RESULTS: In all, 28,142 people were included in the cohort (12,945 olanzapine users and 15,197 risperidone users). The risk of developing diabetes was higher for those exposed to olanzapine than for those exposed to risperidone, but this increase in risk was marginally statistically significant (IRR: 1.209, 95 % CI: 1.001–1.460).
CONCLUSION: Compared to risperidone users, olanzapine users have a slightly higher risk of developing diabetes. There is a need to extend this study over a longer observation period, as the risk of developing diabetes after exposure to antipsychotic drugs is likely to increase with time.

PDG3

AN ECONOMIC EVALUATION OF COMBINATION THERAPY WITH PIOGLITAZONE (ACTOS, TAKEDA) IN TYPE 2 DIABETES MELLITUS FROM A SPANISH HEALTH-CARE PERSPECTIVE

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OBJECTIVE: To assess the cost-effectiveness of pioglitazone (PIO) in combination therapy versus usual care for patients with type2 diabetes.
METHODS: A published, validated model for type1 diabetes mellitus developed by IMIB was adapted to simulate long-term management, health outcomes, resource utilisation and treatment costs of patients with type2 diabetes. The model accounts for most complications in diabetes patients: nephropathy, retinopathy, acute myocardial infarction, angina pectoris, stroke and amputation. The analysis was done from a third-party-payer perspective and costs figured relative to the year 2000. A 6% discount rate was applied and sensitivity analysis was performed to test the results.
RESULTS: PIO 30 mg in combination with metformin (MF) was associated with a higher life expectancy (14.82 years) than sulphonylureas (SU)/MF (14.03 years) or rosiglitazone (RSG 8 mg/MF (14.67 years). Also, PIO-based combinations were associated with the lowest number of complications and deaths. For every 31 patients treated with PIO 30 mg /MF rather than SU/MF or 17 patients, respectively, for PIO 30 mg/SU rather than MF/SU one complication was avoided. For every 27 patients treated with PIO 30 mg/SU instead of MF/SU, one death was avoided. PIO was more expensive, but this was offset by reductions in complications. The average patient-lifetime incremental total treatment cost with PIO over alternatives ranged from 220,983 Spain Pesetas (ESP) to 2,952,973 ESP. The undiscounted incremental cost per life year gained (ICPLYG) of PIO 30 mg/MF relative to SU/MF was 3,660,692 ESP and relative to RSG 8 mg/MF 1,494,369 ESP. The discounted figures were 6,578,162 ESP and 1,913,919 ESP, respectively. The ICPLYG of PIO 30 mg/SU relative to MF/SU was 3,344,145 ESP and 6,013,419 ESP after discounting. Finally, after discounting, PIO 15mg/SU versus MF/SU and RSG 4 mg/SU was associated with an ICPLYG of 7,556,100 ESP and 578,172 ESP, respectively.
CONCLUSION: Combined treatments with pioglitazone improve survival and reduce complications in patients with type 2 diabetes and represent cost-effective use of scarce resources when judged against other therapeutic interventions. It is necessary to confirm the results of this model once long-term effectiveness data with the compared alternatives are available.

PDG4

THE DIFFERENTIAL EFFECT OF SULPHONYLUREA OR BIGUANIDE DRUGS ON CARDIAC REVASCULARIZATION PROCEDURES IN DIABETICS

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OBJECTIVE: Ischemic heart disease is the commonest cause for morbidity and mortality in patients with diabetes mellitus Type II (DMII). Treatment with biguanide drugs has a beneficial effect on lipid profile, decreases insulin resistance, procoagulant activity and body weight. Drugs from the sulphonylurea group cause an increase in insulin secretion, insulin resistance and weight gain. Theoretically, lower rates of cardiovascular events would be expected in patients treated with biguanides. The UKPDS study showed decreased cardiovascular mortality in obese diabetics, but several recent studies reported increased mortality with metformin use. The objective of our study was to compare cardiovascular disease in patients receiving either metformin or sulphonylurea.
METHODS: We compared the rates of revascularization procedure in the year 2000 between patients with DMII that were treated either with metformin or glibenclamide. All received the drugs for at least five years. Demographic parameters were similar between the groups. Data were obtained from the computerized database of the largest HMO in the country.
RESULTS: 140,757 patients were included in the study. *50.3*% were on metformin and 49.7% on glibenclamide. 7601 underwent cardiac revascularization procedures. Of these, 53 % were on glibenclamide and 47% on metformin. The risk of undergoing a revascularization procedure was 1.13 times higher in patients treated with glibenclamide ($P < .01$).
CONCLUSION: The results of our study indicate that patients with DMII treated with metformin have a lower rate of cardiovascular procedures than patients treated with glibenclamide. The use of this group of drugs may decrease the morbidity, mortality and costs in diabetic patients. More studies that include additional end points are needed.