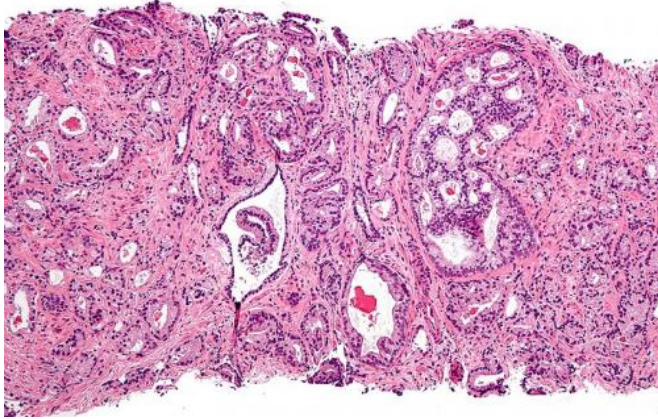


New prostate cancer treatment concept

26 August 2019, by Leigh Macmillan



Micrograph showing prostatic acinar adenocarcinoma (the most common form of prostate cancer) Credit: Wikipedia

The findings, reported in the *Journal for ImmunoTherapy of Cancer*, provide strong preclinical support for clinical trials of combined radiotherapy and PD-directed immunotherapy for [castration-resistant prostate cancer](#).

More information: Stephanie O. Dudzinski et al. Combination immunotherapy and radiotherapy causes an abscopal treatment response in a mouse model of castration resistant prostate cancer, *Journal for ImmunoTherapy of Cancer* (2019). [DOI: 10.1186/s40425-019-0704-z](#)

Provided by Vanderbilt University

Prostate cancer, the second leading cause of cancer-related death for men in the United States, is poorly responsive to immunotherapy. Recent clinical trials have hinted that combining immunotherapy and radiation therapy may be a powerful treatment approach for castration-resistant prostate cancer.

Austin Kirschner, MD, Ph.D., and colleagues combined radiotherapy with immune checkpoint inhibition in a castration-resistant [prostate cancer](#) mouse model. They established prostate cancer tumors in two different locations in each mouse, treated the mice with PD-1 or PD-L1-directed immunotherapy and irradiated one of the two tumors.

The combined therapy increased median survival 70-130 percent compared to immunotherapy alone. The investigators also observed an abscopal treatment effect: the unirradiated tumor responded similarly to the irradiated tumor in the same mouse, suggesting that combination treatment may be effective for widespread metastatic disease.

APA citation: New prostate cancer treatment concept (2019, August 26) retrieved 6 March 2021 from <https://medicalxpress.com/news/2019-08-prostate-cancer-treatment-concept.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.