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Inamrinone

National Cancer Institute

Source

National Cancer Institute. Inamrinone. NCI Thesaurus. Code C61789.

A synthetic bipyridine phosphodiesterase inhibitor with inotropic and vasodilator properties. Inamrinone inhibits type III phosphodiesterase, which is abundant in cardiac and vascular tissues, thereby preventing the degradation of cyclic adenosine monophosphate (cAMP) and increasing intracellular concentrations of this secondary messenger. Elevated levels of cAMP increase the contractile force of the cardiac muscle and produce positive inotropic effects. Although the mechanism of action is not fully understood, inamrinone causes smooth muscle relaxation, resulting in peripheral vasodilation (reduced afterload) and a decreased pulmonary vascular resistance (reduced preload).