

# ST PHARM

## IR Book

2025. 11



# Cautionary Statement regarding Forward-looking Statement

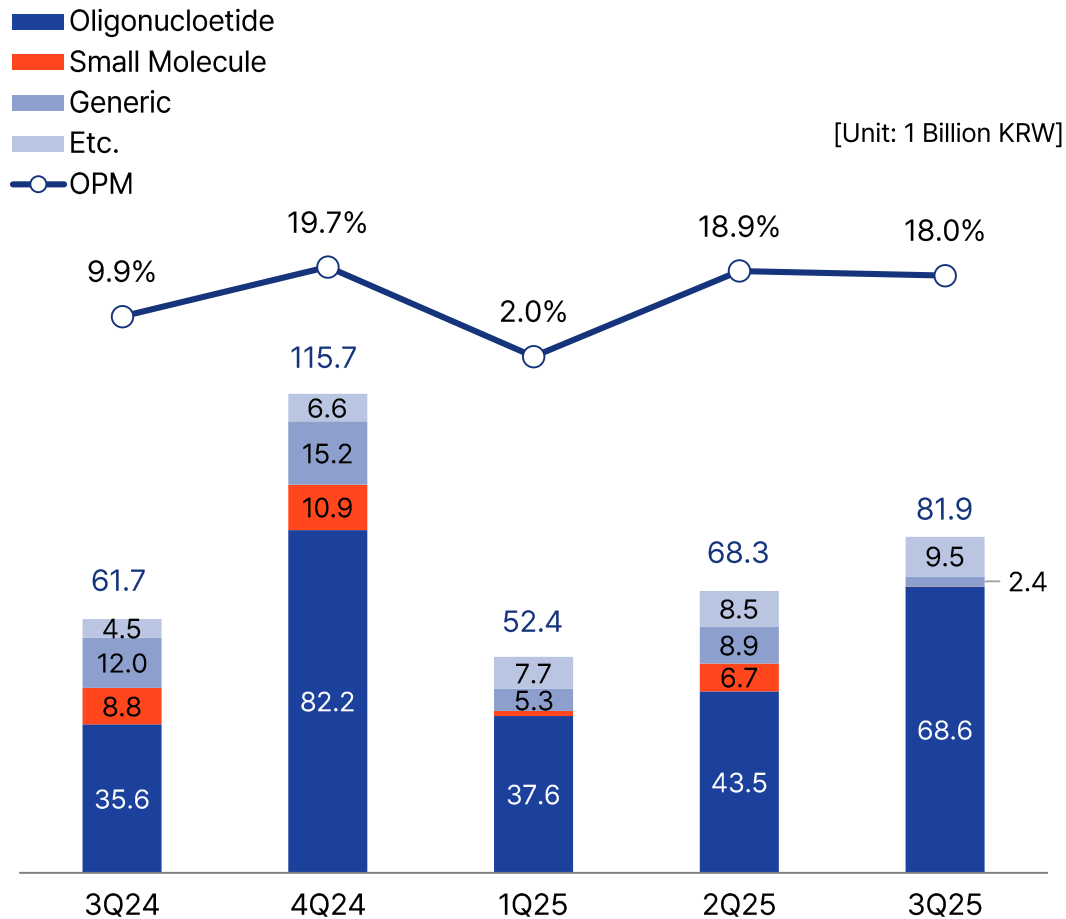
This presentation contains forward-looking statements from Dong-A Socio Group ("the Group") that include, but are not limited to, statements regarding our future financial performance, business strategies, market opportunities, product development, and operational plans. Words such as "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "project," "will," and similar expressions are intended to identify such forward-looking statements.

These forward-looking statements are based on our current expectations and beliefs concerning future developments and their potential effects on the Group. Such forward-looking statements are inherently subject to risks, uncertainties, and assumptions that could cause actual results to differ materially from those expressed in these forward-looking statements.

We caution investors not to place undue reliance on any forward-looking statements. These statements speak only as of the date they are made, and we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law. Additionally, please note that the financial figures and metrics presented in these Investor Relations materials are preliminary and have not yet been audited by an independent auditor. These numbers may be subject to change in future finalized disclosures.

# 2025 3<sup>rd</sup> Quarter Financial Results

## ✓ Preliminary Consolidated Earnings



\* "Etc." includes revenues from CRO subsidiaries, mRNA, etc.

## ✓ Statement

**'25.3Q Revenue ₩81.9 Billion, OP ₩14.7 Billion, NP ₩17.5 Billion**

- 1) Diversification of revenue sources from Oligo CDMO a major development
- 2) Large contribution from Oligo CDMO business boosted topline revenue and margins
- 3) Expect positive growth trajectory throughout 4Q assuming current FX rate is maintained

[Unit: 1 Billion KRW]

Account Category	'25.3Q	'24.3Q	2024	YoY
<b>Revenue</b>	<b>81.9</b>	<b>61.7</b>	<b>273.8</b>	<b>+32.7%</b>
Cost of Goods Sold	44.9	39.2	177.6	+14.4%
Gross Profit	37.0	22.5	96.2	+64.6%
SG&A Expenses	22.3	16.4	68.5	+35.9%
R&D Expenses	6.7	5.6	22.1	+20.2%
<b>Operating Profit</b>	<b>14.7</b>	<b>6.1</b>	<b>27.7</b>	<b>+141.6%</b>
<b>Net Profit</b>	<b>17.5</b>	<b>13.7</b>	<b>32.5</b>	<b>+27.5%</b>
Gross Profit Margin	45.2%	36.4%	35.1%	+8.8%p
Operating Profit Margin	18.0%	9.9%	10.1%	+8.1%p
Net Profit Margin	21.3%	22.2%	11.9%	-0.9%p

