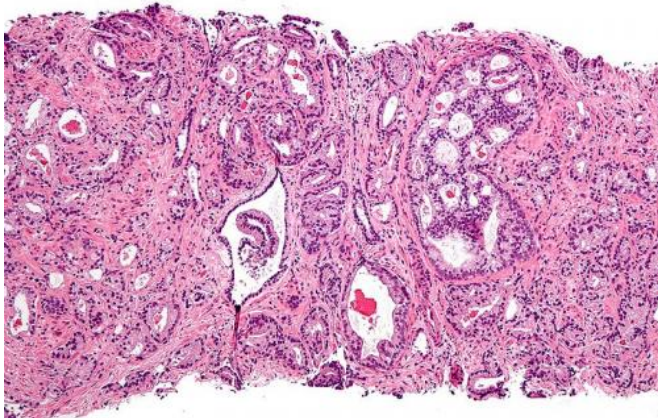


# New insights into treatment targets for men with advanced prostate cancers

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

A study published recently in the *Journal of Clinical Oncology Precision Oncology*, an American Society of Clinical Oncology (ASCO) journal, outlines findings from the largest-ever prospective genomic analysis of advanced prostate cancer tumors. Using comprehensive genomic profiling (CGP) to analyze thousands of tumor samples from men with advanced prostate cancers, the researchers identified that 57 percent of the samples evaluated had genomic characteristics that suggested the tumors were candidates for targeted therapies.

Prostate [cancer](#) is the most common cancer type in men, with about one in nine men experiencing a prostate cancer diagnosis in his lifetime, according to the American Cancer Society. Thanks to early detection techniques, the five-year survival rate for men with prostate tumors that are localized or only in nearby parts of the body is nearly 100 percent, while only about 30 percent of men with [prostate cancers](#) that have spread to distant parts of the body will still be alive five years after their

diagnosis.

The purpose of this study, co-led by Foundation Medicine and Huntsman Cancer Institute (HCI) at the University of Utah (U of U), was to analyze prostate tumors using CGP to identify genomic changes to inform potential targeted treatment strategies. CGP analyzes [tumor](#) samples to identify genomic changes so that, where possible, a patient can be matched to available targeted treatments.

"This study demonstrates that routine clinical use of comprehensive genomic profiling frequently identifies genomic alterations that can inform targeted therapy options, as well as potential therapy development targets, for patients with advanced or [metastatic prostate cancer](#)," said Jon Chung, Ph.D., associate director of clinical development at Foundation Medicine.

Researchers in the study analyzed nearly 3,500 unique tumor samples, including 1,660 primary site tumors and 1,816 metastatic site tumors from unmatched patients. The researchers utilized the FoundationOne test developed by Foundation Medicine for CGP.

"This is the largest study of its kind done to date and gives a very encouraging message in the fact that more than half of the study patients' tumors have characteristics for which [drug targets](#) exist," said Neeraj Agarwal, MD, a prostate cancer physician-scientist at HCI and professor of medicine at the U of U. "This information provides major insights into how we can design new clinical trials or drugs that will better treat men with advanced prostate cancers."

Agarwal and Chung collaborated with scientists from eight other institutions worldwide. The team anticipates these findings may be used to accelerate the development of new drugs and treatment approaches, including immunotherapies, for men with advanced [prostate](#) cancers.

**More information:** Jon H. Chung et al,  
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