

Joint Event

4th EUROPEAN BIOPHARMA CONGRESS

&

6th International Conference and Exhibition on PHARMACOLOGY AND ETHNOPHARMACOLOGY

November 09-11, 2017 Vienna, Austria

An overexploitation approach for cell culture based modular bioprocessing

Ravindra Patel

OmniBRx Biotechnologies Pvt. Ltd, India

In the battle of controlling healthcare costs, the high cost pharmaceuticals, especially biologics has become an important issue. Successful production planning requires consideration of cost factors such as manufacturing cost, capital investment to build new facilities or to retrofit existing ones, as well as the inventory costs. The cost attributed to the opportunity lost in selling the product or failure to meet market demand is also considered as the inventory cost. Any unplanned downtime could severely affect the customer service level, if facility utilization is too high. Underutilization of manufacturing facilities conversely suggests a misplaced investment in capacity. The overexploitation approach is designed to mitigate the above described facility constrains due to its power of combining the benefits of perfusion & fed batch processing mode with adequate elimination of facility constrains of fed-batch bioprocessing. The key factors considered are: 1. Adapting to modular single use technologies for facility design. 2. Smallest mall footprint for upstream processing saves initial investment, significantly. 3. Multiproduct facilities to be designed capable of offering production output in kilograms per month. 4. Completely avoiding the use of conventional Stainless steel bioreactors. 5. Culture revived from single low-passage cell bank can be expanded for several months without compromising the product quality. With continuous processing advantage while adapting an overexploitation approach, the cultured cells can be processed up to 60 passages, typically.

Ravindra.Patel@omnibrx.com