Ten percent of primary tumors and 25 percent of metastases from prostate cancer harbor mutations in genes in the DNA damage repair pathway, including the BRCA1 and BRCA2 genes. The link between an elevated risk of prostate cancer and BRCA mutations has been well established, with the strongest association for the BRCA2 gene. Prostate cancer in BRCA2 mutation carriers appears to occur at an earlier age; has a more aggressive phenotype, a higher risk of nodal involvement, and distant metastasis; and is associated with a poor survival outcome in comparison to non-carriers.

**For patients with a BRCA1 mutation:**
- The lifetime risk for prostate cancer is about 20-30 percent.
- Prostate cancer screening in BRCA1 mutation carriers is recommended starting at age 40. Screening may incorporate prostate specific antigen (PSA), digital rectal exam, ExactVu™ ultrasound, bladder scanning, and genomics.
For patients with a BRCA2 mutation:

- The lifetime risk for prostate cancer is about 30-60 percent.
- Prostate cancer screening in BRCA2 mutation carriers is recommended starting at age 40. Screening may incorporate prostate specific antigen (PSA), digital rectal exam, ExactVu™ ultrasound, bladder scanning, and genomics.

We will develop a personalized screening program for you based on your risk factors and medical history. We encourage shared decision-making with your physicians.

Mount Sinai’s Comprehensive BRCA Program for men and women who have mutations in the BRCA1 or BRCA2 gene provides expert guidance to ensure that you receive appropriate cancer screenings, monitoring, and treatment, as needed.

For information and appointments, call 877-309-BRCA (2722).

www.mountsinai.org/care/cancer/about/brca-program

Image Source: Front: National Institutes of Health (NIH).
Creator: Ernesto del Aguila III, National Human Genome Research Institute, NIH