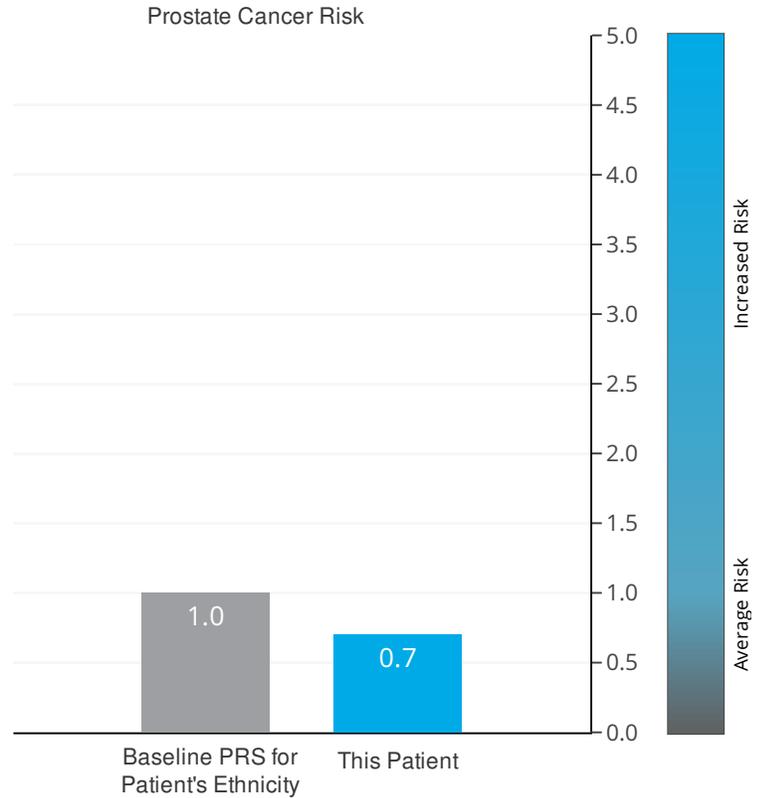# AmbryScore: Personalized Prostate Cancer Risk Estimate

Supplement to Test Results

Polygenic Risk Score (PRS):

0.7

- This individual's prostate PRS of 0.7 is at or below the population baseline PRS of 1.0.

- A PRS in this range is unlikely to have contributed to prostate cancer development in this individual.

Prostate Cancer 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 prostate PRS of 0.7 is at or below the average risk for a man of this ethnicity.
- Use of the AmbryScore risk estimate in medical management and planning should be left to the discretion of the healthcare provider and interpreted in the context of patient age, clinical history, and family history.

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.