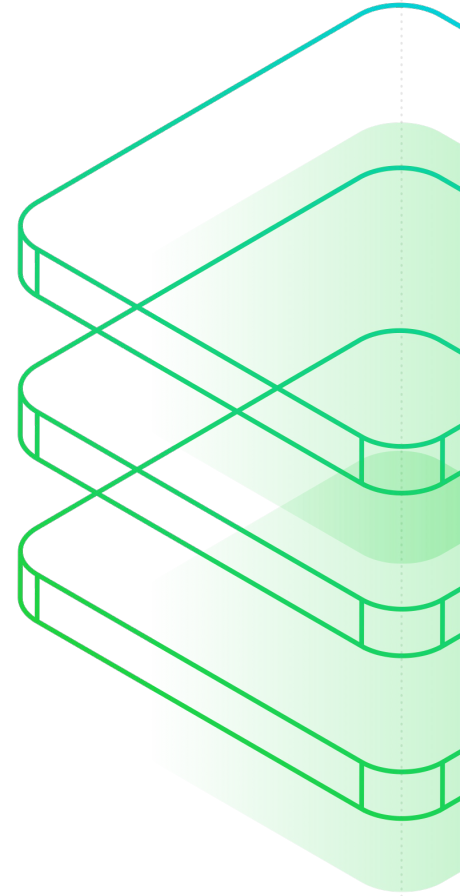


# Training the Regenerative Medicine Workforce for the Future: A Workshop

Robert Deans  
Synthego  
11.15.22



# Building the Future of Cell and Gene Therapies

## A High-Throughput Architecture for Scalable GMP Cell Manufacturing



Currently, an estimated **500% manufacturing shortfall** for cell therapy products - not enough therapies are being produced



Average **6 month survival time** for cell therapy eligible relapsed refractory DLBCL patients



High COGS contribute to high CGT list prices (**\$375K to \$475K per treatment**) - severely limiting patient access to treatments



Global CGT addressable patient population expected to grow from **450K to 2M patients** in the next 5 to 10 years

"It's really clear that the science (of cell and gene therapies) has moved ahead magnificently over the past years, **but the technology has not kept pace.** That is, how we go about making these things needs to be brought along."

- Peter Marks, Director FDA CBER

SAFER AND HIGH QUALITY CRISPR THERAPY

## Cross-Platform Integrations of Innovative Novel CRISPR Tools



Platform Integrations

Disease Models  
Discovery Tools  
Editing Technologies

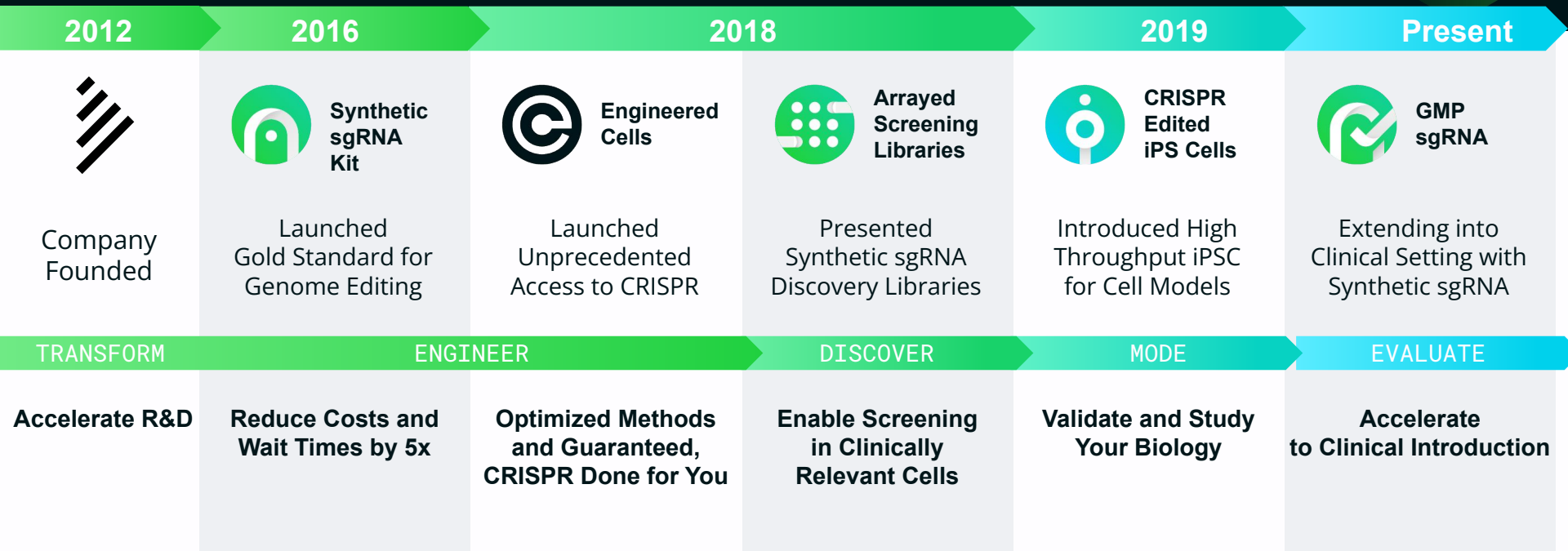
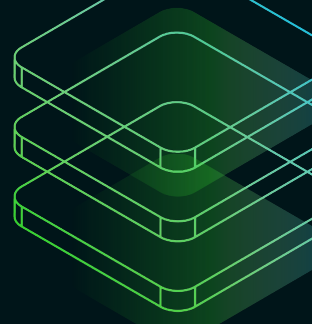


