EVOTEC EXPANDS INTO GENE THERAPY
EVOTEC — GENE THERAPY

State-of-the-art gene therapy site in Orth an der Donau, Austria with an acknowledged and experienced team dedicated to gene therapy drug discovery and development

- World-class expertise and know-how in the field including vectorology, virology, analytics & assays, etc.
- Extensive disease insights and expertise in gene therapy applications for hemophilia, hematology, metabolic and muscle diseases
- Strong leadership team with acknowledged expertise in gene therapy

Rationale behind the step into gene therapy

- Evotec is now able to find the best suited drug candidate agnostic of modality for any given biology
- Development of own and co-owned assets in a completely unbiased manner
- Gene therapies offer hope for a wide array of so far untreatable or difficult-to-treat diseases
- Gene therapy market is expected to grow exponentially in the next decade

Agreement with Takeda

- Multi-year research and development collaboration covering selected Takeda gene therapy projects
- Financials: Undisclosed upfront payment + various payments over time

“GENE THERAPY IS A PROMISING APPROACH IN THE DEVELOPMENT OF POTENTIALLY CURATIVE OR STRONGLY DISEASE-MODIFYING MEDICINES FOR PATIENTS, ESPECIALLY FOR INHERITED AND RARE DISEASES”

Friedrich Scheiflinger, EVP Head of Gene Therapy
Gene therapy is a technique that delivers genetic materials into the cells or body of a patient as a therapy. Gene therapies can work through several mechanisms:

- Replacing a disease-causing gene with a healthy copy of the gene
- Inactivating a disease-causing gene that is not functioning properly
- Introducing a new or modified gene into the body to help treat a disease

There is a variety of types of gene therapy products, including:

- Plasmid DNA
- Viral vectors
- Bacterial vectors
- Human gene-editing technology
- Patient-derived cellular gene therapy products

The history of gene therapy

1972 — A seminal paper titled ‘Gene therapy for human genetic disease?’ was published in Science

1990 — Launch of the first approved gene therapy trial

2003 — China became the first nation to approve a gene therapy (oncology indication)

2012 — First approval granted in Europe

2017 — FDA made the first gene therapy available in the United States

Sources:
https://www.labiotech.eu/features/gene-therapy-history/
FACTS & FIGURES

Market

According to various analyst reports, the gene therapy market was valued at approx. $500 m in 2018, a relatively low number due to still only very few drugs on the market.

The market is expected to reach > $5 bn by 2025 with an impressive CAGR of ~34% over the forecast.

In early 2018, there were more than 950 molecules in the pipeline with various regulatory bodies in various clinical phases. However, around 76% of the molecules are in the developmental or pre-clinical stages and are expected to be available by the late 2020s.

→ This will lead to another further boost for the gene therapy market.

By the end of January 2020, the FDA has approved four gene therapy products and the agency anticipates many more approvals in the coming years, as evidenced by the more than 900 investigational new drug (IND) applications for ongoing clinical studies in this area.

By 2025, it is predicted that the FDA will be approving 10 to 20 cell and gene therapy products a year.

Clinical trials underway worldwide by end of

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Total global financings for gene & gene-modified cell therapy:

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<td>$4.5 bn</td>
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Sources

https://www.pharmaceutical-technology.com/comment/fda-gene-therapy/