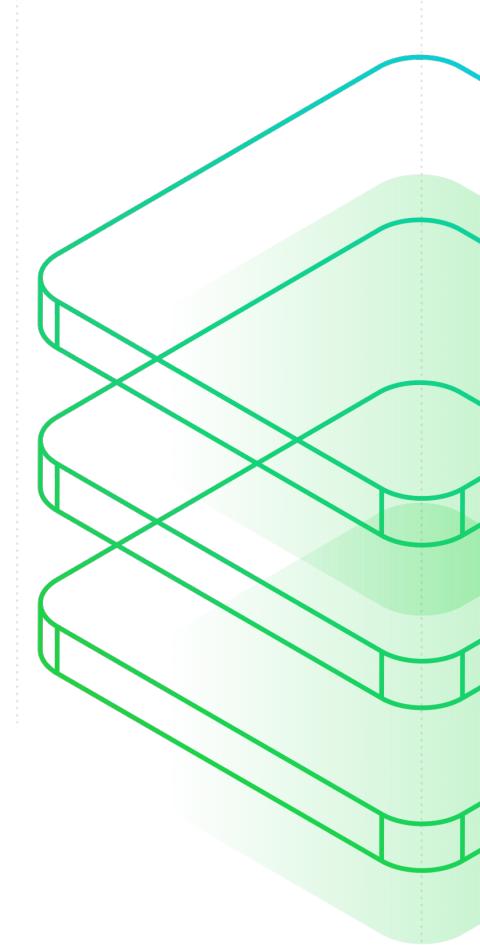


# Training the Regenerative Medicine Workforce for the Future: A Workshop

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



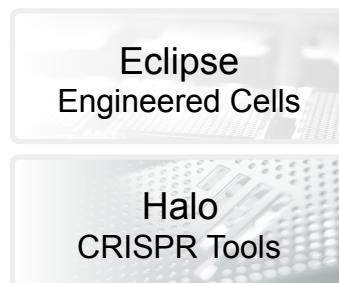
Global CGT addressable patient population expected to grow from **450K to 2M patients** in the next 5 to 10 years

"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

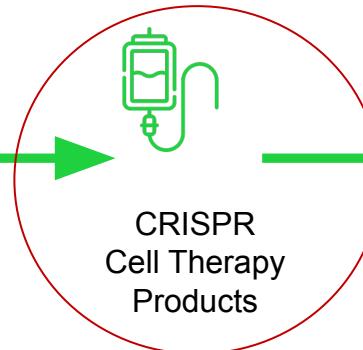


Platform Integrations

Disease Models

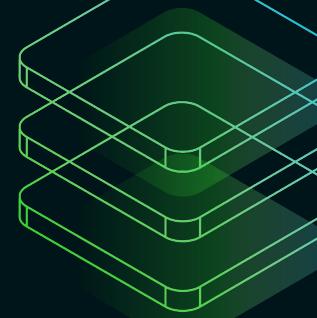
Discovery Tools

Editing Technologies



Patients

# Syntheego's Full Stack Genome Engineering Innovation Timeline



2012	2016	2018	2019	Present
	 Synthetic sgRNA Kit	 Engineered Cells	 Arrayed Screening Libraries	 CRISPR Edited iPS Cells
Company Founded	Launched Gold Standard for Genome Editing	Launched Unprecedented Access to CRISPR	Presented Synthetic sgRNA Discovery Libraries	Introduced High Throughput iPSC for Cell Models
TRANSFORM	ENGINEER	DISCOVER	MODE	EVALUATE
Accelerate R&D	Reduce Costs and Wait Times by 5x	Optimized Methods and Guaranteed, CRISPR Done for You	Enable Screening in Clinically Relevant Cells	Validate and Study Your Biology
				Accelerate to Clinical Introduction

# 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.

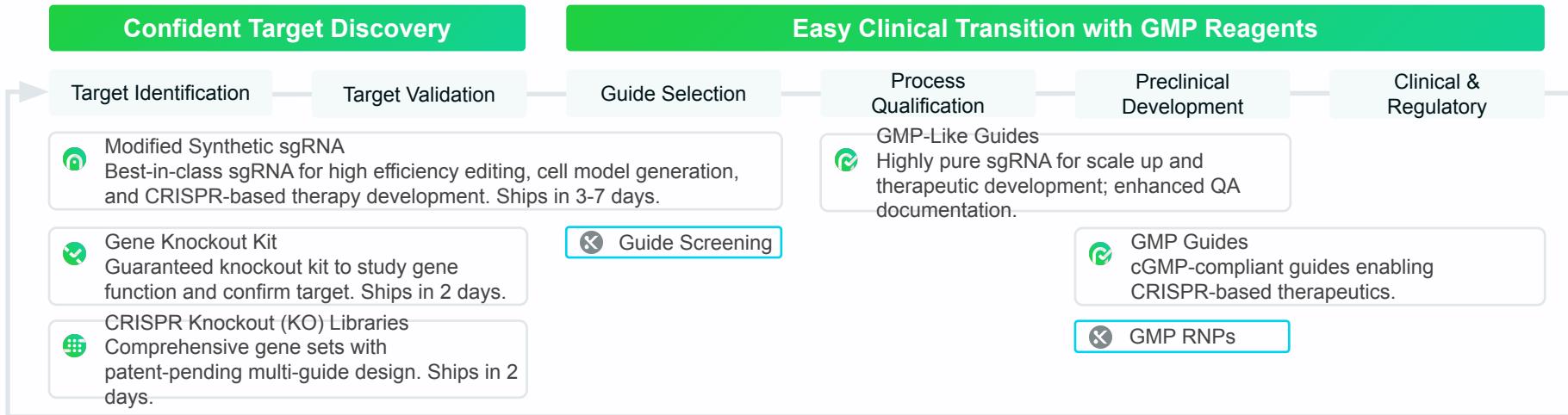
**Predictable CRISPR Design**  
Comprehensive data collection, machine learning, and bioinformatics fuel a dynamic algorithm to improve every subsequent CRISPR edit.