CRISPR  
Cell Therapy  
Products



Patients

# Synthego's Full Stack Genome Engineering Innovation Timeline



# Halo Platform

## Technology & Capabilities for Industrialized CRISPR Tools

Halo™ is an innovative platform that delivers high-quality gene editing tools to seamlessly support your research needs from research-use to clinical-grade reagents. From basic research to the clinic, leverage the power of genome engineering.

### PLATFORM CAPABILITIES

#### Closed-Loop Feedback

Iterative optimization of CRISPR components ensures intelligent guide design for the best possible editing outcomes.

#### Process Control

Automated, precise manufacturing to ensure high quality, reproducible, and scalable reagents.

#### Flexible Scale

CRISPR reagents tailored to the variety and volume your experiment needs.

#### Synthetic RNA

Reproducible and consistent editing, producing the best outcomes in any CRISPR methodology.

#### Therapeutic Reagents

GMP-grade factory enabling reagents of unparalleled quality.

# Eclipse Platform

## Technology & Capabilities

Eclipse™ is a groundbreaking CRISPR-editing platform that delivers the new gold standard in cell-based models. Leave no variant, gene, or mutation unstudied, ever again.

AI/ML based  
optimization

Data Data Data

### PLATFORM CAPABILITIES

#### Optimized Transfection

Variables including guide design and culture conditions are tested in high-throughput to maximize editing success in any human cell line.

#### End-to-End Tracking

State-of-the-art software manages and tracks massive data sets for editing workflows at any scale—an untenable task for humans.

#### Halo Integration

Eclipse leverages the Halo platform to utilize the highest quality CRISPR tools to create the new gold standard in engineered cells.

#### Predictable CRISPR Design

Comprehensive data collection, machine learning, and bioinformatics fuel a dynamic algorithm to improve every subsequent CRISPR edit.

