

Providing Sterilisation & Laboratory Services for the world's most innovative healthcare companies.

### **Integrated Stack for Pharmaceutical Vials**

# Pharmaceutical Vials Services

Medistri's expansion has always been focused on helping the world's most innovative healthcare companies to get their products on the market in the safest & fastest approach. Specifically, by listening to our pharmaceutical & biotechnology customers, we've engineered our company's infrastructures to be working hand in hand with our quality team, under one roof, at all times. On a daily basis, our customers benefit from our integrated stack of services. For example, our fully integrated stack of services for pharmaceutical vials manufacturers allow our customers to scale with operational simplicity.

### **GMP Compliant**

Our In-House Sterilization & Laboratory Ecosystem allow our customers to reduce their need to outsource services to a mixed list of other laboratories & suppliers.



400'000'000 - Number of Pharmaceutical Vials that Medistri sterilizes every year.

Medistri is certified GMP compliant by Swissmedic.

- Sterilisation of pre-filled syringes, vials or cartridges.
- Sterilisation of ready-to-fill syringes, vials or cartridges.
- Terminal sterilisation of sealed devices combining a device and drugs (filled syringes, impregnated stents).
- · Sterilisation of active ingredients in bulk.

Our teams work in sync to perform all your tests on-site in our accredited laboratory within your fastest timeline requirements.

### **Industrial Scale**

400'000'000 is the number of pharmaceutical vials that Medistri sterilises every year. And we're working towards helping our customers scale even faster.

The sterilisation of glass pharmaceutical vials should be performed with a highly specific and well-designed cycle designed after studying all the critical parameters and their interconnections. The sterilisation parameters used during this process depends primarily on the nature and design of the containers, closures and packaging material.

### **End-to-End Solutions**

Once your Pharmaceutical Vials have been sterilised, Medistri will perform Bioburden Testing, Bacterial Endotoxin (BET), Biological Indicators (BI) Sterility and Ethylene Oxide (EO) Residual Analysis in our GMP Accredited laboratory in Switzerland (also certified with ISO 17025) to analyze and demonstrate the safety of your sterile product.

### Simplified processes

Our Integrated In-House Infrastructure allows our customers to:

- Eliminate Logistical Complexities
- Simplify Operational activities.
- · Simplify Supply Chain.
- · Simplify Communications.
- Eliminate Uncertainty.

## Medistri's Complete & Integrated stack of services for pharmaceutical vials:

- Cleaning & Depyrogenation.
- Packaging.
- Sterile Barrier Integrity Testing & Transport Simulation.
- Steam/EO Sterilization.
- ✓ Sterilization Validation.
- In-House Laboratory Testing:
  Bacterial Endotoxin Testing
  Sterility Testing
  Sub-Visible Particle Testing
  EO Residual Testing
  Bioburden Testing
  Cytotoxicity
  And more...

Shipping to end-users.

Sterilization Validation Transport Simulation Sterile Barrier Integrity Testing

### Manufacturing

Cleaning & Depyrogenation Packaging & Assembly

#### Sterilization

EO Sterilization Steam Sterilization

### Laboratory

Bacterial Endotoxin Testing Sub-Visible Particle Testing Bioburden Testing Sterility Testing EO Residual Testing Cytotoxicity

### CO2 Emissions per Vial

In addition to ISO14001, for the first time in our industry, by carefully tracking and analyzing our energy usage, transportation, waste and other environmental factors, Medistri's CO2 Report gives our customers exact data on the average CO2 consumption per pallet that goes through our EO Sterilisation process.

