

THERAPY METHOD THAT USES LONG NON-CODING RNA AND CDK4/6 INHIBITORS TO TREAT BREAST CANCER

[Mishra, Richa](#), [Silva-Fisher, Jessica](#)

[Hardin, Clyde "Frank"](#)

T-021352

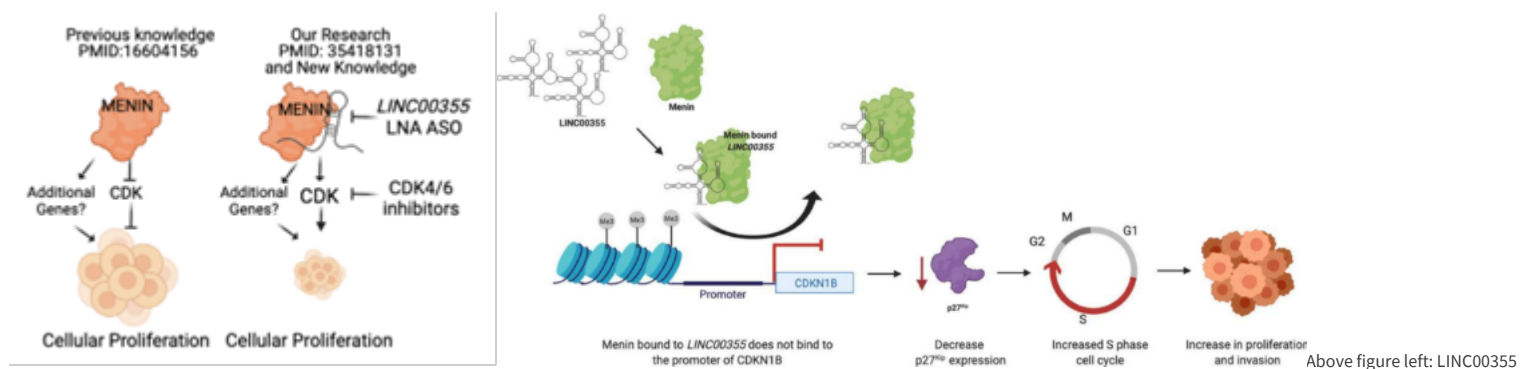
Published date: 4/18/2026

Value Proposition: Combination cancer therapy that utilizes long non-coding RNA and CDK4/6 inhibitors to treat breast cancer.

Technology Description

Researchers at Washington University in St. Louis have developed a cancer combination therapy using CDK4/6 inhibitors and antisense oligonucleotides (ASOs) targeting the long, intergenic, noncoding RNA 355 (LINC00355) to treat breast and late-stage relapse (LSR) breast cancer (BC). Breast cancer is the most common cancer diagnosed among women in the US and is the 2nd leading cause of cancer deaths among women. Currently, there are limited treatment options for late-stage relapse, and some patients are unable to undergo chemotherapy.

This invention offers a new biomarker of late-stage relapse breast cancer that can decrease cell growth and promote cellular proliferation.



Stage of Research

Early stage

Applications

- Antisense oligonucleotide therapy for long non-coding RNAs
- LSR breast cancer treatment

Key Advantages

- Decreases cell growth
- Offers a new biomarker of late-stage relapse breast cancer

Patents

Patent application filed

Related Web Links – [Jessica Silva-Fisher Profile](#); [Silva-Fisher Profile](#)