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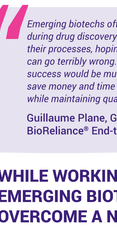
HOW TO TACKLE THE CHALLENGES OF UPSTREAM PROCESS DEVELOPMENT

Upstream process development includes all the steps during which cells are grown in bioreactors with the goal of producing biomolecules, such as antibodies and recombinant proteins for drug development purposes.

UPSTREAM PROCESSING INCLUDES THREE KEY STEPS...



1. Cell Line Development

2. Clone Selection

3. Analytical Development

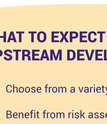
> *Emerging biotechs often find themselves trying to balance costs, speed, and risks during drug discovery and development. Many companies feel the need to speed up their processes, hoping to save money and reach important milestones faster. But this can go terribly wrong. Mistakes can be costly and time-consuming. Chances for success would be much higher, if they invested in quality early on, allowing them to save money and time later. A dedicated partner can also help to speed up processes while maintaining quality.*
>
> Guillaume Plane, Global Development and Marketing Manager, BioReliance® End-to-End Solutions at Merck

WHILE WORKING AGAINST TIME, EMERGING BIOTECHS HAVE TO OVERCOME A NUMBER OF OBSTACLES

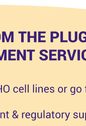
- Choosing robust & stable cell lines
- Choosing the right clones
- Finding the right CRO/CDMO partner
- Considering up-scaling possibilities
- Meeting regulatory demands

EMERGING BIOTECHS CAN GET THE BEST RESULTS WITH AN EXPERIENCED PARTNER

HOW CAN A SUITABLE PARTNER HELP?

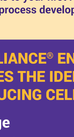


Balances cost & speed to the clinic



Anticipates problems

Guarantees compliance with regulatory requirements



Drives key decisions to get it right the first time

Mitigates & shares risks

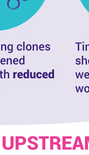
BioReliance®

GET IT RIGHT THE FIRST TIME WITH MERCK'S BioReliance® PLUG & PLAY UPSTREAM DEVELOPMENT SERVICE!

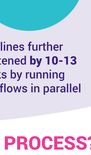
BioReliance® End-to-End Solutions offer adaptive CDMO solutions for small-sized biotechs and start-ups needing to develop and commercialize biologics.

32+
Years process development experience

250+
Biologics launched



100%
IND filing success rate



Various cell lines:
CHO-S, CHO-K1, CHO DG44, CHOZN®

WHAT TO EXPECT FROM THE PLUG & PLAY UPSTREAM DEVELOPMENT SERVICE?

- Choose from a variety of CHO cell lines or go for the proprietary CHOZN® license
- Benefit from risk assessment & regulatory support
- Progress faster with analytical development in parallel to cell line development
- **Save 10 weeks to your first PD experiment with clone selection in parallel to process development**

HOW BIORELIANCE® END-TO-END SOLUTIONS ACCELERATES THE IDENTIFICATION OF HIGH-PRODUCING CELL LINES

CASE STUDY

The Challenge

Cell line development processes are time-consuming and laborious. In order to accelerate upstream processes, high-producing cell lines need to be selected more quickly and efficiently. This can save time and money.

The Solution

BioReliance® End-to-End Solutions developed a semi-automatic mini-pool approach in which a transfected cell population is divided into smaller populations in 96-well plates.

As a result, diversity and competition are reduced, making the detection of cells producing high yields easier.

The Results

3150
mini-pools screened simultaneously

High-producing clones created, screened & isolated with **reduced costs & time**

Timelines further shortened **by 10-13** weeks by running workflows in parallel

NEED HELP WITH YOUR UPSTREAM PROCESS? FIND THE RIGHT PARTNER HERE!

Get in touch with the team at BioReliance® End-to-End Solutions and get all the support you need! Or visit their Plug & Play Upstream Development Service website to learn more!

SOURCES

ESI Technologies
BioPharm International
Merck
• Guidebook, A Molecule's Journey
• BioReliance® End-to-End Solutions
Labiotech.eu
• Just Got Funding? What Now?
• You Need to Reach Preclinical Phase? What Now?

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