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## **eTheRNA immunotherapies and Ghent University Announce mRNA Delivery Collaboration and License Agreement**

- Novel lipid nanoparticles for mRNA delivery will enhance thermostability, biodegradability and safety and pave the way for new off-the-shelf therapies

### **Niel and Ghent (Belgium)**

eTheRNA immunotherapies NV ('eTheRNA'), a clinical-stage company developing mRNA immunotherapies for the treatment of cancer and infectious diseases, announces a collaboration and license agreement with Ghent University.

Under the terms of the agreement, eTheRNA will receive exclusive worldwide rights to commercialise a new library of novel ionizable lipids, co-developed with the research group of Prof. Bruno De Geest from Ghent University, for a new generation of lipid nanoparticle (LNP) formulations. Ionizable lipids are a main driver of LNP activity, enhancing the entrapment and stabilisation of mRNA into the LNP and facilitating the release of the mRNA payload into the cell cytoplasm where the mRNA is subsequently translated into the protein of therapeutic interest. The ionizable lipids in the new library have been designed for improved biodegradability and therefore offer a better safety profile. In addition, LNPs formulated with these ionizable lipids are expected to have favourable thermostability properties, reducing the need for cold chain storage of the final product.

Steven Powell, CEO at eTheRNA immunotherapies commented: "We are delighted to collaborate with the laboratory of Prof. De Geest from Ghent University with their valuable, combined expertise in chemistry, nanotechnology and immunology. One of the bottlenecks with current mRNA pharmaceuticals is the need for elaborate cold-chain logistics. This collaboration and license agreement gives us access to lipid nanoparticles with enhanced thermostability and improved safety profiles. The new ionizable lipids with improved properties will provide the basis for our second generation of LNPs that will be used to develop future prophylactic vaccines and tumor-microenvironment modulating therapies."

Prof. Bruno De Geest, Ghent University commented: "I am delighted that my long-lasting collaboration with Dr. Stefaan De Koker from eTheRNA immunotherapies has culminated in this successful technology platform. I also wish to acknowledge support from the European Research Council (ERC) which enabled my lab to endeavor into this field of research." Dr. Dominic De Groote, Business Development Manager at Ghent University added: "This partnership is the result of continuing efforts by Ghent University and Ghent University Hospital to become a leading academic and clinical center for the development of advanced therapy medicinal products (ATMPs). This LNP technology is part of our growing portfolio of ATMP related assets that we are actively developing from the bench to the bedside through our translational platform GATE."

### About eTheRNA immunotherapies

eTheRNA immunotherapies NV is developing immunotherapy and vaccine products for the treatment of cancer and infectious disease from its multiple RNA, formulation and manufacturing technology platforms. The company is headquartered in Belgium and was established in 2013. Its founding shareholders include Progress Pharma and VUB. eTheRNA is supported by an international group of specialised investors; BNP Fortis Private Equity, Boehringer Ingelheim Venture Funds, Everjoy Fortune PTE. LTD, Grand Decade Development Limited, Fund+, LSP, Novalis Lifesciences, Omega Funds, PMV and Ying Zhou Enterprise Management Company Limited who share the Company's ambition to build a world-leading company in the RNA field. To date, the Company has raised €63 million of venture funding. Further details relating to eTheRNA can be found at [www.etherna.be](http://www.etherna.be).

### About Ghent University

Ghent University (UGent) is a top 100 university in the Shanghai Ranking and one of the largest Belgian universities in the heart of Europe. We are an active partner in national and international educational, scientific and industrial

cooperation. Our organization is committed to research and innovation with more than 5,500 researchers active in a wide range of the life, physical and social sciences. GATE – the Ghent Advanced Therapies and Tissue Engineering platform ([www.gatehealth.be](http://www.gatehealth.be)) – connects researchers and clinicians in the field of gene and cell therapy, and regenerative medicine, covering the complete process from early research to first-in-human clinical trials. GATE works together with UGent TechTransfer and UGent Business Development Centers to support researchers in developing groundbreaking science to bring innovations to the market. More information at [www.ugent.be](http://www.ugent.be)