Case Study #2

Fondazione Telethon

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15 November 2024

Non-profit: Maintaining products for patients

nature

nature > news > article

NEWS | 06 October 2023 | Correction 06 October 2023 | Correction 09 October 2023

Gene therapies for rare diseases are under threat. Scientists hope to save them

As industry steps aside, scientists seek innovative ways to make sure expensive treatments can reach people who need them.

Strimvelis is a potent treatment for a devastating genetic disorder of the immune system and one of the first gene therapies to be approved in Europe. But in 2022, the company that sold it announced that it could no longer afford to do so: Strimvelis was highly effective at treating disease, but not at turning a profit.

Now it is getting a second chance. The Italian charity Telethon Foundation in Milan has announced that it will produce Strimvelis itself. "We are making a paradigm shift," said Francesca Pasinelli, general manager of the Telethon Foundation, in a 12 September statement announcing the decision. "We are the first non-profit organization to take on the commercialization of a gene therapy."

Non-profit: Maintaining products for patients

1995
SR-TIGET is founded

2000
1st ADA-SCID patient treated

2002-2009
Phase I/II
PIVOTAL trial

2000 — 2005 — 2010 — 2015 — 2016

2010
Alliance with GSK

May 2016
First ex-vivo gene therapy treatment approved in the world
Strimvelis®

Feb 2018
NICE appraisal

2018
GSK transferred to OTL
Orchard therapeutics

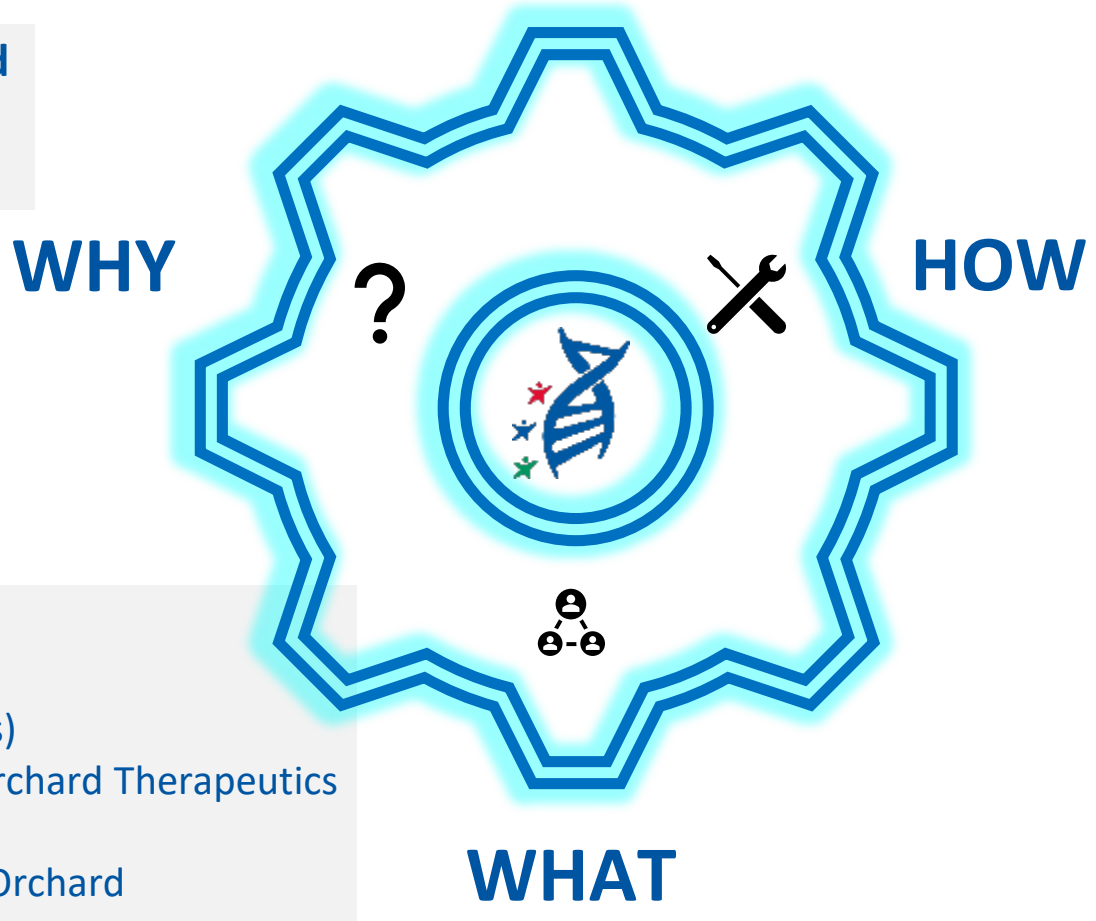
2023
ADA-SCID MA Transferred to Fondazione Telethon

From funding entity to **Marketing Authorisation Holder**

Change in paradigm requiring unparalled support from regulatory authorities

Non-profit: Maintaining products for patients

To foster knowledge aimed at developing treatments for genetic rare disease



Cutting-edge technology

- Focusing on transformative (superiority) treatments irrespective of interest from Industry or Investors.
- A best-in-class pipeline (no me-too therapies, no non-inferiority).
- A top-notch team of scientists.
- Combining a philanthropic model with partnering with Industry and VCs.

