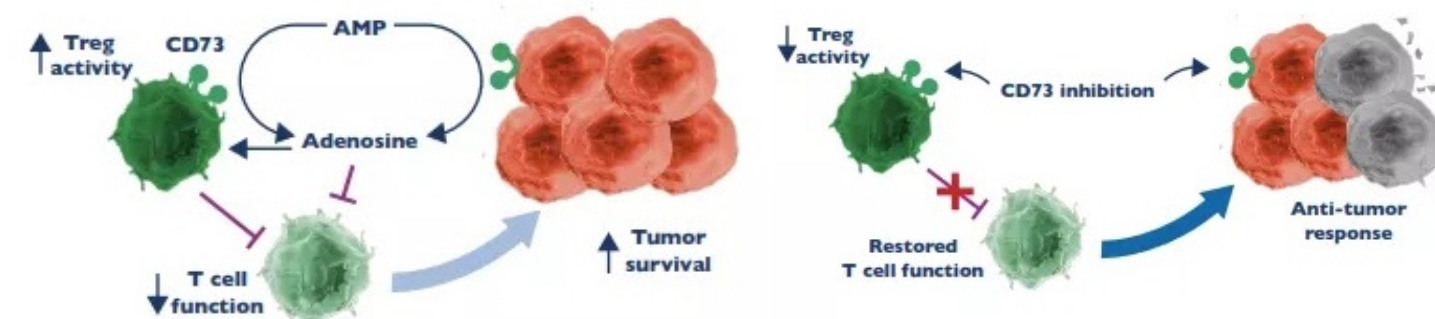
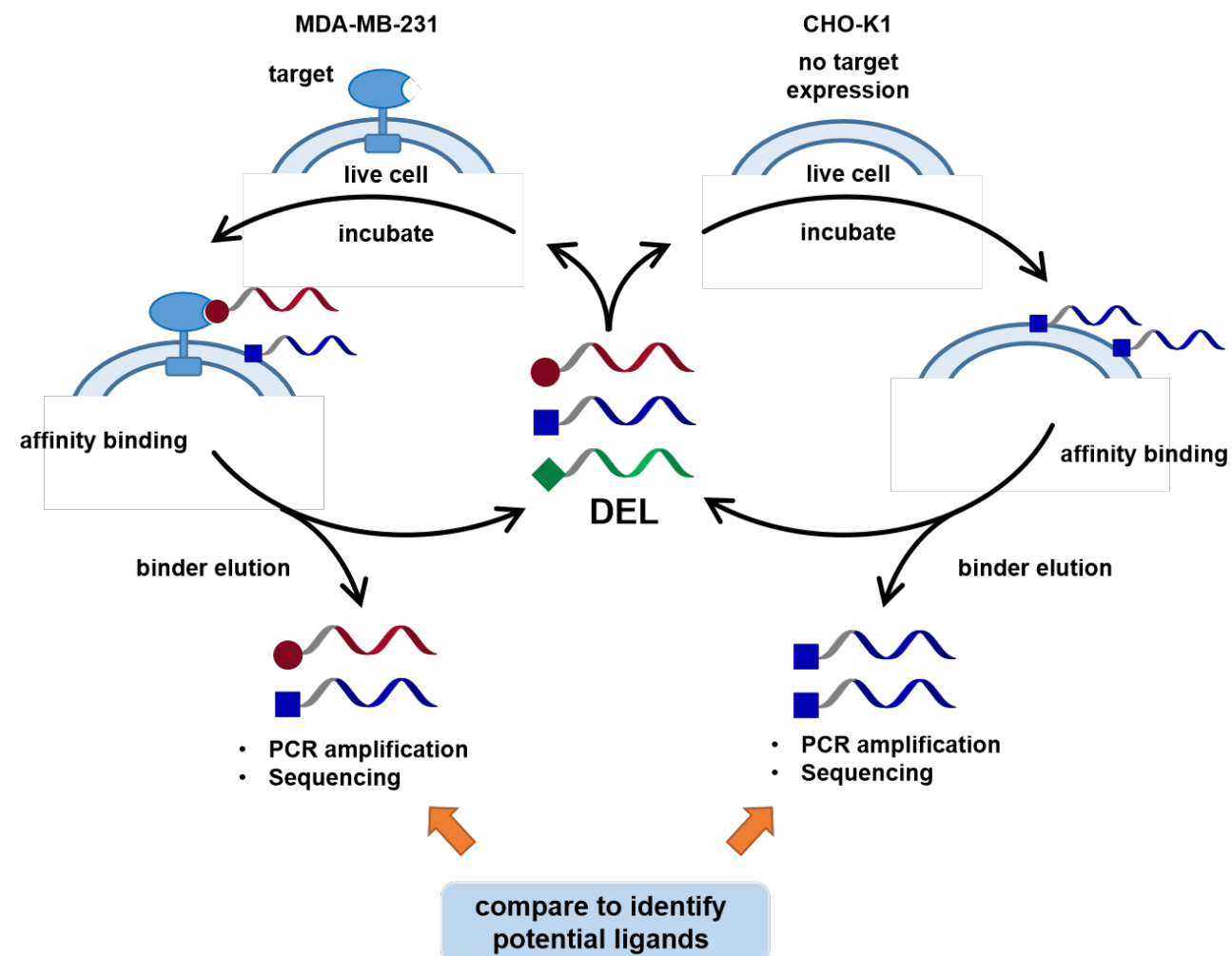
- Currently most DEL selections only guarantee binding affinities, while drug development requires biological activities.
- Low molecular concentration in DEL selections limit activating/inhibitory performance of potential bioactive molecules.
- Functional DEL selections requires special methodology design.



- Representative case of functional screening of DEL live cells: insulin receptor allosteric agonist

In collaboration with Prof. Xiaoyu Li, the University of Hong Kong

DEL Live Cell Screening Case: ND-002



Target: **CD73**

CD73 plays a pivotal role in adenosine accumulation that contributes to cancer immune evasion and is overexpressed on various cell types within an immunosuppressive tumor microenvironment (TME). Thus, Small-molecular inhibitors targeting CD73 is promising in clinical trials as a single agent or in combination with other immunotherapies.

Type: In-house

Competition: The CD73 race is a high-stakes pivot toward Phase III validation (led by Quemliclustat in pancreatic cancer and Oleclumab in NSCLC).

- A DEL library with a scale of 1 billion entries for live-cell screening targeting CD73 was employed.
- After screening, 20 compounds were selected for off-DNA synthesis.
- The lead compound was identified through biological evaluation, with an IC_{50} value of 1.7 μ M.

Chem. Biol., **2011**, 18, 1284; *Angew. Chem.* **2013**, 52, 9544;
ACS Comb. Sci., **2015**, 17, 722; *J. Am. Soc. Chem.*, **2019**, 141, 17057.

DEL Live Cell Screening Case: ND-013

Article

Tumour DDR1 promotes collagen fibre alignment to instigate immune exclusion

<https://doi.org/10.1038/s41586-021-04057-2>

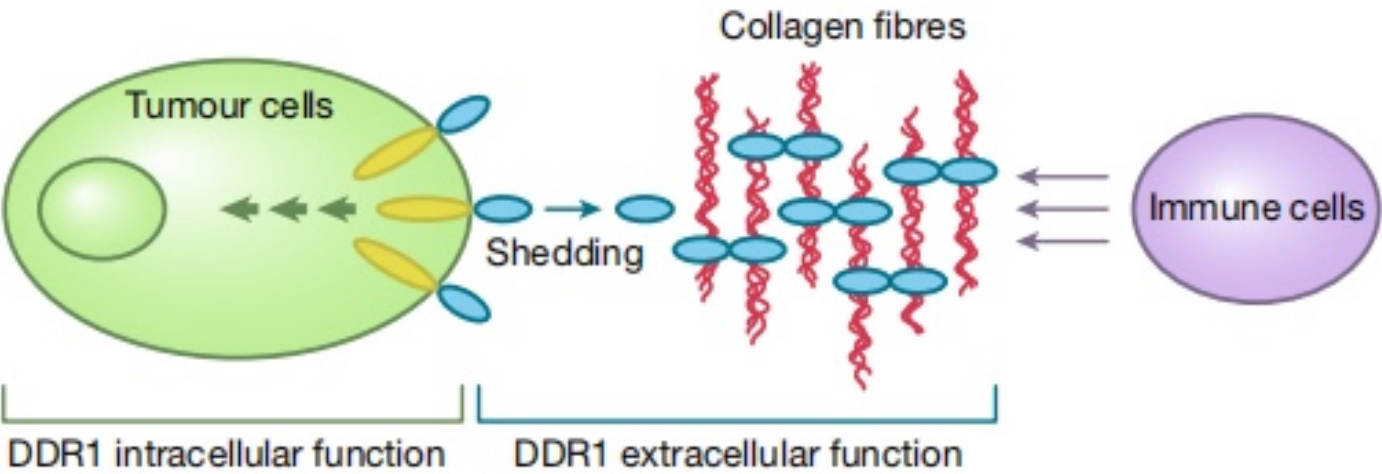
Received: 18 October 2019

Accepted: 22 September 2021

Published online: 3 November 2021

 Check for updates

Xiujie Sun^{1†}, Bogang Wu^{1†}, Huai-Chin Chiang^{1†}, Hui Deng², Xiaowen Zhang¹, Wei Xiong², Junquan Liu², Aaron M. Rozeboom³, Brent T. Harris³, Eline Blommaert⁴, Antonio Gomez⁵, Roderic Espin Garcia⁴, Yufan Zhou⁶, Payal Mitra⁷, Madeleine Prevost¹, Deyi Zhang⁸, Debarati Banik¹, Claudine Isaacs³, Deborah Berry³, Catherine Lai³, Krysta Chaldekas³, Patricia S. Latham⁹, Christine A. Brantner¹⁰, Anastas Popratiloff¹⁰, Victor X. Jin⁶, Ningyan Zhang², Yanfen Hu⁷, Miguel Angel Pujana^{4✉}, Tyler J. Curiel^{8✉}, Zhiqiang An^{2✉} & Rong Li^{1✉}



