UroNav
FUSION BIOPSY SYSTEM

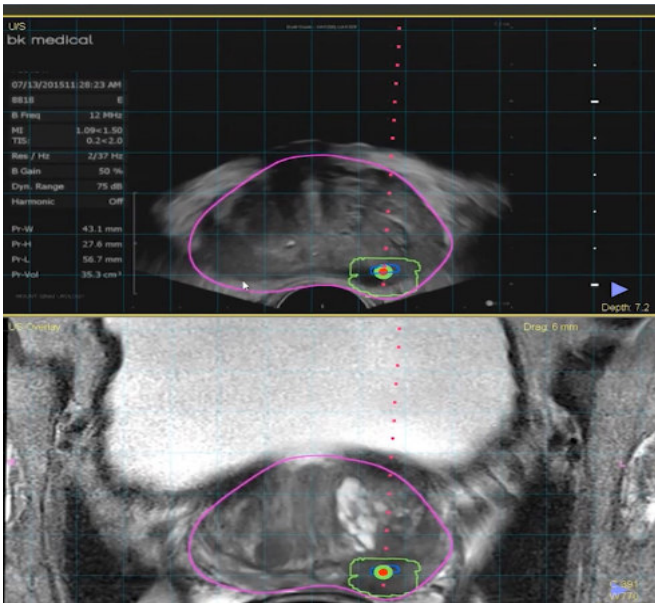
Invivo
inspired by a better way

Welcome to a better way for YOU and YOUR patient.

UroNav
FUSION BIOPSY SYSTEM

The Next Generation of Prostate Care from Invivo

Current methods of prostate cancer screening, such as prostate-specific antigen (PSA) tests and digital rectal exams (DRE), are somewhat unreliable and can lead to many uncertainties for both patient and urologist. Prostate biopsy, the most reliable method of detection, is a challenge because of the difficulties in visualizing not only the entirety of the prostate, but also the location of the biopsy needle. Trans-rectal ultrasound-guided prostate biopsy (TRUS), the current biopsy standard, commonly suffers from poor image resolution, and the biopsy needle often passes through tumor-free areas of the prostate - potentially missing the tumor entirely.



MR/US fusion aligns and registers prior diagnostic MR images (bottom) with real-time ultrasound images (top). Purple outline displays the segmented prostate anatomy from the MR exam and green/red "targets" indicate the location of the MR suspicious lesions.[†]

In addition, it can be difficult to distinguish between lesions that necessitate only a "watchful waiting" period and more aggressive lesions that require therapy. A more confident characterization of the type of lesion could help avoid the risk of side effects such as incontinence, impotence and bowel problems that can result from therapy.

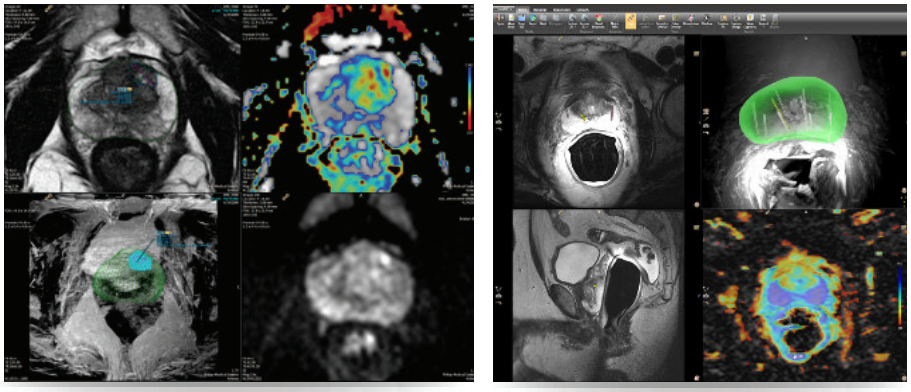
Targeted MR/ultrasound biopsy is poised to become a new standard in prostate care. This technique fuses pre-biopsy MR images of the prostate with ultrasound-guided biopsy images in real time, for excellent delineation of the prostate and suspicious lesions, as well as clear visualization of the biopsy needle.

The fusion of the MR and ultrasound images uses electromagnetic tracking, similar to your car's GPS system. A small, localized electromagnetic field is generated and used in conjunction with a navigation sensor mounted to the trans-rectal ultrasound probe to determine the location and spatial orientation of the biopsy device. A sophisticated algorithm maintains the fusion of MR and ultrasound images - even when the patient moves.

