

INTEGRATED RISK™ Prostate Cancer

John Doe

Sex Assigned at Birth: Male
Date of Birth: 11/15/1971
Sample ID: SM-0000232
Sample Type: BLOOD
Collection Date: 02/01/2024
Received Date: 02/03/2024

Clinic: Proactive Health Center
Physician: Test Provider, M.D.,
Ph.D.

Phone: 510-555-0000
NPI: 1234567890

Requisition ID:
RQ-0000059

Report Number:
RP12345

Report Date:
10/30/2025

Scan to learn more

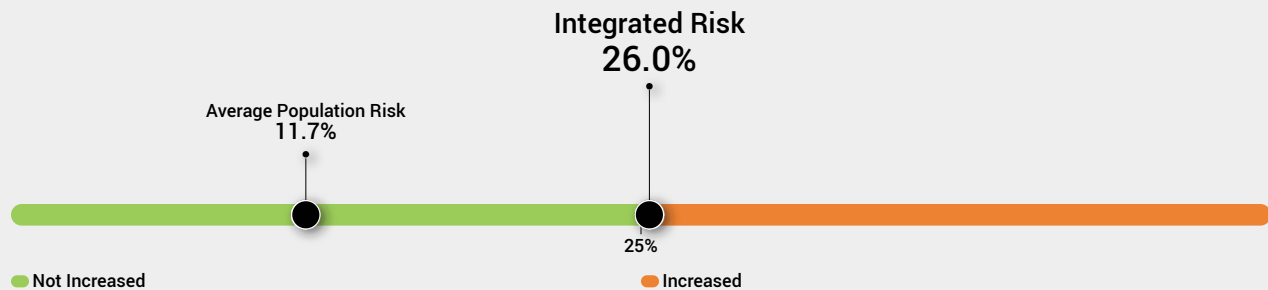


<https://myome.com/r/?id=RP12345>

Increased Risk

Based on the integrated risk score, this patient has a 26.0% chance of developing prostate cancer in their lifetime.

REMAINING LIFETIME ABSOLUTE RISK OF PROSTATE CANCER



Integrated Risk: The chance of developing prostate cancer in the remaining lifetime (or next 10 years) based on the combination of a polygenic risk score (PRS) and clinical risk factors.

Average Population Risk: The chance of developing prostate cancer in the remaining lifetime (or next 10 years) for someone of the same ancestry and age, with no family history of prostate cancer and an average PRS in the general population.

Relative Risk: The relative increase in risk compared to the average person of the same ancestry, with no family history of prostate cancer.

Based on the integrated risk score, this patient has a 3.9% chance of developing prostate cancer in the next 10 years and a 26.0% chance of developing prostate cancer in their lifetime.

For someone of the same ancestry and age, with no family history of prostate cancer and an average PRS, the average population 10-year risk is 2.6% and average population lifetime risk is 11.7%. This patient's relative risk is 2.1-times that of someone of the same ancestry with no family history of prostate cancer.

This test determined that the patient is at increased risk for prostate cancer, defined as an absolute lifetime integrated risk greater than or equal to 25%. Being at increased risk for prostate cancer does not mean that the patient will definitely develop the disease.

There may be other genetic and non-genetic factors not considered here that influence the patient's risk.

NEXT STEPS

Next steps described in this section are based on lifetime risk as estimated by the integrated risk score.

- Individuals with an estimated lifetime prostate cancer risk of 25% or higher should speak with their healthcare provider about published recommendations for increased prostate cancer surveillance, as outlined below [1-4].
- Prostate cancer screening (PSA testing, with or without digital rectal exam) should be offered beginning at age 40.
- Intervals for continued screening should be recommended by a healthcare provider based on PSA level and overall risk profile.
- All men of African American ancestry should be considered for high-risk screening protocols for prostate cancer, regardless of calculated risk.
- Prostate cancer screening should be offered through a shared decision-making process, in which patients and their healthcare providers discuss the potential benefits and risks of screening to make an informed, individualized choice.
- These results should be interpreted in the context of the individual's personal medical history and family history. The patient's male relatives may wish to speak with their healthcare provider to undergo a personalized risk assessment.

CLINICAL MEASUREMENTS

The clinical measurements used to estimate the patient's risk of developing prostate cancer were provided by the ordering physician and are detailed below. Changes in these measurements will result in a change in the patient's risk estimation.

