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LETTERS

Global trends in emerging infectious diseases

Kate E. Jones¹, Nikkita G. Patel², Marc A. Levy³, Adam Storeygard³†, Deborah Balk³†, John L. Gittleman⁴ & Peter Daszak²

Michael A. Jarvis, PhD Plymouth University (<u>www.thejarvislab.com</u>) The Vaccine Group, Ltd (<u>www.thevaccinegroup.co.uk</u>)



"Zoonoses from Wildlife represent the Most Significant, Growing Threat to Global Health of All Emerging Infectious Diseases"

- Incidence of EIDs is increasing.
- Majority of EID events are zoonotic (60%) most from wildlife (72%).
- Low-income, developing countries are disease 'hotspots' for zoonotic EID pathogen emergence with significance to global health.
- Economic and geographic access is a problem for conventional vaccination.

Herpesvirus-based Animal Vaccines to Interrupt Zoonotic Transmission to humans



"It will be important to shore up funds for a camel vaccination option, as this may be the fastest developmental and regulatory route toward licensing a product that can prevent human MERS-CoV infections and deaths"

WHO R&D Blueprint (Nature Medicine, 2016)

Herpesvirus-based Vaccines to Interrupt Zoonotic Transmission

- Emerging infectious pathogens have generally NEVER BEEN SEEN before they emerge into humans.
- RAPID RESPONSE using a versatile vaccine 'plug and play' platform is therefore critical.
- Targeting of human pathogens by vaccination of animal source is EFFECTIVE (control of rabies in wild foxes).
- Vaccinating animals rather than humans results in DECREASED R&D COST and DECREASED TIME to MARKET.
- Herpesvirus platform provides HIGH LEVELS of DURABLE IMMUNITY even after a 'SINGLE-SHOT'.
- SELF-DISSEMINATING vaccines address ACCESS.



• Platform is INEXPENSIVE and Amenable for development for use in LMICs.