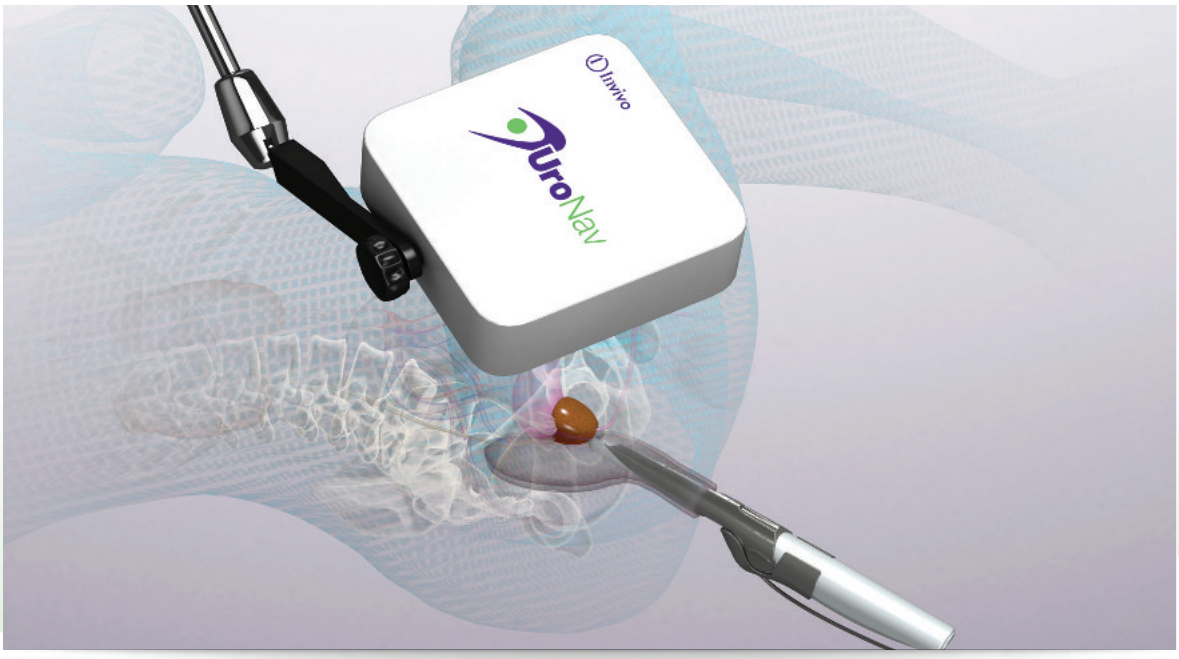
The Power of MRI – Now Available in the Urology Suite

Better Images Mean Better Results

UroNav brings the power of MRI to the Urology suite as prostate and lesion segmentation data from Radiology are quickly and easily transferred to UroNav for review and target identification. This critical exchange of diagnostic information fosters enhanced collaboration between Radiology and Urology in the assessment and biopsy of suspicious prostate lesions. UroNav automatically recognizes the required prostate information and loads the images and reference data at the point of care. It's powerful, fast and simple.



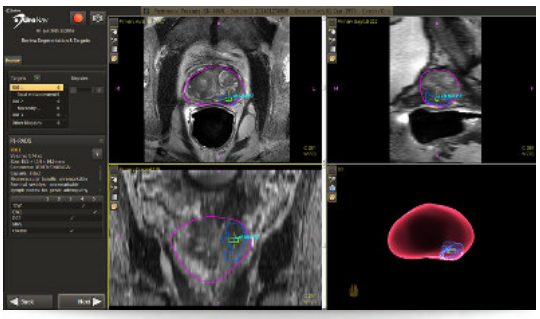
Biopsy core location data can be sent back to Radiology and viewed on DynaCAD as a "reverse fusion" with a pre- or post-biopsy MRI

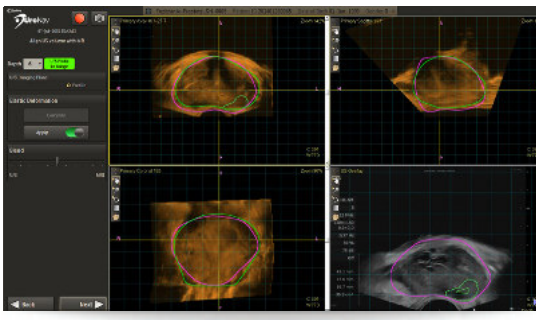


We Work How You Work

With UroNav, there is no need for complex mechanical devices or complicated, time-consuming set-up routines. With a simple click, the navigation sensor, which is factory-calibrated and matched to your ultrasound system*, attaches to your existing ultrasound transducer. Position the navigation system above the patient and you're ready to take advantage of UroNav's simple, guided workflow – which follows the same TRUS biopsy procedure that you are used to.