Target: **DDR1 - ECD**

Type: In house

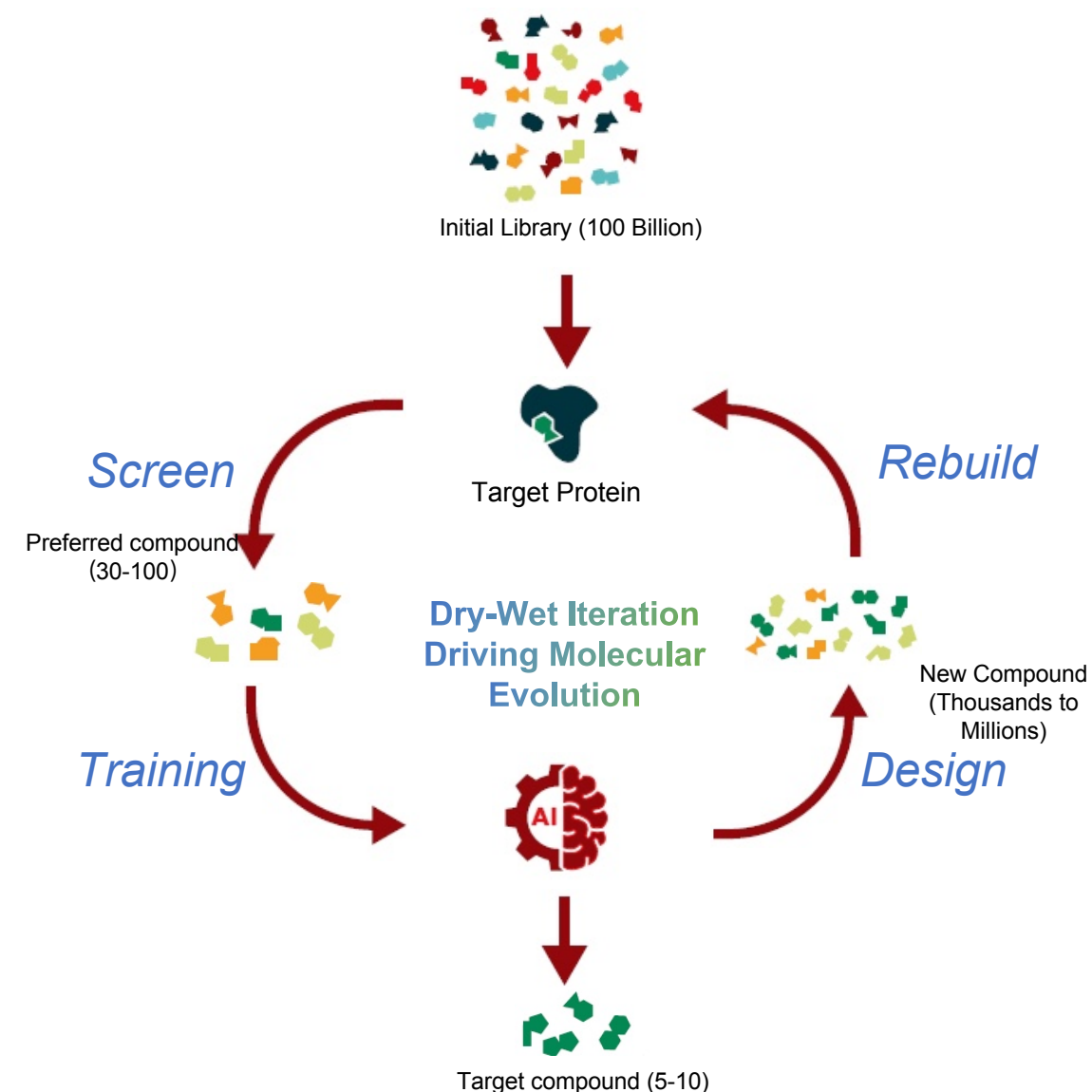
Competition: No current approved drugs on the market.

Entry	Inhibitor	Collagen Binding IC ₅₀ /uM	DDR1-ECD (Kd)
1	NDDP-D4	2.25	4.15 uM
2	NDDP-D5	51.07	
3	NDDP-D6	53.87	
4	NDDP-D7	2.064	21.3 uM
5	NDDP-D8	122.6	
6	NDDP-D9	26.77	
7	NDDP-D10	174.8	
8	NDDP-D11	6.648	21.4 uM
9	NDDP-D12	5.105	8.35 uM

The DDR1 extracellular domain (DDR1-ECD), but not its intracellular kinase domain, is responsive for immune exclusion.

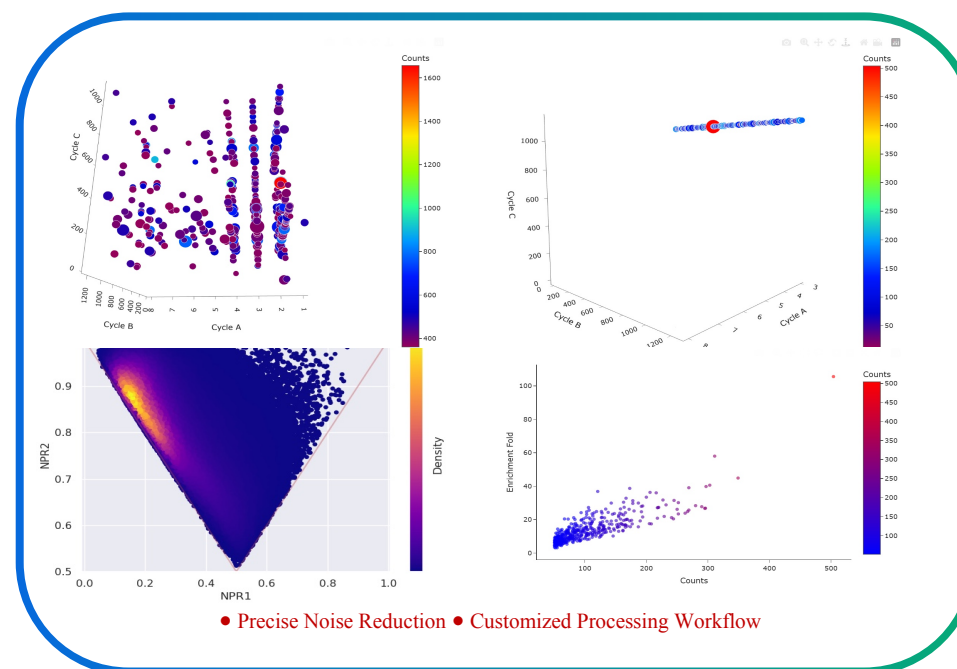
DEL+AI Integration: A Drug Evolution Engine Based on DEL Data

