Selection of Breakthrough Technology & Suitable Partner

Technology advisory to a US big pharma for portfolio expansion using the best-in-class Gene editing technologies

Quick overview

Our client wanted to tap opportunities available in the market to generate modified cell lines through targeted editing of transcription activators (gene-of-interest) and collaborate with potential partners. FutureBridge supported this strategic aspiration by identifying commercially available technologies for editing transcription activators and alternatives to transcription activators for product development. In addition, the advisory also included the patent portfolio-landscape of the identified technology developers & their IP strength for future strategic collaborations.

Client success

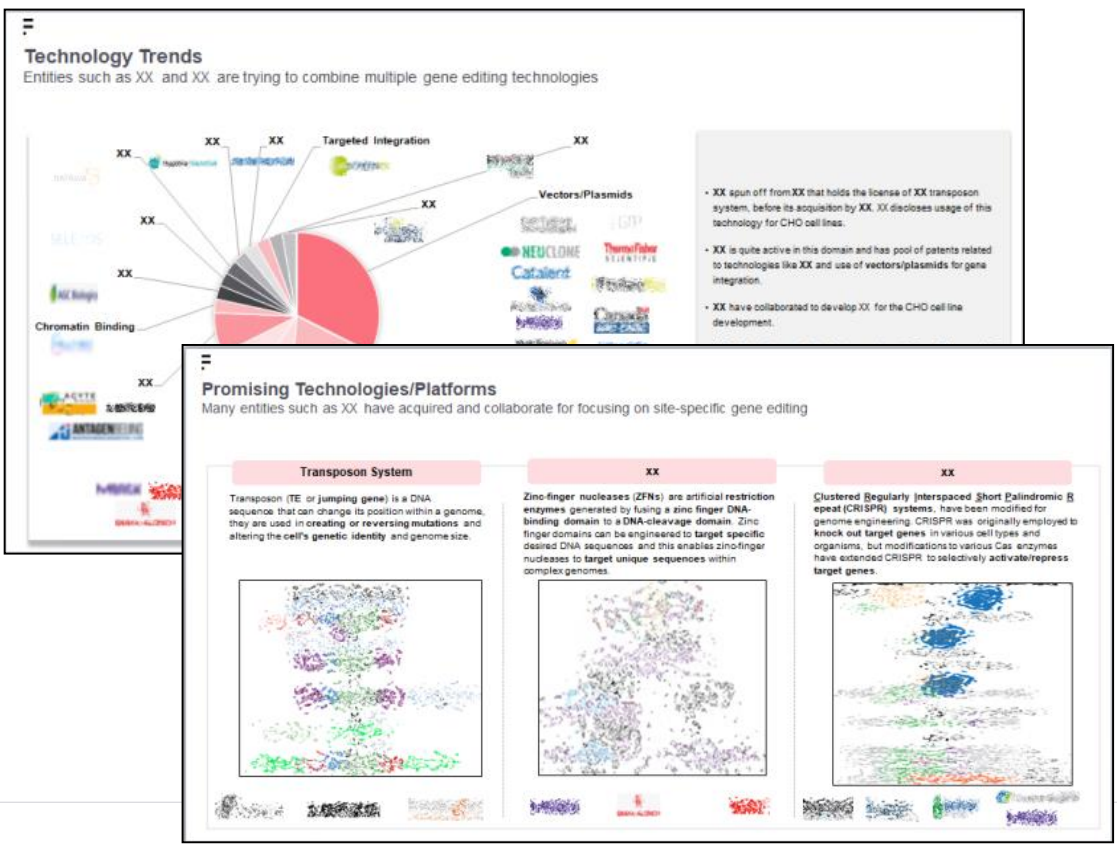
With FutureBridge's Gene therapy domain expertise, ability to screen and analyze relevant technologies, designing frameworks for comparative attributes, and benchmark Best-in-class technologies, the client was able to receive the following insights -

There are significant challenges associated with Gene delivery techniques beyond just selection of gene editing tools. CRISPR/Cas-9 is effective in modifying specific sections of genes, however, for swapping one sequence with another, CRISPR/Cas-9 technology is error prone.

- What is the technology landscape for gene editing technologies and alternatives to nucleases systems?
- What are the various gene delivery systems and their strengths and limitations?
- What are the various strategies to avoid offshoot mutations?
- What is the current IP portfolio and collaborations around the relevant technologies?
- Which entities hold the best-fit technologies for generating homogeneous cell lines through gene editing technologies?
- What strategic activities competitors are pursuing in this field?

FutureBridge conducted comprehensive research & benchmarked across gene-editing technologies such as:

- Exploring beyond CRISPR/Cas9 to include ZFN, MN, TALEN, NgAgo
- Technologies in the ideation or research phase
- Suitable mammalian cell lines such as BHK, HEK, and others
- Non-mammalian cell lines such as E. coli, Pichia pastoris, and others
- Other techniques for increasing titer such as gene silencing, gene knockout, N-1 perfusion, media optimization, protein purification, etc.



The insights and benchmarking provided by FutureBridge supported our client to prioritize different technologies available in the gene-editing platforms and the entities that have relevant IP portfolios to these technologies.

The Client used the output as the due-diligence report for making the informed decision about potential start-ups and SMEs who owns best in class technologies and are open for licensing and partnerships.

About FutureBridge

FutureBridge tracks from 1 to 25 years, how industries and sectors will evolve, develop, and innovate.

We keep you ahead on the technology curve, propel your growth, identify new opportunities, markets and business models, answer your unknowns, and facilitate best-fit solutions and partnerships using our platforms, programs, and access to global ecosystems and players.

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