

21.06.2021 –
25.06.2021

LUGAR

Videoconferencia

Jornada de innovación abierta con gran multinacional farmacéutica

Anexo I – Partnering interests

ENABLING TECHNOLOGIES / CONCEPTS

- **Cell and Gene Therapy**
 - Clinical stage AAV programs for all DA/FAs
 - New capsids for tissue targeting, liver-detargeting and increased payload and reduced immunogenicity
 - Novel Gene editing technologies (e.g.prime editing)
 - Tunability of gene expression (e.g.switches, ZF-TF, CRISPRa/i)
 - Novel technology targeting RNA, RNA tx (e.g.siRNA therapeutics for brain)
 - Non-viral gene delivery
 - RNA delivery technologies (non-liver; e.g.MSD/NS)
- **Biologics**
 - Technologies that enable intracellular targeted biologics
 - Technologies that enable orally administered biologics
 - Next-gen “killer” bi-or multi-specifics
- **Chemistry**
 - AI & ML approaches to advancing med-chem, Novel TPD platform capabilities, LMW targeting approaches for RNA
 - Novel generative chemistry approaches, Novel automated chemistry technologies

RESPIRATORY

- **Asthma & COPD**
 - Reduce the disease burden with disease modifying therapies
- **Sub-specialty Resp**
 - Breakthrough therapies for life-threatening in-hospital Respiratory conditions

- Novel targets with disease modification potential in broad range of high unmet need indications, including IPF, sarcoidosis, PAH, cystic fibrosis, bronchiectasis
- **Food allergy**
 - Therapies that could reduce risk of anaphylaxis from accidental exposure, enable patients to re-introduce certain foods to their diet, and ultimately to prevent and/or cure food allergy
- **Digital Innovation**
 - Digital solutions to address unmet needs in asthma and COPD

NEUROSCIENCE

- **Neurodegenerative Diseases**
 - Amyotrophic lateral sclerosis, Parkinson's Disease, Alzheimer's Disease, Huntington's Disease
 - Therapies for neuronal protection, restoration or remyelination, e.g. in multiple sclerosis
 - Microglia-focused approaches
- **Pediatric Neurological Diseases**
 - Monogenetic neurological and neuromuscular diseases
 - Gene therapies
- **Psychiatry**
 - Refractory psychiatric disorders
 - Treatment resistant depression
 - Schizophrenia -negative symptoms
 - AD/PD psychosis
- **Others**
 - Therapies across broader neuro-muscular diseases and muscular dystrophies
 - Migraine (novel mechanisms of action)

CARDIOVASCULAR, RENAL AND METABOLISM

- **Heart Failure**
 - HFpEF/HF prevention
 - Next generation targets and Novel technologies addressing cardiomyopathies and anti-Arrhythmia therapies
- **Metabolic Diseases**
 - Interest in novel agents, transformational assets and platforms including cell and gene therapies
 - Disease modifying agents in T1/T2DM
 - Targeting unmet need in Obesity (>20% WL)

- **Athero & Thrombosis**

- Expand portfolio beyond inclisiranand TQJ230 (Lp(a) with novel approaches to address CVRR

- **Renal**

- Maximize the value of LNP023 in Renal diseases
- Expand into specialty diseases in CKD: nephropathies, lupus nephritis, SA-AKI, ADPKD, Alport
- Interest in renal indications with limited SOC and high unmet need

HF: heart Failure, HFpEF: HF with preserved Ejection Fraction, CVRR: Cardio-Vascular Risk Reduction, Chronic Kidney

Disease (CKD), Autosomal Dominant Polycystic Kidney Disease (ADPKD), Sepsis-Associated Acute Kidney Injury SA-AKI

OPHTHALMOLOGY

- **Retina**

- Innovative treatments addressing high unmet needs in
 - o Diabetic retinopathy
 - o Early/ intermediate dryAMD
 - o Geographic atrophy
- Disease modifying (non a-VEGF) approaches
 - o wetAMD, DME

- **Orphan & Rare diseases**

- Explore cell & gene therapy programs in rare indications (Retinitis Pigmentosa, Stargardt's disease, etc.)
- Identify potential to address broader target population
- Explore break-through treatments for uveal melanoma (bridge between retina and orphan disease space)

- **Refractive disorders & dry eye**

- Focus on high unmet need and first-in-class, disease modifying medicines for
 - o Dry Eye
 - o Refractive Disorders Presbyopia, Myopia

- **Digital Innovation**

- Digital solutions to improve treatment outcome while providing better diagnosis, treatment, and access
- Earlier diagnosis
- Monitoring disease progression
- Reduce therapy burden and optimize treatment frequency

