Viewpoint: Regulatory hurdles keep life-saving, plant-made vaccines off the market

Plant-made vaccines have been in the pipeline for nearly thirty years. Generated stably in transgenic plants or transiently using virus expression systems, pharmaceuticals have been developed to address global pandemics as well as several emerging One Health Diseases.

This review describes the generation of plant made vaccines to address some of the world's most growing health concerns, including both infectious and non-communicable diseases, such as cancer. The review provides an overview of the research taking place in this field over the past three to five years. The PubMed database was searched under the topic of plant-made vaccine between the periods of 2014 and 2019.

While vaccines and other biologics have been shown to be cheap safe and efficacious, they have not yet entered the marketplace largely due to regulatory constraints. The lack of an appropriate regulatory structure to guide plant made vaccines through to commercial development has stalled efforts to provide life-saving medicines to low- and middle-income families. In my opinion, it is paramount that regulatory hurdles are mitigated to address emerging infectious diseases such as Ebola and Zika in a timely manner.

Read full, original article: <u>The role of plant expression platforms in biopharmaceutical development:</u> <u>possibilities for the future</u> (Behind Paywall)