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Univercells granted $14.3M to deliver measles and rubella vaccines in LMICs

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Adapt the process design of its proprietary NevoLineÃ¢â??Â¢ Bioproduction platform for a sustainable cost-effective manufacturing



UNIVERCELLS

Univercells, on 13 June 2019, announced that it has been awarded a $14.3M grant by the Bill & Melinda Gates Foundation to increase the availability of measles and rubella (M&R) vaccines in low- and middle-income countries (LMICs). Univercells will adapt the process design of its proprietary NevoLine™ platform to deliver affordable M&R vaccines. This novel manufacturing platform has already proven success with its initial application for Sabin inactivated polio vaccine (sIPV), supported by a $12M Grand Challenges grant awarded by the Bill & Melinda Gates Foundation.

Viral infectious diseases, such as measles and rubella, still represent a significant global health burden despite preventability via vaccination. Effective vaccination programs in LMICs are impaired by a substantial gap of affordable vaccines. Conventional vaccine manufacturing requires high capital and operating costs and does not provide a sustainable or cost-effective solution for the future. Univercells will leverage its NevoLine bioproduction platform to sustainably supply measles and rubella vaccines at an affordable cost by minimizing equipment and facility-related capital investment together with lower operating costs.

Under the terms of the agreement, Univercells will develop a NevoLine platform for the measles and rubella processes and initiate clinical validation. As part of this project, Univercells' partner Batavia Biosciences will adapt its highly intensified production process to the M&R vaccines and manufacture GMP material. Univercells will also explore utilizing novel vaccine delivery technologies under evaluation by the foundation. Combining innovations could further reduce costs, facilitate the execution of immunization campaigns and improve the accessibility of critical vaccines.

"We are very honoured to receive this grant and work once again with the Bill & Melinda Gates Foundation to increase the affordability of the measles-rubella vaccine, another critical vaccine especially in view of the recent outbreaks worldwide", said Hugues Bultot, CEO and co-founder of Univercells. "We are dedicated to delivering a portfolio of viral vaccines such as inactivated polio, measles and rubella and other undersupplied vaccines to further increase the availability of these lives - saving products."

José Castillo, CTO and co-founder of Univercells added "This second project with the foundation confirms the trust built upon our breakthrough technology. It enables Univercells to demonstrate the potential of our NevoLine manufacturing

platform to be a game - changer for global health”.

Univercells has also developed scalable, single-use, fixed bed scale-X™ line of bioreactors to further enhance production within the NevoLine™ production platform. Reinventing bench top production, these are easy to use in a biosafety or laminar flow cabinet reducing footprint and capital investment. The scale-X™ High density fixed bed bioreactors depict scalability, reliability and cost-effectiveness for viral production with the seamless scalability from $10m^2$ to $30m^2$ of available growth surface. Novel structured design is rapid with homogeneous media flow and distributed cell entrapment. Its ability to delivers a concentrated harvest simplifies purification process. The device is equipped with automated culture parameter monitoring, sensors, quick access screen, mobile workstation and wonderware^{TM} operating system. The platform is applicable in viral vaccines, viral vectors, oncolytic virus production and delivers high capacity equivalent to 50L bioreactor / 350 roller bottles.