IMMUNOLOGY, HEPATOLOGY & DERMATOLOGY

- **Dermatology**
 - First in class oral or topical treatments for Psoriasis
 - First in class oral, biologic & topical treatments for Atopic Dermatitis
 - Oral or Biologic for Hidradenitis Suppurativa, oral treatments for Vitiligo, Alopecia Areata, Acne
- **Rheumatology & Transplant**
 - Immune regulators without immunosuppression
 - Tolerance induction
 - First in class treatments for Spondyloarthropathies, primary Sjögren's Syndrome and Rheumatoid Arthritis, SLE & IBD if truly differentiated (e.g. in pre-determined responder population; barrier function modulation for IBD)
 - Transformational Transplant opportunities
- **Hepatology**
 - First in class MoAs for NASH, Cirrhosis, Auto-immune Hepatitis, Acute Alcohol induced Hepatitis, monogenic liver diseases
 - Anti-fibrotic therapies, senescence and regeneration/repair mechanisms
 - External collaborations to support combination treatment in NASH
- **Osteoarthritis**
 - Disease modifying treatments for Osteoarthritis (targeted therapeutics based on MoAs with pleiotropic effects and combination assets for internal pipeline)
 - Regenerative approaches for Tendinopathy (LMW programs preferred)

ONCOLOGY

- **Solid Tumors**
 - Breast cancer
 - CRC
 - RCC
 - Lung cancer
 - Melanoma
 - Pancreatic cancers
 - Prostate
- **Hematology**
 - Acute myeloid leukemia
 - MPN-MF/PV

- Myelodysplastic syndrome
- Diffuse Large B cell lymphoma
- Multiple myeloma
- Acute lymphoblastic leukemia
- Sickle cell disease
- Hemophilia
- Immune thrombocytopenic purpura
- Hematopoietic stem cell transplant
- **New Growth Areas**
 - DNA Damage/synthetic lethal targeting molecules/platforms, novel targets in breast cancer and hematologic malignancies
 - Advanced molecules complementary and orthogonal to internal targeted therapeutics
 - Innate immune system targets
 - Myeloid targets
- **CAR-T**
 - Next generation CAR constructs; manufacturing approaches
 - New signaling domains
 - Novel CAR-T targets; targets of potential interest include: CD33, CD138 (for MM), CEA, GP3, EpCAM, mutEGFR, GD-2, MUC-1 (for various solid tumors)
 - Allogenic/off the shelf CAR-T and TCR technologies
 - Next generation adoptive cellular approaches
 - Other cell types (e.g., NK, gamma-delta T, macrophages)

PIONEER AND LEAD THE RADIO LIGAND THERAPY FIELD

- **Innovative targets/ vectors**
 - Identification / characterization of new targets
 - Novel Mechanisms of Action with receptor preferentially expressed on tumor cells or microenvironment, but not in normal tissue
- **New Therapeutic/ diagnostic isotopes**
 - Close partnership with academia and biotech
 - Radioactive atom releasing β (Lu) or α (Ac) particles that induce DNA damage to kill tumor cells
 - Pioneer and explore other isotopes' potential in RLT
- **Manufacturing / supply excellence**
 - To lead Supply & Distribution of RLT technologies
 - Digital and automated supply chain and manufacturing processes

- Partner of choice in scarce raw materials and rare isotopes
- **NewChelators/ Linkers& Ligands**
- Chelators/linkers: Small molecular adaptor enabling attachment of isotope to the ligand
- Ligands: Small molecule, peptide or Ab fragment binding with high affinity on target expressed on tumor cells

GENE THERAPIES

- **Rare CNS**
- Rare, monogenic neurodegenerative diseases
- Genetic epilepsies
- Neuromuscular diseases
- **Next Generation Technologies**
- Novel capsids
- Immune modulation technologies
- Re-dosing technologies
- Novel payloads (e.g. regulatory elements, gene-editing strategies, vectorized antibodies)
- **New Growth Areas**
- Gene therapy approaches for:
 - o Prevalent neurologic indications
 - o Genetically defined cardiomyopathies
 - o Liver diseases
 - o Diseases targeting muscle
- **Ultrarare**
- AAV gene therapies for ultrarare (10's to 100's of patients worldwide) conditions with no current treatment options

BIOPHARMA

- **Oncology**
- Expand our reach in Oncology biosimilars
- **Immunology**
- Biosimilars to complement our portfolio of immunology treatments
- **New Growth Areas**
- New growth area examples:
 - o Neuroscience biosimilars
 - o Rare disease biosimilars
- **Endocrinology**

- Biosimilars to complement our growing portfolio in endocrinology

COVID-19

Inbound BD&L opportunities will be prioritized based on the value we can add based on Company's core competencies

1. Late preclinical and clinical-stage direct-acting antiviral assets, including antibodies, with near-term clinical readout, in scope and will be reviewed
2. ARDS, inflammatory response is in scope
3. Manufacturing of biologics or small molecules for companies will be considered on a case-by-case basis
4. Diagnostics are not in scope
5. Vaccines are not currently in scope (exception: Mass Eye and Ear AAV-based vaccine / AveXis)
6. Consumer products (e.g., hand sanitizers, OTC fever reducers) are not in scope
7. Equipment (e.g. ventilators) is not in scope