3 therapies available to patients:

- ADA-SCID
- WAS under Law 648 (early access)
- Libmeldy® for MLD licensed to Orchard Therapeutics

1 therapy in Ph3

- Ex-vivo GT for MPS1 licensed to Orchard Therapeutics

2 assets in Ph2 and several CTAs planned in the next 2 years

- Currently pursued by Fondazione Telethon

Case Study #1:
Changing the MAH paradigm

A Case Study: Becoming ADA-SCID gene therapy MAH

- Transferring the MA from a commercial entity to a non-profit
- Increasing the responsibility of Fondazione Telethon; building a new organization; introducing new competencies

Milestones:

- Engagement on the product transfer (completed);
- Treating the first patients (completed)

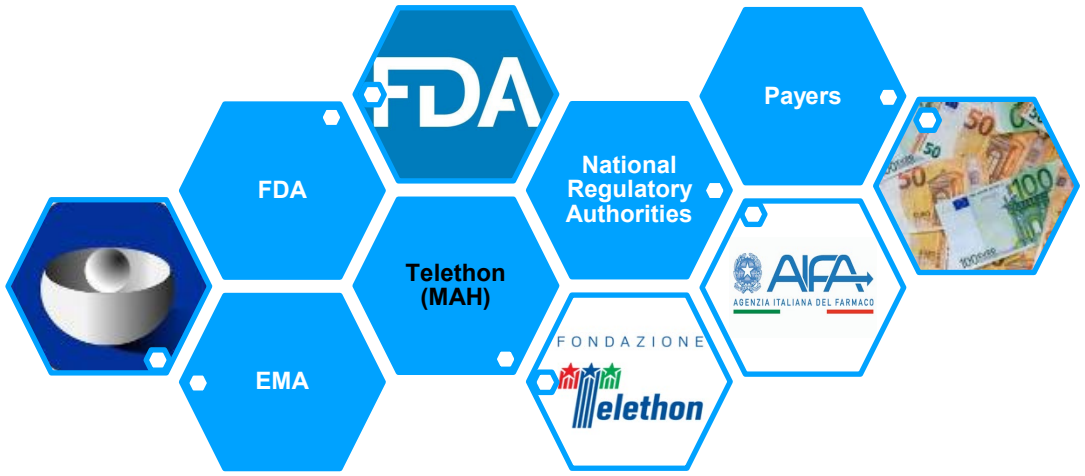
Positives:

- Point of contact model at EMA makes communications consistent and evolutionary
- Willing to discuss upcoming activities and guide on submission strategies

Possible Improvements/Upcoming Challenges:

- Treating patients ex-EU is problematic: mutual recognition (under a framework dedicated to genetic rare disease) would be helpful
- Sustainability remains challenging because of high manufacturing costs, requests for pro-bono patients

Case Study #2:
Filing for Wiskott-Aldrich



Fondazione Telethon intend to submit a **centralised MAA in EU and a BLA** in the US in the coming months.

- Granted orphan designation in both the EU and US;
- Holds a Rare Paediatric Disease Designation in the US;
- Accepted onto the EMA ATMP Pilot Scheme for Academics
- Early Access Scheme (Law 648/96) active in Italy

Current Status:

- Multiple interactions with the EMA, assigned Rapporteur, Co-Rapporteur and FDA to pick up on the prior discussions held by Orchard and GSK
- Clear understanding of the pathway towards the MAA/BLA submissions established

Remaining Challenges:

Achieving alignment across regions on final points to optimize resource use within the Sponsor

