Sacubitril-valsartan cost-effective for treating reduced ejection fraction heart failure

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Sacubitril-valsartan is reasonably cost effective compared to widely-used therapies for reducing mortality and morbidity in patients with reduced ejection fraction heart failure. The findings are published in Annals of Internal Medicine.

Heart failure with reduced ejection fraction (a measure of the percentage of blood leaving the heart each time it contracts) is commonly treated with an ACE inhibitor or angiotensin-receptor blocker (ARB) because the therapies are proven effective and are inexpensive. The recent PARADIGM-HF trial found that sacubitril-valsartan, an angiotensin receptor-neprilysin inhibitor (ARNI), reduced cardiovascular mortality, decreased hospitalizations, and improved quality of life compared to a commonly-prescribed ACE inhibitor, but at a cost of $12.50 a day, sacubitril-valsartan is significantly more expensive.

Researchers sought to determine if the incremental health benefits justified the increase in treatment cost. Using a Markov model, researchers evaluated the cost-effectiveness of sacubitril-valsartan compared with lisinopril (ACE inhibitor) or losartan (ARB) in a cohort of patients with New York Heart Association (NYHA) class II to IV heart failure, and a left ventricular ejection fraction of 0.40 or less. Cost-effectiveness was measured by life-years, quality-adjusted life-years (QALY), costs, heart failure hospitalizations, and incremental cost-effectiveness ratios. The analysis indicated that therapy with sacubitril-valsartan would cost $47,053 per QALY gained in a cohort derived from the PARADIGM-HF trial. According to the authors, these results suggest that sacubitril-valsartan is worth the cost, depending on societal willingness to pay.

More information: Annals of Internal Medicine, http://www.annals.org/article...