



## Company Overview

Greppo Technologies is a medical device startup developing a unique high performance, actively steerable surgical needle enabling minimally invasive treatment of cancer tumors in difficult to access anatomy by Interventional Radiologists. Our device has the potential to reduce trauma to patients leading to fewer complications, shorter hospital stays, and reduced costs to the hospital and payer.

## Problem and Market Opportunity

The cancer tumor ablation market is over \$1B globally. The rigid straight ablation probes used by Interventional Radiologists today make it difficult to access many cancer lesions in the upper dome of the liver. There is a need to navigate around ribs, and avoid puncturing the lung. Our device has the potential to benefit patients and surgeons performing this and other similar minimally invasive general surgery procedures.

The primary market for our device is cancer tumor ablation procedures done by Interventional Radiologists. The initial usage will be for lesions in the upper dome of the liver that are difficult to access with the standard, straight, rigid ablation probes available on the market today. As IR's adopt the steerable needle for liver tumor ablations and become familiar with it, they will then start using it for additional procedures as well.

Currently, the standard of care for microwave ablation systems include straight, non-steerable devices. A steerable needle was recently launched by AprioMed, but the 8 cm radius of curvature limits the utility of the device. Greppo is developing a flexible steerable needle with the ability to create and follow a precise path through soft tissue with high maneuverability. Our tight turning radius (1 cm radius of curvature) and ability to make multiple turns will provide exceptional ease of use for the surgeon.

## Team Information

Mark Yim, PhD (yim@seas.upenn.edu), Founder of Greppo Technologies and inventor of the underlying technology, is the Professor and Director of Integrated Product Design, Mechanical Engineering and Applied Mechanics (MEAM) at the University of Pennsylvania. He is an expert in the field of robotics.

Dick Winkelmayr (wink@greppotech.com), CEO of Greppo Technologies, has over thirty years of experience in the medical device industry, with ten years of medical device leadership as a Senior Business Executive for WL Gore & Assoc Inc's General Medical Products business. He is an expert in new product development and commercialization and business strategy optimization for medical technology companies.