



2024 Jawsome Shark Tank – Multidisciplinary Pilot Project Program

Structured Exercise and Nutritional Guidance in Hispanic/Latino Men with Prostate Cancer: A Pilot Study

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Scientific Abstract:

The Hispanic/Latino (H/L) population is the largest and fastest growing minority group in the U.S. and prostate cancer (PCa) is the most common cancer among H/L men. Evidence suggests that a higher proportion of H/L men present with more advanced stages of PCa at the time of diagnosis relative to non-Hispanic White (NHW) patients (pts). H/L men with PCa who initiate therapy face greater challenges related to treatment-related side effects. Androgen deprivation therapy (ADT), a cornerstone treatment for PCa, induces castrate levels of testosterone, which has negative consequences on physical, metabolic, and cognitive health. H/L men are at an increased risk of developing cardiovascular disease and decrements in physical fitness and quality of life (QoL) compared to NHW men. There is a need for patient-centered prospective studies to evaluate the clinical, functional, and metabolic health benefits of multimodal lifestyle interventions for H/L men with PCa. We hypothesize that community-based exercise and nutritional counseling, integrating culturally adapted and patient-directed strategies, will improve physical fitness, metabolic health, and clinical outcomes in H/L men with PCa undergoing ADT, compared to men who do not participate in the program. The proposal will implement a prospective trial, through the YMCA Livestrong program, in H/L men treated with ADT. We will interrogate circulating lipidomic alterations to better characterize mechanisms underlying the disparate cardiometabolic outcomes in H/L men. This multimodal lifestyle intervention study focuses on bridging oncology care disparities for H/L men with PCa.

Lay Abstract:

Hispanic/Latino men with prostate cancer have more difficulty with side effects from cancer treatment, compared to non-Latino men. We believe that a program combining a community-based exercise training, via the YMCA Livestrong program, along with dietary changes will manage these side effects and improve overall well-being. We will collect insights into what Hispanic/Latino men prefer and apply this information in a clinical trial specifically designed for Hispanic/Latino men receiving hormone treatment for prostate cancer. Our study hopes to address the unique health disparities faced by Hispanic/Latino men with cancer, who are often underrepresented in medical research. We anticipate this trial will be open for enrollment in early 2025 and will have preliminary results in Summer 2025.