



TAKEDA HAS A DIFFERENTIATED R&D ENGINE



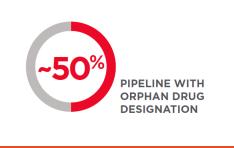
A Diverse and Dynamic Pipeline¹











Expanding Critical Capabilities



CELL THERAPY



GENE THERAPY



DATA SCIENCES

¹ Pipeline as of July 31, 2019



TAKEDA ACADEMIC INNOVATION



Combining the best of academic and industry research to identify bold projects with potential for breakthrough therapies and to accelerate development



9 Alliances 19 Institutes Pan-TA Cross-Modality



TAKEDA AREAS OF INTEREST











Novel approaches

- Modality agnostic
- Including
 - Gene therapy & technologies
 - Cell therapy
 - Antibodies
 - Oligonucleotides
 - Small molecules
- Gene editing
- Delivery technologies
- Translational medicine

Plus: Anything really exciting & novel ('high risk')

ONCOLOGY	GASTROENTEROLOGY	NEUROSCIENCE	RARE DISEASES
Immuno-Oncology (IFN & novel checkpoints Cell engagers and cell therapies)	Motility disorders	Proteinopathy	Rare hematology
Heme Oncology (multiple myeloma, amyloidosis, myelodysplastic syndrome, acute myeloid leukemia, chronic myeloid leukemia)	Inflammation (IBD)	Nervous system protection/repair (incl. remyelination)	Inborn metabolic disorders
Lung - Non-small cell tumors	Liver disorders	BBB shuttle/delivery to the brain	Neuromuscular
Cold to Hot	Microbiome	Synergistic Pharmacology	Genetic linked diseases
Delivery approaches	Genetic linked diseases	Genetic linked diseases (incl. developmental disorders)	
Novel approaches		Emerging diseases of interest (eg neuro-muscular)	



ONE – PROJECT TEAM COLLABORATIVE RELATIONSHIP BUILDING



- Takeda's aim is to build relationships which enable the combination of academic and industrial skills and knowledge to accelerate the development of life changing therapeutics to patients
- Flexible use of in-kind in-house, CRO and funding-based resources to accelerate the project plan
- Regular (~bi-weekly) in-person and webex meetings
- Direct support of academic research to deliver pre-clinical and clinical Proof of Concept studies
- Flexible agreements ranging from SRAs to broad alliance and consortium agreements recognizing each partner's skills and needs
- Support for a range of exits including licenses, incubation & start-up creation