RAPIDLY INCREASE MANUFACTURING OUTPUT BY LEVERAGING EXISTING FACILITIES

OCTOBER 2021
YOUR PARTNER FROM RESEARCH TO COMMERCIAL PRODUCTION
MANY SOLUTIONS POSSIBLE
TWO EXAMPLE CASES
INCREASE THE PRODUCTION VOLUME OF EXISTING VESSELS

Increasing volume from e.g. 1000L to 1200L:

- Re-calculate heat transfer, aeration and agitation
- Modify the over fill protection
- QA should be involved from the beginning to secure proper re-qualification/validation
INCREASE THE CELL DENSITY

- Small scale reactor (30L) with perfusion system to increase the cell density
- Use the «new» N-1 perfusion bioreactor to directly inoculate the production bioreactor
- Higher cell density has impact on the physical properties of the media e.g. viscosity, heat transfer etc.
  => re-calculate the equipment. Agitation and aeration is critical

- Re-build the transfer panel and the former seed bioreactors to increase the amount of production bioreactors