# Pure and simple. That's how your downstream viral vector manufacturing should be.

Speed your science to the clinic and beyond with integrated, end-to-end manufacturing.

## Clarification

**Objective:** After lysis and DNA fragmentation, optimize clarification conditions.

**Strategy:** Choose depth filtration to maximize process efficiency and recovery and to reduce in-process impurities. Consider a single-use automated filtration system with Stax™ capsules for robust process control.

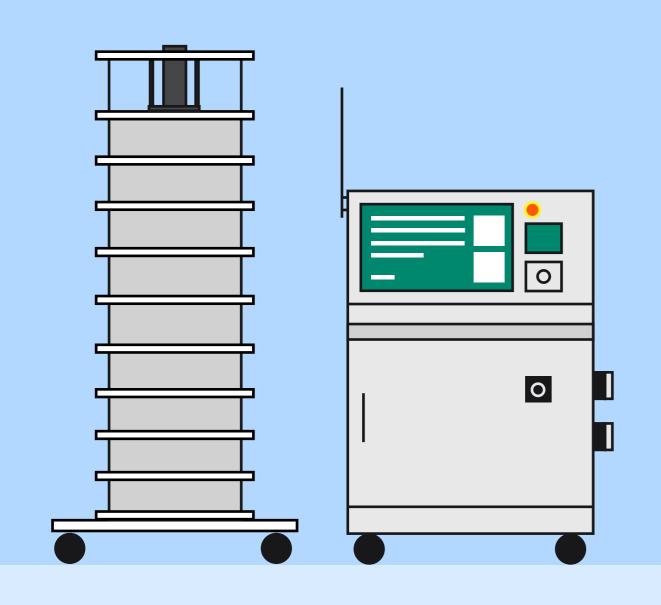
#### **Equipment**

Allegro™ MVP system

#### **Consumables**

#### Depth filters

- PDP8/PDK11 + B010/V100 Stax<sup>™</sup> capsules
   Sterilizing-grade/bioburden reduction
- Sterilizing-grade/bioburden reduction filters
- HDC™ II J100
   Supor™ FKV st
- Supor™ EKV sterilizing-grade capsules



## TFF formulation

**Objective:** Final concentration and exchange to formulation buffer.

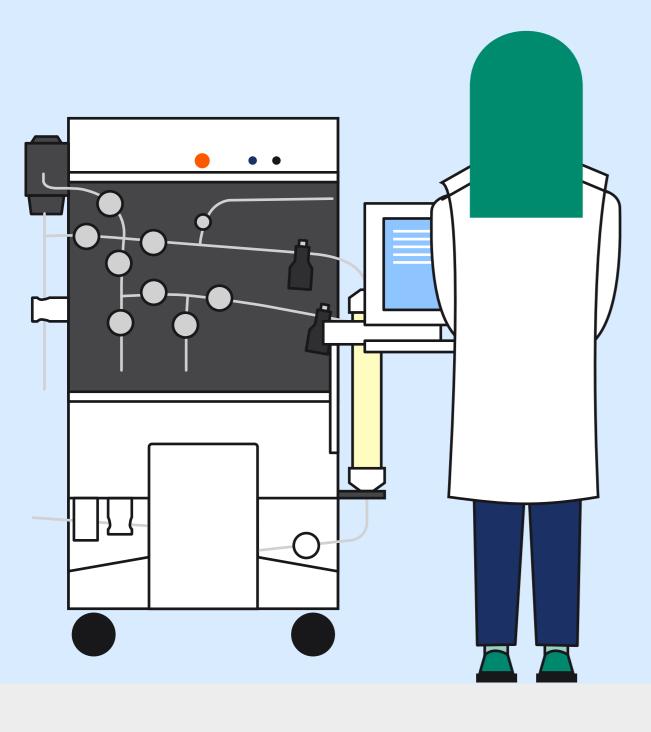
**Strategy:** Consider a scalable tangential flow filtration system with single-use TFF filters and closed processing to reduce steps and handling.

## Equipment

ÄKTA readyflux™ system

## Consumables

ReadyToProcess™ single-use hollow fiber cartridges



## **Capture**

**Objective:** Isolate, stabilize, and reduce volume.

**Strategy:** Choose modern chromatography resins for faster throughput with automated, single-use chromatography systems.

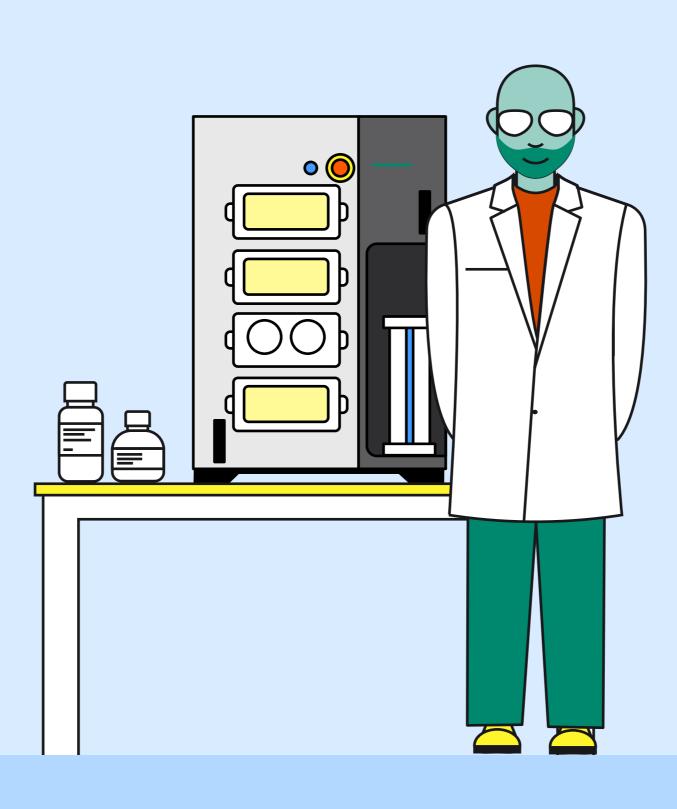
Ensure prepacked columns span sizes from development to full manufacturing.