DELNEXUS® Technology Platform

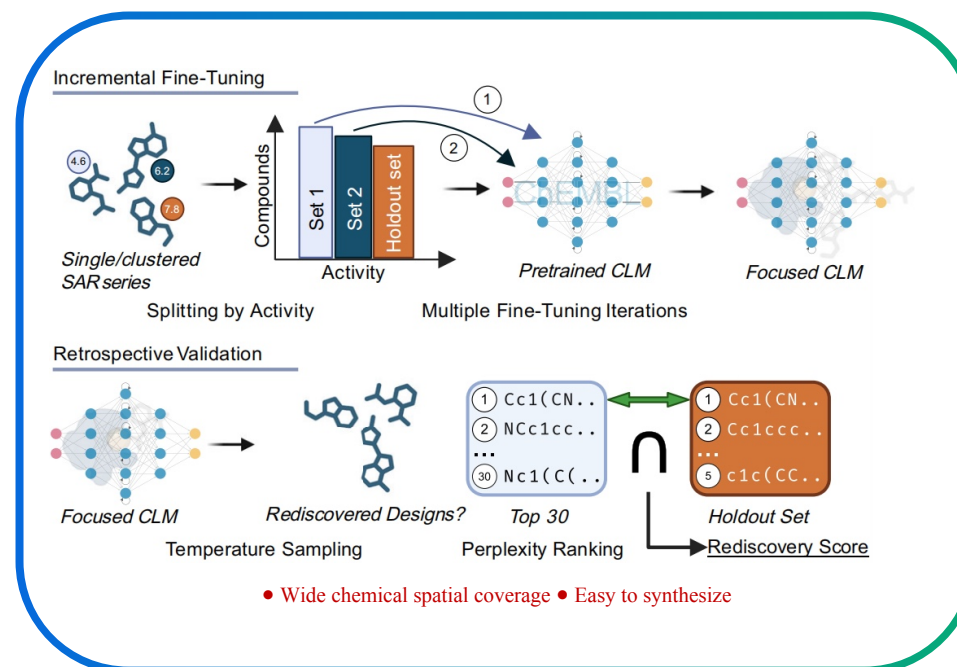


Bring evolution mindset into Drug Discovery

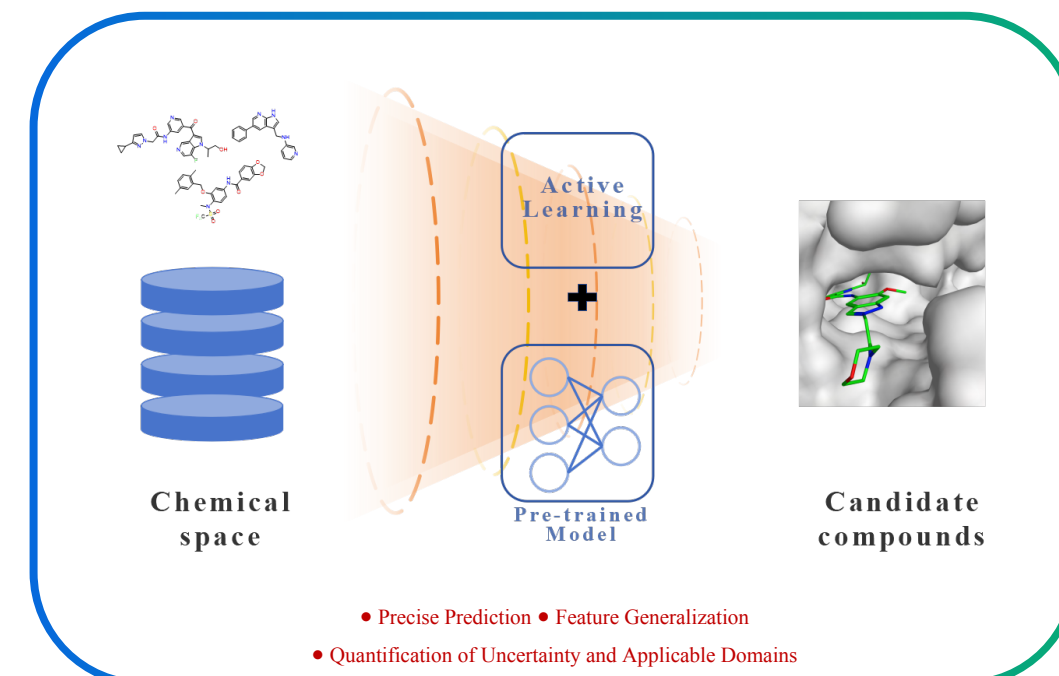
Building the data foundation for the large-scale DL model



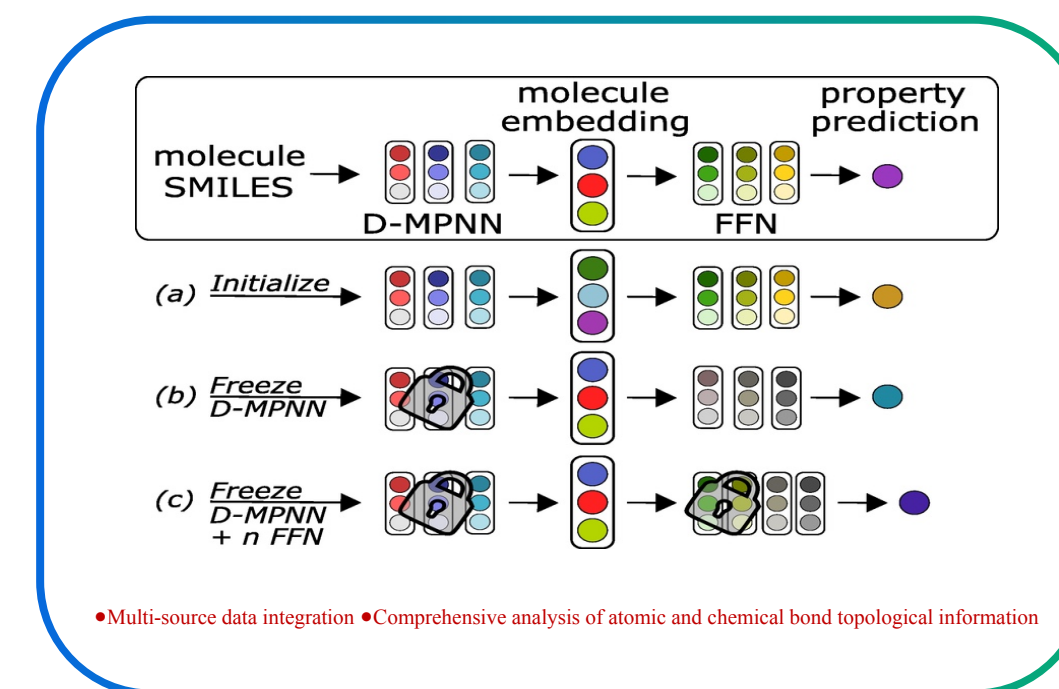
Molecular generation driven by large-scale chemical language models



Virtual Screening and Quantification of Uncertainty



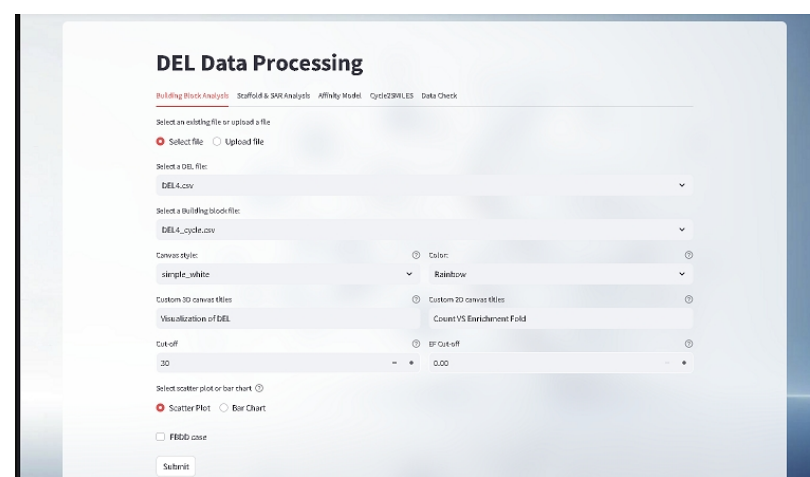
"Pre-training + Fine-tuning" ADMET prediction



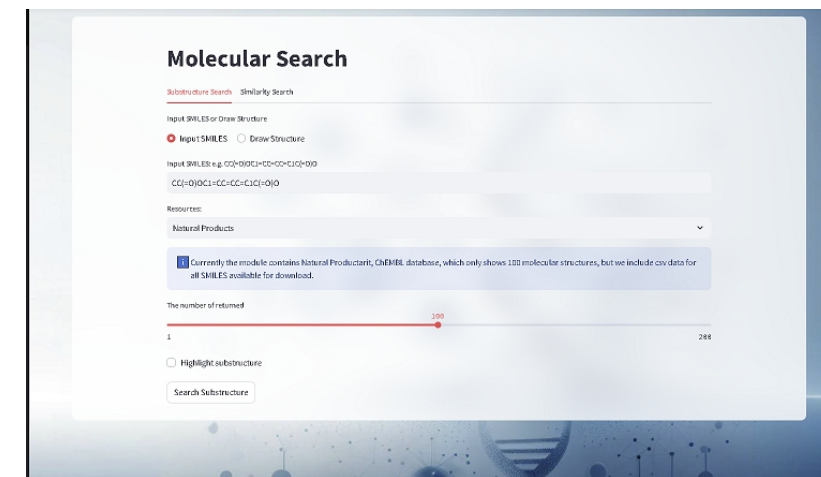
DEL+AI Integration: Combining Dry and Wet Experiments in Drug Discovery



