

The worlds leading CDMO for Microbiome therapeutics  
and next generation probiotics.  
Developing and producing Bacteria  
as a drug for over 70 years



**c**ommitment  
**a**gility  
**r**esponsibility  
**e**xpertise

**bio**se<sup>®</sup> **INDUSTRIE**  
Your global CDMO for Microbiome Therapeutics

One single partner



## Microbiotic candidates

Aerobic & anaerobic  
Consortia & multi or single-strains  
Commensal and delivery GMO  
Post-biotic

## R&D Microbiology Platform

Risk group assessment (Bioinformatics)  
Strain Isolation & characterization: Screening,  
Strain-specific ID (Molecular tools), Strain characterization  
Analytical methods transfer development & validation

## R&D Process Platform

Manufacturability screening and process development  
Fermenters: 0.5L, 2L, 5L, 20L, 150L  
Centrifugation & TFF  
Freeze-driers : 2 x 0.5m<sup>2</sup> - 1.5m<sup>2</sup> - 4m<sup>2</sup>  
Dosage form: Capsule, tablet, sticks, oil-suspension, cream  
Powder & Product characterization  
Comparability tests

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**120 M€** invested to maintain our  
position as the world leading CDMO  
for microbiome therapeutics  
and next generation probiotics



# GMP DRUG PRODUCTION

## DRUG SUBSTANCE

### Scale-up & manufacturing

GMP MCB and WCB manufacturing / according to LBP Guidelines and storage at -80°C & -20°C

DS1 : 300L and 3 500L - Centrifugation & TFF + 25m<sup>2</sup> freeze-dryer

DS2 : 2 000L - Concentration + 6m<sup>2</sup> freeze-dryer

DS3 : 4 x 800L - 2x 30m<sup>2</sup> freeze-dryer

DS4 : 150L - Centrifugation + 1m<sup>2</sup> freeze-dryer

DS5 : 2 000L - Centrifugation + 12m<sup>2</sup> freeze-dryer

DS6 : 5 000L - Centrifugation + 30m<sup>2</sup> freeze-dryer

Commercial or clinical batches released by our QP (PharmD)

Powder placebo production for Capsule & Tablet & Sachet

## DRUG PRODUCT

Formulation for Capsules/ Tablets/ Sachets / Oils & Creams

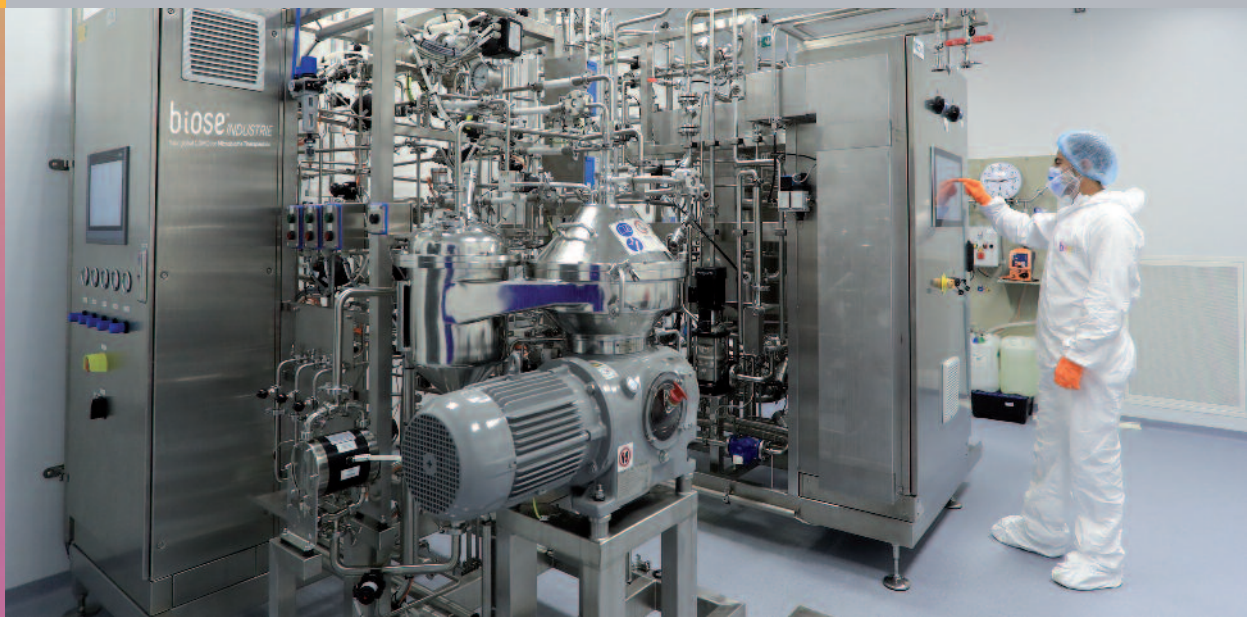
Blending from 10 to 400 kg

Dosage forms : Capsules, Tablets, Powder

Enteric Banding and Coating

Packaging : Blisters, Vials, Sachets, Tubes, Creams & Oils.

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## KEY FIGURES



- + 766 DS batches released in 2023
- + 318 DP batches released in 2023
- + 75 Tonnes of commercial drug substance
- 160 000 QC analyses done in 2023
- 52000m<sup>2</sup> centre of excellence +  
applied R&D laboratory in Boston, US.

**30+ clinical lines including 3x phase III projects in Asia, Europe & the US  
for Microbiome therapeutics and next generation probiotics**

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**Main facility, R&D and GMP production - Aurillac France**  
**R&D and Pilot Plant - Boston USA**

[www.biose.com](http://www.biose.com)