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

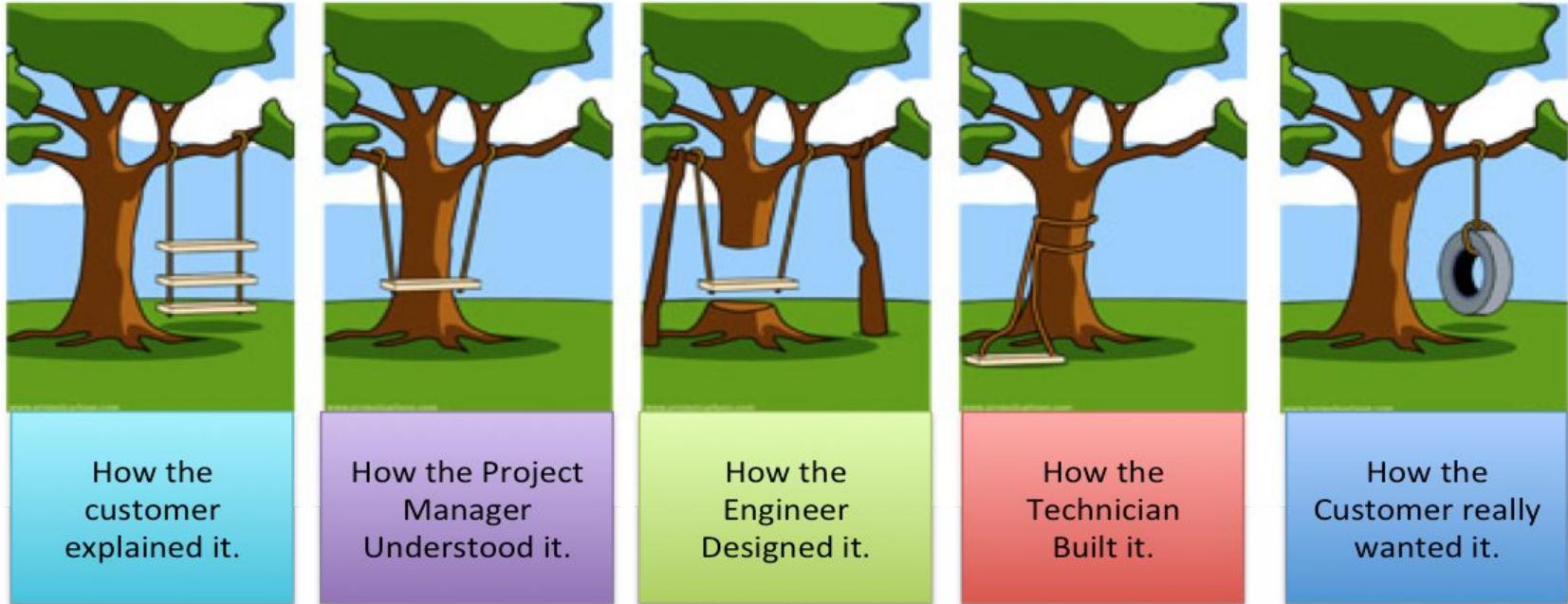
**Modular Design**  
Designed with modularity at the forefront, ensuring seamless capacity and capability upgrades as we scale biological discovery with you.

# Industrialized CRISPR Tools

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



# Engineers meet Biologists



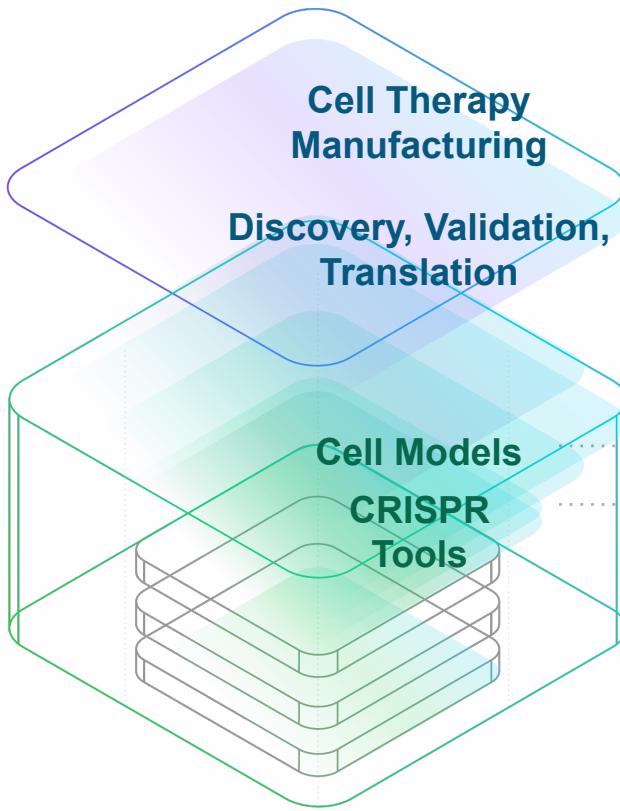
# Synthego Platforms Intersect CRISPR and Cell & Gene Therapy

SOLUTIONS

Future Partner Upside

PRODUCTS & SERVICES

Current High-Growth in Translation



INDUSTRIALIZED CRISPR PLATFORMS

SYNTHEGO

Eclipse Platform  
Halo Platform