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Comparisons of Medical and Prescription Drug Expenditures Between Americans Who Used Insulin Glargine Lantus and its Interchangeable Biosimilar Semglee

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Background

- Biosimilars can boost access to medications by providing clinically equivalent alternatives to an FDA-approved reference product at lower costs.
- Semglee (insulin glargine-yfgn) was approved as an interchangeable biosimilar to the reference product Lantus (insulin glargine) on July 28, 2021 in the U.S.

Objective

- To compare annual medical and prescription drug expenditures between Lantus and Semglee users in a nationally representative sample.

Methods

- Medical Expenditure Panel Survey data (2021-2023) were used to identify individuals with prescription fills for either Lantus or Semglee.
- The proportions of individuals' age, sex, race/ethnicity, education, income, and insurance status were described for both products.
- Annual out-of-pocket (OOP) and total medical and prescription drug costs were adjusted to 2023 U.S. dollars and compared between the two user groups.
- *Statistical significance at P<0.05.

Results

- There were 735 Lantus (weighted n=2,495,364) and 38 Semglee (weighted n=177,531) users in the sample.
- Lantus users had lower income levels than Semglee users (P=0.006).
- Lantus users had a higher mean annual prescription drug cost for both OOP (\$204 vs. \$121) and total cost (\$2835 vs. \$1475) than Semglee users.
- Lantus users had a higher mean annual total medical cost (\$26,943 vs. \$24,610) but lower OOP (\$1,732 vs. \$3,702) than Semglee users.

Figures 1-6: Demographic characteristics of individuals receiving Lantus and Semglee from 2021 – 2023



Figure 7: Prescription drug costs associated with Lantus and Semglee from 2021 – 2023

