

Prostate cancer genetic testing



INVITAE PROSTATE CANCER PANEL

Invitae offers comprehensive genetic testing for patients at risk for hereditary prostate cancer. More than 180,000 cases of prostate cancer are diagnosed each year; 5–10% of those are expected to be hereditary.^{1,2}

Pathogenic variants in *BRCA1* and *BRCA2* are only part of the story. Invitae's comprehensive prostate cancer panel targets up to 17 genes that evidence associates with a hereditary predisposition to prostate cancer:

ATM, BRCA1, BRCA2, BRIP1, CHEK2, EPCAM, FANCA, HOXB13, MLH1, MSH2, MSH6, NBN, PALB2, PMS2, RAD51C, RAD51D, TP53

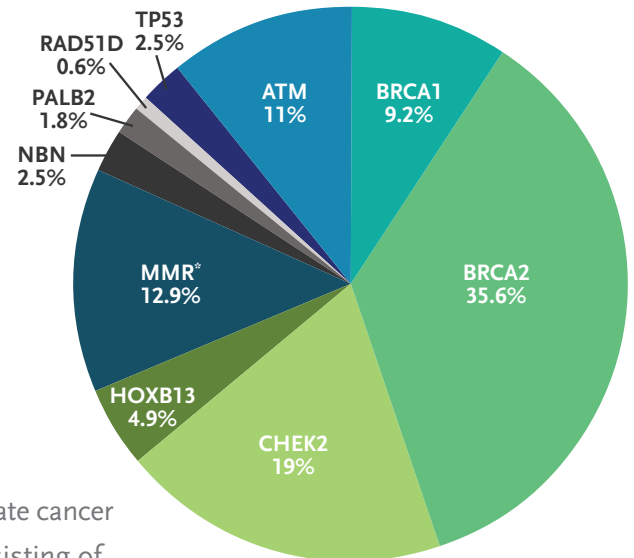
Results from the Invitae Prostate Cancer Panel can help guide medical management for both your patient and their family, including treatments such as PARP inhibitors, platinum agents, and immunotherapy.

CONSIDERATIONS FOR TESTING

This panel may be appropriate for the following patients:

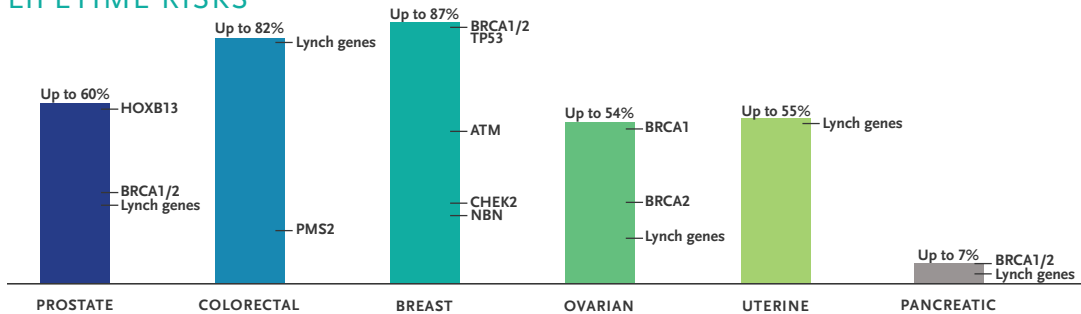
- All men with high-risk, very high-risk, regional, or metastatic prostate cancer
- All men with any stage prostate cancer and a family history consisting of any of the following:
 - Brother, father, or multiple family members diagnosed with prostate cancer at <60 years of age; **OR**
 - Family member with a known mutation; **OR**
 - More than one relative with breast, ovarian, or pancreatic cancer (suggests possibility of *BRCA2* mutation); **OR**
 - More than one relative with colorectal, endometrial, gastric, ovarian, pancreatic, small bowel, urothelial, kidney, or bile duct cancer (suggests possibility of Lynch syndrome)

INVITAE PROSTATE CANCER PANEL VARIANT DISTRIBUTION³



**EPCAM, MLH1, MSH2, MSH6, and PMS2*

LIFETIME RISKS



¹Cancer Genome Atlas Research Network. *Cell*, 2015.

²Pritchard, CC. *et al. NEJM*, 2016.

³Piper LW Nicolosi, *et al.* Presented at ASCO Annual Meeting; June 2017; Chicago, Illinois.

BENEFITS OF TESTING WITH INVITAE

Invitae is a genetic information company whose mission is to bring genetic information into mainstream medical practice to improve the quality of healthcare for billions of people. We offer:

- High-quality results backed by peer-reviewed studies
- STAT panels (results in 7 days on average) for urgent treatment decisions
- Ability to follow up with additional oncology genes at no additional charge
- In-network status for more than 200 million patients in the United States—and growing