## MEDICAL BREAKTHROUGHS RESEARCH SUMMARY

TOPIC: PROSTATE CANCER: WHO ARE THE BEST CANDIDATES FOR HIFU?

REPORT: **MB #4952** 

**BACKGROUND**: Prostate cancer is somewhat unusual when compared with other types of cancer. This is because many prostate tumors do not spread quickly to other parts of the body. Some prostate cancers grow very slowly and may not cause symptoms or problems for years or ever. Even when prostate cancer has spread to other parts of the body, it often can be managed for a long time. People with prostate cancer, and even those with advanced prostate cancer, may live with good health and quality of life for many years. However, if the cancer cannot be well controlled with existing treatments, it can cause symptoms like pain and fatigue and can sometimes lead to death. An important part of managing prostate cancer is monitoring it for growth over time, to find out if it is growing slowly or quickly.

(Source: <a href="https://www.cancer.net/cancer-types/prostate-cancer/introduction">https://www.cancer.net/cancer-types/prostate-cancer/introduction</a>)

**DIAGNOSING:** Testing healthy men with no symptoms for prostate cancer is controversial. There is some disagreement among medical organizations whether the benefits of testing outweigh the potential risks. Most medical organizations encourage men in their 50s to discuss the pros and cons of prostate cancer screening with their doctors. If prostate cancer screening detects an abnormality, your doctor may recommend further tests to determine whether you have prostate cancer. During a transrectal ultrasound, a small probe, about the size and shape of a cigar, is inserted into the rectum. The probe uses sound waves to create a picture of the prostate gland. In some situations, your doctor may recommend an MRI scan of the prostate to create a more detailed picture.

(Source: <a href="https://www.mayoclinic.org/diseases-conditions/prostate-cancer/diagnosis-treatment/drc-20353093">https://www.mayoclinic.org/diseases-conditions/prostate-cancer/diagnosis-treatment/drc-20353093</a>)

**NEW TECHNOLOGY:** Prostate cancer treatment is on the brink of a major advance, thanks to new imaging technology that can pinpoint the location of prostate cancer cells. This new diagnostic tool allows doctors to see whether the cancer cells are still in the prostate or have spread elsewhere — crucial information for determining the best treatment for patients. This form of imaging uses a radiotracer, a radioactive targeting molecule that selectively seeks out and attaches to a protein on the surface of cancer cells. That protein, called prostate-specific membrane antigen (PSMA), is not found on most normal cells. When the radiotracer binds to the prostate cancer cells, they can be detected using a PET scanner. On the PET scan, the cancer cells appear as bright spots.

(Source: <a href="https://www.mskcc.org/news/new-technology-pinpoints-prostate-cancer-will-transform-care">https://www.mskcc.org/news/new-technology-pinpoints-prostate-cancer-will-transform-care</a>)

## FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

HOPE BUGGEY BUGGEYH@CCF.ORG

If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at <a href="mailto:mthomas@ivanhoe.com">mthomas@ivanhoe.com</a>