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## Budget IMPACT Analysis of Sacubitril Valsartan for Heart Failure Treatment in Indonesia

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### Objectives

This analyze aims to estimate the budget impact of sacubitril/valsartan in the treatment of HFrEF from the perspective of Indonesia healthcare payer.

### Methods

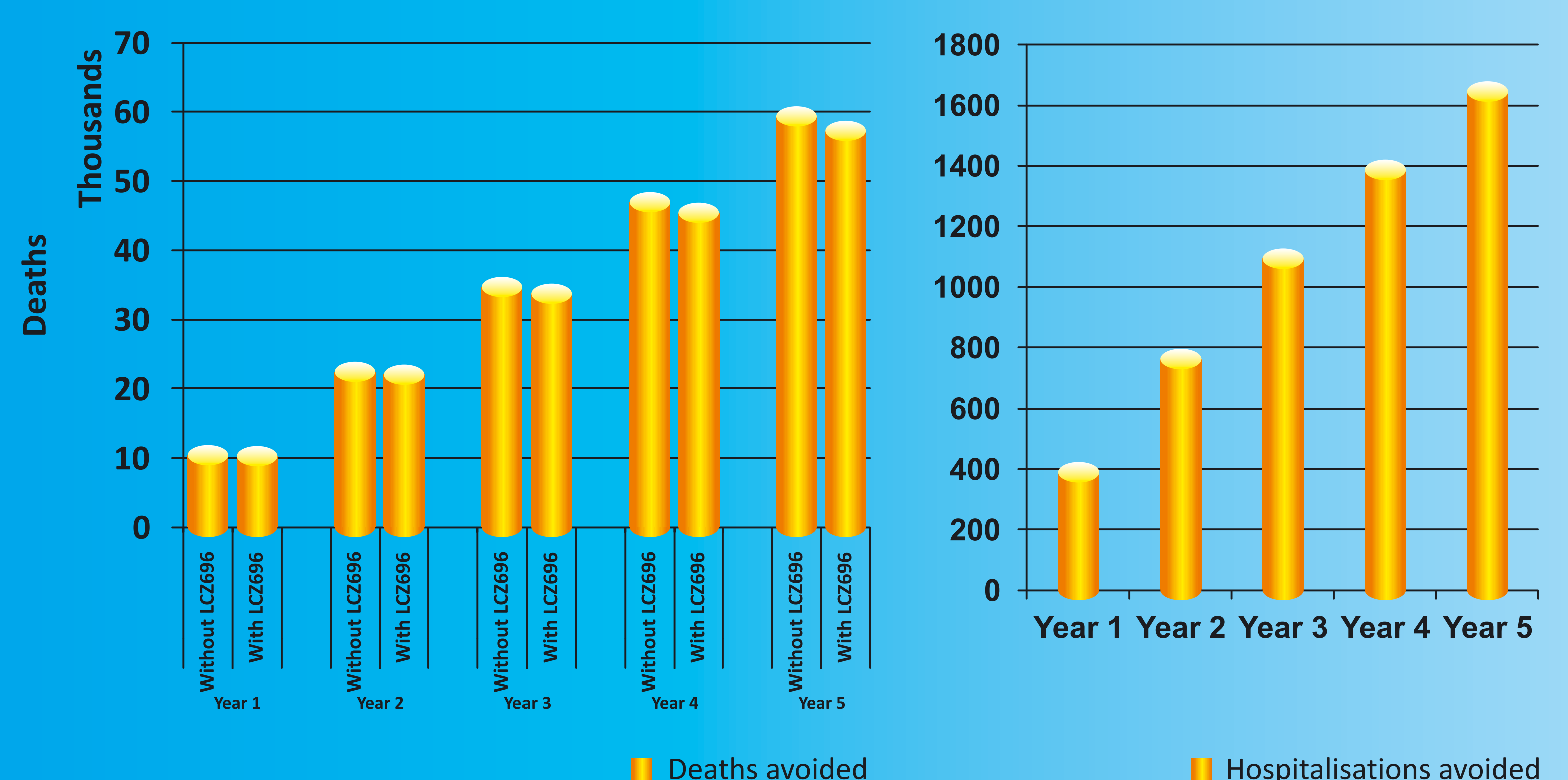
A budget impact model estimated the impact with and without use of sacubitril valsartan for 5-year horizon (2020 – 2024). The local data inputted in the model were including age prevalence rates, drugs costs, HF hospitalization cost, and adverse events costs. The drug cost calculation of sacubitril valsartan was coming from regular price, while drugs costs of standard of care were mostly coming from reimbursement cost. The budget impact was estimated from the difference budget in which the target population is treated with the current therapy (without sacubitril valsartan) and the future scenario in which the target population is treated with sacubitril valsartan based in a market penetration rate of 9%, 19%, 28%, 38%, and 47% in the first, second, third, fourth and fifth years, respectively.

