

2255-PUB / 2255 - Medical Resource Use and Costs in Patients with Type 2 Diabetes Mellitus during the Trial Evaluating Cardiovascular Outcomes with Sitagliptin (TECOS)

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Disclosures

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Background: TECOS, a cardiovascular safety trial, randomized 14,671 participants from 38 countries to sitagliptin or placebo, added to usual care, who were managed to achieve individualized glycemic control, equally in both groups. Sitagliptin was non-inferior to placebo for the primary composite cardiovascular outcome. Secondary and tertiary objectives were to compare medical resource use and costs between treatment groups.

Methods: Medical resource use data were collected from randomization to study end. Medical services and medications were valued using U.S. Medicare payment rates and wholesale acquisition costs, respectively. Hierarchical generalized linear models (HGLM) were used to account for variable practice patterns by country. Results: Mean and median follow-up was 3.0 years in both groups. Resource use and costs were similar (Table). Sitagliptin-treated patients had 5 fewer hospitalizations per 100 patients (p=0.16). Total costs, exclusive of sitagliptin, were \$11,937 vs. \$12,409 for sitagliptin vs. placebo. Mean sitagliptin costs were \$9,978 per patient. When adding study medication costs, total costs in the sitagliptin group averaged \$21,915.

Conclusions: In a trial designed to achieve glycemic equipoise between groups

small reductions in hospitalizations rates with sitagliptin slightly offset treatment costs.

Table. Medical Resource Use and Costs *HGLM Did Not Converge.

Mean (SD)	Sitagliptin (n=7332)	Placebo (n=7339)	Difference (95% CI with bootstrap method)	P-value
Hospitalizations	0.66 (1.29)	0.70 (1.43)	-0.049 (-0.095 to -0.008)	0.16
Inpatient days	5.50 (16.38)	5.74 (16.54)	-0.243 (-0.768 to 0.241)	0.99
Outpatient care visits	19.42 (17.36)	19.43 (17.35)	-0.008 (-0.520 to 0.583)	0.86
Inpatient costs	\$6947 (19,935)	\$7377 (20,066)	-430 (-1109 to 168)	*
Outpatient costs	\$1465 (1413)	\$1464 (1364)	1 (-39 to 50)	0.85
Diabetes medication costs	\$3524 (7644)	\$3567 (7623)	-43 (-269 to 216)	0.26
Total costs, excluding sitagliptin	\$11,937(22,265)	\$12,409 (22,283)	-472 (-1193 to 247)	0.59