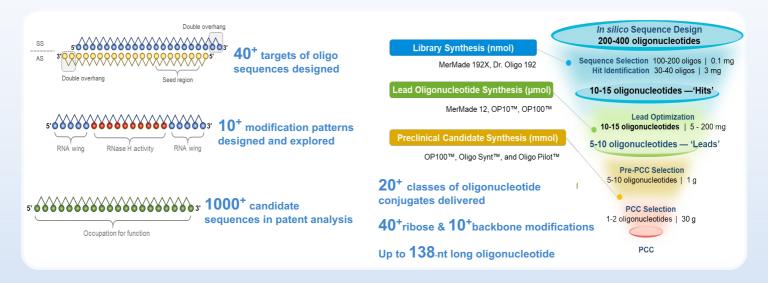


# WuXi Biology

# **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**

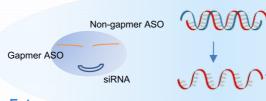
ASO splicing reporter, psiCHECK

#### **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

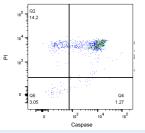
#### **Delivery tool development**

- LNP, peptide conjugate and more

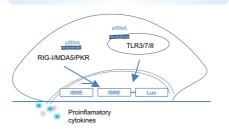
# **Off-target and Safety Assessments**

#### 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



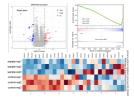
Comprehensive PRR reporter cell lines Cytokine release in PBMC: Multiple species and comprehensive cytokine profiling methods, including MSD and Luminex

#### 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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