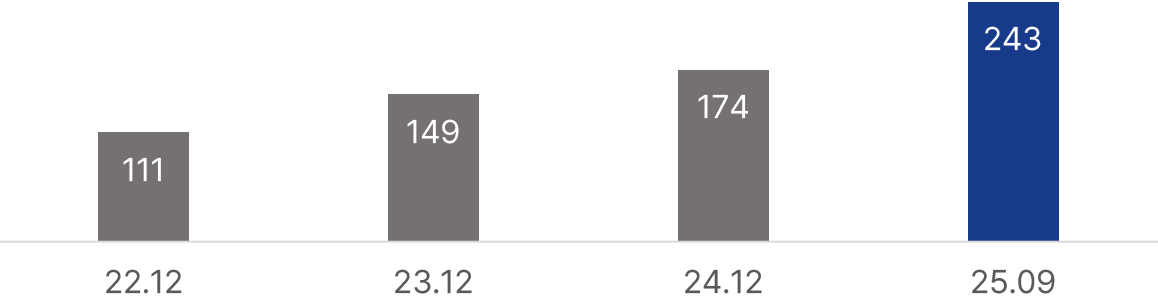
Revenue Breakdown

[Unit: 1 Billion KRW]

Segments		'24.3Q	'24.4Q	'25.1Q	'25.2Q	'25.3Q	YoY
Oligo	Total	35.6	81.2	37.6	43.5	68.6	+92.9%
	Comm.	29.6	55.5	32.4	37.2	34.1	+15.2%
	Clinical	5.9	26.8	5.1	6.3	34.5	+481.3%
Small Molecule		8.8	10.9	1.2	6.7	0.1	-99.1%
mRNA		0.8	0.4	0.6	0.7	1.4	+82.2%
Generic		12.0	15.2	5.3	8.9	2.4	-79.9%
Separate		57.2	109.1	44.7	59.8	72.5	+26.9%
Subsidiaries		4.5	6.7	7.7	8.4	9.3	106.9%
Consolidated		61.7	115.7	52.4	68.3	81.9	32.7%

Backlog Trend

[Unit: 1 Million USD]



\* 25.09 Backlog may be subject to change depending on future currency exchange rates, shipment schedule, etc.

Comments

Oligo Revenue increased by 92.9% YoY  
New Drug CDMO Projects increased to 43 projects from 30 (in '24)

Revenue Details

- Oligo API CDMO: ₩68.6 Billion (Commercial project portion = 49.6%)
  - New commercial projects' sales and clinical project recovery boosted sales
- Small Molecule: key project (Mitochondrial Deficiency) scheduled shipment in 4Q
- mRNA: ₩1.4 Billion revenue from early R&D stage projects (SmartCap®, etc.)
- CRO: ₩9.3 Billion revenue with profits at BEP level

Other Management/Business Comments

- Accumulated Total Backlog ≈ \$243 Million (adjusted for 25.3Q Revenue)
  - Oligo Backlog ≈ \$199 Million, Small Molecule Backlog ≈ \$38.1 Million
- Newly added 9 Projects in Oligos, 4 Projects in Small Molecules (vs. end of 2024)

Upcoming

- [4Q] (SM) Mitochondrial Deficiency Project NDA approval

# INTRODUCTION

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Chapter. 1

Introduction

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Chapter. 2

Business & Technology



## ST Pharm: API CDMO in xRNAs

**Chief Executive** | Sung Moo-je

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**Establishment** | 1983

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**Employees** | 687

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**Revenue** | 273.8 Bn KRW (Overseas 80%, 2024)

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**Shareholder** | Holdings Co. & Affiliated Party 38.7%

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### Business Highlight

#### Experience

Successfully delivered 200+ programs with flexibility, covering upstream to downstream  
15 NCEs launched/to-launch by YR2025

**200+/15**

#### Reliable CMC

Provide stage appropriate services in PR&D, analytics, manufacturing and documentation.  
Offer Asset Development program

Global Inspection **+29**      PAI result **NAI**

#### Business Area

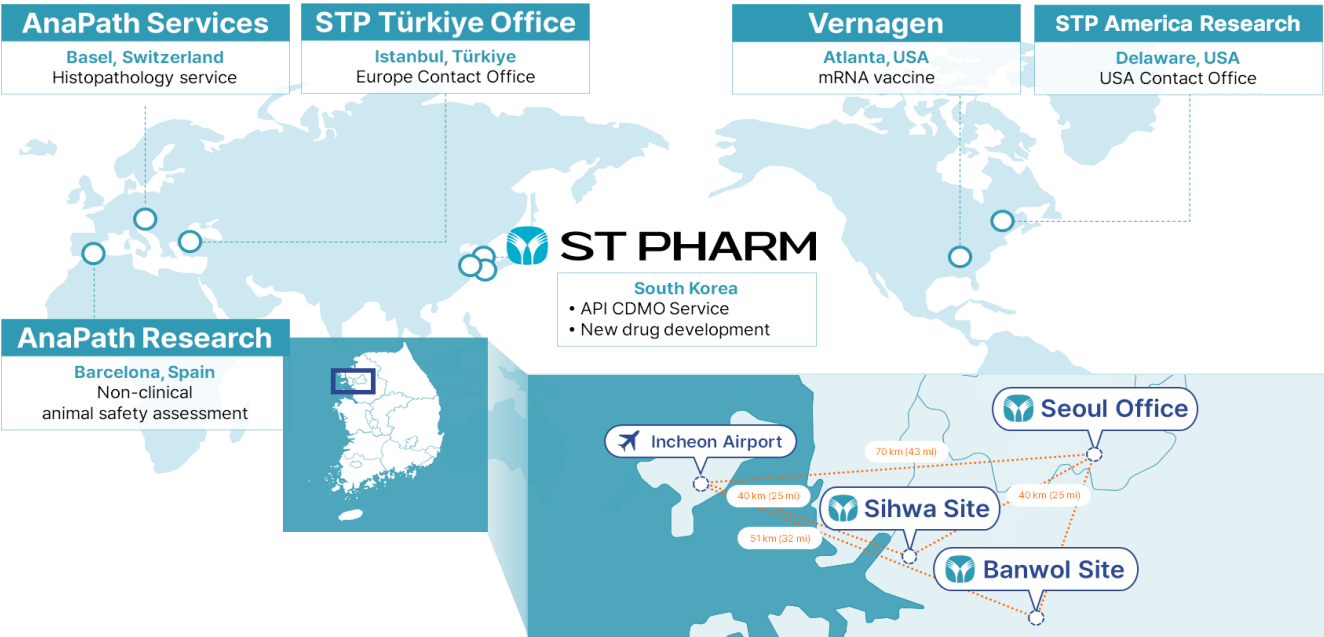
Covering RNA and Small Molecule API space including Lipid Nano Particles (Oligonucleotides & Amidites, mRNA & circRNA, Gene Editing CRISPR/Cas)