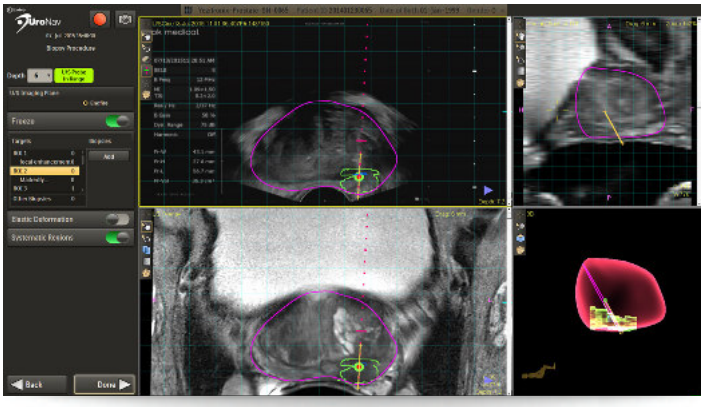
- Familiar freehand technique provides complete range of motion and unrestricted access to difficult locations within the gland.
- Ultrasound-only work flow for guided navigation without the need for pre-biopsy MR data.
- Display prior biopsy core location and data for previous procedures performed with UroNav.
- Robust, 3D gland segmentation modeling and flexibility to perform dynamic adjustments of the ultrasound segmentation boundary.
- Elastic (deformable) and rigid registration options - allowing you to select the registration technique best suited for your patient data.
- On-the-fly registration adjustments, which can be made in seconds without the need to restart the fusion procedure.



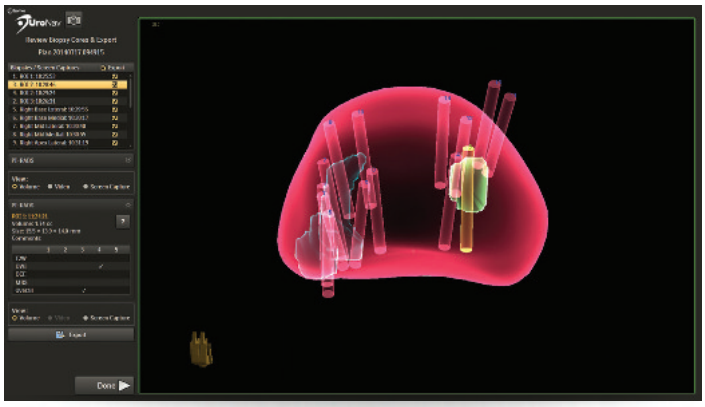


From setup to post-biopsy review, UroNav guides you through its intuitive workflow.†

Invivo
inspired by a better way



UroNav simultaneously displays registered MR and ultrasound images and the projected needle path relative to the suspicious target lesion during the biopsy procedure.†



Post-biopsy review provides the visualization and recording of target and biopsy core locations in multiple 2D and 3D views.†

A Better Way

UroNav fusion biopsy system from Invivo enables easy clinical use of this remarkable MR/US fusion technique. It combines electromagnetic tracking and navigation with an on-board computer and a real-time imaging interface in one easy-to-use, mobile workstation. The combination of UroNav with Invivo's powerful MR ultrasound solution for the evaluation and biopsy of suspicious prostate lesions.

UroNav is vendor independent, so it can accommodate MR data from MR scanners and interface with common urology-based ultrasound systems.* This enables a high level of collaboration and a virtually seamless interface between radiologist and urologist, without disrupting your current workflow.

Contact Invivo to ascertain compatibility with your system.

Invivo is a leader in prostate care, with products and solutions that bridge clinical workflow across multiple specialties, and world-class customer service and applications support.

DynaCAD for PROSTATE

Our Comprehensive Prostate Solution combines:

- UroNav Fusion Biopsy System
- DynaCAD for Prostate advanced visualization and analysis software
- DynaLOC interventional planning software
- DynaTRIM (Trans-Rectal Interventional MRI) hardware
- Invivo interventional instruments

For more information about UroNav or any of the Complete Solution products from Invivo, please call us at 1-800-331-3220,or visit our website at www.invivocorp.com

Gainesville, FL U.S.A.
T: 877-INVIVO1
T: 407-275-3220
E: info@invivocorp.com

Europe:
Alex Kypriotis
T: 0044 (0)7867908926

www.invivocorp.com

† Images courtesy of Art Rastinehad D.O.