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# Challenges developing biologics for the prevention and treatment of infectious diseases impacting global health

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## CHALLENGES DEVELOPING BIOLOGICS FOR THE PREVENTION AND TREATMENT OF INFECTIOUS DISEASES IMPACTING GLOBAL HEALTH

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**Abstract:** Biologics have enjoyed tremendous success as products in high income countries of the world. However the high cost of these products today prevent their use in low income countries and with the notable exception of palivizumab there has been little commercial interest in developing biologics for infectious diseases that are prevalent in these geographies. Recent advances in the study of HIV, malaria, pertussis and Ebola highlight the potential of monoclonal antibodies (mAb) for prevention or treatment of these diseases. The evolution of the industrialized CHO process over the past 30 years to satisfy market demands for mAbs is remarkable. The need to meet high product quality standards and provide for reliable supply dominated design considerations of this process over process economics in the context of high margin products in the market today. Innovation in bioprocessing to lower the production cost and ease scalability will be needed to enable potential lifesaving mAb products of tomorrow for the treatment of infectious diseases to reach people in those geographies most in need.