



TAK-CELERATOR

Introducing a new External R&D
Initiative to Accelerate Development
of Therapies in Rare Diseases

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Takeda Pharmaceutical Company Limited

Patients
Partnerships
Performance

Centre for External Innovation: Assembling a World Leading R&D Business Development Organisation



R&D Business Development

- BD function for GI, Oncology and CNS disease areas
- Find, evaluate and transact for the R&D organisation
- Manage strategic partnerships
- Lead out-licensing opportunities

Takeda Ventures

- Evaluate, Invest-in and manage NewCo's. Aligned with internal strategy

Centre for External Innovation

External Outreach and Project Mgmt

- Lead due diligence activities
- Development and implement communication strategy
- Knowledge management

Tak-celerator

- Accelerator to drive internal/external pipeline
- Operating outside Takeda's core therapeutic areas
- Deliver preclinical POC
- Form new business models/collaborations



An Accelerator Model to Meet Patient Needs



An Externally-Focused, Highly-Collaborative and Capital Efficient Model



- Focus on early engagement with industry and academic partners, fostering relationships to support ground-breaking science
- The TAK-celerator adopts an accelerator-type model to **unlock new value** in assets, and most importantly - **deliver novel patient solutions by:**
 - Operating within a resource-efficient and milestone-driven capital model
 - Accelerating delivery of critical go/no go data via creative development strategies. Preclinical POC
 - Broadening external reach to maximize innovation and scientific collaboration
 - **Forming new companies and partnerships to create new therapeutic opportunities for patients**

TAK-celerator Focus



- 1** Establish the capability to execute **rare disease projects** with external partners
 - As well as, maximizing opportunities in disease areas of high unmet medical need
 - Major rare disease Co collaboration - Ultragenyx
- 2** Bridge the **gap between academia and industry**, providing a mechanism to accelerate early stage programs to preclinical development.
For example: Tri-TDI
- 3** **Reposition assets** from Takeda pipeline
 - In addition to *de novo* opportunities
 - TAK-448 → Strategic out-license with Roivant Sciences



TAK-celerator is Building a Diverse Source of Pipeline Assets

Academic Institutes

Strategic partnerships with leading academic institutes, providing access pioneering medical innovations

Tri-I TDI

An unprecedented collaboration with three academic institutions to expedite early-stage drug discovery into innovative treatments and therapies for patients

Patient Advocacy and NFP groups

Collaborations to support early stage development opportunities with significant patient focus



Venture Capital

Unique collaborations with Venture Capital firms designed to identify, fund and develop pioneering early stage assets

DDUs and TAUs

A source of assets which fall out of scope with Takeda's TA strategy

*DDU: Drug Discovery Unit
TAU: Therapeutic Area Unit
NFP: Not for profit*

Our Rare Disease Experience

- Primary focus on **monogenic rare diseases**, as well as exploring opportunistic programs in disease areas of high unmet need with no available treatment
 - Ideally no disease modifying therapies available
 - Level of confidence around preclinical models and/or access to patient derived samples
 - Natural History data available and clinical endpoints
- The TAK-celerator is **building an external network and establishing key collaborations** with world leading experts

Haematological conditions

- Sickle cell disease
- B-Thalassemia
- Castleman's Disease

Neurological

- Neiman Pick A-C
- Charcot Marie Tooth Disease
- Spinal Muscular Atrophy
- Retts Syndrome
- CDKL5
- Angellman Syndrome

Metabolic /Inflammatory

- Kawasaki Disease
- Prader-Willi Syndrome
- Hyperinsulinism
- Wolfram Syndrome

Gastrointestinal

- Peutz Jeghers syndrome
- Pediatric IBD
- Autoimmune hepatitis
- Alpha-1 antitrypsin deficiency
- Wilson's disease

A Successful Track Record



JOINT COLLABORATION

- A world leading specialist rare disease company
- Create and develop a novel pipeline of programs in rare or ultra rare diseases
- A 5 year joint collaboration, with a predefine preclinical program, and the option to develop up to 5 additional products in rare diseases



SINGLE ASSET NEWCO

- A world leading venture capital company, providing growth capital to the healthcare sector
- Creation of NewCo: **Outpost Medicine**
- Promising asset which is outside Takeda's areas of focus, Urology and Gynaecology



MULTIPLE ASSET NEWCO

- A unique Biopharmaceutical company with world class drug development experts
- Creation of NewCo: **Myovant Sciences**
- Myovant Sciences set up around 2 asset within the Women's Health franchise

The Complete Partner: How we stand out from the crowd



● Access the Benefits of a Global Pharma Company

- Funding: Internal and External funding opportunities
- Expertise and Quality: Access to internal experts, infrastructure and technologies
- Global footprint: Leading R&D organisation in Asia

● Our Style of Working

- Agile, Flexible Partnerships
- Focus on building mutually benefitting collaborations, ensuring future success for both partners

● Strive for Long Term Success

- Vested interest in appropriate exit strategies
 - Investment in NewCo formation
 - Partner in joint collaborations
 - Potential to internalise programs into Takeda



Thank you



Takeda Pharmaceutical Company Limited