All about **RNA & SM**

#### Sustainability

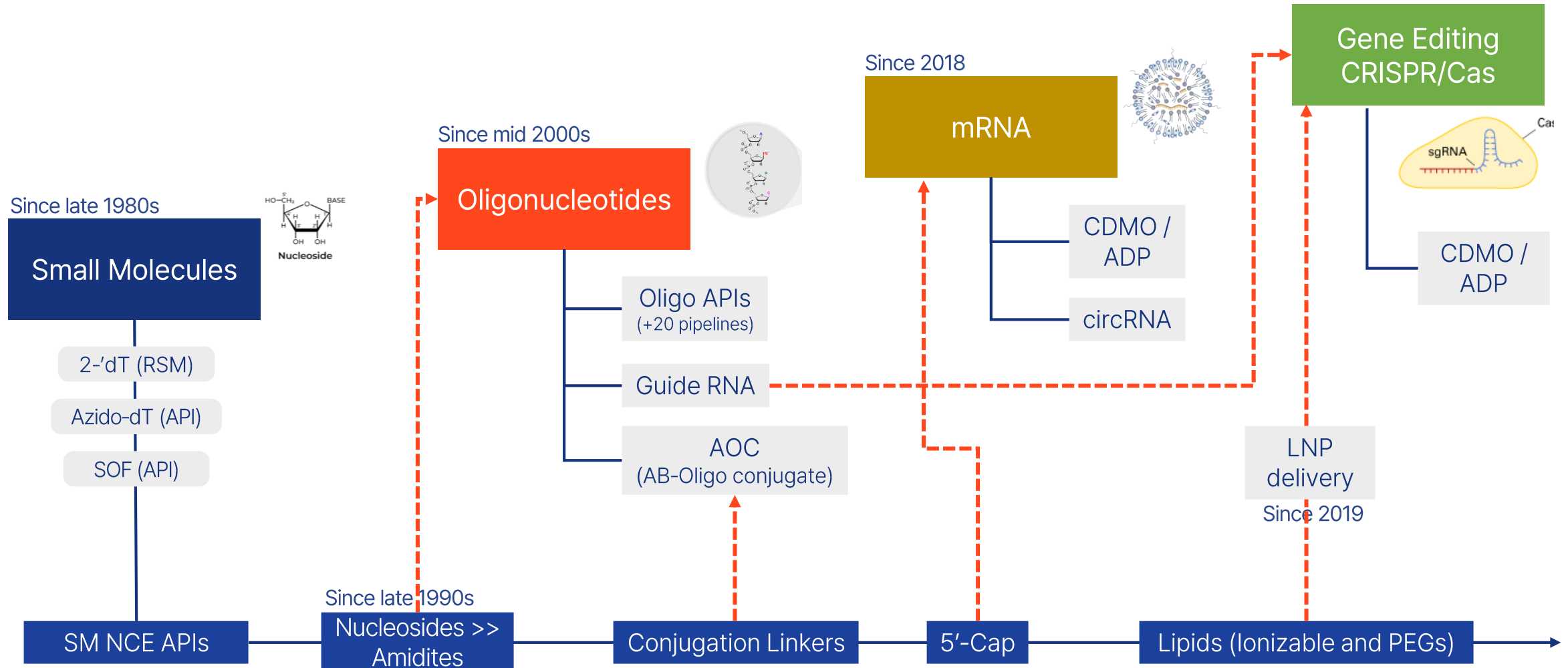
EcoVadis Gold Medal (2024) with launched Net-Zero Initiative

Banwol Campus  
**EcoVadis Gold (Top 5%)**





## ✓ Business Expansion



# BUSINESS & TECHNOLOGY

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Chapter. 1

Introduction

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Chapter. 2

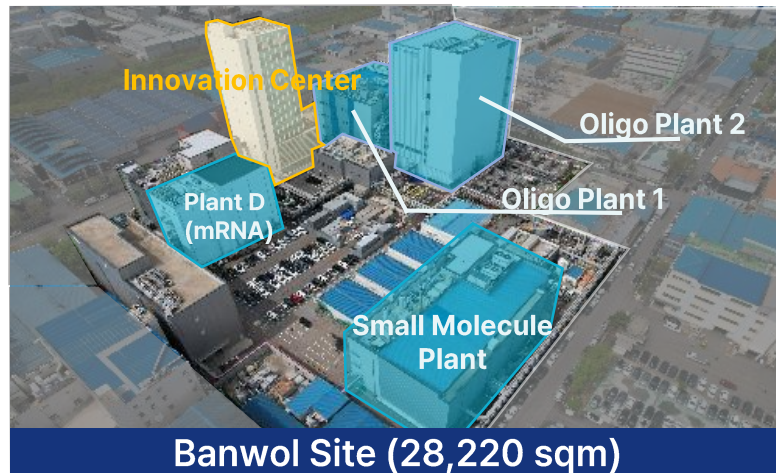
Business & Technology





## ✓ Production Facilities

Facility	Chemical Plant	Oligo Plant	mRNA Plant
	SM, Generic, Monomer	Oligonucleotide API	mRNA, sgRNA
Capacity	96 reactors (376,250 L)	6 lines (6~8 mole)	Max. 100M Dose/Yr



