

AmbryScore: Personalized Prostate Cancer Risk Estimate

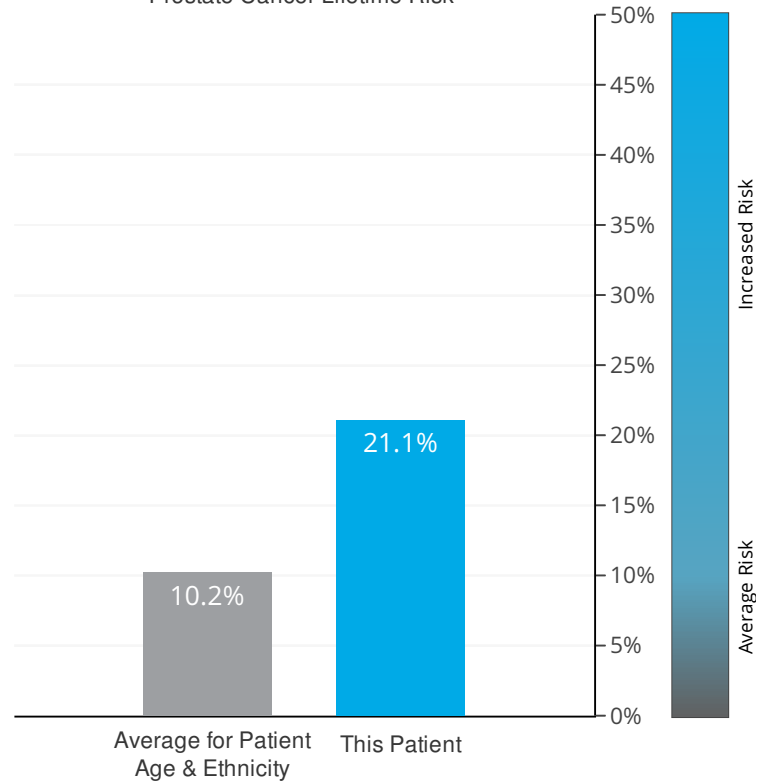
Supplement to Test Results

Remaining Lifetime Risk:

21.1%

- This individual's remaining lifetime risk for prostate cancer is estimated at 21.1%, which is increased above the general population risk of 10.2%.
- Increased prostate cancer surveillance for this patient should be considered.

Prostate Cancer Lifetime Risk



For comparison, studies support an approximate 1.5 to 2.5-fold increase in risk for men with an affected 1st or 2nd degree male relative (e.g. father, brother, grandfather, uncle) [PMID: 25837820, 22652152].

Interpretation

- This individual's remaining lifetime prostate cancer risk of 21.1% is above the average risk for a man of this age and ethnicity.
 - **A prostate cancer polygenic risk score (PRS) of 1.7 was used in the remaining lifetime risk calculation.**
- Males at increased prostate cancer risk may benefit from earlier and more frequent prostate cancer screening.
- In addition to this AmbryScore lifetime risk estimate, family history is an important independent risk factor for prostate cancer which should be considered when developing a screening plan.

Technical Details

The AmbryScore tool provides a personalized estimate of prostate cancer risk based on the following patient-specific factors: age at testing, ethnicity, and results of single nucleotide polymorphism (SNP) profiling. A population-standardized PRS is computed as the sum of the patient's risk alleles across 72 SNPs, weighted by the SNP-specific effects reported in large prostate cancer studies, and ethnicity-specific allele frequencies [PMID: 27197965, 27080480]. The AmbryScore calculation is highly-dependent on the accuracy of clinician-provided data. Other factors not accounted for in the AmbryScore calculation may impact prostate cancer risk including, but not limited to, germline mutations not analyzed by the ordered genetic test. The AmbryScore provided is patient-specific and cannot be used to infer risk to relatives. Additional technical details and supporting references can be found here: www.ambrygen.com/ambryscore.