

ABSTRACTS

- PITCHES COMPANIES -

1. SMADMINX: Sheila Krishnadath

Novel inhibitors to inhibit the stroma-cancer cross to prevent cancer growth

Gastro-intestinal cancers such as esophageal, gastric and pancreatic cancers are still the top three gastrointestinal malignancies responsible for millions of deaths on a yearly base. Developing highly specific patient tailored targeted therapies is an unmet medical need. SMADMINX B.V. is a spin off company led by Prof. Dr. Krishnadath. SMADMINX has developed novel targeted therapies for patients with aggressive malignancies within the Gastro-intestinal which in pre-clinical studies prove to be highly effective in a specific subset of cases. The SMADMINX therapeutics are low molecular weight Llama antibodies (VHH) with high specificity against several morphogenes (BMP2 and BMP4) that act as growth factors in a subset of highly aggressive cancers. These VHHs are highly effective in inhibition of tumor growth.

4. Elmedix: John-Paul Bogers

Using Heat to Treat Cancer: Join Our Mission

Thermal therapy, specifically through the application of heat or hyperthermia, is an established and promising approach for cancer treatment. Local hyperthermia techniques are already utilized in clinical settings, often in combination with radiotherapy, and have demonstrated efficacy in specific cases. Building on this foundation, we have launched a spin-off company from the University of Antwerp to develop an innovative whole-body platform technology for treating patients with advanced metastatic cancer.

Our initial focus is on stage 4 pancreatic cancer, a highly aggressive malignancy with limited therapeutic options. We are currently in the final stages of a clinical trial at UZ Antwerpen and are preparing to initiate a larger, multicenter efficacy trial in the near future. Early results from our studies are highly encouraging, underscoring the potential of our technology to make a meaningful impact in oncology.

Despite extensive research, the precise mechanisms underlying hyperthermia's therapeutic effects remain incompletely understood. To address this, the Laboratory of Cell Biology and Histology at the University of Antwerp is conducting cutting-edge research to elucidate the cellular and molecular effects of elevated temperatures. Our projects include investigating the impact of hyperthermia on the cell cycle, metabolic pathways, and the broader cellular stress response. Additionally, we are exploring heat-induced genetic and expression changes to better understand its role in modulating cancer cell behavior.

This is an exciting time to join us in advancing this rapidly evolving field. We are actively seeking motivated students to contribute to our research and development efforts, whether through experimental studies, data analysis, or clinical trial support. By joining our team, you will have the opportunity to work at the intersection of translational science, innovative technology, and clinical application, helping to shape the future of cancer treatment.

If you are passionate about oncology, cellular biology, or therapeutic innovation, we invite you to become part of our mission to revolutionize cancer care through hyperthermia. Let's work together to make a difference.

6. SGS CPU: Nick Praet

Rethinking Research: Healthy Volunteers in Early Oncology Studies

“Oncological phase 1 trials should avoid the use of healthy volunteers due to ethical concerns regarding anticipated adverse events without therapeutic benefit.”

This is what most would consider common sense, and still apply today. However, with the advent of more targeted therapies and the use of specific monoclonal antibodies, this paradigm is slowly evolving. Given the appropriate mechanism of action and robust preclinical data, phase 1 cancer studies can, and have already, been conducted in healthy volunteers. This approach allows to avoid treatment of cancer patients with inactive or subtherapeutic therapies, while simultaneously generating higher quality data and accelerating the drug development process.