Press release: PamGene, GenXpro and the University Medical Center Groningen have been awarded a research grant for development of personalized lung cancer treatment

Den Bosch, the Netherlands, 11 September 2015 – A Dutch – German public-private consortium of PamGene, GenXpro and the University Medical Center Groningen today announced that they have been awarded a research grant from the EU Eurostars-2 program for the **Triple T** project of € 1.55 million: *Rationalized Tailored Targeted Therapy for Cancer*.

Lung cancer is a major cause of cancer related death. Increasing numbers of patients present themselves with difficult-to-treat lung cancers that become drug-resistant after an initial response. The choice of the follow-up treatment is currently not supported by knowledge about the molecular features of the tumors. Therefore, therapies frequently fail. The project aims at the development and validation of personalized treatment for (therapy resistant) lung cancer patients. This is achieved by application of three powerful types of analyses to human lung cancer tissues that will provide information on the proteomic activity and genetic and metabolic profiles of different cell types in the tumor tissue. The 36 month joint research project is expected to deliver a series of optimized and validated miniaturized technologies for tumor sample analysis that will be established as a service to doctors treating patients with lung cancer. This first service of its kind in the field of lung cancer will enable clinicians to precisely tailor treatments to their individual patient's needs.

"Combining technologies is key to proper diagnosis and treatment of cancer," says Dr. Rob Ruijtenbeek, program leader Triple T and VP R&D at PamGene. PamGene has a unique proprietary array-based platform to measure the activities of kinases & nuclear receptors, enabling deeper understanding of drug interactions with these important classes of signaling molecules. This technology is combined with GenXpro's most advanced technology for intelligent sample preparation, the latest next generation- or "deep sequencing" methods and powerful bioinformatics. The University Medical Center Groningen contributes its Laser Micro Dissection technology to select small groups of cancer and surrounding cells. "This collaboration represents an important step towards knowledge-based treatment of secondary lung cancer and may significantly aid to extend the patient's life span." says Prof. Dr. Harry Groen, lung oncologist from the University Medical Center Groningen.

The project Triple T was initiated through Vivomicx BV, a spin off from the University Medical Center Groningen, specialized in Laser Micro Dissection and analysis of small groups of cells to determine the true effect of drugs in the target tissue.

The Eurostars Programme is powered by EUREKA and the European Community

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About PamGene International B.V.

PamGene (www.pamgene.com) is a functional proteomics and biomarker company, focused on new opportunities in the arena of personalized medicine (pre-clinical, translational and clinical). PamGene provides a peptide array technology platform and bioinformatics tools for several disease applications and is involved in multiple clinical biomarker studies mainly focusing on oncology and immunology. PamGene provides access to its technology through offering of Services and sales of its microarray equipment, PamStation®, and PamChip® microarray products.

For more information please contact Rinie van Beuningen (rvbeuningen@pamgene.com). Tel: +31 736 158 080

About GenXpro GmbH

GenXpro's (www.genxpro.de) provides next-generation sequencing based genome and transcriptome analyses and related bioinformatics services for all sectors of the life sciences. The company is engaged in the development of Liquid Biopsies for pancreatic-, liver- and kidney cancer diagnostics and Alzheimer research.

For more information please contact Dr. Björn Rotter (rotter@genxpro.de), Tel: +49(0)69-95739710

About University Medical Center Groningen

The UMCG (www.umcg.nl) is the only university hospital in the northern part of the Netherlands, and therefore the final point of referral for many patients. The UMCG focuses on healthy ageing in all priority areas: research, clinical care and education. The healthy ageing-related research is bundled in the Institute of Healthy Ageing. This institute forms the shell in which the healthy ageing activities are embedded, i.e. the cohort study LifeLines, the UMCG Center for Geriatric Medicine (UCO) and the European Research Institute on the Biology of Ageing (ERIBA).

For more information please contact Joost Wessels, UMCG corporate Communications at j.r.l.wessels@umcg.nl

About Vivomicx BV

VIVOMICX (www.vivomicx.eu) technology allows the analysis of small groups of cells with comparable features in a complex tissue. The Vivomicx approach assigns the molecular basis of cell (dys)function and effects of drug treatment in complex tissue to specific cell types. This compartmentalization will provide a better insight in the true pharmacological behavior of a compound in relation to the disease status. Vivomicx has proven expertise in analyses of in vivo samples in endothelial biomedicine and vascular drug targeting research of inflammatory conditions and cancer. The Vivomicx technology can be used to improve the focus of drug discovery research and determine the efficacy of a new drug or a drug targeting technology.

For more information please contact: Jan Zuidema, CBO & co-founder of Vivomicx, j.zuidema@vivomicx.eu

Cautionary statement regarding forward-looking statements

This press release contains certain forward-looking statements. Any forward-looking statement is only applicable on the date of this press release. By their nature, forward-looking statements are subject to a number of known and unknown risks and uncertainties that may or may not occur in the future and as a result of which the actual results and performance may differ substantially from the expected future results or performance expressed or implied in the forward looking statements. No warranties or representations are made as to the accuracy, achievement or reasonableness of such statements, estimates or projections, and the Parties mentioned in this press release have no obligation to update any such information or to correct any inaccuracies herein or omission herefrom which may become apparent.