CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
DP140072

Project Title:
OncoNano Medicine: Transforming Cancer Surgery by Tumor Illumination

Award Mechanism:
New Company Product Development Award

Principal Investigator:
Sumer, Baran

Entity:
OncoNano Medicine

Lay Summary:

OncoNano Medicine, a Dallas-based University of Texas Southwestern Medical Center (UTSWMC) spinout, is developing nanotechnology-enabled fluorescent probes to help a cancer surgeon excise tumors. Surgery is a major mode of cancer treatment with over 550,000 cancer resection procedures per year in the US. A major challenge in these cancer surgeries is in differentiating tumors from healthy tissue. Incomplete tumor removal is a major concern in cancer surgery as the remaining tumor could regrow and metastasize to other organs. Conversely, excess and critical healthy tissue removal can have adverse effects such as the ability to swallow in head and neck surgery, or have severe cosmetic scarring effect such as in breast cancer surgery. The initial markets targeted by OncoNano include breast lumpectomies, Mohs surgery, Melanoma surgeries and head and neck cancer surgeries. OncoNano's origin and heritage have strong ties to Texas. OncoNano is headquartered in Dallas and will operate in UTSWMC's incubator. OncoNano will contribute to the cancer ecosystem in Texas by creating high quality cancer research jobs, recruiting talent into the state, and funding collaborations and clinical trials with leading Texas oncology hospitals including UTSWMC and MD Anderson Cancer Centers.