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Sacubitril/Valsartan

National Cancer Institute

Source

National Cancer Institute. *Sacubitril/Valsartan*. NCI Thesaurus. Code C162629.

A combination of sacubitril and valsartan with natriuretic and anti-hypertensive properties. Upon administration, sacubitril is metabolized by esterases to its active metabolite, LBQ657 (sacubitrilat), which inhibits neprilysin, a neutral endopeptidase that cleaves natriuretic peptides such as atrial natriuretic peptide (ANP), brain natriuretic peptide (BNP), and c-type natriuretic peptide (CNP), as well as certain vasoconstricting peptides including as angiotensin I and II, and endothelin-1. Inhibition of neprilysin leads to increased concentrations of endogenous natriuretic peptides, which function to activate downstream receptors that promote vasodilation, natriuresis and diuresis, while simultaneously increasing the concentration of vasoconstricting peptides such as angiotensin II. Co-administration with valsartan, an angiotensin II receptor blocker, prevents the vasoconstrictive effects of neprilysin inhibition and promotes a decrease in vascular resistance and blood pressure.