Case Study #3:
Driving regulatory excellence and innovation

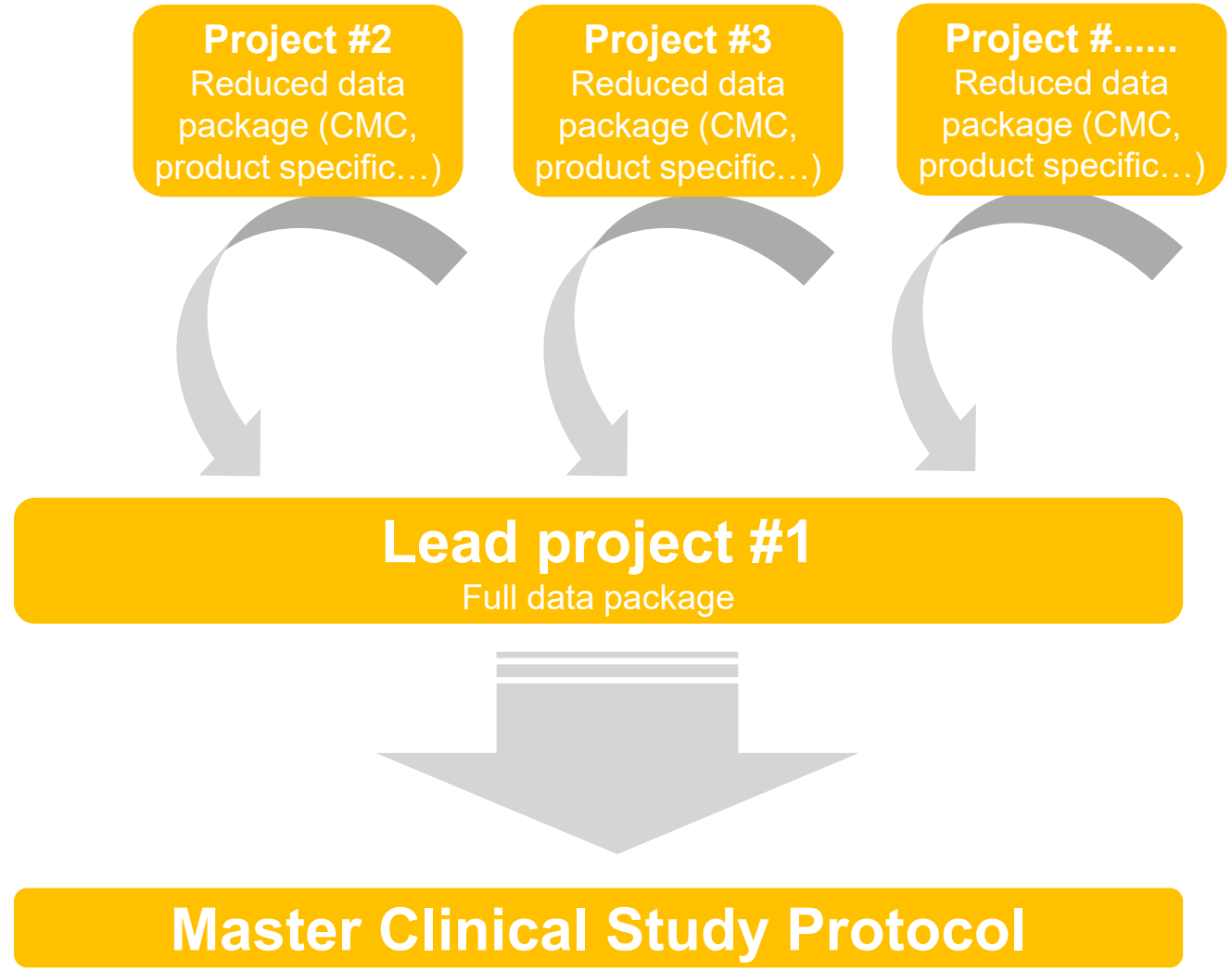
A Case Study: Platform approach for the development of novel ex-vivo gene therapies for the treatment of lysosomal storage diseases

One core technology

- Multiple diseases with common characteristics; not identical target
- Accelerate entry to clinic for rare/ultra-rare diseases

Regulatory Engagement

- Engagement with AIFA on core approach to cross leverage data
- Representatives engaged and willing to discuss
- Both potential clinical trial and registrational aspects discussed



Conclusions

For a Charity, being a MAH is **challenging**.

- High costs:
  - Need to streamline develoment and manufacturing
- Pricing&Access:
  - Sustainable pricing, mutual recognition, granting access worldwide.
- Risk:
  - Cannibilizing funds for research.
- Framework:
  - Patients to drug rather than drug to patients (sustainability)
- Regulatory:
  - Frequent interactions (like partners) is very helpful.

It also comes with **opportunities**.

- No shareholders, only stakeholders.
- Research is funded by donations and by public funds.
- Consortia.
- Incentives, like the PRV, can help sustainability

Non-profit can fill the gap left by Industry in the ultra-rare space.
Responsibility to demonstrate that this is sustainable.