
Advances in germline genetics for prostate cancer funded by the Prostate Cancer Foundation

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The Prostate Cancer Foundation (PCF) is the world's largest non-profit organization that funds patient-centric prostate cancer research. PCF has funded numerous

critical studies surrounding the identification, biology, and clinical significance of prostate cancer germline and somatic genetic alterations, and is accelerating the application of these findings to improving outcomes for patients and their families.

Key Words: prostate cancer, genetics, research

The Prostate Cancer Foundation (PCF) is the world's largest non-profit organization that funds patient-centric prostate cancer research. Seminal advances leading to the identification, biology, and clinical significance of prostate cancer germline and somatic genetic alterations affecting risk, malignant transformation, disease progression, tumoral sensitivity and resistance to treatments, and the ushering in of the precision medicine era have been funded by PCF. The International PCF Prostate Cancer Dream Team published landmark studies describing the landscape of germline and somatic alterations in patients with advanced prostate cancer.^{1,2} The significance of alterations in androgen receptor, PI3Kinase, WNT signaling genes, DNA damage repair (DDR) genes and many more were discovered in PCF-funded science projects.^{1,2} PCF Young Investigator Awards have supported the conduct of important clinical trials, including the GENTleMEN Study, a nation-wide study providing access for patients with metastatic prostate cancer to genetic counseling and testing, and PROREPAIR-B, the first prospective study to evaluate the impact of germline alterations in DDR genes on the outcomes of men with metastatic castration-resistant prostate cancer (mCRPC).³ One of

the most important new studies funded by PCF include the TARGET study, which aims to develop mobile and web-based tools to educate physicians, patients and the public on prostate cancer genetics and facilitate timely identification of men with prostate cancer who meet NCCN guidelines for genetic testing. PCF has funded numerous other critical previous and ongoing laboratory and clinical studies in prostate cancer germline genetics, and is accelerating the application of these findings to improving outcomes for patients and their families.

Disclosures

Dr. Howard R. Soule and Dr. Andrea K. Miyahira have no disclosures.

References

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