

## Bopindolol: Pharmacological Basis and Clinical Implications

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### ABSTRACT

Bopindolol, a non-selective antagonist of  $\beta_1$ - and  $\beta_2$ -adrenoceptors (ARs), has been found by pharmacological, molecular biological techniques and molecular modeling to have several unique properties. Bopindolol produces sustained blockade of  $\beta_1$ - and  $\beta_2$ -ARs, has intrinsic sympathomimetic as well as membrane stabilizing actions, inhibits renin secretion, and interacts with 5-HT receptors. Also, our recent molecular modeling studies identified possible interaction sites between bopindolol and  $\beta$ -AR subtypes. The reviewed studies support our findings that bopindolol is non-selective for  $\beta_1$ - and  $\beta_2$ -ARs, has low affinity for  $\beta_3$ -AR subtype and has pharmacological properties that are likely to be beneficial in the treatment of cardiovascular diseases.