



Press Release

## **Mireca's key patent application receives "Notice of Allowance" from USPTO.**

**Tübingen, Germany, February 20th, 2019 – Mireca Medicines GmbH, an ophthalmology start-up company developing treatments for inherited retinal degeneration, receives the validating "Notice of Allowance" from the USPTO for its proprietary formulation and medical use patent application "Targeted liposomal delivery of cGMP analogues" (PCT/EP2016/055659).**

German ophthalmology start-up Mireca Medicines GmbH receives "Notice of Allowance" for its patent application "Targeted liposomal delivery of cGMP analogues" (PCT/EP2016/055659) from the United States Patent and Trademark Office (USPTO), declaring that the application has been examined and is allowed for issuance as a patent. The invention relates to means and methods for targeted drug delivery of cGMP analogues for retinal and other diseases. All inventors are related to the group of founders and shareholders of Mireca, which wholly owns this patent.

Mireca's lead program of developing LP-DF003, a liposomal cGMP analogue formulation, in Retinitis Pigmentosa (RP), Leber's congenital amaurosis (LCA) and Stargardt's disease (STGD) is a first application of this patent. Further benefits and protection for this development program comes from our orphan drug designation (ODD) in the lead indication (EU/3/15/1462). Also wholly owned patent applications "PKG antagonists" (PCT/EP2017/066113) and "PKG agonists" (PCT/EP2017/071859), both protecting the routes of manufacturing +250 further cGMP analogues as composition of matter, provide for an extension of the cGMP approach into other, more common neurodegenerative retinal diseases like age-related macular degeneration and diabetic retinopathy, as well as other disease indications.

"Being rewarded with an issued US patent for the core of our invention is very rewarding and a validation of Mireca's set of intellectual property, manufacturing and (pre)-clinical assets", comments Prof. Dr. François Paquet-Durand, CSO of Mireca. "Allowance of Mireca's first patent application crucially supports our current fundraising, aimed at driving forward clinical development of LP-DF003 in the near future", adds Barbara Brunnhuber, CEO of Mireca Medicines GmbH.



## **About Retinal Degeneration**

Hereditary retinal degeneration is a neurodegenerative condition that leads to loss of photoreceptors and ultimately blindness; the conditions still lack effective treatments. The diseases are caused by gene mutations, whereas the genes in question code for a variety of proteins with different functions, although often related to photoreceptor specific activities. Based on Retinal Information Network data<sup>1</sup>, the number of disease genes amounts to over 250, with an even higher number of individual mutations in each of these genes. Amongst the diseases are Retinitis Pigmentosa (RP), Leber's congenital amaurosis (LCA), and Stargardt's disease (STGD), which, depending on the actual variant, affect between 1:3.000 – 1:30.000 individuals. Mireca believes that around 450,000 persons are affected by these conditions in the EU, US and Japan alone. Inherited retinal degenerations are today untreatable, and while individually they are rare, together they constitute a major cause of severe visual loss and blindness in the working age population.

## **About Mireca Medicines GmbH**

Mireca is a pre-clinical stage ophthalmology start-up company seated in Tübingen (Germany) aiming to bring its targeted, small molecule drug candidate to patients suffering from inherited retinal degeneration like Retinitis Pigmentosa (RP), Leber's congenital amaurosis (LCA), and Stargardt's disease (STGD) covering a broad range of mutations.

The company creates value through leveraging the combination of orphan size drug development, orphan market protection and a large combined market size protected by its proprietary intellectual property. For more information: [www.mireca.eu](http://www.mireca.eu)

## **For further information, please contact**

Mireca Medicines GmbH  
Barbara Brunnhuber, CEO  
Phone: +31 6 23 93 69 66  
E-mail: [bb@mireca.eu](mailto:bb@mireca.eu)

---

<sup>1</sup> <http://sph.uth.edu/Retnet/>