significant improvements in glycemic control (HbA1c 0.59%) and body weight (BMI 0.52 kg/m²). The aim of this analysis was to estimate the long-term clinical and cost implications associated with therapy conversion from insulin glargine to detemir in type 2 diabetes patients in Germany. METHODS: A previously published and validated diabetes model (CORE Diabetes Model) was used to make long-term projections of clinical and cost outcomes based on patient characteristics (age 62.3 years, duration of diabetes 7 years, HbA1c 8.30%, 50.4% male) and treatment effects from the German part of PREDICTIVE. The model was used to estimate life-expectancy, quality-adjusted life expectancy and to account direct medical costs (pharmacy, patient management and complication costs). Costs were derived from published sources and expressed in 2006 Euros. Future costs and clinical benefits were discounted at 5% annually.

RESULTS: Therapy conversion from insulin glargine to insulin detemir was projected to improve life expectancy by approximately 0.13 years (7.08 ± 0.13 versus 6.95 ± 0.12 years) and quality-adjusted life expectancy by 0.29 quality-adjusted life years (QALYs) (4.53 ± 0.09 versus 4.24 ± 0.08 QALYs). Direct costs associated with insulin detemir treatment were projected to be lower over patient lifetimes than with glargine (€ 54,807 ± 1,788 versus € 55,839 ± 1,749 per patient, difference € 1,032). Cost savings were driven by lower complication costs (due to HbA1c improvements) associated with insulin detemir. CONCLUSION: Modeling the long-term implications of therapy conversion from insulin glargine to detemir based on data from German patients in PREDICTIVE indicates that insulin detemir is associated with benefits in terms of life expectancy, quality-adjusted life expectancy and complication rates, as well as reducing costs from a third-party health care payer perspective in Germany.