PROSTATE CANCER A Major Issue for Public Health

PROSTATE CANCER IS THE MOST COMMON CANCER AMONG MEN, with more than 1.1 million new cases diagnosed every year worldwide, before lung cancer and colorectal cancer.



Prostate cancer is the THIRD leading cause of cancer- related deaths in American men



It is estimated that 161,360 American men will be diagnosed with prostate cancer



NEARLY

20 MILLION American men will be confronted with important early detection decisions



BIOPSIES ARE CRITICAL

and the only diagnostic test that confirms the presence of prostate cancer and evaluates prognosis.

OF BIOPSIES PERFORMED WORLDWIDE ARE "BLIND" resulting in low positive detection rates (20-30%).

A urologist can decide between fusion-targeted therapy with

local anesthesia or a blind biopsy without general anesthesia.

BLIND BIOPSY is the removal of 12 to 40 spread samples.

- More samples to maximize the chances of finding an infected site
- Not as clear visualization of potential cancer on the ultrasound scanner
- Difficult to take an even spread of organ samples
- 30% MRI/US Fusion **Cancer Detection Rate**

FUSION-TARGETED BIOPSY is the

- removal of 3 to 18 samples. Locate suspect areas on
- the ultrasound image in realtime Guide biopsy needle
- directly into the suspect areas on the MRI
- Precision of a few millimeters
- 60% MRI/US Fusion **Cancer Detection Rate**

PROSTATE CANCER TUMOR IMAGING CHALLENGES



CHALLENGE 1 To localize and register patient's prostate and cancer lesions on a personalized 3D cartography



CHALLENGE 2 To give the urologist the means to pinpoint with

exact precision



To validate a targeted treatment technique