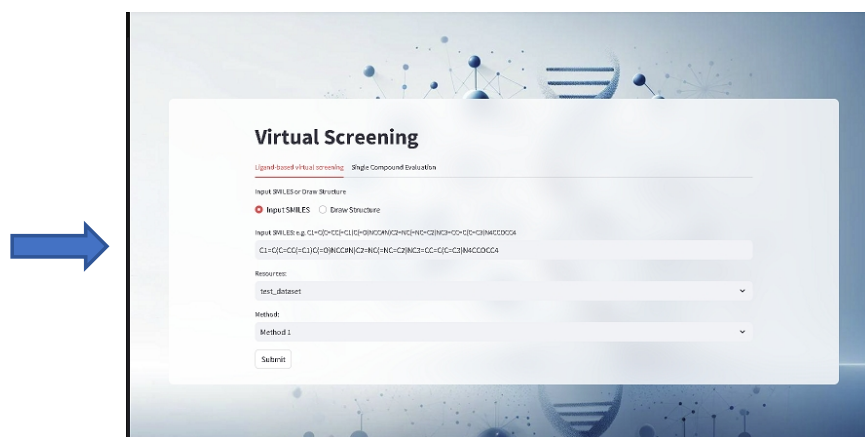
DELNEXUS® Technology Homepage



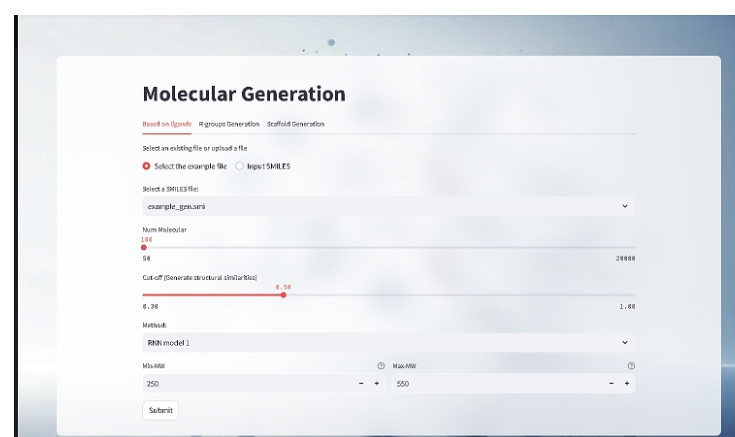
AI assisted DEL Data Analysis



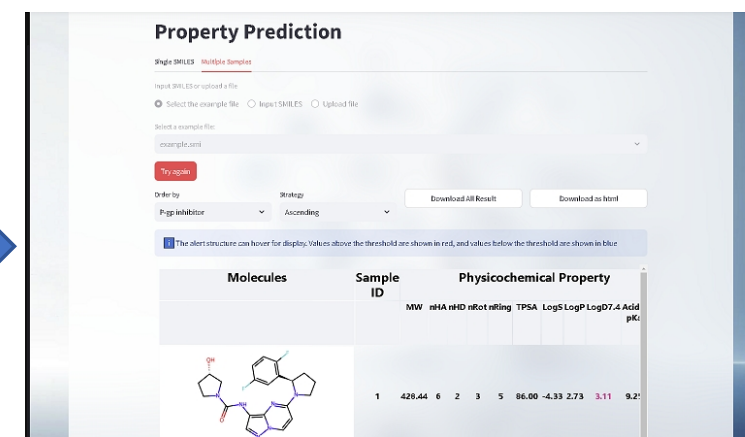
AI assisted Molecule Search



AI empowered virtual screening



AI assisted Molecular Generation



AI based ADMET Prediction

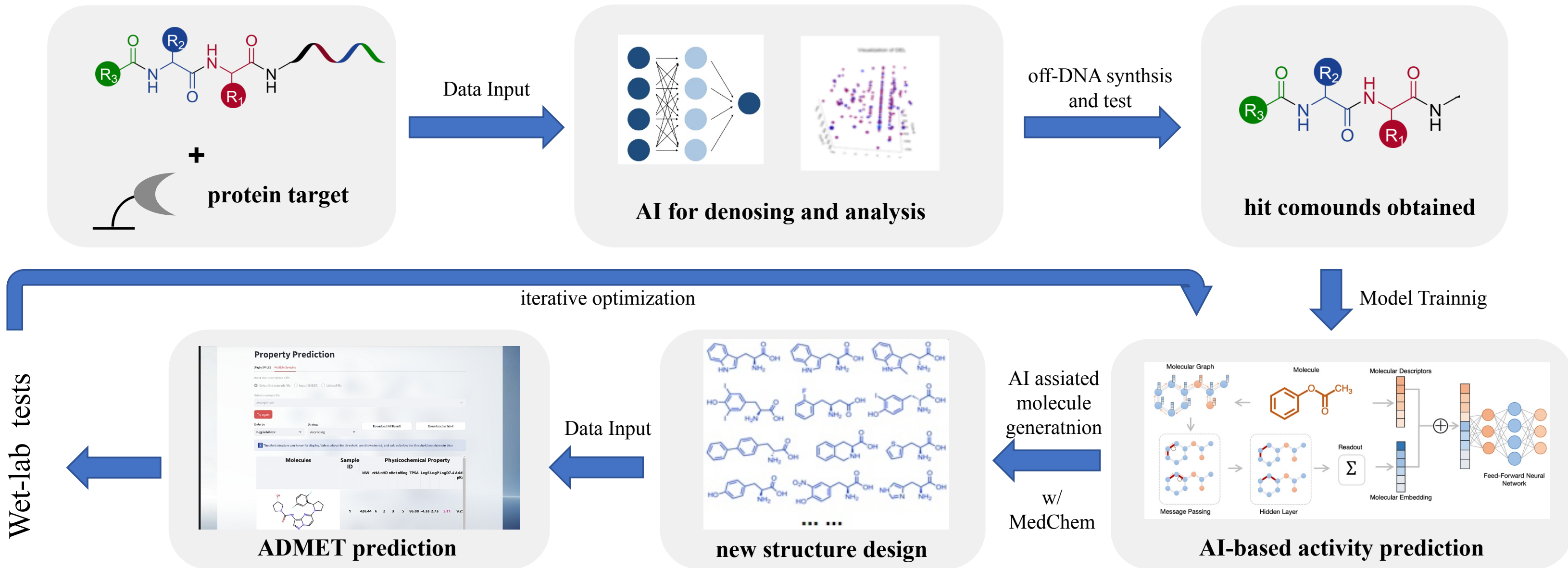
Target Compounds

- Advanced data processing and generation as well as model training and prediction.
- Comprehensive structural optimization procedure.
- Detailed ADMET prediction capabilities.

Publications integrating AI and DEL screening:

- Active Discovery Model: Front. Chem., **2022**, 26: 982539
- Molecular Generation: Front. Pharma., **2022**, 13:1085665

DEL+AI Technology Case Study: ND-C02

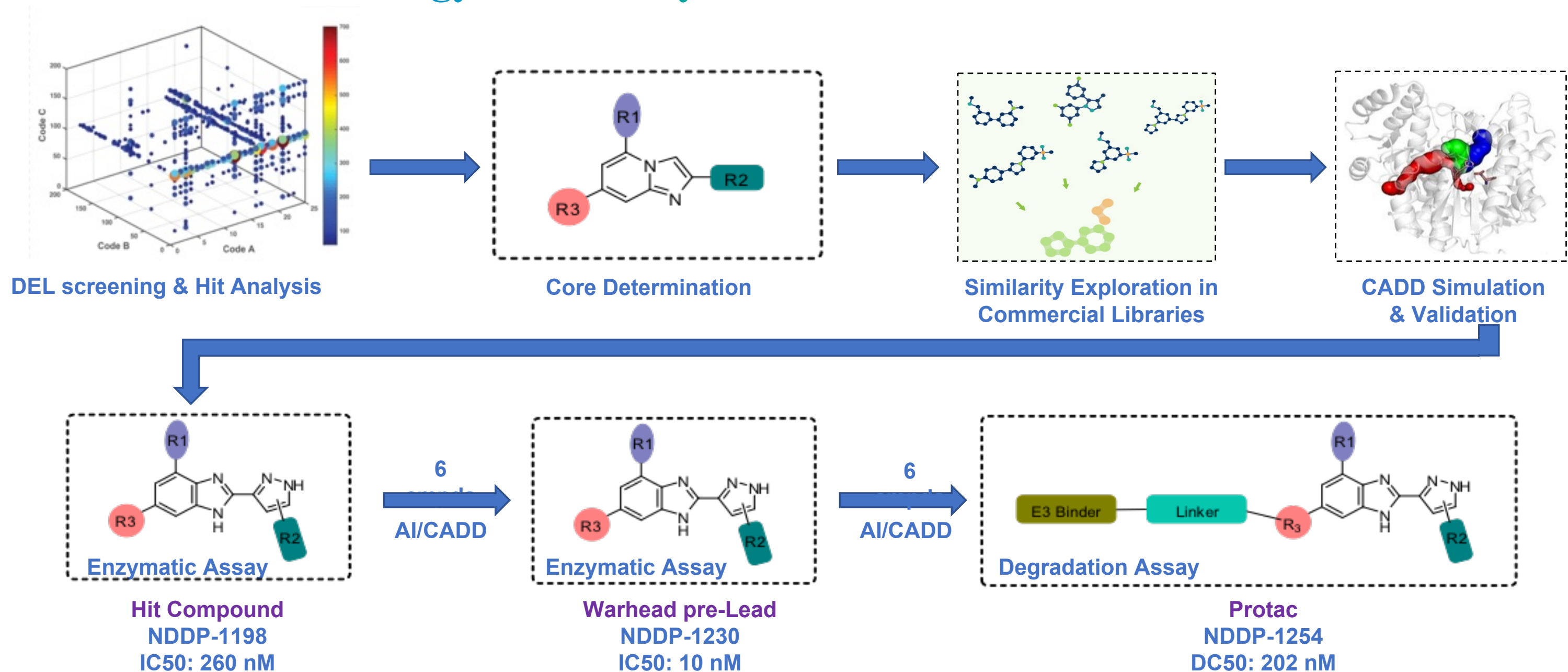


Target: Not disclosed; FIC-class target

Type: Technical Service

Results: The DEL screening identified a series of active compounds with significant inhibitory effects, among which the most potent compound exhibited an IC₅₀ of approximately 13 nM, along with low CYP inhibition risk and minimal hERG toxicity. By integrating AI-driven molecular design with medicinal chemistry approaches to optimize molecules across multiple core architectures, and through ADMET predictions coupled with wet-lab validation, several lead compounds with IC₅₀ around 2 nM were developed, with demonstrated favorable pharmacokinetic (PK) profiles.

