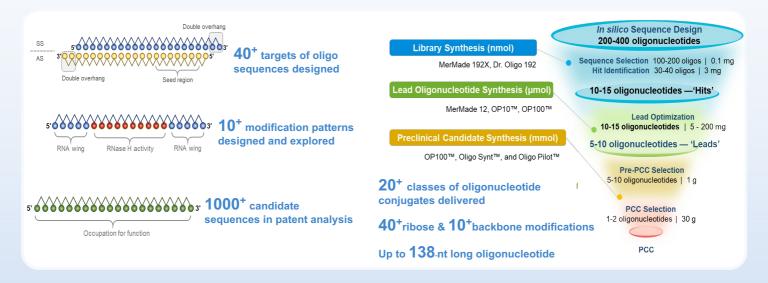


WuXi Biology

Supporting Discovery of Oligonucleotide Drugs



Sequence Design and Chemical Synthesis





WuXi Biology

In Vitro Evaluation of Stability and Efficacy

Cell lines

1500+ cell lines and patient-derived fibroblasts. Customized stable cell lines

Primary cells

Primary hepatocytes of human, mouse, rat, dog and monkey. Customized other primary cells

Reporter cell lines

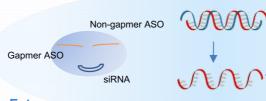
ASO splicing reporter, psiCHECK

Methods

Free uptake and transfection

Stability

Plasma, tissue homogenate, RNase, EMSA, HPLC,SL-PCR



In Vivo PK/PD Assessments

Entry Binding, uptake, intracellular trafficking, endosome release

Protein

ELISA, Luminex, MSD, CBA, FACS, Western/ capillary Westerna and more

Functional assays: Customized



mRNA Expression RT-qPCR, bDNA, ddPCR, capillary electrophoresis, Sanger sequencing,

transcriptome profiling, RISC loading

PK and PD assessments in mouse

- · Hydrodynamic injection (HDI) mouse model
- AAV mouse model
- Transgenic mouse model
- Cell transplant model

Disease models for functional assessment in mouse and NHPs

Efficacy

- Neurodegenerative disease
- Metabolism & liver disease
- Ophthalmic disease
- Ear disease
- Infectious disease



Delivery

In vivo sampling

Blood, CSF (+/- cannula), aqueous & vitreous humor, biopsy

In vivo imaging

Organ collection

Bulk analysis and single cell analysis for PK and PD assessments, sequencing

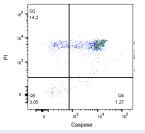
Delivery tool development

- LNP, peptide conjugate and more

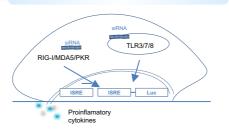
Off-target and Safety Assessments

Cytotoxicity assays

Abundant cell resources: Primary cells, cell lines, engineered cells, etc Multiple readouts: CellTiter-Glo, LDH assay, caspaseGlo3/7 and more



In vitro immunogenicity assays



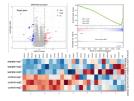
Comprehensive PRR reporter cell lines Cytokine release in PBMC: Multiple species and comprehensive cytokine profiling methods, including MSD and Luminex

Off-target profiling

In silico analysis: Prediction of potential off-target

RNA-seq: *In vitro* or *ex vivo* evaluation of potential off-target

psiCHECK reporter: *In vitro* evaluation of potential off-target





Contact Us

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