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events. Transition probabilities were based on Framingham risk formulae. RESULTS: Over 10 years, in Type-2 diabetes patients with controlled LDL-c and low HDL-c (<1 mmol/L), addition of Niaspan® (2g daily) to statin treatment was projected to reduce the absolute incidence of MI (3.2%), angina (0.7%) and CHD death (1.6%) compared to statin monotherapy. Relative risk reductions were 13.3%, 12.5% and 13.1% respectively. In patients with elevated LDL-c (>3 mmol/L), ezetimibe plus statin was associated with a reduced absolute incidence for MI (2.3%), angina (0.5%) and CHD death (1.1%) versus statin alone. Relative risk reductions were 7.7%, 7.4% and 7.9% respectively. CONCLUSIONS: Over 10 years, both Niaspan® and ezetimibe may lead to substantial reductions in the cumulative incidence of CHD events in Type-2 diabetes patients failing to reach cholesterol targets with statin monotherapy. These findings highlight the potential long-term benefits of raising HDL-c in Type-2 diabetes patients with controlled LDL-c.

PROJECTED IMPACT ON CORONARY HEART DISEASE AT 5, 10 AND 35 YEARS OF ADDING PROLONGED-RELEASE NICOTINIC ACID (NIASPAN®) TO STATIN TREATMENT IN PATIENTS WITH TYPE-2 DIABETES

 $\label{eq:constraint} \frac{Renaudin}{C^1}, Roze \; S^2, Palmer\; AJ^2, Valentine\; WJ^2, Minshall \; ME^3, \\ Liens \; D^1$

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OBJECTIVES: To evaluate the clinical benefits of raising HDLc by adding Niaspan® on coronary heart disease (CHD) endpoints in Type-2 diabetes patients on statin therapy. METHODS: Two successive models were developed to project long-term clinical benefits of treating patients over different time periods. The first model (Monte Carlo simulation) was used to evaluate the impact of simvastatin treatment on lipid levels and identify patients with low HDL-c. Baseline cohort characteristics and effects of statin treatment were taken from the diabetic subpopulation of the 4S study. In patients with HDL-c <1 mmol/L, treatment with statin plus add-on Niaspan® was compared to statin monotherapy. Niaspan® treatment effects were taken from several clinical trials as summarized in the European SPC. The second model was then used to simulate the development of CHD events based on the Framingham risk formulae. This Markov model included five states: no CHD, history of myocardial infarction (MI), history of MI and angina, and dead. Cycle length was one year. **RESULTS:** Addition of Niaspan[®] (2g daily) to statin treatment was associated with a lower cumulative incidence of CHD events than statin monotherapy. Absolute risk reductions of 2.1%, 4.0%, and 8.1% for myocardial infarction, 0.5%, 0.9%, and 1.3% for angina, and 1.0%, 1.9%, and 4.0% for CHD death were projected at time horizons of 5, 10, and 35 years respectively. CONCLUSIONS: Due to its positive effect on HDL-c levels, addition of Niaspan® to statin treatment was projected to reduce the cumulative incidence of CHD events compared to statin monotherapy in type-2 diabetes patients with persistently low HDL-c. These data indicate that as the treatment period increases, the clinical benefits associated with statin plus Niaspan® may also increase compared to statin monotherapy.

TYPE-2 DIABETES IN GERMANY: PREVALENCE AND MEDICATION USE

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OBJECTIVE: Type-2 diabetes is recognized as a growing problem across the world, with the number of individuals diagnosed with this disorder expected to approximately double in the next 25 years. The objective of this study is to examine the prevalence of Type-2 diabetes as well as trends in antidiabetic medication use in Germany. METHODS: Data for this study were obtained from the German Disease Analyzer-Mediplus database. All patients who were identified with Type-2 diabetes between 01/01/2001 and 12/31/2003 and who were at least 20 years of age when first identified as having Type-2 diabetes were included in the prevalence estimate (N = 45988). While the 2003 prevalence estimate was based on data from a three year window, patient characteristics and medication use was examined for each of the three calendar years. These cohorts consisted of patients identified with Type-2 diabetes who were at least age 20 during the year (N = 20766 for 2001; N = 22778 for 2002; and N = 23326 for 2003). RESULTS: The prevalence of Type-2 diabetes was estimated to be 3.93% in 2003. From 2001 to 2003, there was a decrease in the percentage of patients with Type-2 diabetes who were not receiving antidiabetic medication (from 34.28% to 28.27%; p < 0.0001) as well as a significant decrease in the use of sulfonylureas (from 20.02% to 16.02%; p < 0.0001). In contrast, there were significant increases in monotherapy insulin use (from 7.95% to 9.90%; p < 0.0001), monotherapy metformin use (from 14.04% to 18.71%; p < 0.0001), and oral combination antidiabetic medication use (from 14.34% to 16.99%; p < 0.0001) over the same time period. CONCLUSIONS: The prevalence estimate confirms that Type-2 diabetes is a significant health concern in Germany. Furthermore, recent trends demonstrate that physicians are increasingly likely to prescribe antidiabetic therapies for the treatment of this disease.

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