Objective

Cancer is one of our times most threatening diseases, killing more than 10 million people each year. Approximately 60% of all cancer patients will need some type of surgery, where minimal invasive surgery is commonly known as the best type of procedure from the patients perspective, where recovery time and infections can be kept to a minimum.

Despite proven benefits from a patient’s perspective, the utilization of minimal invasive cancer surgery remains relatively low. Limited visualization with large challenges in identifying the cancer tumors position are a strongly contributing factor. The limited view from the surgical camera makes it challenging for the surgeon to
navigate along the surgery procedure, not to mention removing the tumor with precise margins.

Navari aims to revolutionize today's minimal invasive cancer surgery, by developing a technology increasing the visualization aspect during this type of procedure. By utilizing augmented reality, Navari's innovation can present the surgeon with an AR-projection, showing the cancer tumor and its exact position inside the organ. The projection of the cancer tumor is shown as an integrated part of the video feed from the surgical camera, enabling live-streamed navigation assistance along the full procedure. In short terms, our innovation enables surgeons to locate and remove the tumor in the safest and most precise way possible.

In this project, we aim to design and perform a pre-clinical study, realizing our next value enhancing milestone, giving us the validation needed for the innovation to enter future clinical studies. With the data given from the pre-clinical study, the business model could be validated further, where a health economic analysis could be performed measuring the social sustainability impact of our innovation. The outcomes from the study, would enable further product optimization from a technical perspective, as well as strengthening our communication towards investors.

**Fields of science**

- medical and health sciences  > clinical medicine  > surgery
- engineering and technology  > electrical engineering, electronic engineering, information engineering  > electronic engineering  > sensors  > optical sensors
- social sciences  > economics and business  > business and management  > business models
- medical and health sciences  > clinical medicine  > oncology
- natural sciences  > computer and information sciences  > software  > software applications  > simulation software

**Keywords**

- Augmented Reality
- Minimal Invasive Surgery
- Cancer Tumor
- Robotic Surgery

**Programme(s)**

HORIZON.3.2 - European innovation ecosystems  MAIN PROGRAMME
Topic(s)

HORIZON-EIE-2022-SCALEUP-02 - Women TechEU

Call for proposal

HORIZON-EIE-2022-SCALEUP-02

See other projects for this call

Funding Scheme

HORIZON-CSA - HORIZON Coordination and Support Actions

Coordinator

NAVARI SURGICAL AB

Net EU contribution

€ 75 000,00

Address

Lararegatan 3
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Region

Södra Sverige > Västsverige > Västra Götalands län

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00

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