

Development of novel therapeutic splice-switching oligonucleotides against aggressive prostate cancer

Value Proposition

One in twelve men will be diagnosed with prostate cancer in their lifetime. Castration resistant prostate cancer, which resists traditional hormone therapies and continues to grow and often metastasize with poor survival outcomes, remains an unmet clinical challenge.

Technology

This technology targets a protein variant that is constitutively active and known to confer hormone treatment resistance and a high rate of recurrence and metastasis in men with prostate cancer. This technology is designed to correct this constitutive activation and restore the patient's sensitivity to hormone therapies. The technology has shown to be highly effective in prostate cancer cell line models, even more effective at reducing proliferation than enzalutamide hormone therapy.

Advantages

- Many prostate cancer patients will become resistant to hormone therapies and require additional treatment.
- The variant protein this technology is designed to target underlies treatment resistance, recurrence, and ultimately poor survival in some prostate cancer patients who subsequently develop castration resistant prostate cancer.
- This technology is superior to other small molecules and inhibitors because it is designed to silence creation of the overactive protein variant in the cell while also increasing levels of the protein's other variants which may be more responsive to hormone therapy.
- This technology offers a method of restoring treatment response and survival probabilities in aggressive prostate cancer patients.



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Patents

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