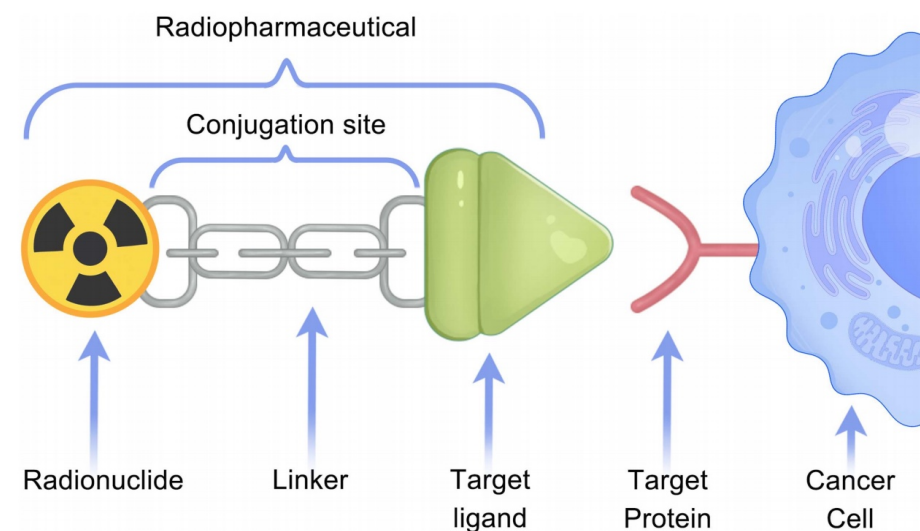
DEL+AI Technology Case Study: ND-018



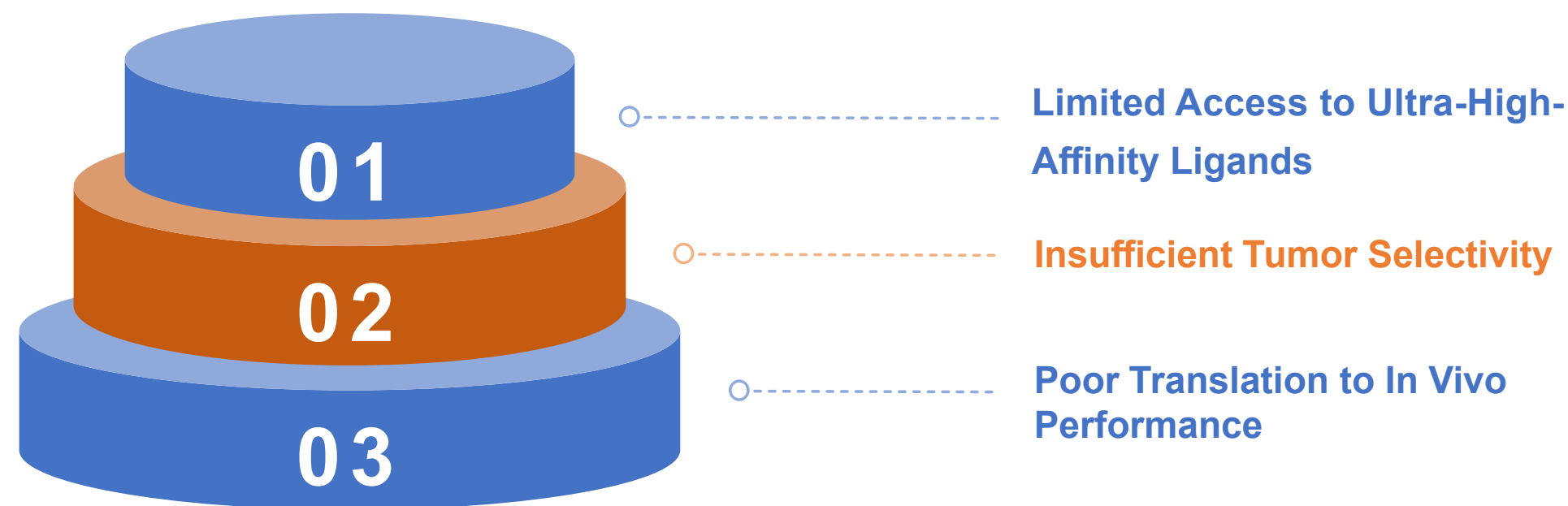
Type: In-house

Results: The DEL screening yielded a series of promising lead compounds with strong inhibitory effects. Through the DELNEXUS platform optimization, multiple 10 nM Warhead molecules were obtained. Finally, the PROTAC molecule DC50 was constructed with a potency of **202 nM**.

DEL@RDC: Overcoming Core Bottlenecks in RDC Drugs



Bottlenecks in RDC Development



DEL-Enabled Advantages

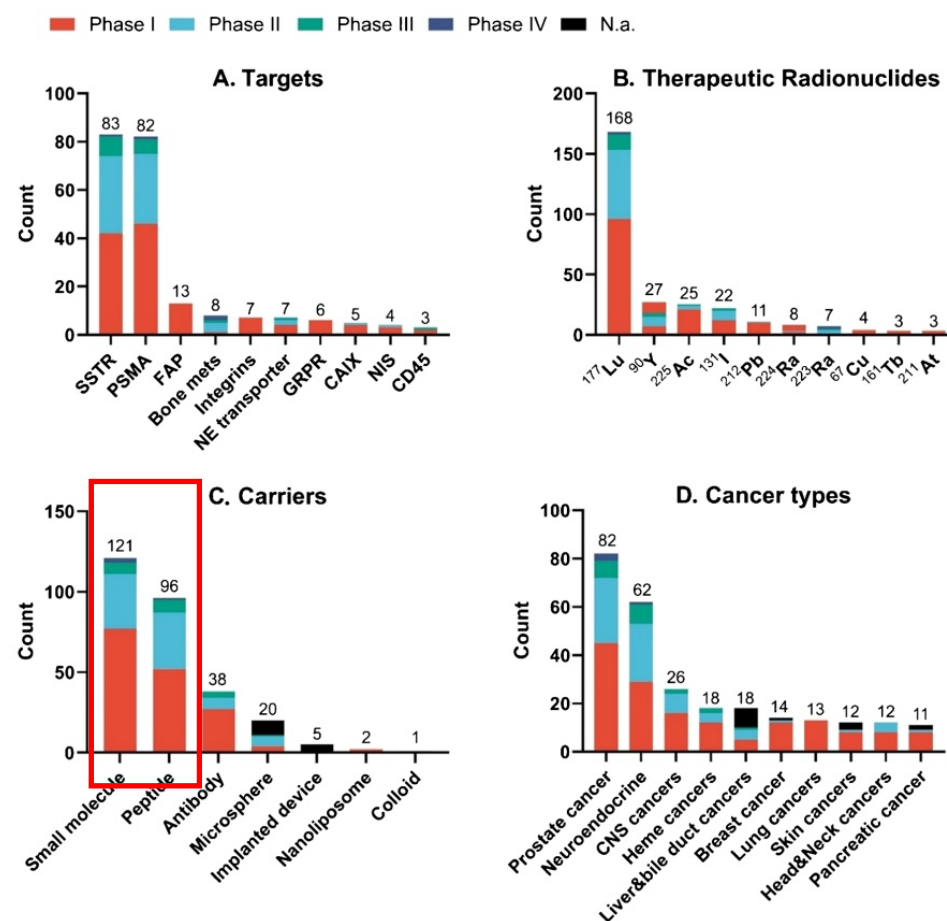
Discovery of Ultra-High-Affinity Binders

Early Selectivity Profiling

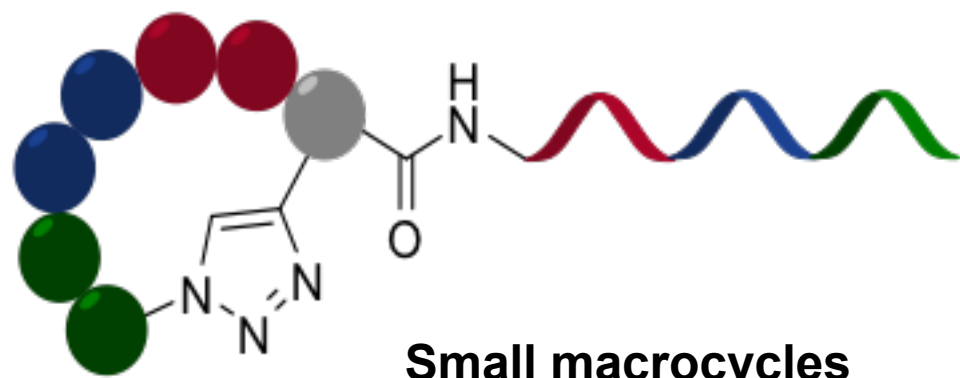
Optimization of Binding Kinetics

Enabling Effective Radioligand Performance

Modular Transition to Radioligands



DEL@MCP Peptide Drug Discovery



Small macrocycles

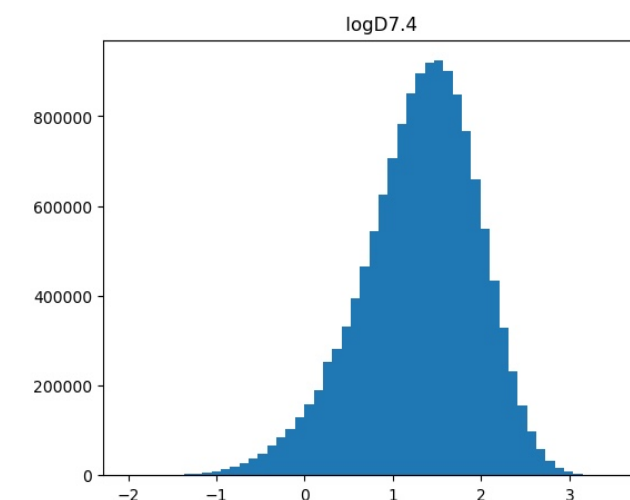
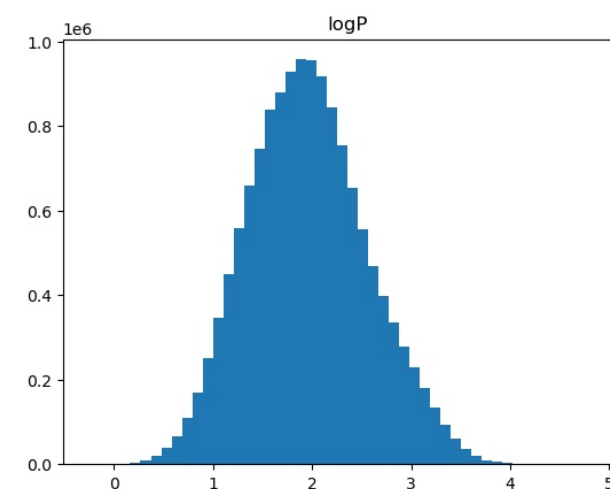
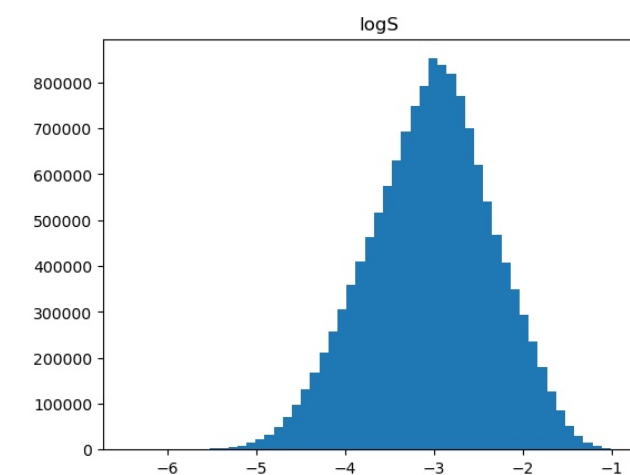
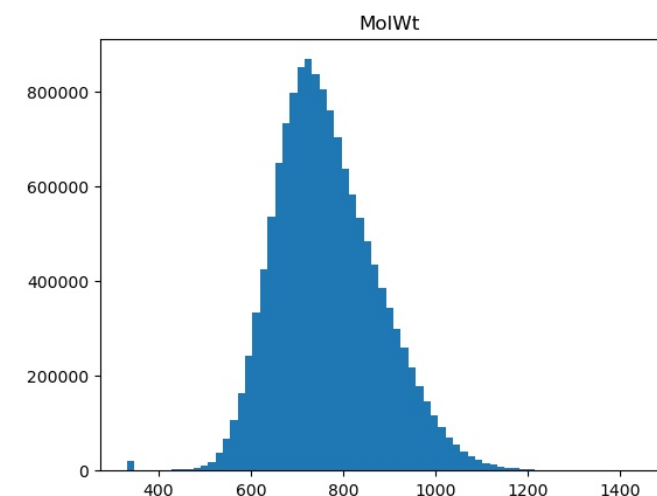
3-7 natural/unnatural amino acids

