

(54) Title of the invention : A METHOD OF SYNTHESIS OF THIAZINE-SUBSTITUTED 9- ANILINOACRIDINES FOR INHIBITION OF BREAST CANCER TARGETS

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(57) Abstract :

The present disclosure provides a method of synthesis of thiazine-substituted 9-anilinoacridines which effectively inhibit activity of breast cancer targets such as Oestrogen receptors (ERs), human epidermal growth factor receptor (HER), the Poly (ADP-ribose) Polymerase 1 (PARP1) or other targets. The prepared therapeutic agents show their prominent effect by specifically targeting and binding to the receptors which are expressed on the surface of breast cancer cells, thereby disrupting their growth, proliferation and reducing toxicity of such cancerous cells. The obtained compounds hold significant promise in addressing drug resistance through their distinct mechanism of action, potentially enhancing efficacy by specifically targeting cancer cells and safety profile make them a valuable addition thus representing a significant advancement in the treatment of breast cancer, potentially improving quality of life of cancer patients.

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