### Results

Given the number of patients eligible for treatment was estimated as 86,594 in the first year and assumption of annual increase of HF prevalence was 1.1% based on population growth, about 2,092 deaths and 5,444 hospitalizations may be avoided over 5 years. The scenario of implementing sacubitril valsartan for HF treatment had impact of additional budget (of drug cost) of 2%, 4%, 5%, 6%, 7% over 5-year horizon compared to current therapy strategy. In addition to this study, an alternative scenario was simulated using different drug displacement rate and higher hospitalization cost (based on the budget in different type of hospital). When using this scenario, the incremental budget were 1%, 2%, 3%, 4%, 5% over 5-year horizon.

#### Output of hospitalization and deaths avoided

|                                            | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------------|--------|--------|--------|--------|--------|
| <b>Annual Hospitalization avoided</b>      | 423    | 797    | 1127   | 1419   | 1678   |
| <b>Cummulative Hospitalization avoided</b> | 423    | 1,220  | 2,347  | 3,766  | 5,444  |
| <b>Annual Deaths avoided</b>               | 158    | 301    | 430    | 548    | 655    |
| <b>Cummulative Deaths avoided</b>          | 158    | 458    | 889    | 1,436  | 2,092  |



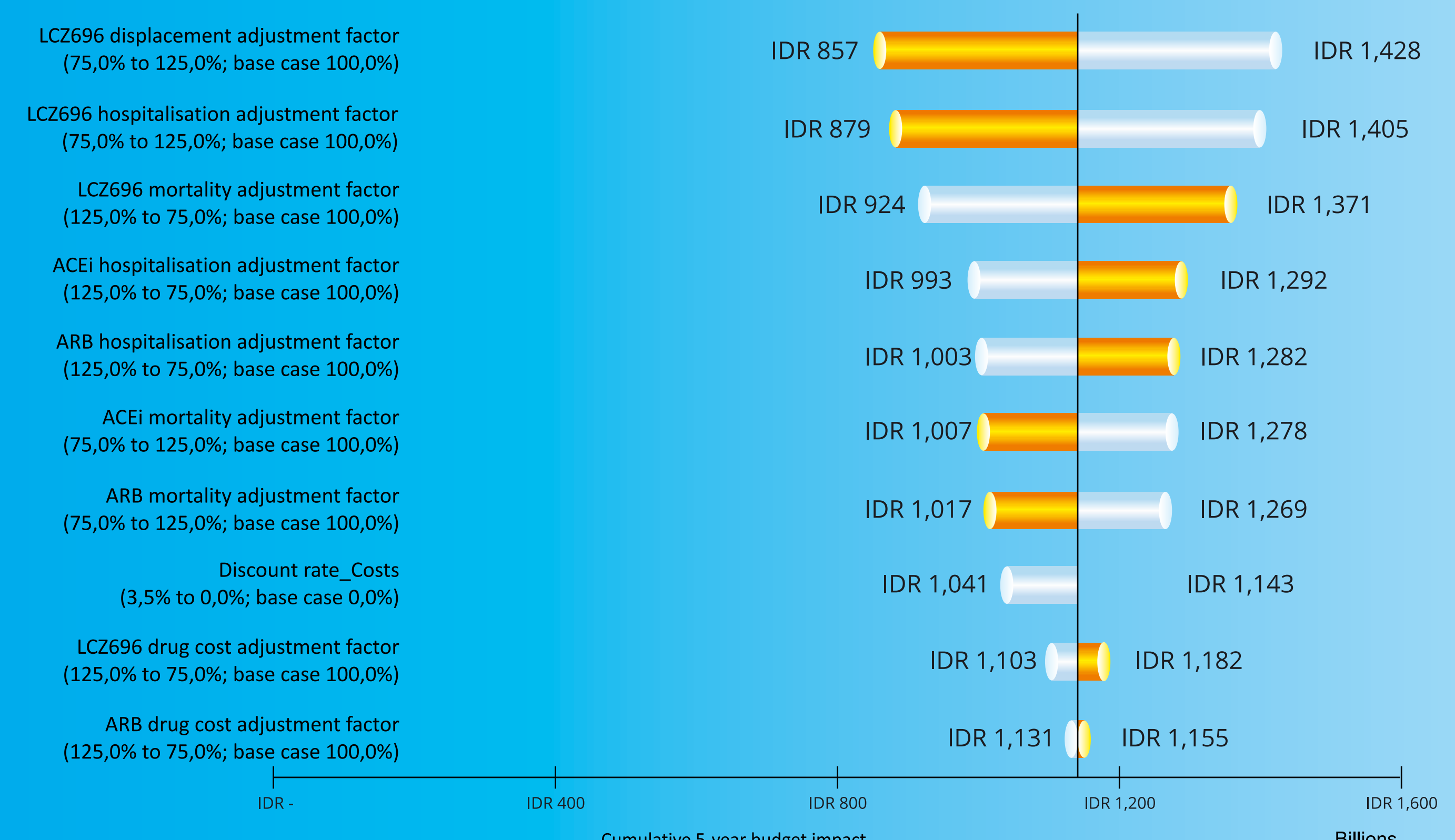
#### Cumulative budget impact of implementation of sacubitril/valsartan in Indonesia setting

|                                               | Cumulative budget (in Billions) |           |           |            |            |
|-----------------------------------------------|---------------------------------|-----------|-----------|------------|------------|
|                                               | Year 1                          | Year 2    | Year 3    | Year 4     | Year 5     |
| <b>Without LCZ696: Cumulative expenditure</b> | IDR 3,092                       | IDR 6,219 | IDR 9,379 | IDR 12,575 | IDR 15,806 |
| <b>With LCZ696: Cumulative expenditure</b>    | IDR 3,159                       | IDR 6,425 | IDR 9,807 | IDR 13,312 | IDR 16,948 |
| <b>Cumulative Budget Impact</b>               | IDR 67                          | IDR 206   | IDR 428   | IDR 737    | IDR 1,142  |
| <b>Cumulative Budget Impact</b>               | 2%                              | 3%        | 5%        | 6%         | 7%         |