#### Clones with Integrity

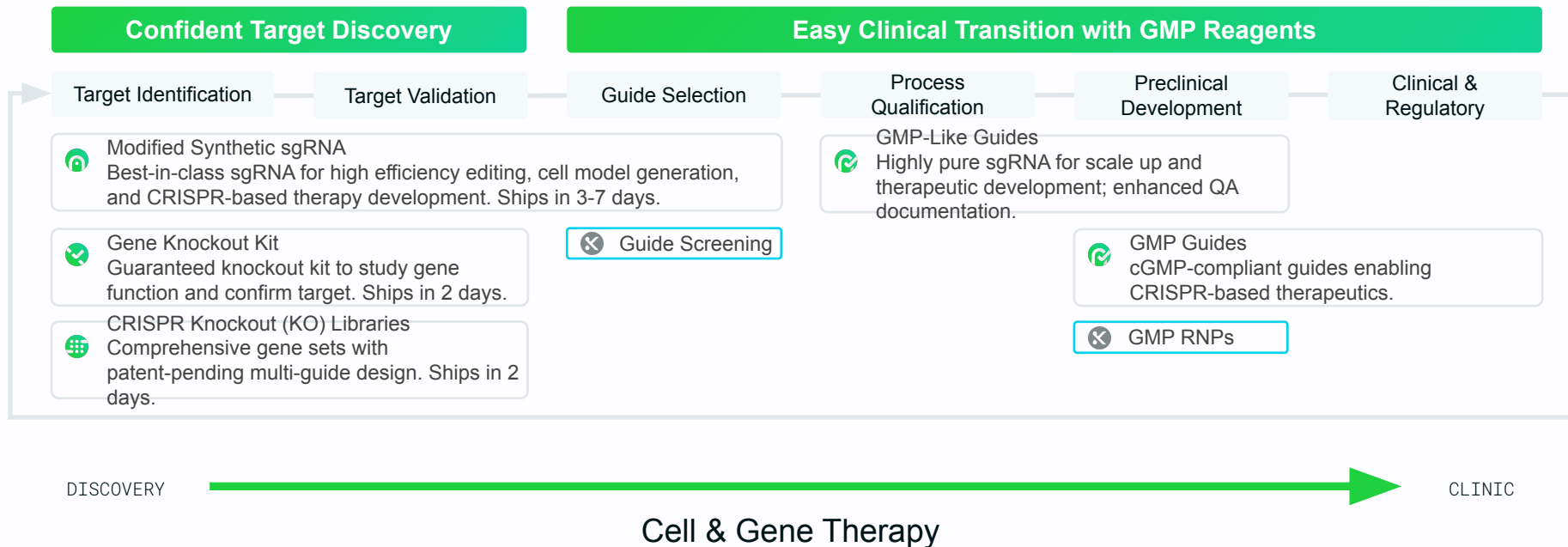
Automated single-cell isolation is optimized to maintain cell health and integrity. Optimal editing efficiency is unlocked for speed and accuracy.

#### Modular Design

Designed with modularity at the forefront, ensuring seamless capacity and capability upgrades as we scale biological discovery with you.

# Industrialized CRISPR Tools

The Gold Standard in R&D and Cell & Gene Therapy Development Tools





# Engineers meet Biologists



How the  
customer  
explained it.



How the Project  
Manager  
Understood it.



How the  
Engineer  
Designed it.



How the  
Technician  
Built it.



How the  
Customer really  
wanted it.

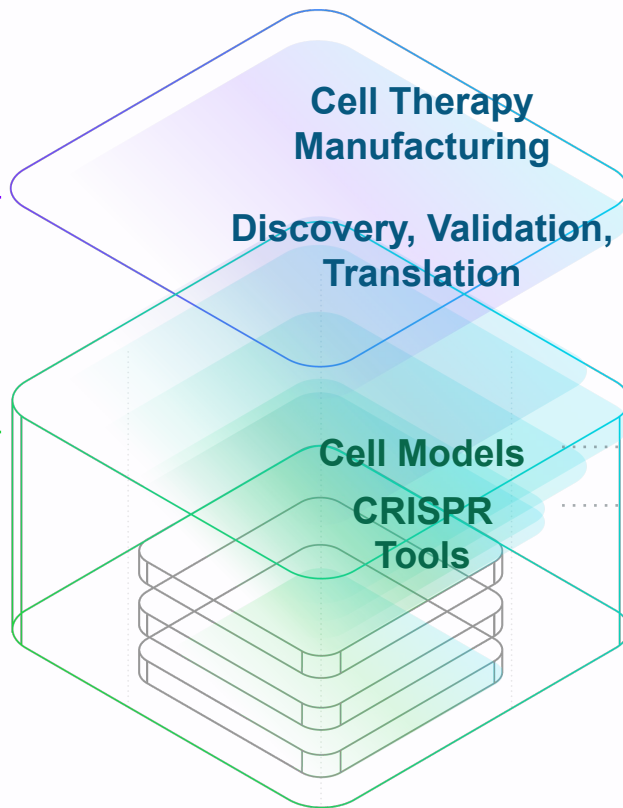
# Synthego Platforms Intersect CRISPR and Cell & Gene Therapy

SOLUTIONS

Future Partner Upside

PRODUCTS & SERVICES

Current High-Growth in Translation



INDUSTRIALIZED CRISPR PLATFORMS

SYNTHEGO

Eclipse Platform

Halo Platform