



# ABZENA

## Case Study: Complex Biologics Development – Self Assembling Nanoparticle

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## CUSTOMER BACKGROUND

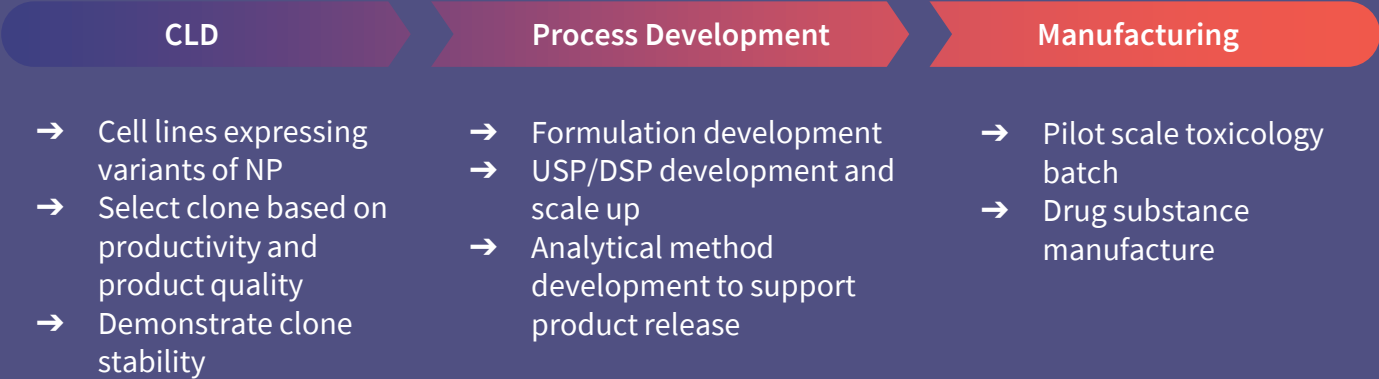
Not for profit research institute dedicated to the development of novel biomedical interventions to address global health concerns.

Began using Abzena services in in 2020 for process development and manufacture of a conjugate vaccine in monovalent and tetravalent forms

Collaboration expanded to include a second program to develop a cell line and manufacturing process for a fusion protein that self-assembles to form nanoparticles (NP)



## NP PROJECT SCOPE



## RESULTS

- + Selection of lead NP sequence
- + Generation of clonal RCBs
- + 5 of 6 clones stable to >60 generations
- + NP titers >2g/L in initial USP
- + DSP process developed
- + Monodisperse product (DLS)
- + USP optimization to further improve titers