- Established in 1984 and acquired in 2015
- **12 workshops: Small molecule/Oligonucleotide/mRNA/LNP**
- Expansion Schedule:
  - 3 oligo lines (Oligo Plant 2) newly installed in 2025
  - 2 more Kilo-scale lines of OEL3A for small molecule by 1H, 2026
- Regularly inspected by US-FDA since 2006



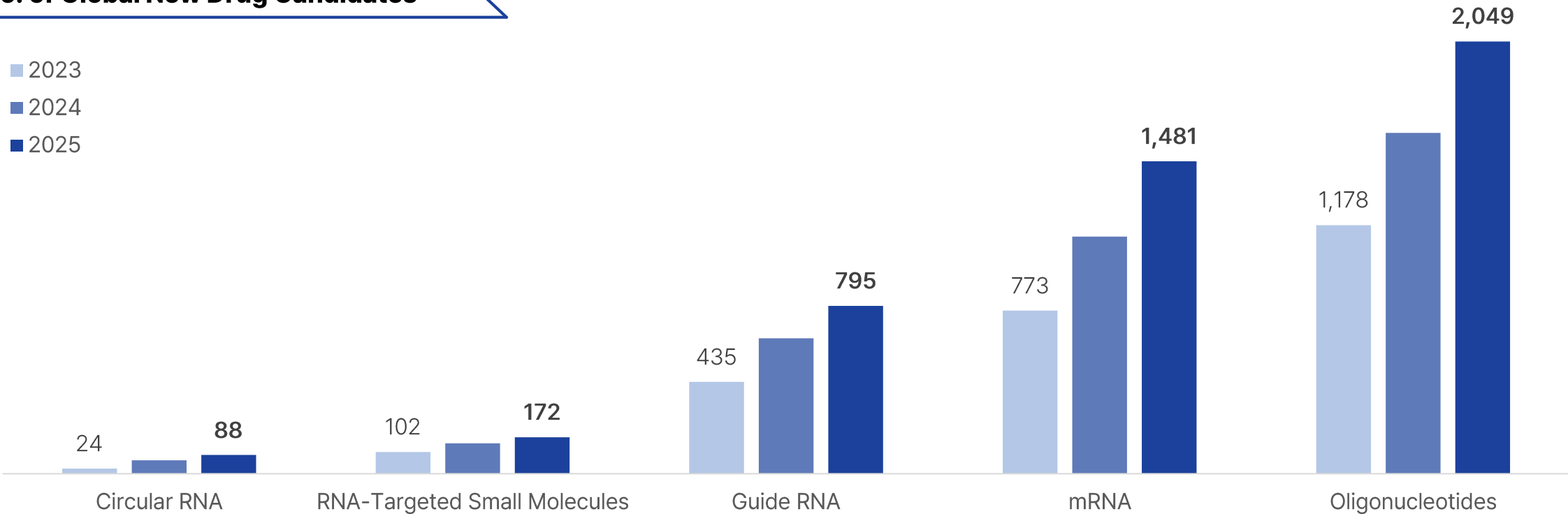
- Established in 1987
- **8 workshops: Small molecule**
- Expansion :
  - Extended Plants planned to be ready by 2028 (extended capacity with OEL3A and automation)
- Regularly inspected by US-FDA since 2006

# Oligonucleotide Therapeutics Market Landscape

## ✓ Oligonucleotide Market Growth Prospect

Initially-approved Oligo drugs targeted hereditary/genetic diseases undruggable with established modalities (mAb, Small Molecule, etc.)  
Targetable disease through is expanding with hastened development in delivery plantforms (ex. Alnylam’s GalNac-siRNA conjugates, etc.)  
Further conjugation technology fueling expansion of delivery platforms for an already-fast growing market (ex. Antibody-Oligo Conjugate)

No. of Global New Drug Candidates



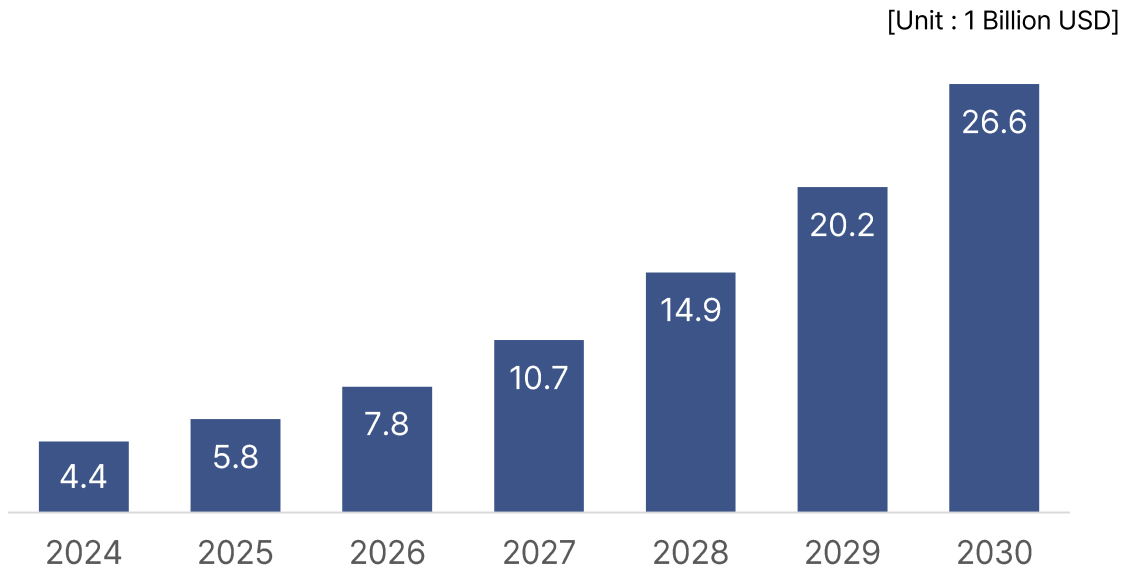
[Source: 2024 RNA Landscape Review, Beacon]

