RAPID PROTEIN PRODUCTION USING CHO CELLS: FROM TRANSFECTION TO 100G IN 6 WEEKS

Jill Cai, Biologics Development, WuXi Biologics, Shanghai, China cai_jiexing@wuxiapptec.com Weichang Zhou, Biologics Development, WuXi Biologics, Shanghai, China

As more and more companies start to use pool materials for toxicology study to shorten overall IND enabling biologics development timeline, a rapid protein expression system using CHO-K1 cells has been developed to meet the demand for large amount of protein required for toxicology studies. 100-200g of proteins can be delivered 6 weeks after transfection using this CHO-K1 based expression system we call WuXian Express. The poster will describe this system and compare key antibody product quality attributes from materials generated from the WuXian Express, stable pools and Master Cell Banks (MCBs), and demonstrate comparability among them. Materials generated from this system have also been used at WuXi Biologics for developability study during antibody candidate molecule selection, early downstream, formulation and analytical method development, saving about 2 months compared with materials generated from stable pools.