

Potential Use of β_3 -Adrenoceptor Antagonists in Heart Failure Therapy

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ABSTRACT

Recently, a functional, negatively inotropic, β_3 -adrenoceptor was characterized in the human heart. Several studies now suggest that this receptor might play an important role in the pathophysiology of heart failure, by counterbalancing the effects of a β_1 - and β_2 -stimulation. Therefore, this review summarizes the rationale and effects of β -adrenergic blockade in chronic heart failure and specifically addresses the question of the potential use of β_3 -adrenoceptor antagonists in the treatment of heart failure and other pathophysiological conditions associated with a decreased cardiac contractility.