

---

## **Biopharmaceuticals: current state on manufacturing and future challenges**

*Monica Pallmann, PhD*

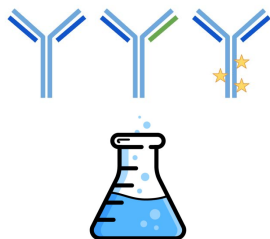
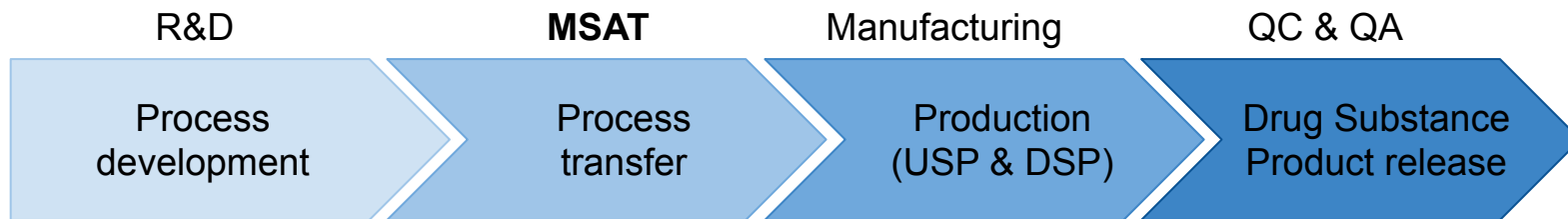
*30.11.2020*

*MSAT Engineer at F. Hoffmann-La Roche AG, Switzerland*



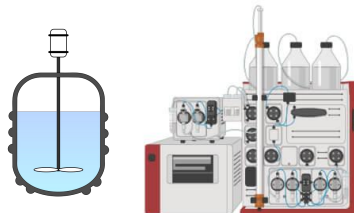
# Introduction

## *Manufacturing science and technology (MSAT)*

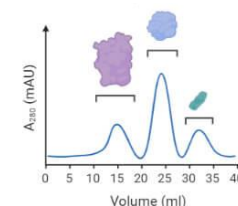


Small scale process characterisation

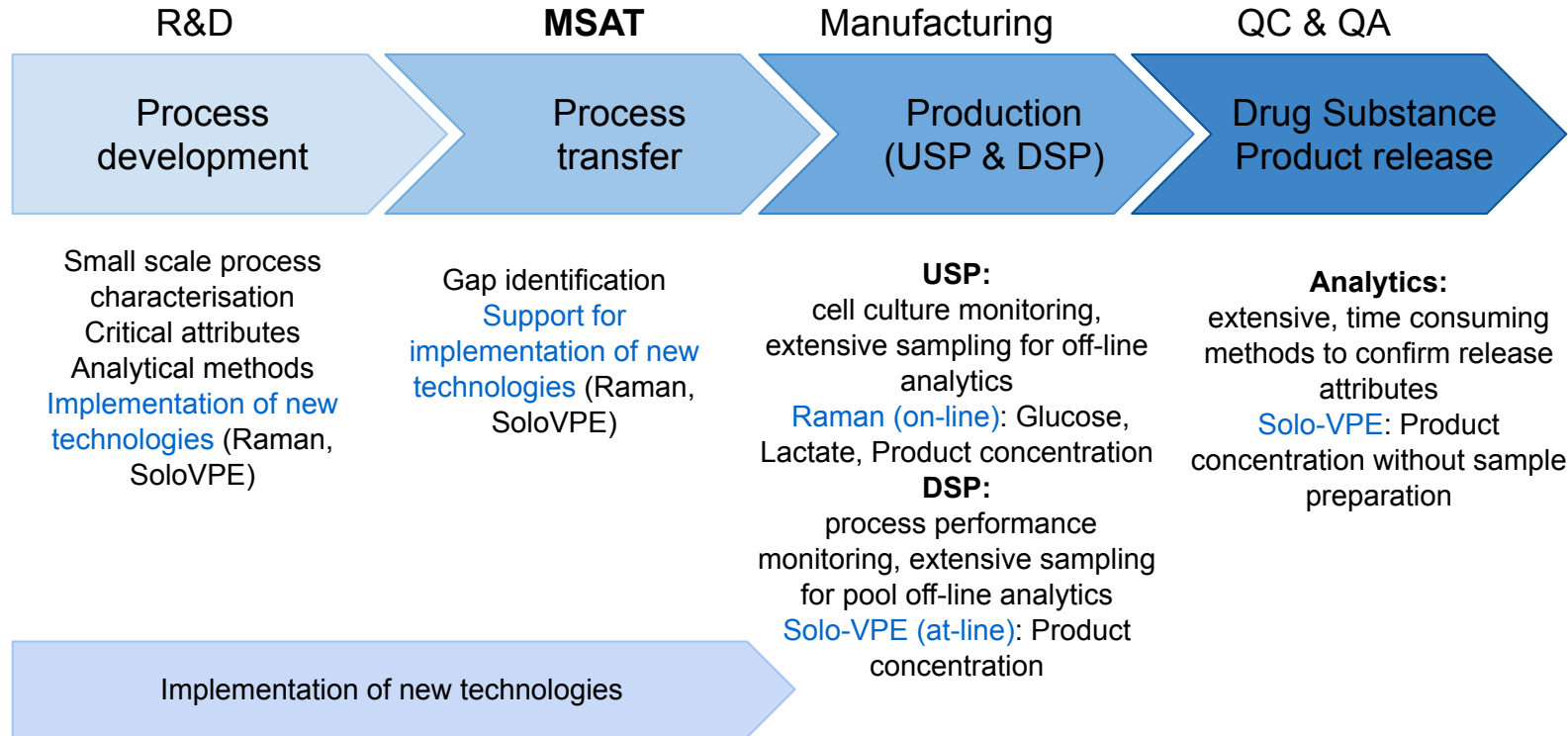
Facility Fit  
Up-scaling  
Process Owner  
Support &  
Troubleshooting



