University of Central Florida

Technology Available for Licensing

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Prognostic Marker for Aggressive Prostate Cancer

microRNA marker and target for drug-resistant prostate cancer

Background

Prostate cancer is one of the leading causes of cancer deaths among men in the United States. Most of these deaths are due to advanced prostate cancer, defined as cancer that has spread beyond the prostate. The standard treatment for advanced prostate cancer is androgen deprivation therapy (ADT) which reduces the levels of male hormones. However, prolonged ADT can lead to the growth of androgen independent cells and the development of an aggressive form of prostate cancer known as castration-resistant prostate cancer (CRPC). The exact mechanism by which CRPC develops is not known, but altered expression of microRNAs (miRNAs) – small noncoding RNAs that regulate gene expression – is thought to have a significant role.

Technical Details

UCF researchers have profiled a genome-wide miRNA array and identified a specific cluster of miRNAs that are involved in the transition of androgen dependent prostate cancer cells to androgen independent prostate cancer cells. The identified miRNAs and its target protein could be further developed for use as biomarkers and/or therapeutic targets for drug resistant and castration resistant prostate cancer.

Looking for Partners

We are seeking partners to further develop this technology for clinical use.

Stage of Development

Preclinical

UCF Inventors

Ratna Chakrabarti, Ph.D.; Richard Ottman

Publications

Ottman et al.: MicroRNA expressions associated with progression of prostate cancer cells to antiandrogen therapy resistance. Molecular Cancer 2014 13:1.

Applications

- Prognostic marker
- Cancer therapy

Tech Fields

Cancer, Diagnostics, Drugs, Therapeutics

Keywords

cancer, therapy, microRNA, marker

If you or your company are interested in this opportunity, Contact:

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