Age	54
Family History of Prostate Cancer	Unknown (treated as No)

REFERENCES

1. Wei JT, Barocas D, Carlsson S, et al. Early detection of prostate cancer: AUA/SUO guideline part I: prostate cancer screening. J Urol. 2023;210(1):45-53. PMID: 37096582
2. Smith RA, Andrews KS, Brooks D, et al. Cancer screening in the United States, 2019: A review of current American Cancer Society guidelines and current issues in cancer screening. CA Cancer J Clin. 2019;69(3):184-210. PMID: 30875085
3. Wolf A, Wender RC, Etzioni RB, et al. American Cancer Society guideline for the early detection of prostate cancer: Update 2010. Ca Cancer J Clin. 2010;60:70-98. PMID: 20200110
4. US Preventive Services Task Force. Screening for Prostate Cancer: US Preventive Services Task Force Recommendation Statement. JAMA. 2018;319(18):1901–1913. PMID: 29801017
5. National Cancer Institute. Cancer stat facts: prostate cancer. SEER <https://seer.cancer.gov/statfacts/html/prost.html> (accessed November 2025).

TEST METHODS

- Patient data is provided by the ordering physician. Specimen receipt, accessioning, data analysis and interpretation is performed by MyOme, Inc., 1505 Adams Drive, Suite B1, Menlo Park, CA 94025, CLIA#05D2203070. Blended Genome-Exome sequencing, excluding data analysis and interpretation, is performed by Broad Clinical Labs LLC, 27 Blue Sky Dr, Burlington, MA 01803, CLIA#22D2055652.
- Genomic DNA obtained from the submitted sample was used to construct a PCR-free whole genome library and an exome library and sequenced using Illumina technology generating low-coverage whole-genome and higher coverage exome data. Reads were aligned to the NCBI GRCh38.p14 assembly.
- Genotype likelihoods are estimated for bases covered by at least one sequencing read. Genotypes at additional sites are imputed based on a genotype panel.
- A polygenic risk score (PRS) is calculated for each of 5 continental ancestries of which the patient is a part as the sum of the patient's risk alleles weighted by the allele-specific effect sizes. The raw scores are centered using four principal components and standardized with a population-specific standard deviation. Standardized PRSs weighted by fractional ancestry and ancestry-specific effect sizes are summed (caPRS).
- The standardized PRS is integrated with non-genetic risk factors, including age and family history to estimate the patient's 10-year and/or remaining lifetime risk of developing prostate cancer. If patient is under age 40 or above age 70, the report will only include remaining lifetime risk.
- **The increased-risk cutoff of 25% was set to correspond to approximately 2x the lifetime risk of prostate cancer in the United States population [5].**

TEST LIMITATIONS

- This tool cannot be used to detect rare variants including those in genes associated with increased risk to develop prostate cancer. The results of this test may not be valid if the patient has a pathogenic variant in a prostate cancer predisposition gene (e.g. BRCA1, BRCA2).
- The clinical risk was calculated based on the patient data provided by the ordering physician. Incorrect information will impact this calculation and the integrated risk score.
- A risk calculation will not be performed for individuals younger than 30 or older than 75 years old or individuals who indicate a prior prostate cancer diagnosis. 10-year risk is only calculated for patients between the ages of 40 and 70.
- The prostate cancer integrated risk is a risk assessment tool and is not diagnostic. These results should be interpreted in the context of the individual's personal medical history and family history.
- Performance of this tool may be reduced in certain populations.
- A history of stem cell or bone marrow transplantation, or recent blood transfusion may impact the accuracy of the results.
- Like most tests, this test carries a risk of false negative or false positive results, which may be caused by, without limitation, sample contamination from biological or non-biological sources, specimen marking issues, rare genetic variants interfering with analysis, and other technical issues and limitations.

DISCLAIMERS

This test was developed, and its performance characteristics were determined, by MyOme, Inc., a clinical laboratory certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) and College of American Pathologist (CAP) accredited to perform high complexity clinical laboratory testing. This test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). Test results should always be interpreted by a clinician in the context of clinical and familial data with the availability of genetic counseling when appropriate. MyOme is not responsible for the content of third-party websites referenced in this report.

REVIEWED BY

MyOme

MyOme Example Lab Director

10/30/2025

Date