

ANNUAL BIOTECHNOLOGY CONGRESS

August 17-18, 2017 | Toronto, Canada

Plant made pharmaceuticals for developing countries

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Plant made biologics have elicited much attention over recent years for their potential to assist those in developing countries who have poor access to modern medicine. Vaccines and other biopharmaceuticals derived from plants are inexpensive, lack refrigeration requirements and can be produced en masse in a relatively short period of time. Pharmaceuticals developed in this fashion could be utilized for functions ranging from defense against infectious diseases that have pandemic potential, such as influenza or Ebola virus, to combating orphan diseases which are poorly

funded yet remain paramount to global health in their respective endemic regions. Biopharmaceuticals have been generated via many plant production platforms, including stable expression in transgenic plants, suspension cell cultures and hairy roots, as well as transiently using plant virus expression vector technologies. The presentation will provide an overview of plant-derived pharmaceuticals and will conclude with a projection of the impact they could have for developing countries.

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