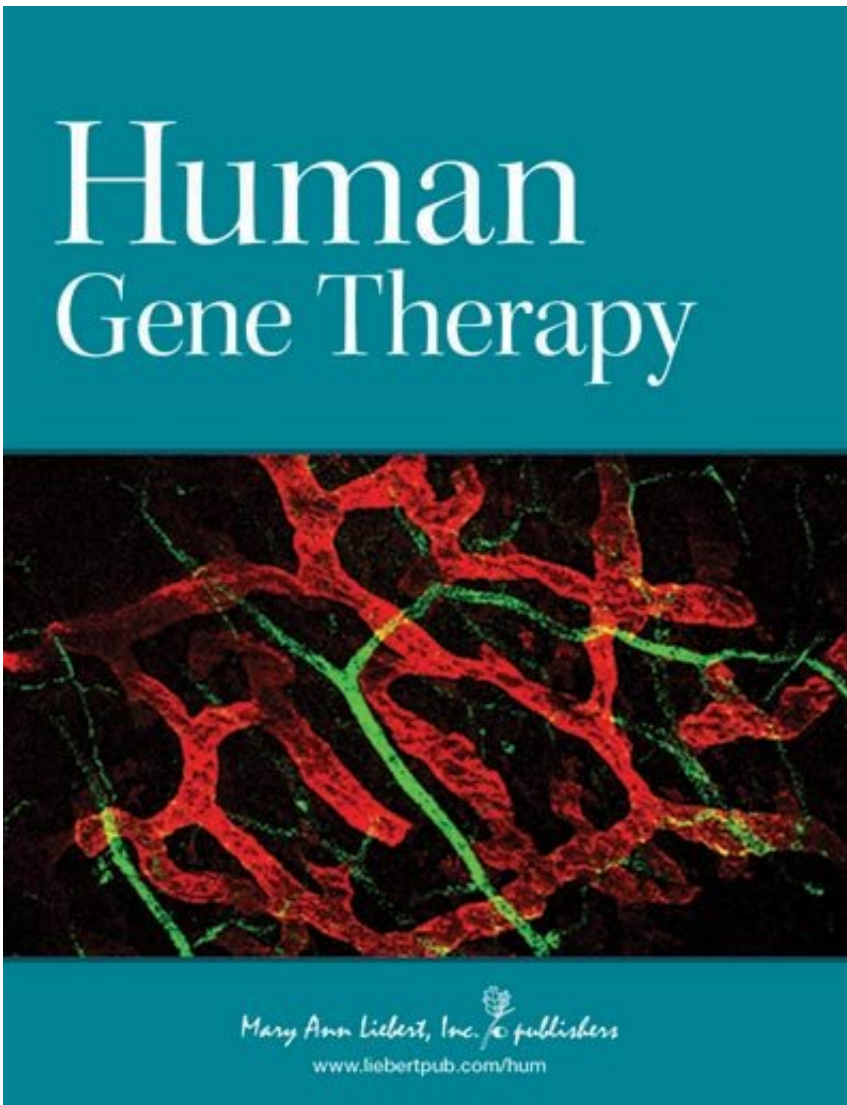


ZMapp antibody delivered by viral vector protects against Ebola infection

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Human Gene Therapy presents reports on the transfer and expression of genes in mammals, including humans. Credit: Mary Ann Liebert, Inc., publishers

A new study comparing the effectiveness of individual ZMapp antibodies versus a cocktail of antibodies, administered to mice using recombinant adeno-associated virus (rAAV) delivery vectors, showed the ability to achieve 100% protection against infection by Ebola virus. The study, which reported the best results using a single rAAV-delivered antibody, is published in *Human Gene Therapy*.

Bruno Gaillet, University Laval (Quebec, Canada) and coauthors from National Research Council Canada (Montreal), Public Health Agency of Canada and University of Manitoba (Winnipeg), University of Pennsylvania (Philadelphia), and McGill University (Montreal) coauthored the article entitled "Gene Transfer of ZMapp Antibodies Mediated by Recombinant Adeno-Associated Virus Protects Against Ebola Infections."

The researchers evaluated the therapeutic effectiveness of three ZMapp antibodies (c2G4, c4G7, and c13C6) and different doses and various routes of administration (intravenous, intramuscular and intranasal). They also compared different doses of the individual antibodies to the effectiveness of the three-antibody cocktail.

"Vectored antibody delivery has the potential to revolutionize how we respond to emerging pathogens like Ebola virus disease," says Editor-in-Chief Terence R. Flotte, MD, Celia and Isaac Haidak Professor of Medical Education and Dean, Provost, and Executive Deputy Chancellor, University of Massachusetts Medical School, Worcester, MA. "Professor Gaillet's work provides vital proof of this concept, which could greatly aid global preparedness for the next outbreak."

More information: Marc-André Robert et al, Gene Transfer of ZMapp Antibodies Mediated by Recombinant Adeno-Associated Virus Protects Against Ebola Infections, *Human Gene Therapy* (2017). [DOI: 10.1089/hum.2017.101](https://doi.org/10.1089/hum.2017.101)

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