Drug Discovery Technology （1/3）

（Revised August 7, 2025）

PROTACs, molecular glue	● Efficient evaluation method for degraders ● Technologies that can comprehensively analyze on-target and off-target ● Technology to discover targets for degradative drivers (excludes cancer and tumors) ● Technology to reach the target tissue (such as CNS)
Small Molecules Targeting RNA	● Method for measuring the binding affinity of RNA-targeting small molecules with in vivo relevance ● Excludes SPR, ITC, MST, AS-MS and SHAPE ● High through put in silico screening technology for RNA ● Efficient method for evaluating the three-dimensional structure of RNA
Drug discovery method aimed at covalent binders	● Fundamental technologies ● Evaluation methods for drug discovery
Screening and Synthesis Automation Technologies	● Virtual screening methods that can screen a large-scale virtual library with high accuracy and speed ● Operate throughout the day

Drug Discovery Technology （2/3）

（Revised August 7, 2025）

Peptide Therapeutics	● Identification of intracellular PPI targets ● Efficient method for transferring peptide drug molecules into cells ● Technology for highly accurate docking (SBDD) and simulation (LBDD) of peptide drug molecules
Antibody Therapeutics	● Technology to deliver antibodies into brain ● Discovery of novel target molecules for antibody drug development - Chronic infectious diseases - Central nervous system diseases - Motor dysfunction diseases
Nucleic Acid Therapeutics	● Neurodegenerative diseases and motor dysfunction diseases for siRNA therapeutics ● Deliver siRNA into the brain and immune cells

Drug Discovery Technology （3/3）

SHIONOGI

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Pharmacokinetics	● In vitro assay for predicting human biliary clearance and enterohepatic circulation ● Drug transport and drug-drug interaction (DDI) risk prediction models using human P-gp/BCRP transgenic or knock-in animals ● Intracellular drug quantification for PK/PD and MoA insights ● Predict the risk of P-gp or BCRP inhibitory effects on drug absorption and disposition
Safety	● AI system to classify biochemical toxicity data as adverse or non-adverse ● In silico toxicity mechanism analysis system ● Predicting toxicity target organs using live animal image diagnosis (CT, MRI, etc.) ● In vitro model for ocular toxicity evaluation and mechanism analysis ● In vitro evaluation system to evaluate damage and regeneration of inner ear hair cells ● In vivo evaluation system for ototoxicity using ABR (Auditory Brainstem Response) ● Ames avoidance measures and prediction tools in nucleic acid analog drug discovery
Drug Discovery Platform Technologies	● Method for screening and optimizing enzyme activity based on substrate specificity of metabolite biosynthetic enzymes ● Bioinformatics techniques including enzyme sequence data ● Data-driven optimization for reproducible scale-up cultivation