### Equipment

ÄKTA ready™ 450 system

#### **Consumables**

Capto™ AVB resin



## **Sterile filtration**

Objective: Ensure product sterility.

**Strategy:** Select the proper filters that will optimize recovery.

# Consumables

Supor EKV sterilizing-grade filter



## Polishing

**Objective:** Remove product and process impurities (including viral clearance).

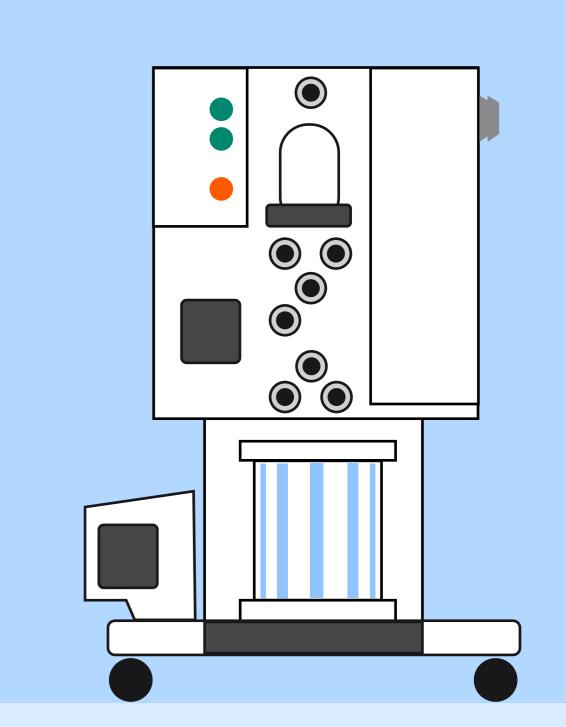
**Strategy:** Effectively separate full and empty capsids using modern chromatography solutions with optimized conditions for baseline separation across serotypes.

#### **Equipment**

ÄKTA ready 450 system ÄKTA ready variable UV system

#### **Consumables**

Capto Q ReadyToProcess columns
Mustang™ Q XT chromatography
membrane capsules



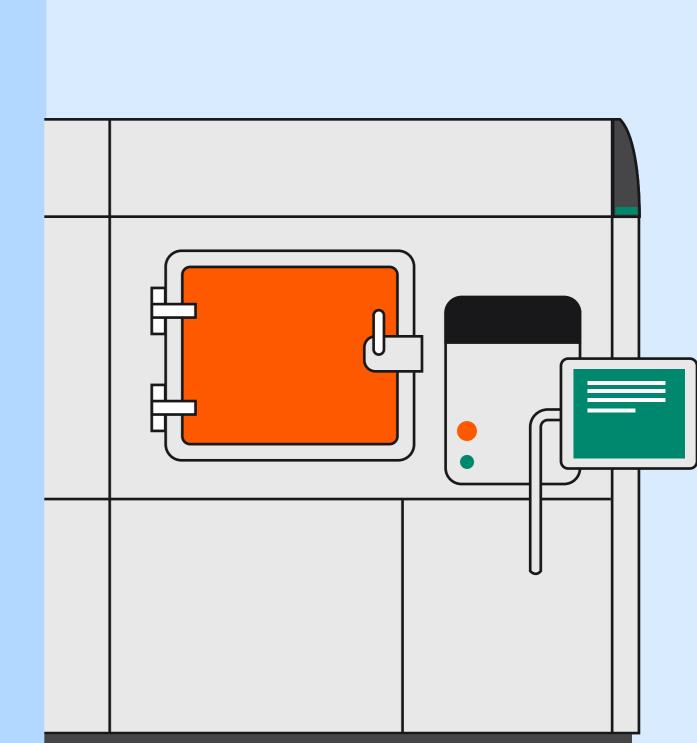
## **Aseptic filling**

**Objective:** Fill vials for small batches while maintaining aseptic conditions.

**Strategy:** Consider fully automated, gloveless cGMP vial filling with a closed robotic isolator, which allows for risk reduction to the quality of your viral vector drug product.

# Equipment

Microcell™ vial filler



# **Technical expertise**

you know you have a problem.

Application support by local field application specialists for operational training and proof-of-concept runs.

**OptiRun™ Connect**, our IoT solution for Cytiva equipment, is currently available for ÄKTA ready, and soon ÄKTA readyflux and readyflux XL. It allows experienced service engineers to receive alarms and alerts in real time, enabling them to respond with a solution, possibly even before



# **Fast Trak<sup>™</sup> Process Development Services**

Utilize our 100+ industry-trained scientists to de-risk process scale-up and tech transfer, and drive speed to market.



Are you ready to elevate your downstream process? Let's talk.