Library size > 3 billion

Advantages and characteristics in constructing a DNA-encoded cyclic peptide compound library:

1. The library contains a wide variety of molecular building blocks: Fmoc-protected amino acids and their derivatives, totaling over 800 types.
2. High-quality sample preparation: Strict quality control (QC): HPLC purification + MS analysis; 100% comprehensive detection via enzyme-linked reactions.
3. The peptide library exhibits excellent physicochemical properties.

Characteristics of one typical MCP DEL library



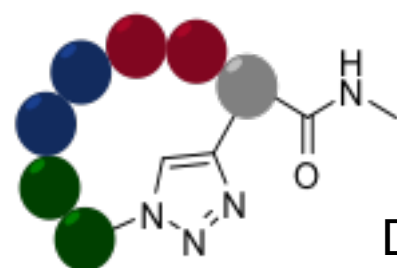
DEL@MCP Case: ND-017

Target: IL-23R

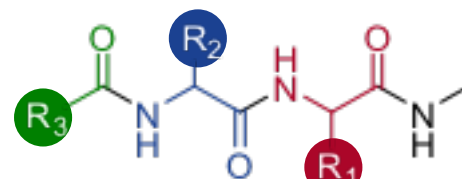
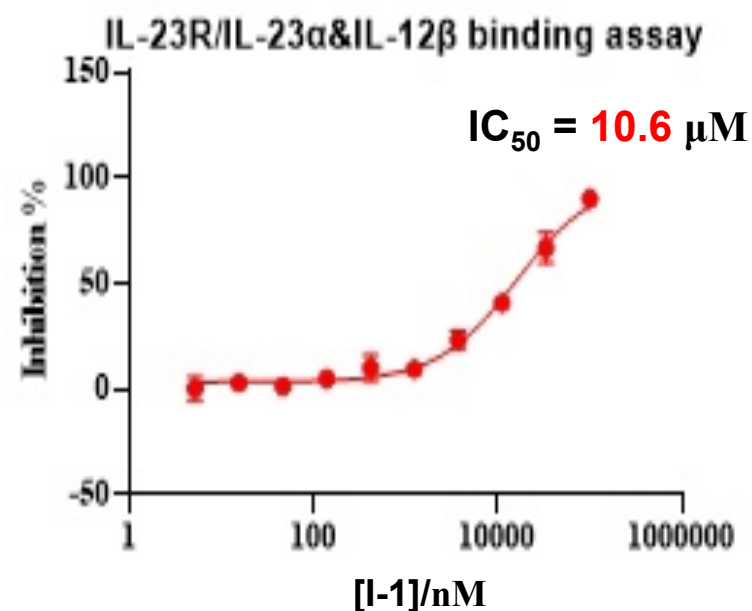
IL-23R binds to IL-23 to activate JAK and STAT signaling molecules, mainly activates STAT3, thereby regulating the release of pro-inflammatory cytokines by IL-23/IL-17 signaling pathway.

Type: In house

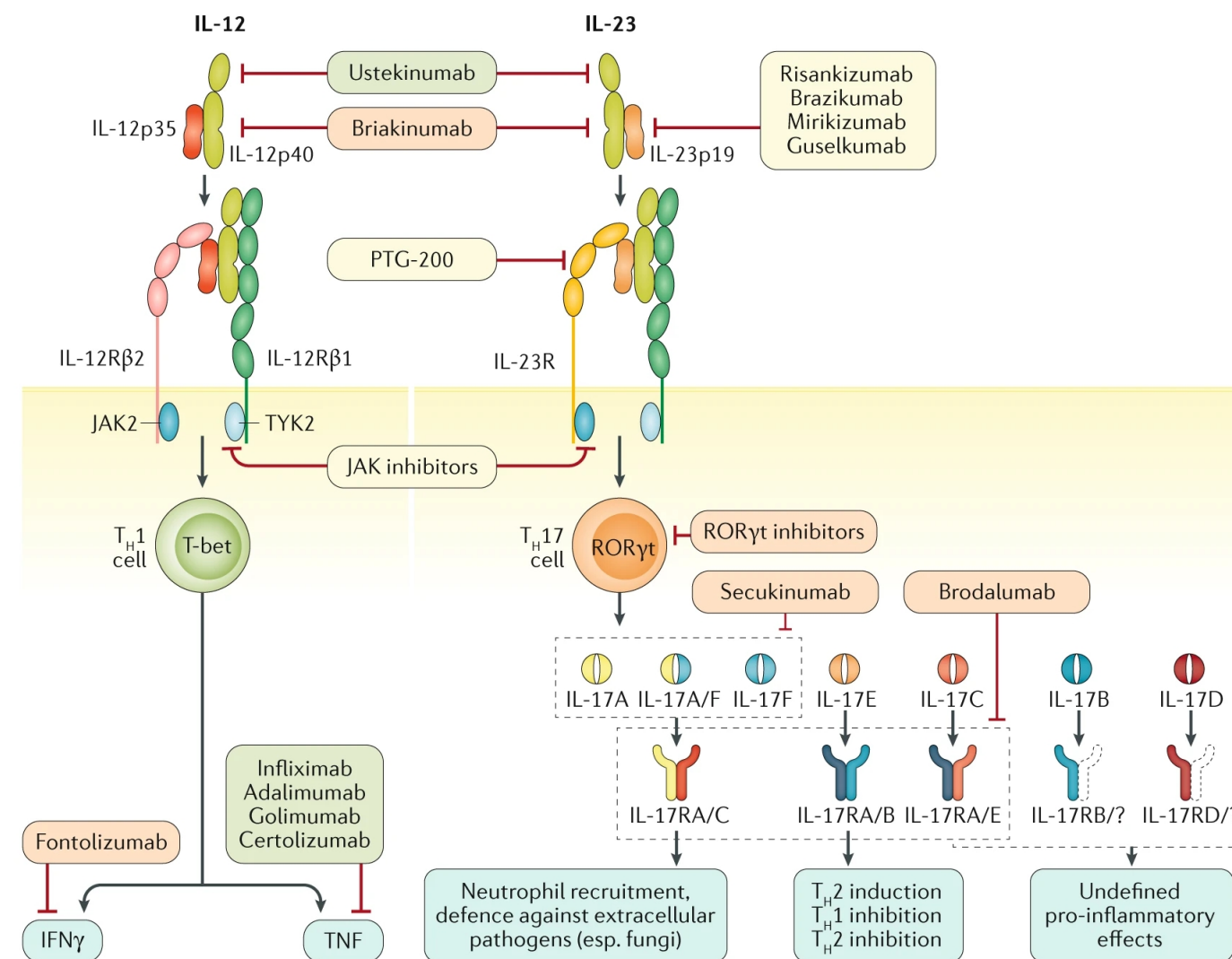
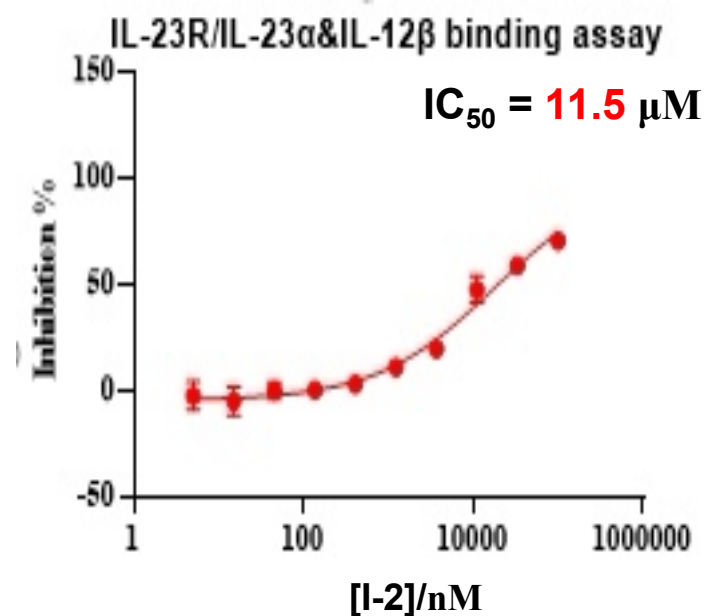
Competition: Currently, there are four approved antibody drugs targeting IL-23 on the market, with only one peptide drug just approved.



