

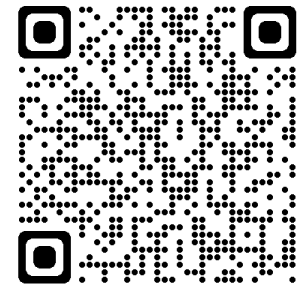
Presenters



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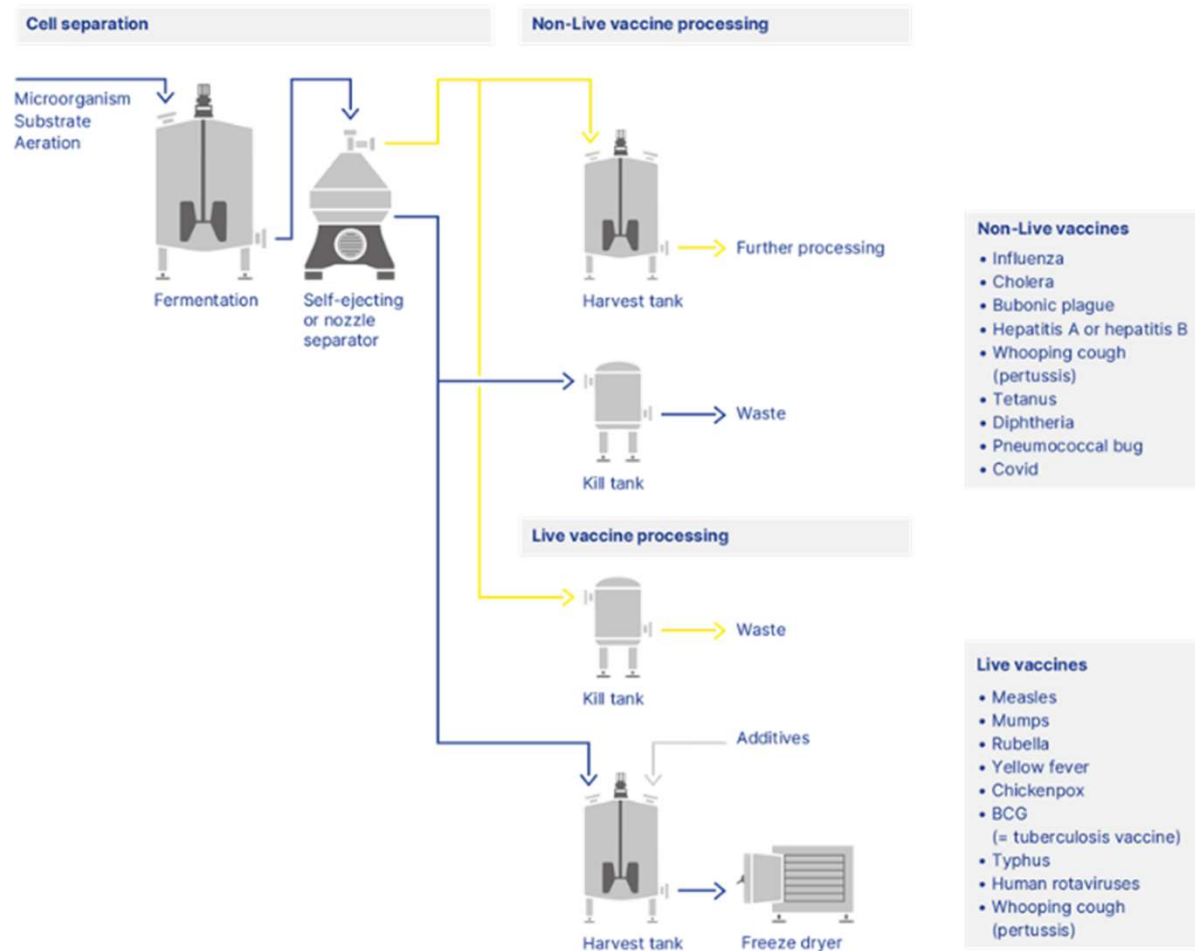
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GEA in human vaccine processes



GEA pharma Separator line aseptic
GEA pharma Separator line pure

GEA kytero® single-use pharma Separator



GEA kytero® 500

GEA kytero® pharma Separator

All our competence
in an easy-to-operate
single-use system.



GEA kytero® 2000

Freeze Drying

Why is freeze drying done?

The main reasons are:

- ☒ Good conservation
- ☒ Good solubility/reconstitution
- ☐ Good opportunity if drug is sensitive to heat

How is freeze drying done?

Freeze drying is removal of water from a product by freezing and a combination of sublimation and desorption.



Lyophilization (freeze drying)

Vial manufacturing



 GEA core technology

  Strategic partnership

 Sourced technology

Further state-of-the-art components for liquid pharma processing

GEA Hilge Sterile Pumps



GEA pharma Valves



GEA pharma Homogenizers



Complete portfolio Separation, Valves, Pumps, Homogenizers:
gea.com/energizing-pharma