



## **Kala Presents Data on Enhanced Topical Ocular Delivery of a Receptor Tyrosine Kinase Inhibitor**

*Data Presented at ARVO 2013 Annual Meeting Demonstrated Potential of Kala's Proprietary Mucosal-Penetrating Particle Technology for Ocular Disease*

Waltham, Mass., May 6, 2013 – Kala Pharmaceuticals, Inc., a leading developer of innovative products that rapidly and effectively penetrate the mucosal barrier to treat ocular diseases, announced today the presentation of preclinical data demonstrating that topical delivery of a small molecule receptor tyrosine kinase inhibitor (RTKi), which has been formulated utilizing Kala's proprietary mucosal-penetrating particle (MPP) technology, greatly enhanced drug levels in the retina. These data, which were presented at the Association for Research in Vision and Ophthalmology (ARVO) 2013 Annual Meeting, demonstrated that by utilizing its MPP technology Kala could create potential non-invasive treatments for retinal diseases such as wet age-related macular degeneration (wet AMD).

"Today, wet age-related macular degeneration is treated primarily with frequent intraocular injections, which are associated with potential risks to patients, as well as significant discomfort and inconvenience," said Kim Brazzell, PhD, Chief Medical Officer at Kala Pharmaceuticals. "By applying our MPP technology Kala has demonstrated the potential to create a first-of-its-kind, non-invasive treatment for wet AMD. In addition, these data further support the significant potential of the MPP technology in creating highly effective topical treatments for a broad range of ocular diseases."

In a poster presentation entitled "Enhanced Topical Delivery of a Small Molecule Receptor Tyrosine Kinase Inhibitor (RTKi) via Mucosal-Penetrating Particle Technology," Kala Pharmaceuticals researchers presented preclinical data which demonstrated that:

- Topical RTKi-MPP showed a 5-fold enhancement in retinal drug concentration over a non-MPP nanoparticle control in non-pigmented rabbits.
- A single dose of RTKi-MPP resulted in retinal drug levels that were >40 higher than the drug's IC50 for KDR, an RTK also known as VEGFR2, for up to 24 hours.
- Topical administration of RTKi was well-tolerated and significantly reduced vascular leakage in an *in vivo* VEGF-induced retinal vascular permeability model.

### **About Kala Pharmaceuticals**

Kala Pharmaceuticals, Inc. is developing innovative products which are capable of penetrating mucosal barriers for the treatment of ocular diseases and diseases that affect the lungs, gastrointestinal tract, and female reproductive system. Mucosal barriers have been largely overlooked as a limitation for drug efficacy. Using the company's proprietary technology platform, Kala's Mucosal-Penetrating Products (MPPs) have the unique ability to rapidly and uniformly coat and permeate mucosal tissues leading to highly effective treatments with improved side effect profiles. The company is leveraging its platform as an internal product engine for a wide spectrum of potential applications, including treatments for respiratory, ophthalmic, female reproductive tract and gastrointestinal diseases. Kala is also pursuing collaborations with partners to transform the therapeutic properties of marketed drugs and compounds in development. Kala was founded by leaders in the fields of nanomedicine and biopharmaceutical engineering, Dr. Justin Hanes of The Johns Hopkins University School of Medicine, Dr. Robert Langer of

the Massachusetts Institute of Technology, and Dr. Colin Gardner formerly of TransForm Pharmaceuticals/Johnson & Johnson and Merck. The company is now backed by leading investors including Lux Capital, Polaris Venture Partners, Third Rock Ventures and, Crown Venture Fund, LLC. For more information, please visit [www.kalarx.com](http://www.kalarx.com).

**Contact:**

*Kala Pharmaceuticals, Inc.*

*Tel: 781 810 4748*

*info@kalarx.com*

**Media:**

*Gina Nugent*

*The Yates Network*

*gina@theyatesnetwork.com*

*617-460-3579*