

Engineering Conferences International ECI Digital Archives

Integrated Continuous Biomanufacturing II

Proceedings

Fall 11-4-2015

How continuous-like processes improve affordability for viral vaccines - Example of LAIV

Jose Castillo Univercells SA, j.castillo@univercells.com

Follow this and additional works at: http://dc.engconfintl.org/biomanufact ii



Part of the Biomedical Engineering and Bioengineering Commons

Recommended Citation

Jose Castillo, "How continuous-like processes improve affordability for viral vaccines - Example of LAIV" in "Integrated Continuous Biomanufacturing II", Chetan Goudar, Amgen Inc. Suzanne Farid, University College London Christopher Hwang, Genzyme-Sanofi Karol Lacki, Novo Nordisk Eds, ECI Symposium Series, (2015). http://dc.engconfintl.org/biomanufact_ii/87

This Conference Proceeding is brought to you for free and open access by the Proceedings at ECI Digital Archives. It has been accepted for inclusion in Integrated Continuous Biomanufacturing II by an authorized administrator of ECI Digital Archives. For more information, please contact franco@bepress.com.

HOW CONTINUOUS-LIKE PROCESSES IMPROVE AFFORDABILITY FOR VIRAL VACCINES - EXAMPLE OF LAIV

Jose Castillo Univercells S.A. j.castillo@univercells.com

Designing a continuous process for a life viral vaccine could be seen useless, and challenging, as the virus infection will kill the cell substrate after 2-5 days of infection.

From the technical perspective, chaining the operations of cell culture under perfusion and viral production, clarification and capture / concentration is an efficient option to setup a small scale continuous automated process to manufacture massive amounts of viral vaccines.

We will show how beneficial it can be in terms of process development, manufacturing simplicity, capital expenditure and cost of production. Also, we will show how this approach can help producers of viral vaccines to produce at very low cost even for segmented markets for which small amounts of multiple vaccines are needed.