DEL hit: I-1



DEL hit: I-2



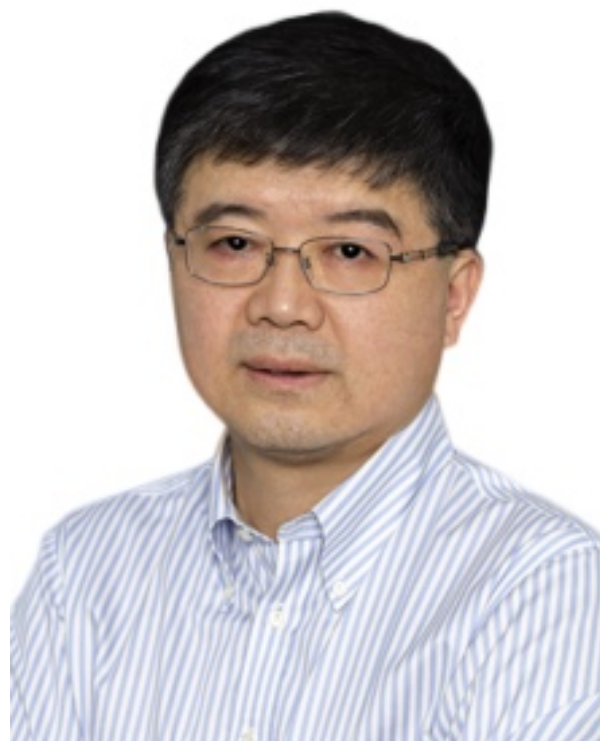
The background is a gradient from blue on the left to green on the right. A series of concentric circles are centered on the page. The innermost circle is solid white and contains the text 'Team introduction'. The next circle is dashed white and contains the text 'Core Team | Chief Scientist | Technical Team'. The outermost circle is solid white and has several small white dots spaced evenly around its circumference.

Team introduction

Core Team | Chief Scientist | Technical Team

The company core team

Chairman: He Xun



- Master Degree in Biochemical Engineering from Tsinghua University, EMBA from the National University of Singapore, Certificated Professor Level Senior Engineer.
- Member of the 8th National Pharmacopoeia Commission; Member of the 3rd Shenzhen Science and Technology Expert Committee; Expert for Drug Production Quality Risk Assessment at the 4th Shenzhen Municipal Level; Founder of the Shenzhen Life Sciences and Biotechnology Association.
- Currently serves as Chairman of the Guangdong Small Molecule New Drug Innovation Center, Chairman of Shenzhen We Biotechnology Co., Ltd., and General Manager of Shenzhen Weiming Xinpeng Biopharmaceutical Co., Ltd.
- Ever served as General Manager at Shenzhen Kexing Biological Products Co., Ltd., Shandong Kexing Biological Products Co., Ltd., Tianjin Weiming Biopharmaceutical Co., Ltd., Shenzhen Resproly Biopharmaceutical Co., Ltd., and Shanghai Longyao Biotechnology Co., Ltd.
- Professional capabilities in fundraising, investment management, and exit strategies, achieving returns exceeding 10-fold for multiple innovative pharmaceutical enterprises;
- Reviewed 10,000+ biopharmaceutical projects spanning areas including biological products, chemical drugs, traditional Chinese medicine, diagnostic reagents, medical devices, and medical technologies
- 30+ years of expertise in the comprehensive healthcare sectors



The company core team



CEO: Dr. Xiong Feng

Ph.D. graduate from Nanjing University and postdoctoral fellow at the UKU; C high-level overseas talent in Shenzhen. Under the supervision of Professor Xiaoyu Li , a world famous expert in DNA-encoded library technology. Proficient in the design, synthesis, and application of DNA-encoded compound libraries in drug screening, with extensive research experience in medicinal chemistry and the field of DNA-encoded libraries.



CMO: Shang Beicheng

Graduated from the Second Military Medical University in 1991, masters degree from Kunming Medical University. Currently serves as Associate Chief Pharmacist and Licensed Pharmacist, with 25+ years of experience in clinical research on new drugs; worked at Kunming General Hospital of Chengdu Military Region on formulation optimization and clinical trials. Since 2010, he has held positions including Clinical Director and Senior Clinical Director at pharmaceutical companies.



VP: Zhang Shuihua

Master of Biotechnology from Shanghai JiaoTong University; participated in projects that secured 1 biologics production approval and 9 clinical trial approvals; successfully acquired multiple pharmaceutical companies and invested in several biopharmaceutical and chemical drug development projects.



Expert Advisory Team



Advisor on DEL: Prof. Dr. Xiaoyu Li

Professor at HKU, PhD at U Chicago ,
Postdoc at Harvard, 20+ years in DNA-
encoded libraries research.



Advisor on CADD/AIDD: Prof. Dr. Jun Xu

Professor and director at Sun Yat-sen University,
expert in drug molecular design, former lead drug
design scientist at a Top10 pharma company.



Advisor on ND-003: Prof. Dr. Ke Ding

Professor at SIOC and
School of Pharmacy at JNU.
70+ patents granted, multiple
new drug pipelines
commercialized.



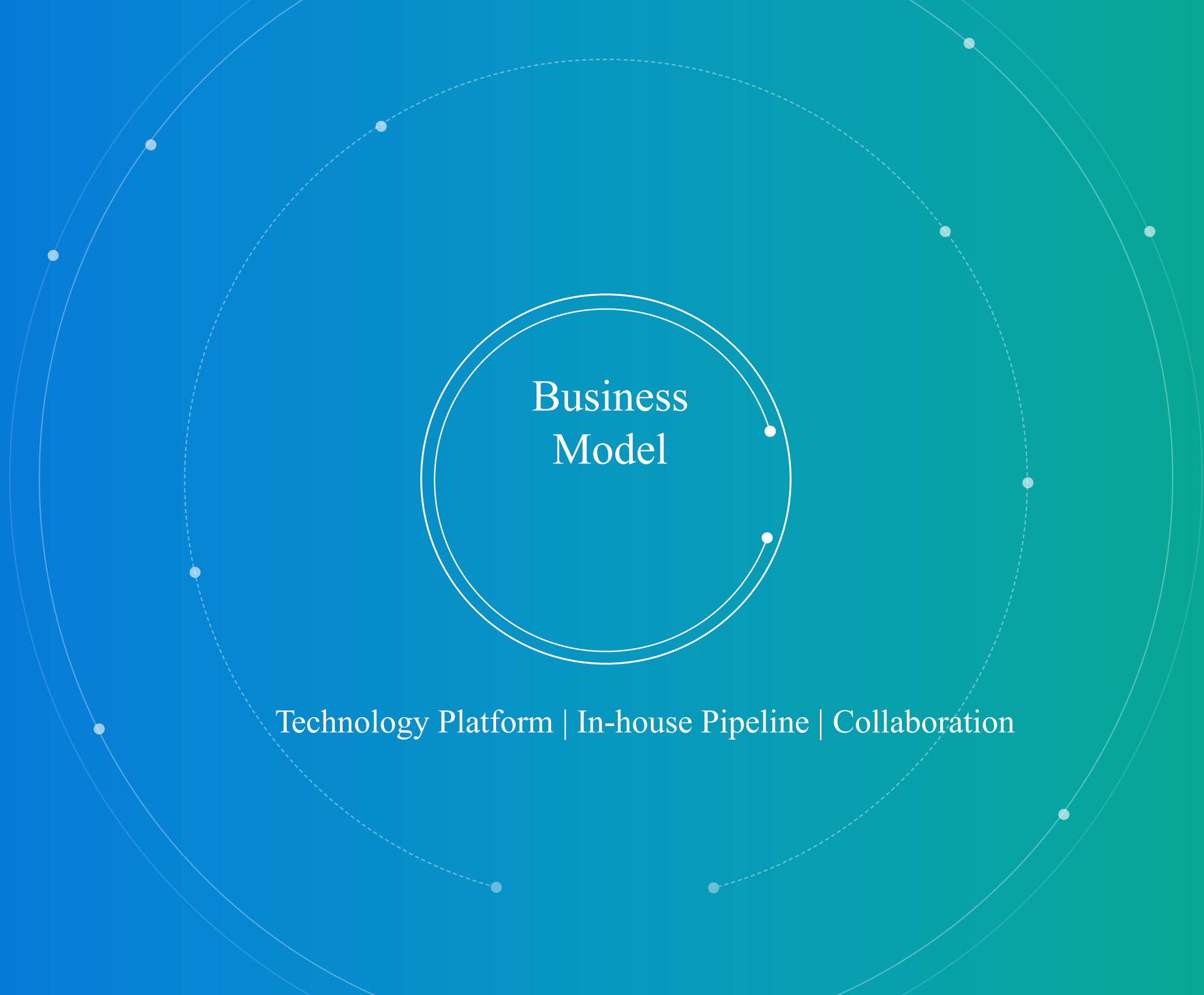
Advisor on CADD/AIDD: Prof. Dr. Jianping Lin

Professor at Nankai University,
specialized in AIDD/CADD,
incl. molecular simulation,
drug design, and biological
databases and mining.



Advisor on Metabolism: Prof. Dr. Shangyu Hong

Professor at Fudan
University, genetic
engineering lab PI, focusing
on diet, nutrition, and
metabolism.



