Balancing cancer detection and finding false positives: Enhancing tumor imaging technology provides guidance

Many forms of cancer go undetected until a later stage, making them hard to treat and putting patients at greater risk of death. On the flip side, many existing tests provide too many false positives that lead to risky surgeries.

Physicians must therefore strike a careful balance that enables both early and accurate detection to enable longer lifespans for cancer patients. One solution—a clear image of a tumor and its features—is not yet available to doctors, but scientists are working diligently to develop the technology to produce a readable, inexpensive “snapshot.”

[A] group of engineers and doctors at Washington University in St. Louis launched efforts to determine if an imaging-based technique could provide a more detailed view of [breast] cancer and enable women to make an informed decision for treatment options at the onset. This process combines an ultrasound with an additional optical imaging component—diffused near-infrared light. Preliminary findings in a pilot study suggest that, after just a couple of weeks, the technique can show how a patient’s breast tumor is responding to a particular chemotherapy regimen.

Researchers and doctors are studying and striving to deliver non-invasive imaging technologies to enable women to make much more informed decisions about surgery and have a better quality of life. If we can provide a better look, a better image, it might just make for a better future.

Read full, original post: A New Way to “See” Cancer