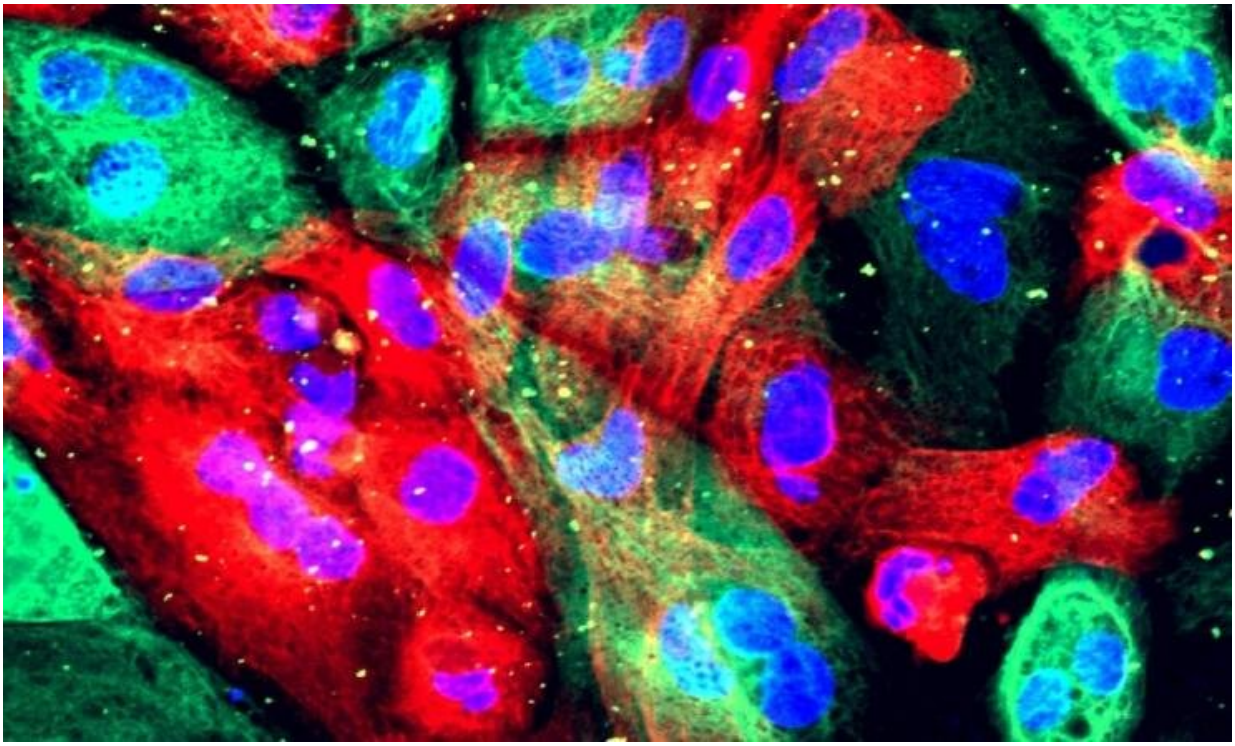
MedicalXpress

# Research team develops new screening assay for drugs targeting prostate cancer

April 6 2022



Prostate cancer cells. Credit: NIH Image Gallery

A novel high-throughput screening assay is designed to identify inhibitors of the androgen receptor, which plays a critical role in the progression of prostate cancer. The assay could be used to identify new drugs to treat resistant forms of prostate cancer, as described in the peer-reviewed journal *ASSAY and Drug Development Technologies*.

Approximately 75% of patients with castrate-resistant prostate cancer express androgen receptor variants that lack the ligand binding domain. These forms of disease evade all forms of currently available androgen receptor-targeting treatment. The amino terminal domain (NTD) of the androgen receptor has been shown to be critical for the receptor's function. Iain McEwan, from the University of Aberdeen, and co-authors developed a cell-based high-throughput assay for screening and identifying inhibitors of the androgen receptor-NTD.

"We demonstrate the suitability of the assay for high-throughput screening platforms and validate two initial hits emerging from a small, targeted, library screen in prostate cancer cells," state the investigators.

"McEwan and coworkers endeavor to address a clear, unmet medical need in prostate cancer. The impact on translation of new chemical hits and drug repurposing and repositioning for this type of prostate cancer will be quite high, highlighting the importance of new assay development," says *ASSAY and Drug Development Technologies* Editor-in-Chief Bruce Melancon, Ph.D., Director of Medicinal Chemistry at the Warren Center for Neuroscience Drug Discovery at Vanderbilt University.

**More information:** Amy E. Monaghan et al, Development of a High-Throughput Screening Assay for Small-Molecule Inhibitors of Androgen Receptor Splice Variants, *ASSAY and Drug Development Technologies* (2022). DOI: 10.1089/adt.2021.128

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