

# Clinician Management Resource for HOXB13

This overview of clinical management guidelines is based on this patient's positive test result for *HOXB13* gene mutation. Unless otherwise stated, medical management guidelines used here are limited to those published in Implementation of Germline Testing for Prostate Cancer: Philadelphia Prostate Cancer Consensus Conference 2019¹. Please consult the referenced website link for complete details and further information.

Clinical correlation with the patient's past medical history, treatments, surgeries, and family history may lead to changes in clinical management decisions; therefore, other management recommendations may be considered. Genetic testing results and medical society guidelines help inform medical management decision but do not constitute formal recommendations. Discussions of medical management decisions and individualized treatment plans should be made in consultation between each patient and his or her healthcare provider and may change.

SURVEILLANCE CONSIDERATIONS <sup>1,^</sup>	AGE TO START	FREQUENCY
Prostate cancer		
Consider prostate cancer screening.*	Starting at age 40 years, or 10 years before the youngest prostate cancer diagnosis in the family	Individualized
When possible, refer to specialty prostate cancer high-risk clinics.	Individualized	Individualized
When possible, refer to clinical screening trials.	Individualized	Individualized
Counseling		
Refer to a genetic counselor to discuss family history-based cancer screening, management recommendations, and cascade testing for family members.	Individualized	Individualized

<sup>^</sup> There is a need for consensus agreement on genetically informed prostate cancer treatment, management, and early detection.

<sup>\*</sup> HOXB13 has a strong association to prostate cancer risk and early-onset disease, though screening outcomes data are limited.

<sup>1.</sup> Giri VN, et al. (2020) J of Clin Oncol 38(24):2798-2811. https://ascopubs.org/doi/10.1200/JCO.20.00046



## Understanding Your Positive HOXB13 Genetic Test Result

INFORMATION FOR PATIENTS WITH A PATHOGENIC MUTATION OR VARIANT, LIKELY PATHOGENIC

### 4 Things To Know

1	HOXB13 mutation	Your testing shows that you have a pathogenic mutation or a variant that is likely pathogenic in the <i>HOXB13</i> gene.
2	Cancer risks	Males with a pathogenic mutation or a variant that is likely pathogenic in this gene have an increased chance to develop prostate cancer.
3	What you can do	Risk management decisions are very personal. There are options to detect cancer early or lower the risk to develop cancer. It is important to discuss these options with your doctor and decide on a plan that works for you.
4	Family	Family members may also be at risk – they can be tested for the <i>HOXB13</i> likely pathogenic variant that was identified in you. It is recommended that you share this information with your family members so they can learn more and discuss with their healthcare providers.

### HOXB13 Mutations in the Family

There is a 50/50 random chance to pass on a *HOXB13* mutation to each of your children. The image to the right shows that everyone can carry and pass on these mutations, regardless of their sex at birth.



#### **RESOURCES**

- Ambry's hereditary cancer site for families patients.ambrygen.com/cancer
- Us TOO International Prostate Cancer Education & Support Network ustoo.com
- National Society of Genetic Counselors nsgc.org
- Canadian Society of Genetic Counsellors cagc-accg.ca

Please discuss this information with your healthcare provider. The cancer genetics field is continuously evolving, so updates related to your *HOXB13* result, medical recommendations, and/or potential treatments may be available over time. This information is not meant to replace a discussion with a healthcare provider, and should not be considered or interpreted as medical advice.