CYP3A4 Epoxygenase Inhibitors for ER+ Breast Cancer Treatment

Tech ID: 24752 / UC Case 2015-143-0

BRIEF DESCRIPTION

Small molecule CYP34A inhibitor oncology therapeutics are being developed in collaboration between scientists at UC Irvine and U of Minnesota. These molecules have been shown effective against ER+ xenograft models of breast cancer. Due to their mechanism of action, these molecules may enhance treatment with tamoxifen and paclitaxel to decrease risk of recurrence.

HIGHLIGHTS OF THE PROJECT

- Highly potent *in vitro* against CYP34A activity.
- Animal models have been completed in xenograft models for ER+ breast cancer.
- Because these molecules activate AMPK, other applications include type II diabetes and obesity. Mice treated with compounds demonstrate dose dependent weight loss.
- Worldwide patent claims pending.
- Useful in treating recurrent/metastatic ER+ breast cancer, may be complementary to tamoxifen, paclitaxel and adjuvant hormonal therapy.

We are currently looking for commercial partners to further develop these inhibitors for treatment of breast cancer, type II diabetes, or obesity.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,272,055	04/30/2019	2015-143

Additional Patent Pending

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OTHER INFORMATION

CATEGORIZED AS

- **Medical**
  - Disease: Cancer
  - Disease: Metabolic/Endocrinology
  - New Chemical Entities, Drug Leads

RELATED CASES

2015-143-0

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