# Oligonucleotide Therapeutics Market Landscape

## ✓ Investments in clinical pipelines tailwind for growth

- ✓ Big Pharmas greatly increasing investment in early-phase RNA pipelines  
→ recognition of RNA therapies' potential & accelerating development
- ✓ Potential to be the fastest growing gene therapy among CGT modality
- ✓ Accelerated development in DDS platform expanding indications

## RNA Therapeutics Market Size Forecast



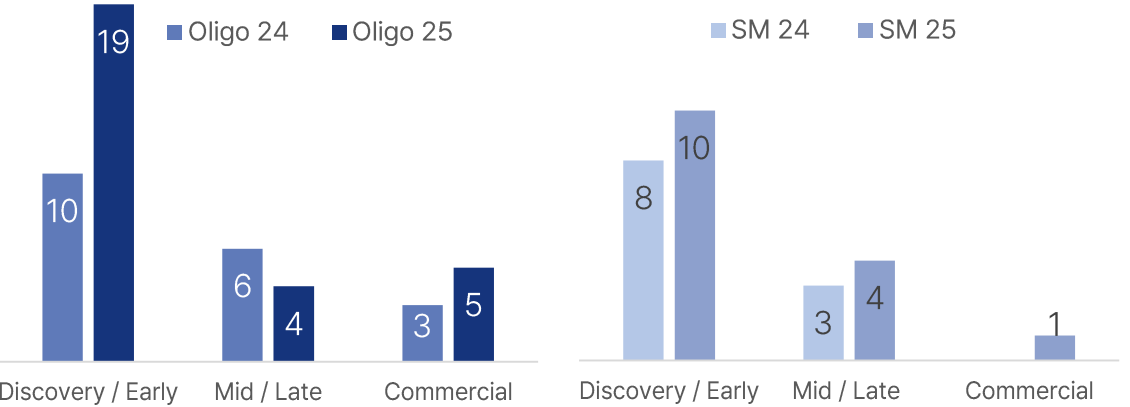
## ✓ RNA Therapeutics Licensing & Acquisition Deals('25)

Date	Deal Type	Category	Investee	Investor	Size
25.01.08	Collaboration	ASO	Alloy Tx.	Sanofi	\$400 Mil. ~
25.02.07	License Deal	siRNA/RNAi	OliX	Eli Lilly	~ \$630 Mil.
25.02.10	License Deal	siRNA/RNAi	Arrowhead	Sarepta Tx.	~ \$825 Mil.
25.04.30	Acquisition	microRNA	Regulus Tx.	Novartis	~ \$1.8 Bil.
25.05.14	License Deal	siRNA/RNAi	ADARx	AbbVie	\$335 Mil. ~
25.05.15	License Deal	RNA Editing	Rznomics Bio.	Eli Lilly	~ \$1.3 Bil.
25.05.27	License Deal	siRNA/RNAi	City Tx.	Biogen	~ \$1 Bil.
25.06.12	Acquisition	mRNA	CurVac	BioNTech	\$1.25 Bil.
25.06.17	Acquisition	RNA Editing	Verve Tx.	Eli Lilly	\$1.3 Bil.
25.06.30	Acquisition	RNA Delivery	Capstan Tx.	AbbVie	\$2.1 Bil.
25.08.18	Collaboration	RNA Splicing	Skyhawk Tx.	Merck KGaA	~ \$2 Bil.
25.08.28	Collaboration	srRNA	Replicate Bio.	Novo Nordisk	~ \$550 Mil.
25.09.02	License Deal	siRNA/RNAi	Arrowhead	Novartis	~ \$2 Bil.
25.09.03	License Deal	siRNA/RNAi	Argo Biopharma.	Novartis	~ \$5.2 Bil

Major CDMO Projects

#	Type	Indication / Target	Project Stage			
			P1	P2	P3	Approved
1	Oligo	Hyperlipidemia				
		CVRR	Indication Expansion			
2	Oligo	SMA				
3	Oligo	MDS				
		MF	Indication Expansion			
4	Oligo	FCS				
		sHTG	Indication Expansion			
5	Oligo	HAE				
6	Oligo	Atherosclerosis				
7	Oligo	IgA Nephropathy				
8	Oligo	Chronic Hepatitis B				
9	SM	Undisclosed				
10	SM	Mitochondrial Dysfunction				

Growth in CDMO R&D Projects



Oligo CDMO Project Backlog (as of 25.09)

[Unit : 1 Million USD]

	2022	2023	2024	2025
Commercial	13.2	36.1	109.7	31.0
Clinical	67.5	81.4	44.5	13.5
Total	80.7	117.4	154.2	198.8

\* Backlog status based on date of Product Order receipt. Adjustment for quarterly sales included.  
\*\* Commercial/Clinical project determined based on date of pipeline's new drug approval  
\*\*\* CHF/USD = 1.20 for "2025" backlog

\* SMA: Spinal Muscular Atrophy, MDS: Myelodysplastic Syndrome, MF: Myelofibrosis, FCS: Familial Chylomicronaemia Syndrome, sHTG: Severe Hyper-triglyceridemia, HAE: Hereditary Angioedema

