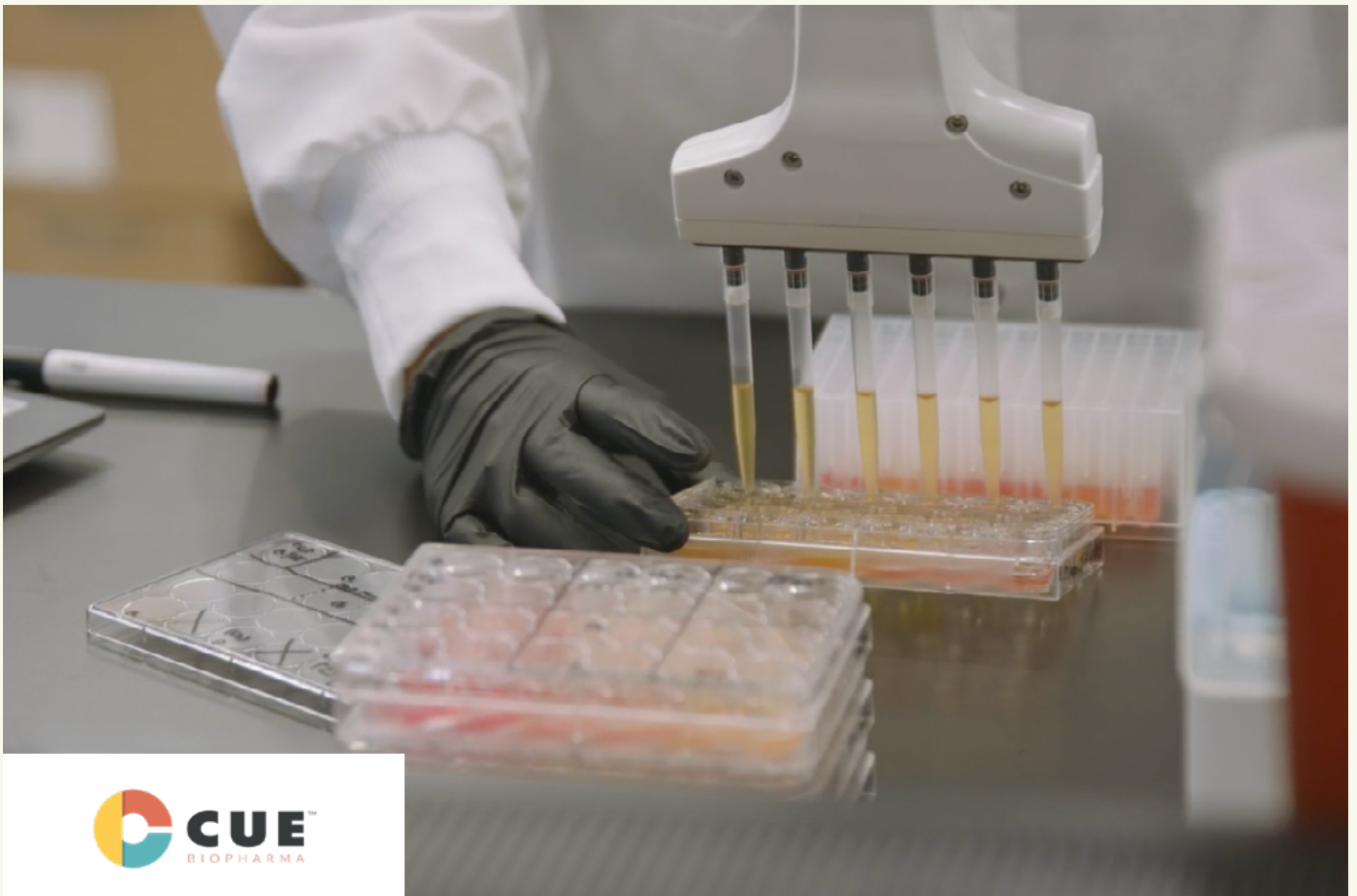




Case Study

Improving data  
management  
for modern  
Biologics process  
development

# Cue Biopharma





# Building a structured and traceable data foundation across process development to help accelerate their novel immunotherapies into the clinic

Cue Biopharma, a clinical-stage company is developing a novel class of injectable biologics to transform the treatment of cancer and autoimmune disease. Using a unique approach to activate a natural immune response, Cue Biopharma addresses the specificity and diversity of the human immune system by selectively engaging and modulating targeted, disease-relevant T cells directly within the patient's body. In an effort to advance its drug product development and to provide patients with immunotherapies with the potential of greater efficacy and tolerability in a timely manner, Cue Biopharma has scaled up, growing and expanding its capabilities for process development work in-house.

## Company Profile

Industry

Biopharma

Location

Cambridge, MA

### ↑ Accelerated process development

Advancing more drug candidates through process development faster, decreasing time to milestone and time to market.

### ↑ Improved collaboration

Collaboration and handoffs between teams – particularly between research and development – are effortless, improving scientist efficiency.

### ↑ Increased innovation

Adaptable data structures allow Cue Biopharma to embrace more cutting-edge ideas and processes, answering new questions faster and improving the probability of technical success.

“From a process development standpoint, all the data we are capturing can still be in the same environment as our discovery data allowing for a seamless knowledge transfer. We have the benefit of various functional teams working within an environment they are already familiar with. It facilitates knowledge transfer and helps with the ability to expeditiously move the process forward.”



Samantha Povlich  
Director of Analytical Operations  
and CMC Digital Strategy Biopharma



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## Challenges

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### **Tracking data across the entire product lifecycle**

For Cue Biopharma, it was challenging to figure out how to track all their data and full experimental context — in addition to insights to inform the engineering process.

### **Barriers to cross-team communication**

Rapid scaling, combined with the inherent difficulty of bridging research and development, led to communication and handoff challenges.

### **Accommodating evolution with rigid data systems**

Traditional data management systems, such as LIMS, have data structures that are fairly static, preventing novel ideas and ingenuity from being incorporated into data models.

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## Outcomes

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### **Advancing drug candidates through process development faster**

Cue Biopharma has created a strong foundation for data capture within Benchling. With the name, location, history, and results of all samples now stored in an interconnected suite of applications, scientists experience faster, more complete handoffs across teams with a unified solution. By bringing together capabilities for process design, execution, and analysis, Benchling enables Cue Biopharma to shorten process development cycles while harnessing data at scale.

### **Simplifying collaboration and handoffs**

Benchling helps teams across Cue Biopharma partner more effectively to coordinate samples and data transfers. With over 4000 engineered constructs to consider, it has been critical for an efficient operation to have an interconnected system automatically managing each completed step, batching together handoffs to the next team, and recording sample history. This more streamlined request system reduces time spent asking for status updates while surfacing result trends over time.

### **Ready for innovation with adaptable data structures**

Benchling provides Cue Biopharma the ability to modify on the fly without needing to rewrite the entire data model. By easily absorbing data from different modalities into the data structure, teams are able to capture the same information within the same environment, saving them time in learning something new. By developing databases with appropriate structures, Cue Biopharma makes data from a variety of sources easily accessible to partners, such as contract testing labs.

“As we developed as an organization, it became evident we needed an efficient means of communicating cross-functionally. Benchling enabled centralization of information that helped with streamlining onboarding and enhanced our understanding and evaluation of data as a whole.”



Samantha Povlich  
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