

Public Abstract

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Title: THE ROLE OF MTOR IN SAF-1-MEDIATED VEGF EXPRESSION AND BREAST CANCER PROGRESSION

Breast cancer is the second most common cancer in women in the United States and the second leading cause of death in cancer patients. The mortality rates of breast cancer declined recently due to the early detection and improved targeted treatment regimens. One of the promising targets for treatment of the breast cancer is its ability to recruit blood supply, which is known as angiogenesis. Use of the current anti-angiogenic agents for treatment of breast cancer patients was precluded by the serious adverse effects of these treatments. The side effects of the standard antiangiogenic treatments are largely attributed to the indiscriminate action of these agents on normal blood vessels as well as the tumor blood vessels. Therefore, the goal of my research was to investigate some potential mechanisms involved in promoting angiogenesis, specifically, in breast cancer cells. Targeting these mechanisms specifically would result in maximizing the effect of the treatment and minimizing its adverse effects.