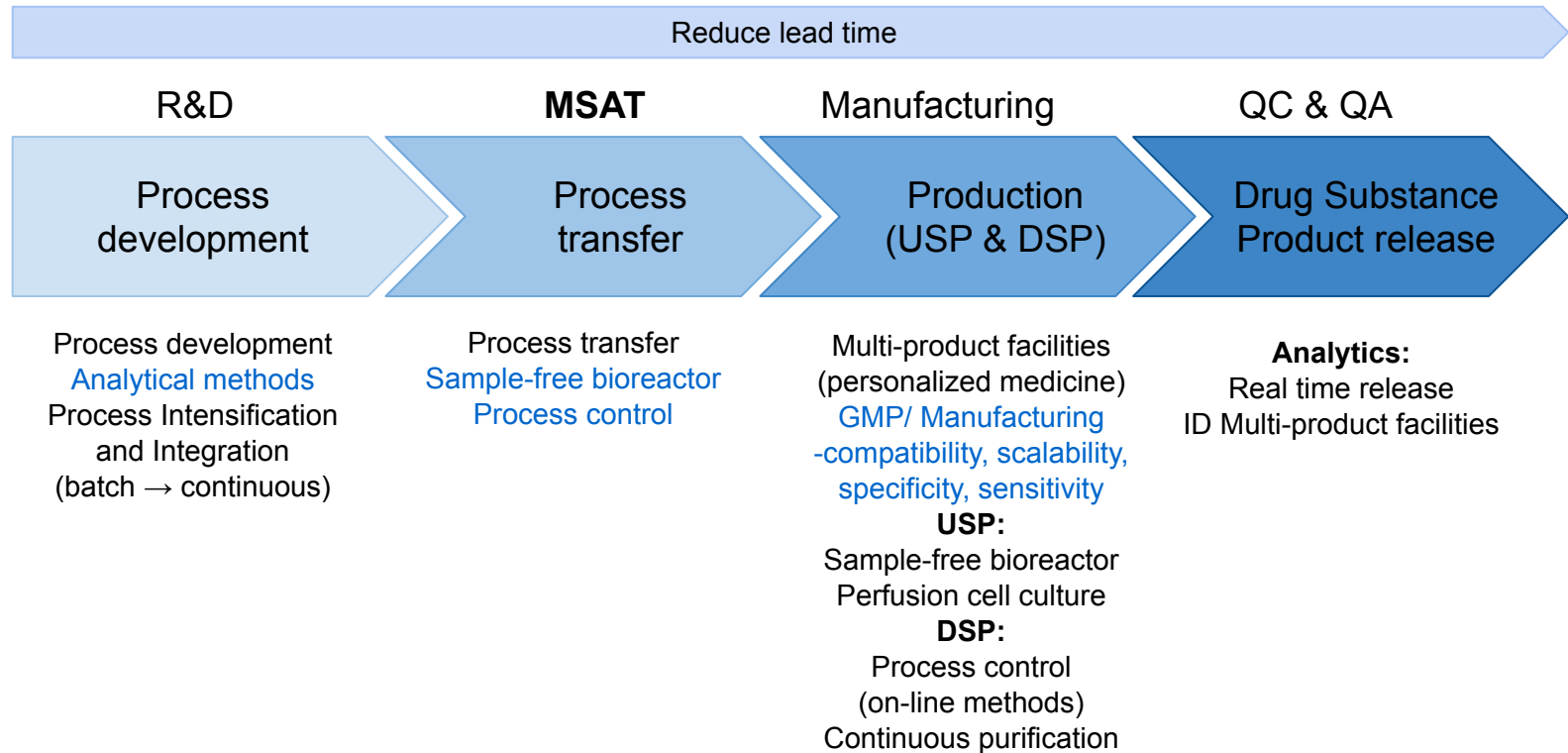
Cell culture &  
Purification



# Current state



# Future challenges / needs



*Doing now what patients need next*