# Enzymatic Ligation for Oligo Production

## Development of Enzymatic Ligation approach

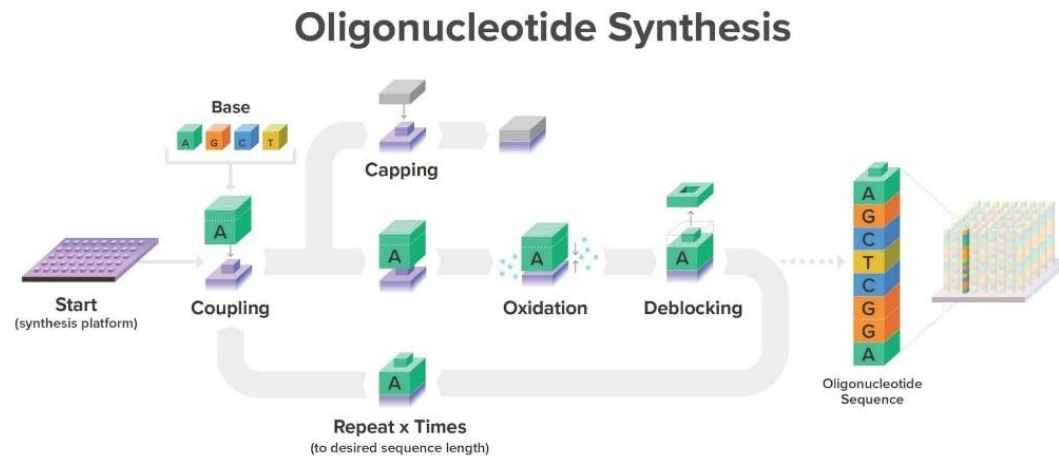
- ✓ Synthesize monomers into shortmers instead of phosphoramidites
- ✓ Synthesize shortmers into full-length oligo APIs through enzymatic ligation

*\* Ongoing joint research with 3 global clients for commercialization of technology*

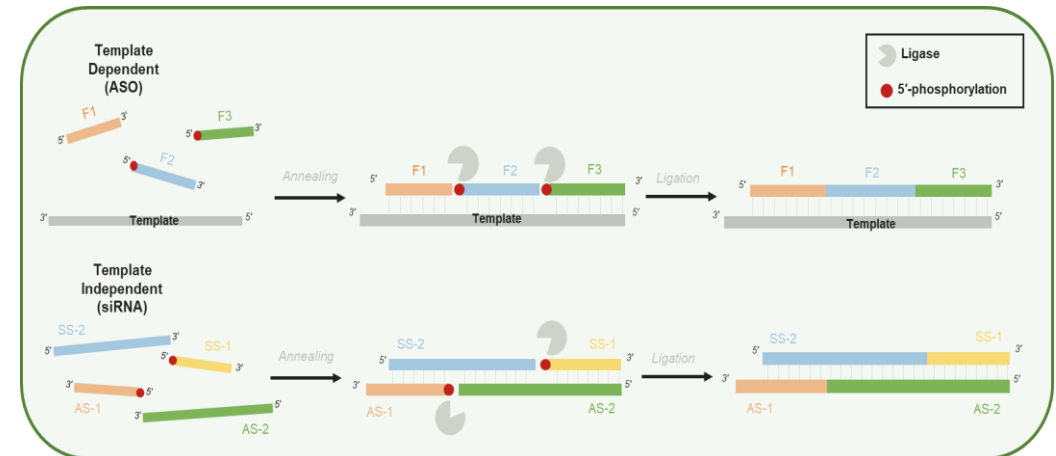
## Key Distinctions from Conventional Method

- ✓ Improved productivity and cost efficient
- ✓ More compatible for large productions due to larger batch size ( >2x)
- ✓ Enables higher-yield synthesis for longer-length oligomers

### Solid Phase Oligonucleotide Synthesis





### Enzymatic Ligation of Full-Length Oligos



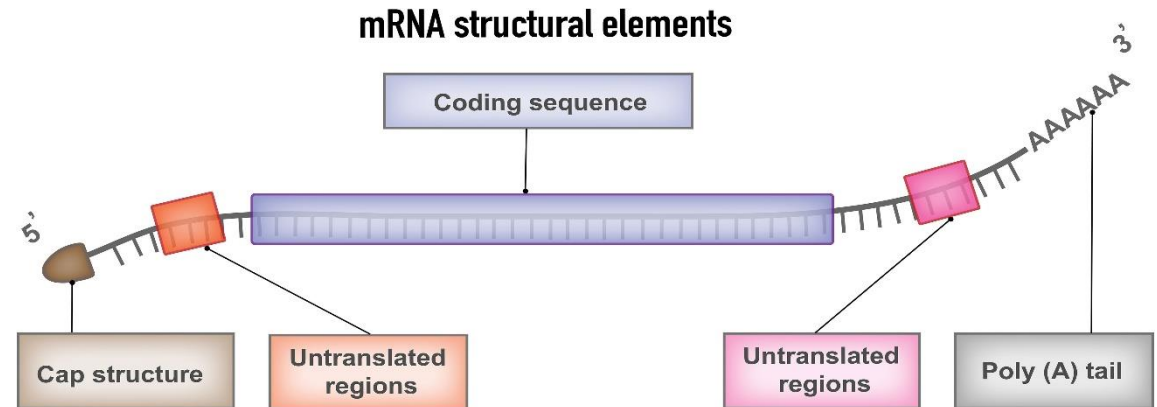
## SmartCap® (5'-Capping)

- ✓ Registered Patent in Korea
- ✓ Registered PCT International Patent (Registered in Japan on Mar. 2025)
- ✓ Over 30 capping analogues → highly customizable for clients
- ✓ Confirmed safety on humans through STP2104(P1) trial