Business Model: Two Pillars – Technical Service and in-house R&D

Technical Service

DEL Screening and New Drug Development Services
DEL Custom Library Screening and Optimization Service
AI Virtual Screening Service

Target Customer

MNC, Biotech

Profit Model

FFS, EFS



In-house R&D

0–1: Rapid and low-cost project accumulation
Radiopharmaceutical Pipeline Development
Peptide Drug Pipeline Development

Target Customer

MNC, Pharma & Hospitals

Profit Model

Out-licensing, JV, NewCo

DEL+AI Platform well recognized and validated within the industry

Project	Area	Hit	Lead	PCC	IND-enabling	Client type	Progress
FFS	ND-C01	FIC, Hit Delivery				Domestic public BigPharm	Completed
	ND-C02	FIC, PCC Delivery				Domestic public BigPharm	Lead to PCC
	ND-C03/05/06	Epigenetic, Overseas→CN				Domestic Biotech	Completed
	ND-C04	Agrochemical, Cell Screen				European MNC	Completed
	ND-C07	PPI, Cell Screen				TOP10 MNC	Completed

- The cumulative amount of technical service contracts has exceeded **5 million USD**.
- Multiple projects have achieved milestone deliveries ahead of contract schedule.

In-house product portfolio: Multiple high-value preclinical projects

ID	Target/MoA	Indications	Type	Hit-to-Lead	Lead-to-PCC	PCC-to-IND	Phase1	Phase2
ND-005	ADAR1	Solid tumor (PROTAC)	In-house					
ND-018	IRAK4	Autoimmune (PROTAC)	In-house					
ND-021	\	\	In-house					
ND-014	New E3 ligase	\	In-house					
ND-017	IL23R	Autoimmune	In-house					
ND-023	\	Solid tumor (RDC)	In-house					
ND-024	\	\ (RDC)	In-house					

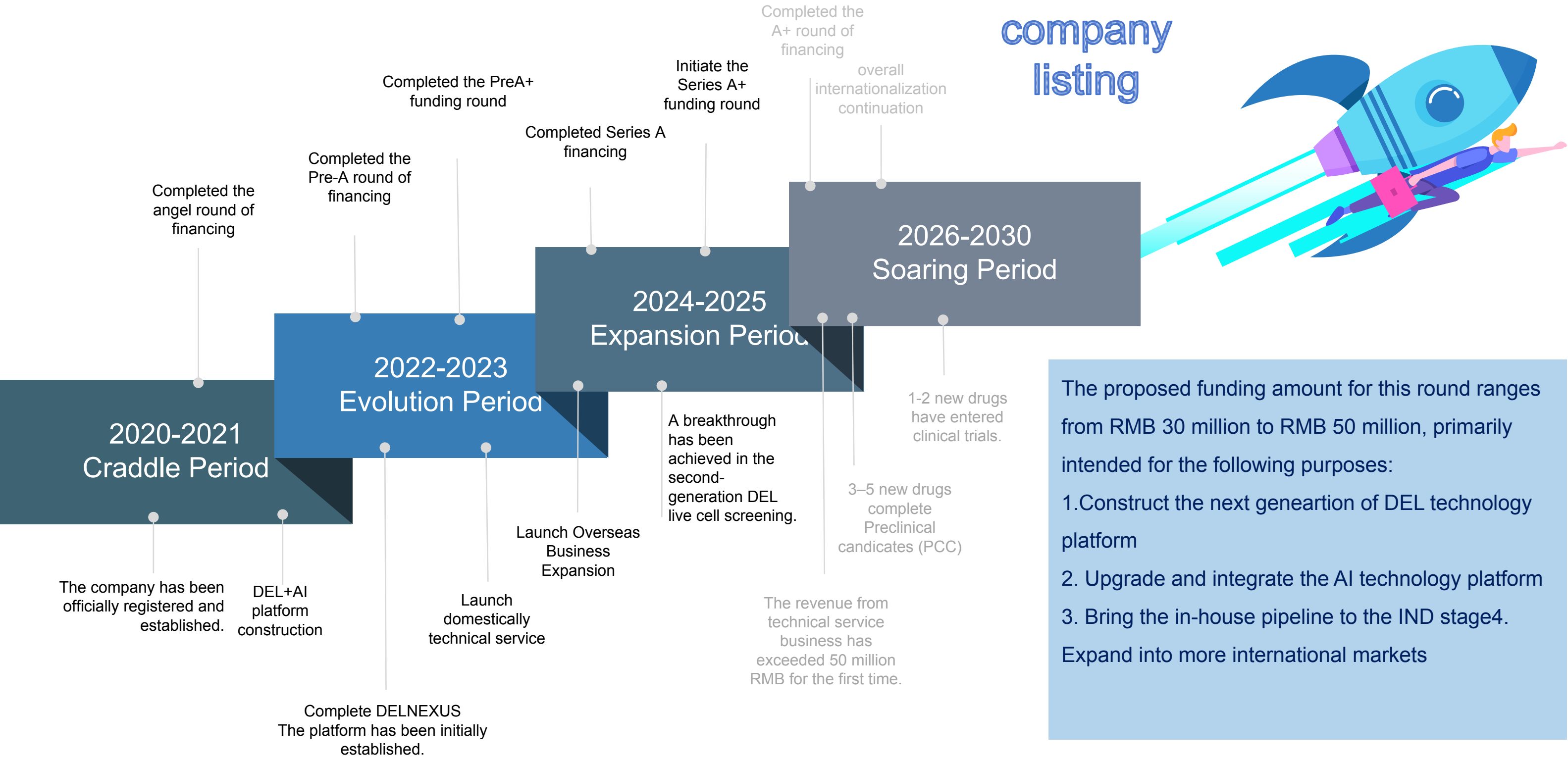
- The revenue generated from the licensing transfer of preclinical pipelines will support the expansion of the DEL+AI engine and platform, further driving subsequent pipelines into a new phase of value growth.
- By combining "rapid commercialization with technological accumulation," a dual closed-loop system for cash flow and valuation is established.



Strategic
Planning

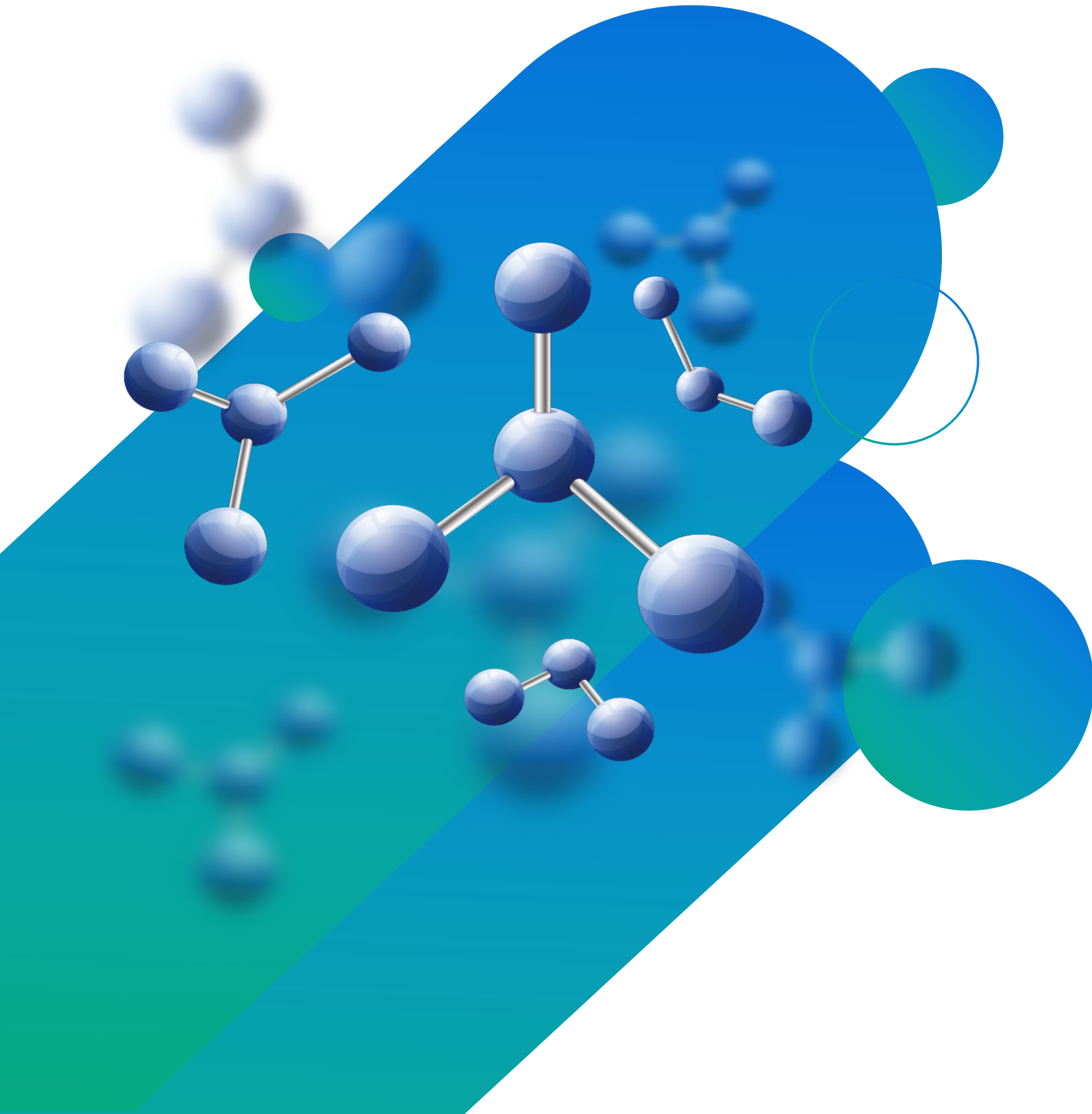
Technology Platform Development | Pipeline
Construction | Capitalization Path

Development Plan and Financing



The proposed funding amount for this round ranges from RMB 30 million to RMB 50 million, primarily intended for the following purposes:

- 1. Construct the next generation of DEL technology platform
- 2. Upgrade and integrate the AI technology platform
- 3. Bring the in-house pipeline to the IND stage
- 4. Expand into more international markets



We look forward to working with
you hand in hand to create new
value together

- Thank you for your interests •