serum HDL cholesterol levels (from 54.7 ± 2.3 to 57.7 ± 2.7 mg/dl, $P < 0.05$) and serum adiponectin levels (from 8.27 ± 0.76 to 9.13 ± 0.81 μg/ml, $P < 0.05$) increased significantly. Furthermore, plasma levels of interleukin-6 were significantly decreased (from 2.26 ± 0.27 to 1.60 ± 0.14 pg/ml, $P < 0.01$) and levels of high sensitive C-reactive protein tended to decrease (from 0.088 ± 0.015 to 0.064 ± 0.010 mg/dl, $P = 0.055$). HOMA-IR also tended to decrease, but statistically not significant.

Conclusions: These findings suggest that oral administration of telmisartan improve vascular inflammation and prevent atherosclerosis through the reduction in visceral fat accumulation and the increase in serum adiponectin concentrations.

P819
The efficacy and safety of pioglitazone plus a SU or metformin versus a fixed combination of metformin plus glibenclamide: results on lipid metabolism

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Aims: Aim of this study was to compare the effectiveness on lipids of the co-administration of pioglitazone with either metformin or a sulphonylurea versus a fixed combination of metformin + sulphonylurea.
Methods: This was a prospective, open, three-arm comparative, randomised study in patients with type 2 diabetes. After a 1-week run-in period, patients received either pioglitazone 15 mg once daily as add-on in patients receiving metformin or sulphonylurea or a fixed dose combination of metformin 400 mg and glibenclamide 2.5 mg twice a day. Pioglitazone could be increased to 30 mg/day and the fixed combination could be increased to three times a day at 15 days, 2 or 4 months if the plasma glucose was >140 mg/dl or HbA1c was >7.5%. HDL-cholesterol, total cholesterol and triglycerides were measured at baseline and 6 months. 398 patients were screened and 250 were randomised into the trial. 103 patients were put into the pioglitazone + metformin group, 77 into the pioglitazone + sulponylurea group and 80 into the fixed dose metformin + glibenclamide group.
Results: HDL-cholesterol was significantly raised by 2.3 mg/dl from baseline in the pio + met group whereas there was a significant decrease of −3.3 mg/dl in the fixed dose combination group at 6 months. There was a significant difference in favour of both pio + met and pio + SU vs. fixed dose regarding HDL change. There were no differences between the groups for total cholesterol. A significant drop in triglycerides was only seen in the pio + SU group (28.3 mg/dl).
Conclusions: This study showed that using pioglitazone in co-administration with either metformin or sulphonylurea effectively improved diabetic dyslipidemia as compared with a worsening of HDL and no effect on other lipid parameters with the fixed dose combination. All three treatments were well tolerated with an increase in body weight seen in all three groups.

P820
Rosiglitazone in family practice, 6 years experience

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The first of a new class of oral hypoglycemic agents, rosiglitazone became available in Canada in Feb 2000. While there are published clinical trials, these have rigid inclusion and exclusion criteria. We set out to investigate how this new class of agent performed in a typical family practice which is where most type 2 diabetes is treated.
Aims: To observe the performance and complications of rosiglitazone under typical family practice conditions without rigid inclusion or exclusion criteria. Since the UKPDS had shown an inevitable deterioration of beta cell function over time no matter what the treatment; of particular interest was whether treatment with this TZD led to preservation of beta cell function over a 5-year period.
Methods: 500 type 2 diabetics who had failed to attain Canadian Diabetes Association targets for glycemic control on conventional agents and therefore had rosiglitazone added to their treatment regime are reported on in this unsupported observational study.
Results: There was a progressive reduction in A1c. The initial 1.5% absolute A1c reduction seen by the sixth month of treatment has persisted for 5 years. There was no change in liver or kidney functions. Lipid parameters were stable. Drug discontinuation was similar to other reported studies at about 5%, the most common reason being fluid retention. Weight gain was minimal after all subjects received counseling on the potential for weight gain with the TZD drugs. Renal functions show a progressive decline in microalbuminuria, There is a small cohort of patients who have no glycemic response to Rosiglitazone, the reasons for this are not clear but need further investigation.
Conclusions: Six years of experience has shown rosiglitazone to be a safe and effective drug for the treatment of type 2 diabetes, both in monotherapy and combination treatment. The persistence of the glycemic control improvement suggest that there may be beta cell preservation.
Conclusions: Five years of experience has shown rosiglitazone to be a safe and effective drug for the treatment of type 2 diabetes, both in monotherapy and combination treatment. Persistence of glycemic improvement suggests beta cell preservation.

P821
Safety, tolerability, pharmacokinetics, and pharmacodynamics of BI 1356, a novel DPP-IV inhibitor with a wide therapeutic window

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Background and Aims: Dipeptidyl peptidase IV (DPP-IV) inhibitors represent a new class of oral antidiabetic drugs. BI 1356 is a novel, orally available, selective, and potent inhibitor of DPP-IV in clinical development for the treatment of type 2 diabetes.
Materials and Methods: The safety, tolerability, pharmacokinetics, and pharmacodynamics of BI 1356 were evaluated in a double-blind, randomised, placebo-controlled single-rising dose trial. Sixty-three healthy male volunteers between 21 and 65 years of age, received a single oral dose of 2.5–600 mg BI 1356 or placebo.
Results: Treatment with BI 1356 was well tolerated. There were no serious adverse events, no episodes of hypoglycaemia, and no discontinuations due to adverse events. The most common adverse events reported in both, BI 1356 and placebo treated subjects, were headache and nausea. The overall incidence of adverse events was not different between BI 1356 and placebo. BI 1356 showed non-linear pharmacokinetics in the lower dose range with increasing clearance and volume of distribution, while dose-proportionality was observed over a dose range of 100–600 mg. Renal clearance represented a minor elimination pathway. A dose of 5 mg BI 1356 resulted in a mean inhibition of DPP-IV plasma activity of >80% of baseline 1.5 h after drug administration. BI 1356 plasma concentrations were directly correlated to plasma DPP-IV activity, resulting in a maximum inhibition ranging from 73% to 97% for doses of 2.5–600 mg BI 1356, respectively, within 3 h after dosing.
Conclusions: In summary, BI 1356 was well tolerated over the dose range 2.5–600 mg once daily in healthy male volunteers. BI 1356 has a wide therapeutic window of >100-fold based on a therapeutic dose of 5 mg. The pharmacokinetic profile is consistent with a once daily dosing regimen.