

# **Bioscibex**

# All-in-one single-use bioreactors

#### In a nutshell

We are developing innovative bioreactors and single-use bags allowing a fully integrated cell culture system to to produce any biologic drugs and cell therapies. The bioreactor will handle large volume range (30mL to 30L) allowing to perform all the cell expansion steps in the one vessel. Patents will be filled in August 2024.

# Why is our technology important?

The market for biopharmaceuticals reached \$411 billion in 2022, projected to grow at 15.2% annually. The growth is partially driven by the development of personalized medicine, utilizing treatments like monoclonal antibodies and cell & gene therapies tailored to individual patients.

Biologics and cell therapies typically undergo production via cell culture, a batch process composed of a multistep process. Each step transfer is manually performed by an operator, incurring significant contamination risk, labor costs, productivity losses and batch-to-batch variability.

There is a need of a simplified production process for biologics and cell therapies.

#### The benefits of our solution

- a. Increase process productivity by 20%
- b. Decrease contamination risk by 80%
- c. Decrease the cost in full-time equivalent (FTE) by 80%

#### **Keywords**

Single-use bioreactor, biopharmaceutical, cell culture, cell expansion, cell therapies, biologics

#### **Founding Team**

# François Carruzzo, co-founder & CTO

François holds a B.Sc from EPFL and a M.Sc from ETHZ in chemical & bioengineering and he performed his master thesis at Berkely university (USA). He has 6 years of experience in the biopharmaceutical industry (UCB, Merck, KBI). As a biopharma scientist, he learnt to develop new production processes for cutting edge therapies (biologics) and to set up a pharmaceutical laboratory in a GMP environment.

### Chloé Albietz, co-founder & CEO

Chloé holds a M.Sc of chemical engineering and biotechnology from EPFL and she performed her master thesis at Cornell University (USA). She has 7 years of experience in the industry (Givaudan, Procter & Gamble). At Givaudan, she worked as an industrialization manager. As an innovation leader at P&G, she coordinated a team of 15 people and has launched more than 10 pharmaceutical products on the market. She has an extensive track record of successfully delivering projects on time and within budget.