



## NEWS RELEASE

### Monoclonal Antibody-based Filovirus Therapeutic Licensed to Leaf Biopharmaceutical

Web Site Release

July 15, 2014

---

**Toronto, ON** - Today Defyrus announced an exclusive, worldwide license to their Ebola therapeutic monoclonal antibody (mAb) patent portfolio to Leaf Biopharmaceutical Inc. of San Diego, CA. This license expands the commercial relationship between LeafBio and Defyrus who have been actively collaborating to drive the commercialization of mAb-based Ebola therapies.

LeafBio, the commercialization partner of Mapp Biopharmaceutical, had been developing proprietary Ebola-specific antibody drug MB-003 in collaboration with the National Institutes of Health and the Defense Threat Reduction Agency (DTRA). The licensing of Defyrus' ZMAb antibody portfolio, pioneered at the Public Health Agency of Canada (PHAC) and licensed earlier to Defyrus, consolidates the intellectual property of a superior combination mAb drug – termed ZMapp™ - which is composed of the best mAbs of MB-003 and ZMAb.

Under the terms of the exclusive, worldwide license, LeafBio assumes the commercial responsibility for the ongoing development of ZMapp™. The two companies have agreed to an equitable revenue sharing model based on ZMapp™ product sales.

“Integrating key ZMAb antibody technology into our ongoing Ebola virus preclinical and planned clinical development program has been welcomed by our US government partners” stated Larry Zeitlin, President of LeafBio. “ZMapp™ has enhanced efficacy as a treatment in our non-human primate challenge models.”

ZMapp™ antibodies are being produced under an existing manufacturing collaboration with Kentucky Bioprocessing (KBP, Owensboro KY). Using a fully automated production system that operates in accordance with good manufacturing practices (GMP), the antibodies are produced in Nicotiana. This high performance manufacturing process decreases production time, increases the quantity of antibody produced, and lowers the cost of manufacturing.

“This license to LeafBio places our ZMAb technology in the hands of experienced antibody manufacturers with specific regulatory expertise and funding. We share a joint vision with LeafBio to deliver an effective treatment for Ebola virus infection on a cost effective basis globally.” said Jeffrey Turner, President & CEO Defyrus.

#### **About Defyrus**

Defyrus is a Canadian private, life sciences biodefence company that collaborates with military and public health R&D partners in the United States, Asia and Canada to develop broad spectrum anti-viral drugs, MAbs and vaccines as medical countermeasures to viral and bacterial infectious diseases. [www.defyrus.com](http://www.defyrus.com)

#### **About Mapp and Leaf Biopharmaceutical**

Mapp Biopharmaceutical develops novel biopharmaceuticals for the prevention and treatment of infectious diseases, focusing on unmet needs in global health and biodefense. As these products transition to clinical evaluation, Leaf Biopharmaceutical assumes ownership and commercialization responsibilities.

[www.mappbio.com](http://www.mappbio.com), [www.leafbio.com](http://www.leafbio.com)



###

**For further information:**

Dr. Jeffrey D. Turner  
President & CEO  
Tel: (613) 674-1138  
info@defyrus.com

Dr. Larry Zeitlin  
President  
Tel: (800) 372-2176  
larry.zeitlin@leafbio.com