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Haramine-Mediated Anticancer Effects in Breast Cancer Cells: Targeting TAZ as a Therapeutic Strategy

Aniket Kumar¹, Ashish Vajidwal², Rajesh Kumar³, Arvind Maurya⁴, Vaibhav Pandey⁵
IGNTU Department of Pharmacy^{1,2,3,4,5}

Indira Gandhi National Tribal University, Amarkantak, Madhya Pradesh, India

Abstract: Breast cancer is still one of women's greatest life-threatening diseases on the planet today, urgently requiring sheer innovations in therapeutic means such as these. The aim of this research was to study the anti-cancer effect of haramine and its ability to suppress breast cancer cells, with a special interest in TAZ (Transcriptional Co-activator with PDZ binding motif), an oncogenic protein that is involved in both cell survival and migrating invasive potential. Our results indicate that haramine inhibits breast cancer cells from growing tumours, and also that it causes apoptosis by acting upon the TAZ pathway. Diverse a variety of in vitro assays gave us an idea about haramine; there was a marked decrease in both cell viability and metastatic potential among breast cancer cells after being treated with haramine. These findings suggest that haramine represents a potential candidate for cancer treatment and targeting TAZ is therefore an exciting innovation in the fight against breast cancer. Electrical mechanisms of haramine's effect, and its clinical potential to cure breast cancer, remain areas for future study.

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