Prostate Cancer: Introduction

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Prostate Cancer

Cases/Year*  217,730
Deaths/Year*  32,050

Prostate Biopsies/Year ~ 1,000,000

*Estimated U.S. 2010
Prostate Biopsy

Men currently undergo prostate biopsy:

• Elevated PSA (for diagnosis)
• Active Surveillance (for evaluation of grade)
• Focal Therapy (such as cryotherapy)
Clinical Questions for Research

• Why is prostate cancer the only solid tumor that is diagnosed by randomly sampling the organ in the hopes of hitting the tumor?

• If organ sparing treatment has been developed for other cancers (breast, kidney, bladder, etc.) why not prostate?
Prostate Biopsy: Elevated PSA

Prostate MRI
Prostate Biopsy: Surveillance

Ultrasound-Guided Fusion Biopsy

Prostate MRI
Turn “Focal Therapy” into “Image Guided Therapy”

Prostate MRI

Ultrasound-Guided Focal Therapy
Systemic Therapy:
Evaluation of Response/PD