

Background/aim: Non-small-cell lung cancer (NSCLC) is the most frequently diagnosed malignancy and the first cause of cancer-related death. Here, we investigated the antineoplastic effect of the combination of the antihistamine loratadine, the beta-blocker nebivolol, and the tyrosine-kinase inhibitor gefitinib on NSCLC cell lines. Results: The combination nebivolol-loratadine-gefitinib produced a significant synergistic effect on inhibiting the metabolic activity and colony formation, as well as on promoting apoptosis in both cell lines. Several drugs including antihistamines and beta-adrenergic receptor blockers (beta-blockers) display antiproliferative properties on cancer cells.