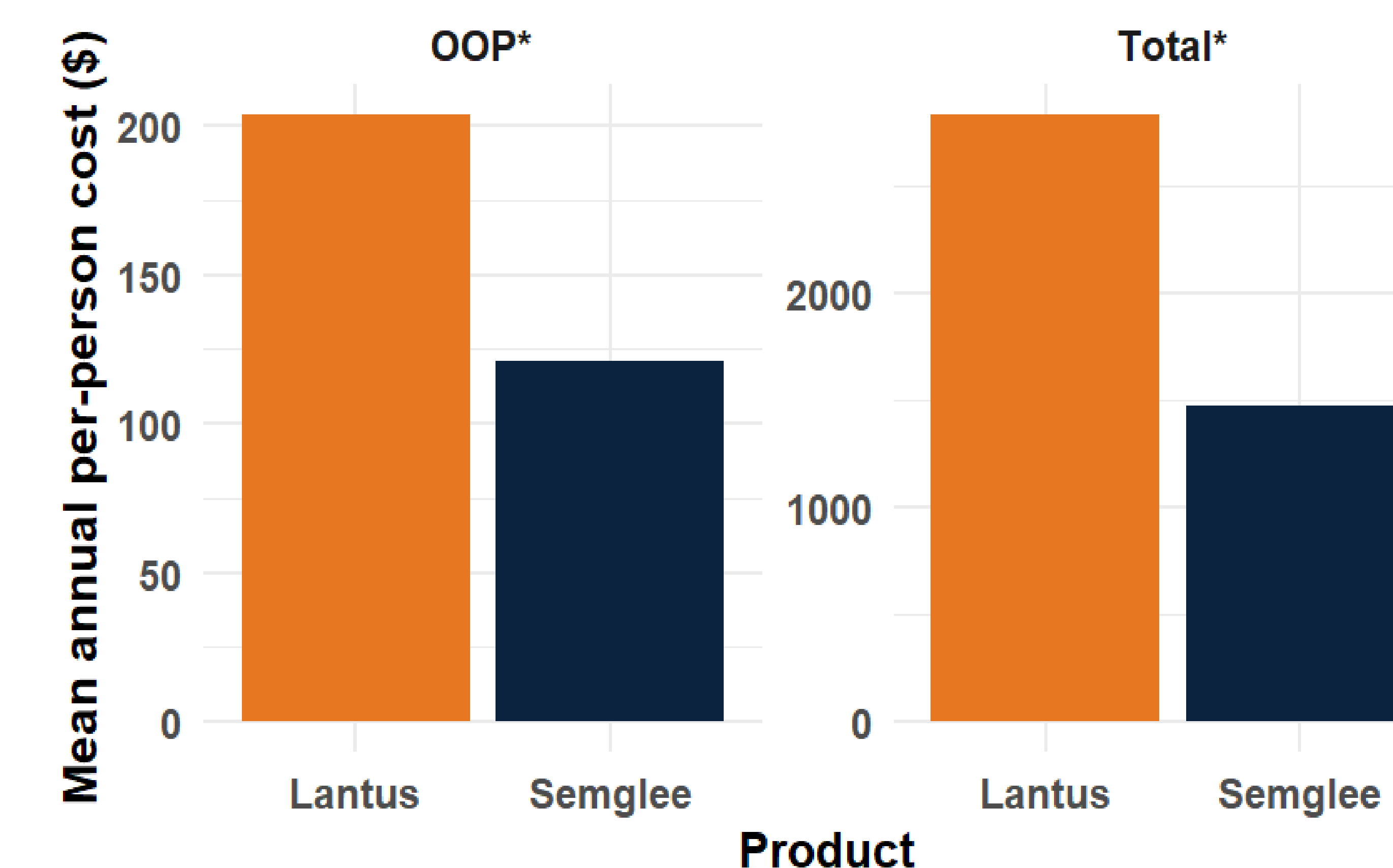
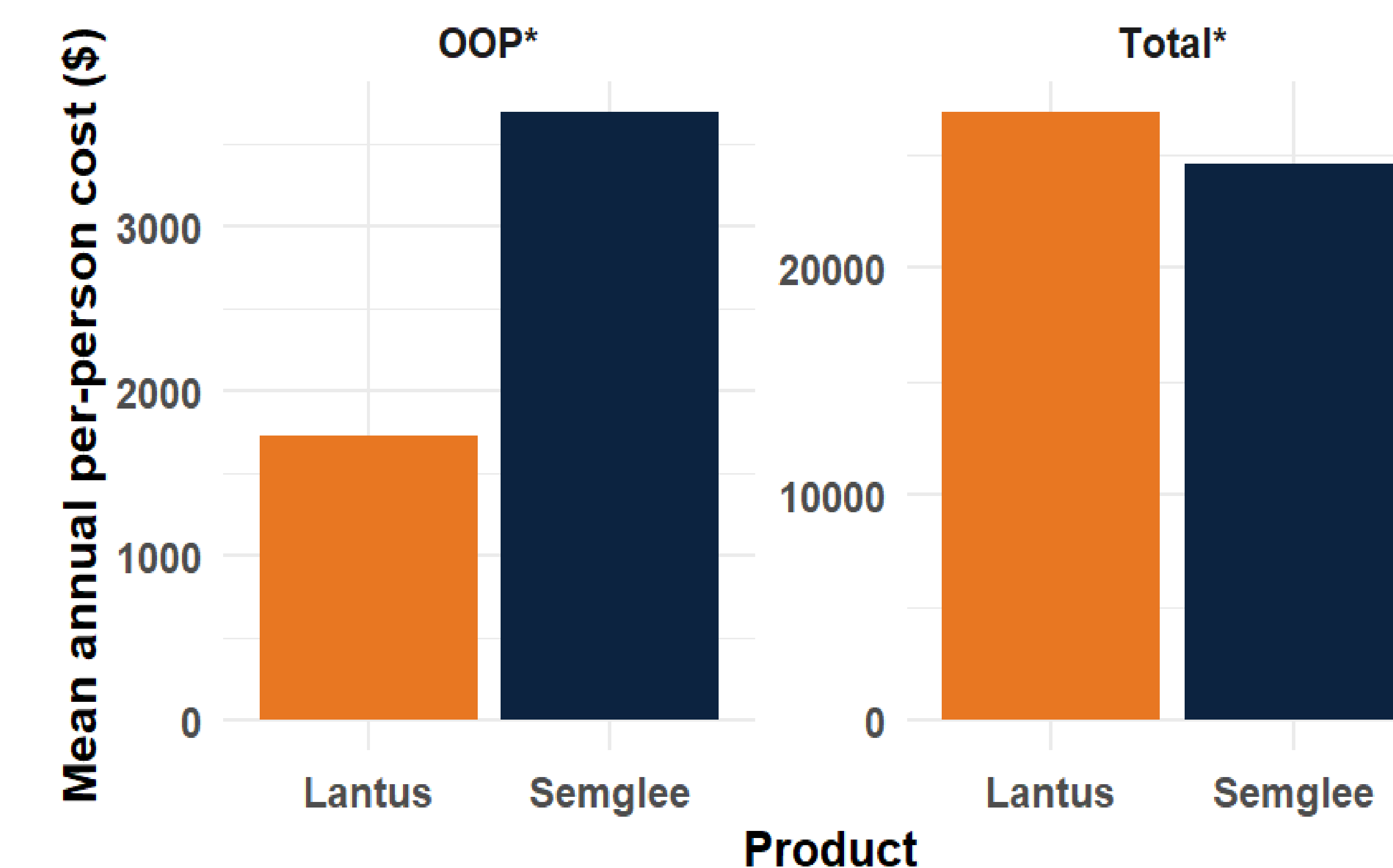


Figure 8: Medical costs associated with Lantus and Semglee from 2021 – 2023



Conclusions

- Semglee led to lower total and OOP prescription drug costs compared to Lantus, without increasing total medical costs.
- Findings call for more real-world studies to compare the effectiveness and safety of Lantus and its interchangeable biosimilars for further adoption of biosimilars.