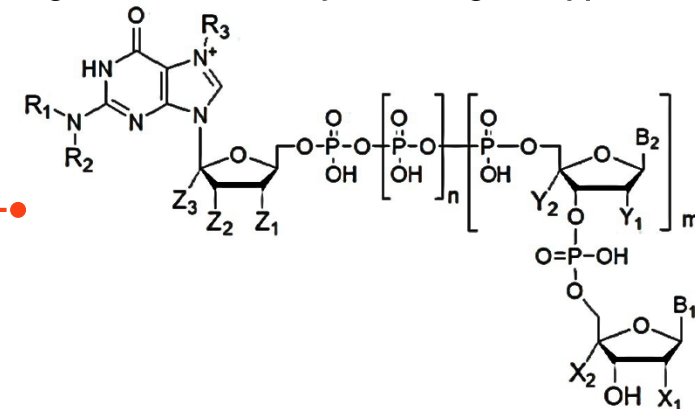
## Supply Agreements & Partnerships

Date	Company	Content
24.08.20	Quantoom Biosciences 	First Supply Agreement of SmartCap® under Extended Collaboration to Advance RNA Manufacturing
25.01.08	Evonik Industries 	RNA and nucleic acid delivery

## SmartCap® Structure



## Oligonucleotides for synthesizing 5'-capped RNA



# Development of RNA Editing CDMO Platform

## ✓ sgRNA in response to CRISPR/Cas Development

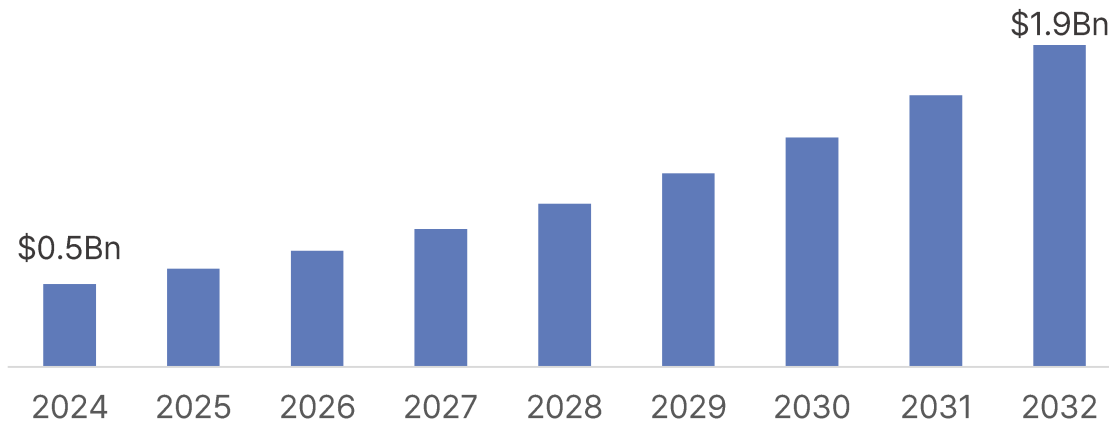
### ✓ Successful manufacturing of 100-mer sgRNA

- +20 years of expertise in Oligo-/nucleotide synthesis supported high-purity
- Established in-house capability chain of synthesis-purification-analysis

### ✓ Ongoing facility expansion and developments

- Work-in-progress for high-purity 130-mer sgRNA
- Planned installation of dedicated production line in 2025

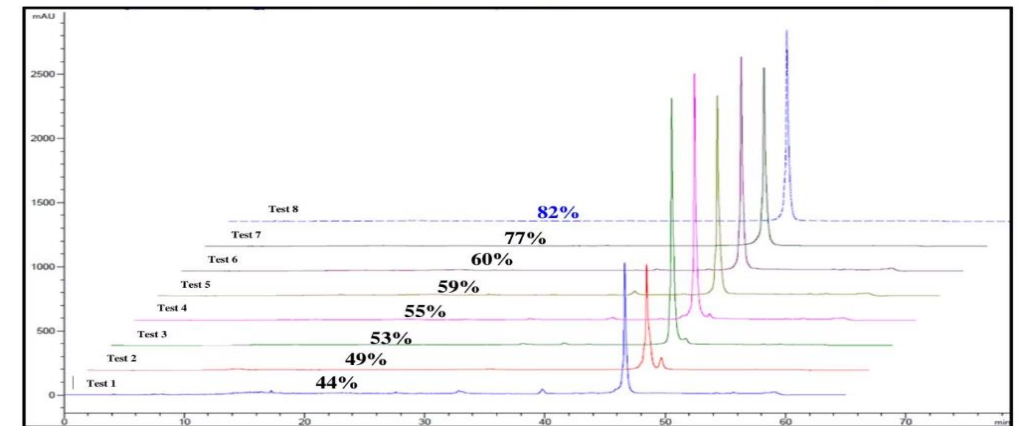
## 2024~2032 gRNA Global Market Forecast



[Source: AnalystView Market Insight]

## sgRNA purification developed from 44% → 82%

### Achieved 82% Purity through Process Development



## GMP/non-GMP Production Facility

Status	Capability
R&D Lab Line	50 µmol ~ 1.2 mmol
Small-scale Line	1.2~20 mmol
Dedicated Small-scale Line	1.2 mmol

\* Currently utilizing two installed lines for both oligonucleotide & sgRNA synthesis



**✓ Highlights from Earlier Trials (Preclinical ~ Phase 1)**

- ✓ Observed anti-viral efficacy under monotherapy  
Confirmed safety with Therapeutic Index (TI) > 6,020  
(Raltegravir > 2,710)
- ✓ Differentiation from conventional mechanisms such as Integrase Inhibitor MoA  
4 ~ 400 times higher anti-viral efficacy against resistant viruses  
(Preclinical)
- ✓ Global HIV/AIDs treatment Market : 2024년 + \$32.8 Billion (2024)  
Approved Treatments : Biktarvy (\$13.4B), Descovy(\$2.8B),  
Truvada(\$2.1B)

