



## **Press release - Biogazelle and Isis evaluate long non-coding RNAs to identify and validate novel targets for anti-cancer drugs**

**GHENT, Belgium, October 15, 2015** - Biogazelle NV today announced a research-stage collaboration with Isis Pharmaceuticals in which they will identify and validate novel targets to treat colon, liver and lung cancer, diseases with clear unmet clinical needs. As part of this collaboration, Isis will provide access to its proprietary antisense platform to Biogazelle for large-scale validation of therapeutic long non-coding RNA (lncRNA) targets from Biogazelle's proprietary target identification pipeline.

Antisense drugs are small, DNA- or RNA-like compounds that degrade complementary RNA targets inside the cell. In recent years, antisense drugs have been successfully developed to treat various diseases by targeting disease-associated, protein-coding mRNA targets.

lncRNAs constitute a newly discovered class of RNAs that do not code for proteins. Increasing evidence suggests an important role for lncRNAs in cancer development and progression.

According to Biogazelle's CEO Jan Hellemans, the vast and unexplored landscape of lncRNAs holds great potential for cancer treatment: "Long non-coding RNAs have many features that make them excellent therapeutic targets for antisense drugs. Their remarkable cell type specific expression will help in developing safe treatments with minimal side effects. Biogazelle's capabilities and expertise in this field makes it an ideal development partner".

On the collaboration with Isis Pharmaceuticals Hellemans says: "Isis Pharmaceuticals is the leading company in RNA-targeted drug development, with a proven track record of bringing these new generation drugs to the market. It is the perfect match with our expertise in predicting and validating which lncRNAs are important for cancer cells."

*"Long non-coding RNAs represent a new class of RNA targets that is uniquely addressable by our proprietary antisense technology. This collaboration broadens the application of our technology to this promising new area and provides us with a knowledgeable partner that has the diagnostic expertise and experience to quickly advance from screening to target validation. As such, we are enthusiastic to work with Biogazelle, as we identify novel RNA targets and explore the broad range of therapeutic opportunities offered by targeting lncRNAs," said C. Frank Bennett, Ph.D., senior vice president of research at Isis Pharmaceuticals.*

### **About Biogazelle**

Biogazelle is a Ghent University spin-off founded in 2007 by prof. Jo Vandesompele and dr. Jan Hellemans. It is focused on the development of RNA-targeted therapeutics and has proprietary knowledge to prioritize candidate therapeutic RNA targets in specific cancer types, building on years of expertise in exploring the human transcriptome. Therapeutic inhibition of candidate lncRNA targets are evaluated in high-throughput *in vitro* RNA perturbations and in preclinical animal models.



Biogazelle also offers expert laboratory services (with ISO 17025 accreditation) in the area of RNA diagnostics and gene expression analysis.

Being at the forefront of the genomics revolution, Biogazelle is convinced that unraveling the coding and non-coding regions of the genome will lead to RNA-targeted therapeutics and biomarkers for better healthcare.

## **Contact**

Biogazelle NV – [www.biogazelle.com](http://www.biogazelle.com)  
Jan Hellemans, PhD, CEO  
office phone +32 9 245 96 43  
Mobile +32 499 39 12 58  
Technologiepark 3,9052 Ghent, Belgium