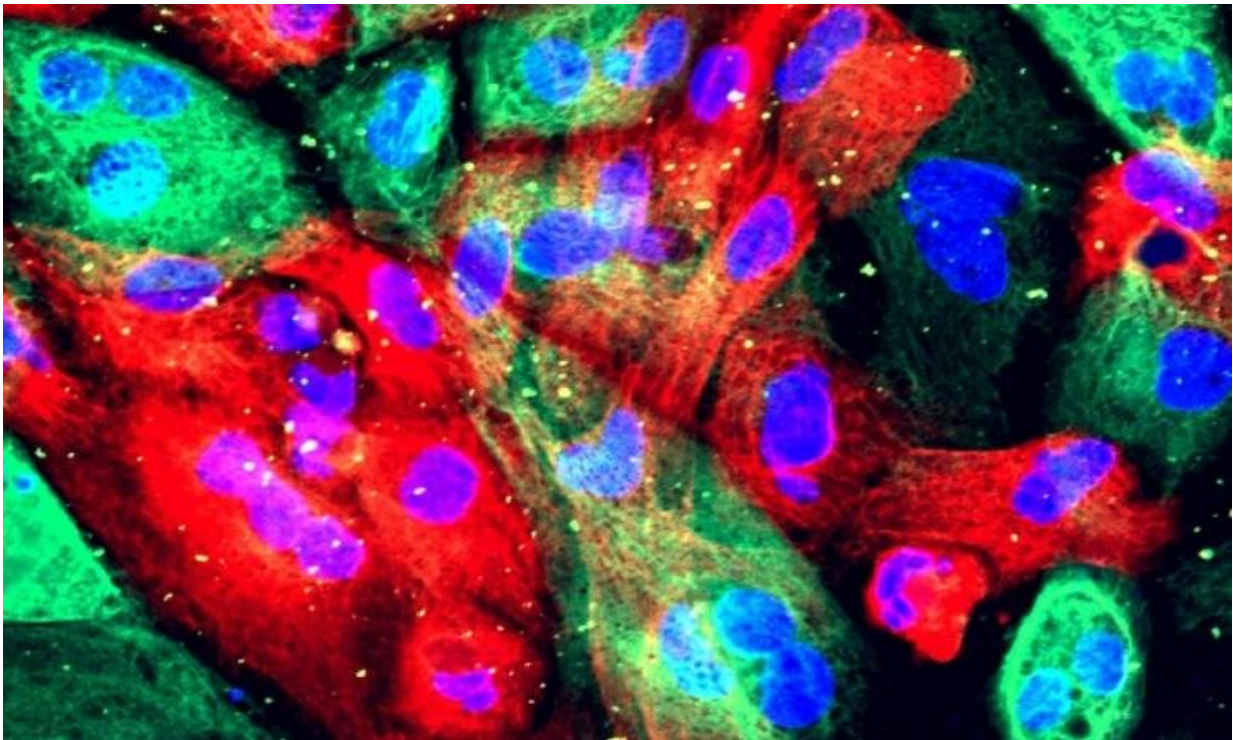


Research team develops new screening assay for drugs targeting prostate cancer

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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](https://doi.org/10.1089/adt.2021.128)

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