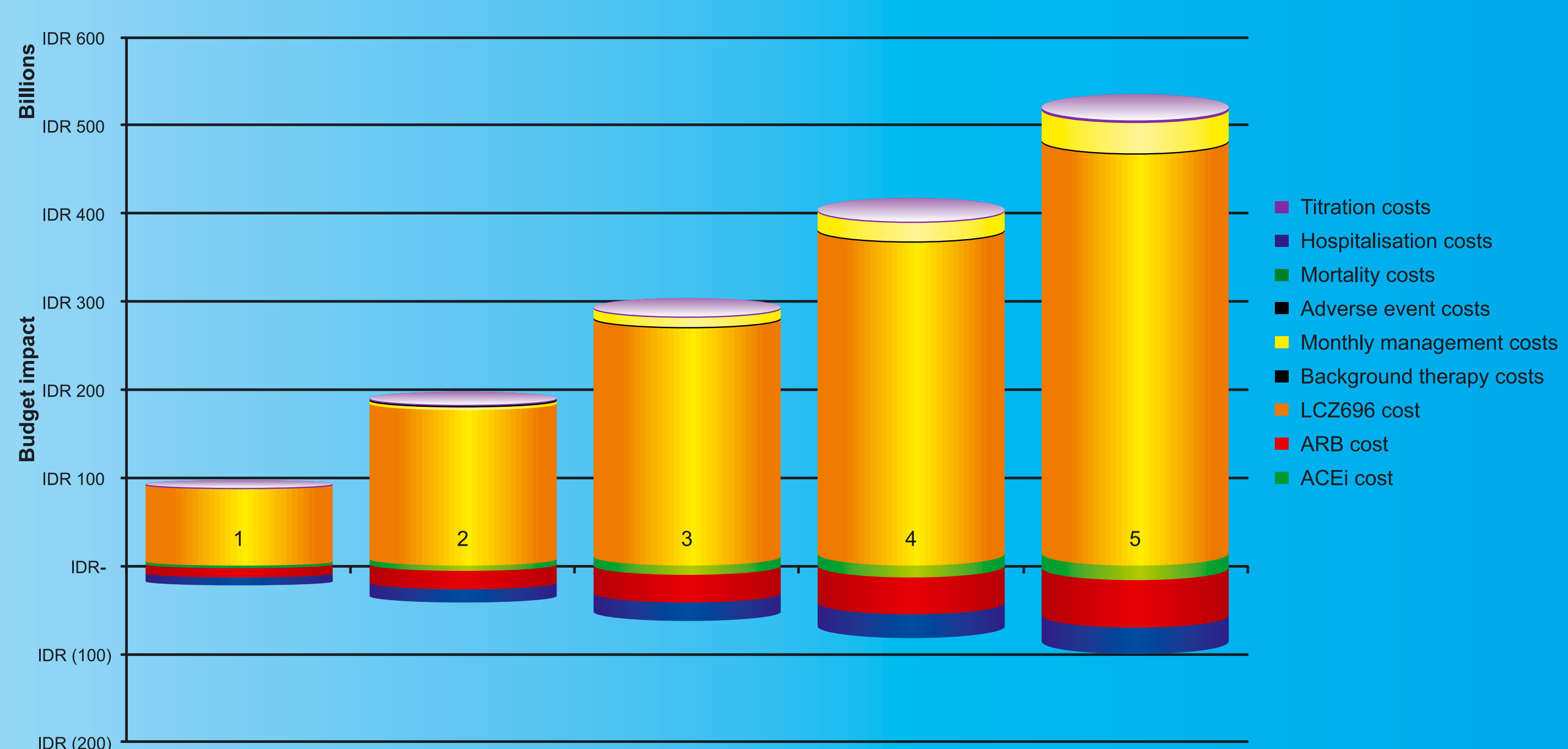
#### Cumulative budget impact (result from scenario analysis: change input of displacement rate and hospitalization costs)

|                                               | Cumulative budget (in Billions) |           |           |            |            |
|-----------------------------------------------|---------------------------------|-----------|-----------|------------|------------|
|                                               | Year 1                          | Year 2    | Year 3    | Year 4     | Year 5     |
| <b>Without LCZ696: Cumulative expenditure</b> | IDR 3,101                       | IDR 6,237 | IDR 9,407 | IDR 12,613 | IDR 15,853 |
| <b>With LCZ696: Cumulative expenditure</b>    | IDR 3,144                       | IDR 6,370 | IDR 9,682 | IDR 13,087 | IDR 16,588 |
| <b>Cumulative Budget Impact</b>               | IDR 43                          | IDR 133   | IDR 275   | IDR 474    | IDR 735    |
| <b>Cumulative Budget Impact</b>               | 1%                              | 2%        | 3%        | 4%         | 5%         |

#### Tornado diagram of sensitivity analysis



#### Annual budget impact of implementation of sacubitril/valsartan in Indonesia setting



### Conclusion

This analysis provides estimation of budget impact of implementing sacubitril valsartan in the treatment of patients with HFrEF as an input for Indonesia healthcare payer in implementing strategy for HF treatment.