

## Prostate cancer genetic testing

### Invitae prostate cancer panel

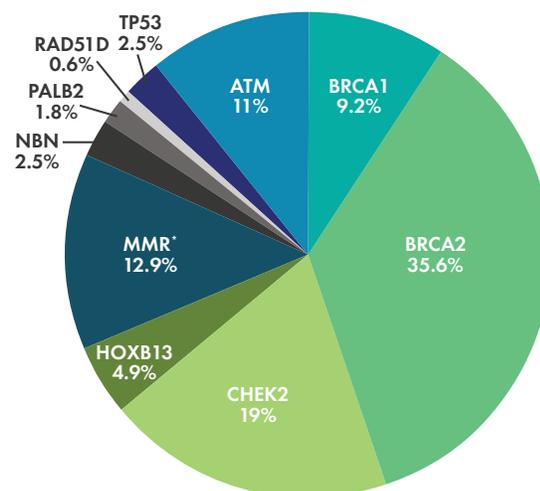
Invitae offers comprehensive genetic testing for patients at risk for hereditary prostate cancer. More than 180,000 cases of prostate cancer are diagnosed each year; 5–10% of those are expected to be hereditary.<sup>1,2</sup>

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.

Invitae Prostate Cancer Panel variant distribution<sup>3</sup>



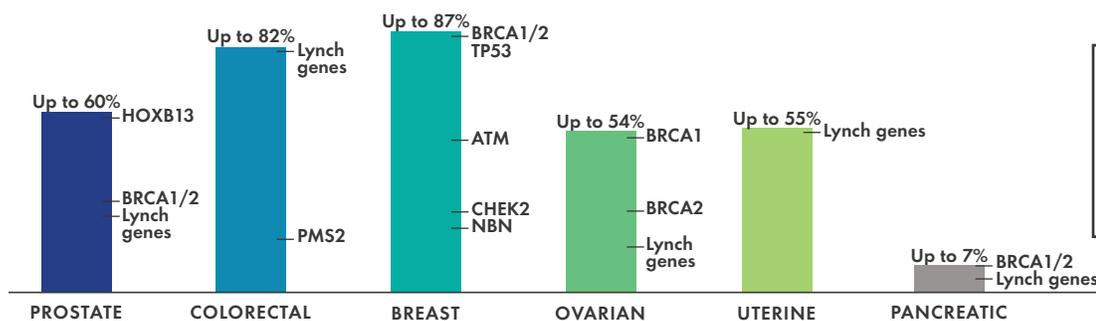
\**EPCAM, MLH1, MSH2, MSH6, and PMS2*

### 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)

### Lifetime risks



1. Cancer Genome Atlas Research Network. *Cell*, 2015.  
 2. Pritchard, CC, et al. *NEJM*, 2016.  
 3. Piper LW Nicolosi, et al. Presented at ASCO Annual Meeting; June 2017; Chicago, Illinois.

### Benefits of testing with invitae

- 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 (learn more at [www.invitae.com/re-requisition](http://www.invitae.com/re-requisition))
- In-network status for more than 270 million patients in the United States—and growing
- Test blood relatives of patients with pathogenic or likely pathogenic mutations at no additional charge within 90 days (learn more at [www.invitae.com/family](http://www.invitae.com/family))