

# Benefits of sacubitril/valsartan use in patients with chronic heart failure after cardiac valve surgery: a single-center retrospective study.

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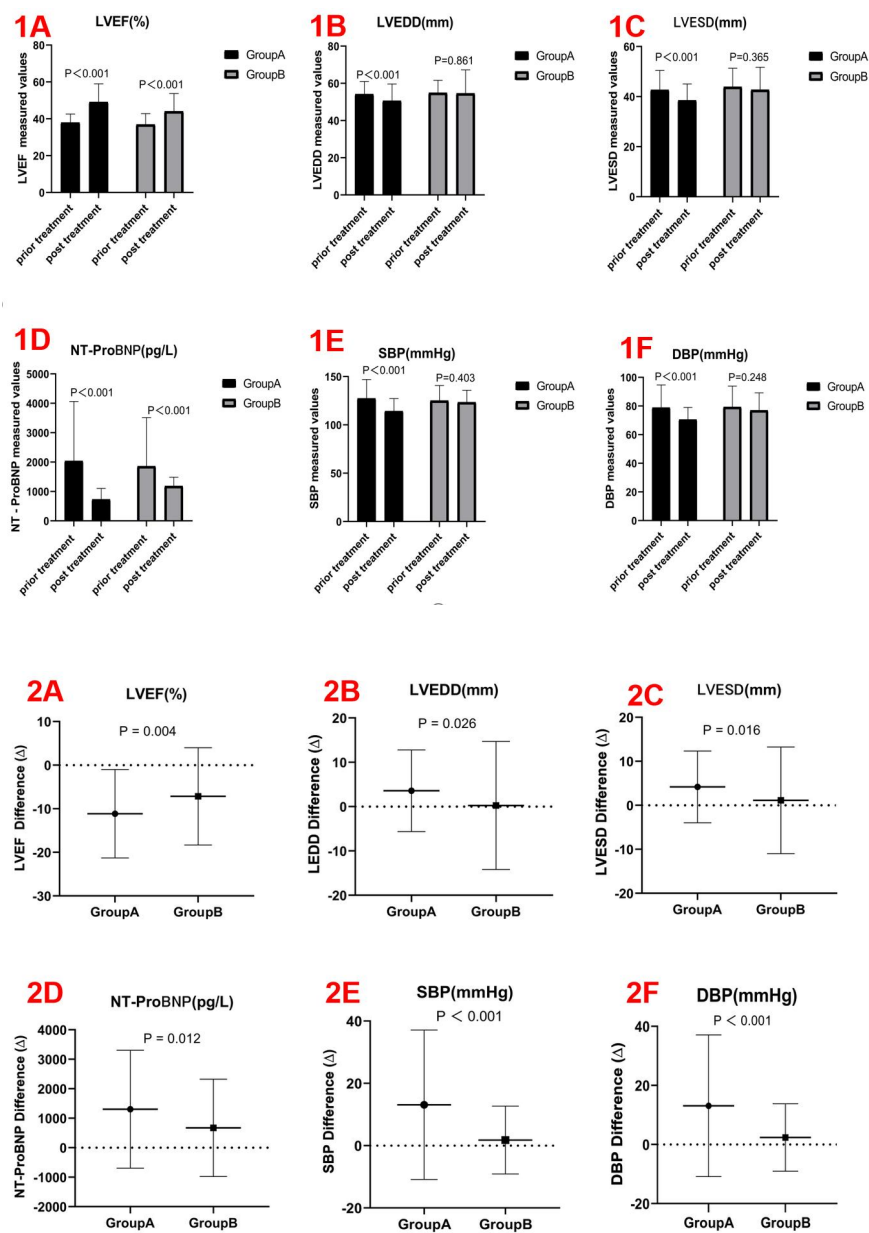
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## Abstract

**Objective:** To evaluate the efficacy of sacubitril/valsartan for the treatment of patients with chronic heart failure (CHF) after cardiac valve surgery (CVS). **Methods:** Data of 259 patients who underwent CVS due to organic heart disease, and who were admitted to the hospital with CHF from January 2018 to December 2020, were collected. The patients were divided into Group A (treatment with sacubitril/valsartan) and Group B (treatment without sacubitril/valsartan). The duration of treatment and follow-up was 6 months. Prior-treatment clinical characteristics, post-treatment data, mortality, and follow-up data of the two groups were analyzed. **Results:** The total effective rate of Group A was higher than that of Group B (82.56% versus 65.52%,  $P < 0.05$ ). The left ventricular ejection fraction (LVEF) was improved in both groups ( $11.14 \pm 10.16$  versus  $7.15 \pm 11.18$ ,  $P = 0.004$ ). The left ventricular end-diastolic/-systolic diameter (LVEDD/LVESD) in Group A decreased more than that in Group B ( $3.58 \pm 9.21$  versus  $0.27 \pm 14.44$ ,  $P=0.026$ ;  $4.21 \pm 8.15$  versus  $1.14 \pm 12.12$ ,  $P=0.016$ , respectively). The N-terminal prohormone of B-type natriuretic peptide (NT-proBNP) in both groups decreased ( $1305.65 \pm 2000.85$  versus  $675.91 \pm 1649.84$ ,  $P=0.012$ ). The systolic and diastolic blood pressure (SBP/DBP) in Group A decreased more than that in Group B ( $13.13 \pm 23.98$  versus  $1.81 \pm 10.89$ ,  $P < 0.001$ ;  $8.28 \pm 17.79$  versus  $2.37 \pm 11.41$ ,  $P = 0.005$ , respectively). Liver and renal insufficiency, hyperkalemia, symptomatic hypotension, Angioedema or acute heart failure have no statistical differences between the two groups. **Conclusion:** Sacubitril/valsartan can effectively improve the cardiac function of CHF patients after CVS by increasing LVEF, reducing LVEDD, LVESD, NT-proBNP and BP, with good safety.

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