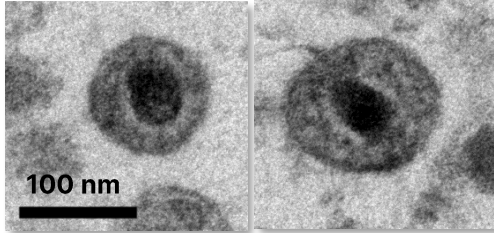
**✓ Phase 2a Trial Data (Interim)**

- ✓ Design: Randomized, Double-blinded, Placebo-controlled  
Participants: ARTs-naïve / limited exposure to ART  
Cohort 1: 200mg, Cohort: 400mg  
Cohort 3: 600mg → Data expected in 2026.1Q
- ✓ Antiviral Activity (change in plasma HIV-1 RNA copies in D11):  
-1.552 ~ -1.191 (log10 copies/mL) from pre-dose baseline  
Drug A: -1.9 ~ 1.7 (log10 copies/mL), Drug B -2.00 ~ -0.92 (log10 copies/mL)\*
- ✓ Safety:  
3 possible related adverse events out 16 total AEs  
No severe AEs or discontinuation reported  
All AEs resolved & recovered
- ✓ Pharmacokinetics:  
Linear PK profile, less than dose-proportional across dose range

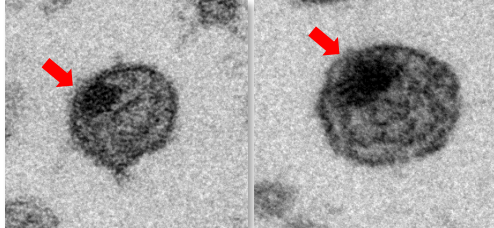
\* Based on low- to mid-size dosage comparison

## ✓ ALLINI MoA for Potential Functional Cure of HIV/AIDS

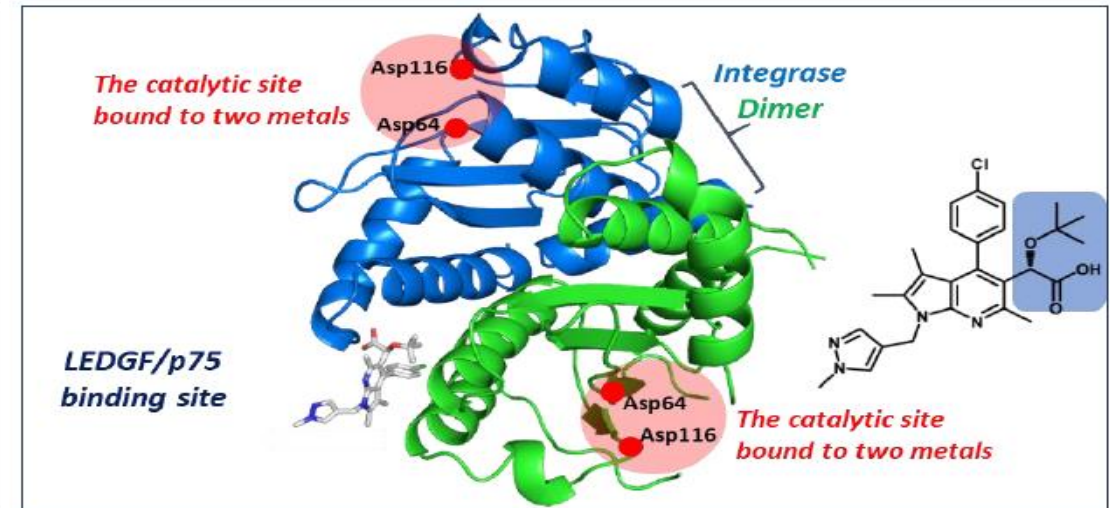
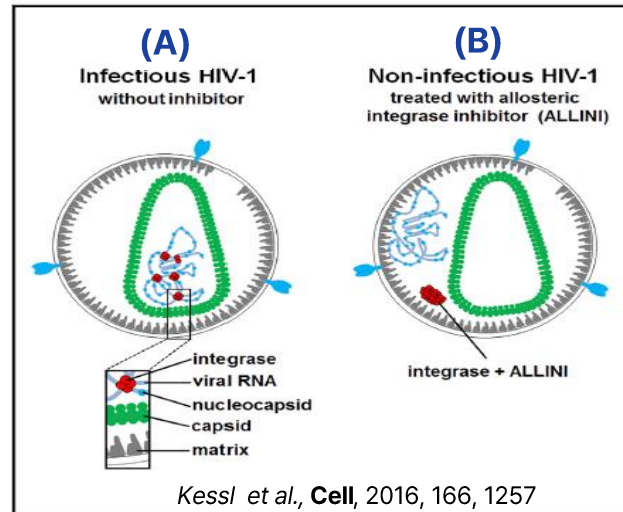
Before Injection (A)



After STP0404 0.2μM Injection (B)



TEM study in Emory Univ.



- ✓ New mechanism ALLINI (Allosteric integrase inhibitor) founded by Prof. M. Kvaratskhelia (Univ. of Colorado) in 2016
- ✓ HIV-1 integrase binds the viral RNA genome and plays an essential role during virion morphogenesis (A)
- ✓ ALLINI induces aberrant integrase(IN) multimerization and binds to viral RNA, leading to mislocalization of viral RNA (B)
- ✓ STP0404 leads to mislocalization of vRNP\* complexes outside the viral capsid, allowing the formation of non-infectious HIV-1 (B)
- ✓ New MOA for HIV-cure as "maturation inhibitor" - "Divide and Conquer", not 'Shock & Kill' or 'Block & Lock'
- ✓ Identification of ALLINI mechanism supported by US NIH grants in 2018. Collaboration with Emory University & University of Colorado Boulder

\* Viral ribonucleoprotein

# Thank You

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