UK: 7%, 4% (±6%), 16% (±7)%/2% (±4%). Within each country, burden of type 2 diabetes tended to increase with age among diabetic individuals (all-age, 18–24, 25–34, 35–44, 45–54, 55–64, 65–69 yrs: % pts); Italy: 61%, 17%, 16%, 31%, 66%, 79%, 61%; France: 63%, 7%, 19%, 46%, 61%, 73%, 76%; Spain: 66%, 18%, 16%, 44%, 75%, 68%, 93%; UK: 79%, 10%, 34%, 64%, 84%, 89%, 93%; Germany: 81%, 22%, 27%, 60%, 82%, 91%, 85%; The Netherlands: 84%, 50%, 50%, 71%, 86%, 89%, 92%. Type of treatment observed among type 1/type 2 diabetics varied across the countries (not mutually exclusive: % using Dietary restrictions/exercise, Oral-therapy/oral-anti-diabetics, Insulin therapy): The Netherlands: type 1—16%, 4%, 92%, type 2—39%, 63%, 22%; UK: type 1—19%, 13%, 81%, type 2—39%, 62%, 16%; Spain: type 1—33%, 13%, 73%, type 2—57%, 61%, 17%; Germany: type 1—19%, 17%, 79%, type 2—61%, 54%, 23%; France: type 1—52%, 44%, 35%, type 2—66%, 78%, 16%; Italy: type 1—38%, 27%, 44%, type 2—79%, 77%, 14%. Among those using medications to manage diabetes, prescription medicines predominated (range: 74% (Spain) to 86% (The Netherlands)); use of OTC-products/complementary-therapy was rare (<1%–3%), and so as herbal-therapy (<1%–4%, except in Spain (12%)). CONCLUSIONS: Diabetes disease burden appear to be substantial in European nations studied, with type 2 diabetes burden increasing with age. The reported treatment patterns varied dramatically. With the aging European population, appropriate interventions, outcome evaluations and cost-effective diabetes management strategies are warranted to alleviate this burden.

**PDB9**

**ESTIMATED INCIDENCE OF TESTOSTERONE DEFICIENCY IN AGING BRAZILIAN MEN AND THE CONSEQUENT COSTS OF NEW CASES OF OSTEOPOROSIS-RELATED HIP FRACTURES**

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OBJECTIVES: This study aimed to model the increase in osteoporosis-related fractures and the associated costs related with aging and testosterone deficiency (TD) in the male population above 65 years in the Brazilian Private Health System (PHS). METHODS: Population-based prospective cohorts established age-specific annual incidence rates of testosterone deficiency and the prevalence of osteoporosis in men. Based on these estimates, projections for the number of cases of men with osteoporosis-related fractures and the associated national costs associated with hip fractures have been previously recorded as R$ 24,051 (US$14,402) per event. RESULTS: Among 1,164,379 male individuals above 65 years under the Brazilian PHS, 27,130 new cases of TD would be expected in one year. Considering an osteoporosis incidence of 6% and 12.3% for men with normal and deficient testosterone, respectively, 709 new cases of osteoporosis attributed to TD would be expected. This would result in an annual absolute increase of 0.16% in non-vertebral fracture incidence in men between 65–69 years; 0.24% between 70–74 years; 0.32% between 75–79 years and 0.40% above 80 years. Each of these absolute increases represents a 105% relative increase in the incidence of non-vertebral fractures between men with TD relative to men without TD. Seventy-one new non-vertebral fractures and 13 new cases of hip fractures would be expected, resulting in incremental costs of R$318,002 (US$190,420) for the Brazilian PHS. CONCLUSIONS: Male aging is associated with gradual decrease in circulating testosterone, which may be detrimental to bone. This model suggests that, for the Brazilian male population above 65 years, testosterone deficiency is associated with a significant increase in new cases of osteoporosis-related fractures in one year. Diagnosis and proper treatment of this condition could have a favorable impact in the prevention of this costly complication.

**PDB10**

**COMPREHENSIVE LIPID PROFILE AMONG TYPE 2 DIABETES MELLITUS (T2DM) POPULATION IN SPAIN. RECAP-DM SPANISH COHORT STUDY**

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OBJECTIVES: Diabetes patients’ management is complex and requires that many issues, beyond glycemic control, be addressed. Management of lipid profile is a crucial component of cardiovascular (CV) risk reduction in diabetic population. We assessed the characteristics of dyslipidemia among an adult type 2 diabetes mellitus (T2DM) population that added either sulphonylurea (SU) or a PPARγ agonist to previous metformin (MF) therapy in Spain. METHODS: A retrospective clinical chart review and patient survey during physician visits (June 2006–February 2007) was conducted in Spain. Patients were aged ≥30 years at time of T2DM diagnosis and added SU or a PPARγ agonist to previous MF between 2001 and 2006. Patients with gestational diabetes or T1DM were excluded. For the present analysis patients with missing values for LDL-c, HDL-c or triglycerides (TGs) were excluded. Individual patient lipid profiles were compared with the recommended lipid targets for diabetic patients by the latest ADA consensus. RESULTS: A total of 493 patients were recruited, and 338 included in this analysis. Average age was 63.1 (SD 10.6) years, 46.7% were female, and mean time from diabetes diagnosis was 8.6 (SD 5.3). The lipid parameter most frequently not at target was LDL-c (79.6%), followed by TGs (42.9%) and HDL-c (37.6%). 17.5% of patients had the three lipid parameters out of goal, and 31.4% had two of them not at target. Out of the 338 patients only 20 (a 6% approx.) presented all three lipid parameters at the recommended level. CONCLUSIONS: diabetic patients that start oral combination therapy with either MF+SU or MF + a PPARγ agonist, very frequently have their lipid parameters not at recommended level. A greater focus is required to comprehensively manage their lipid profile, and reduce the cardiovascular risk associated with it.

**PDB11**

**POTENTIAL IMPACT OF LIPID CONTROL AND SUBSEQUENT CARDIOVASCULAR (CV) RISK REDUCTION IN T2DM POPULATION TREATED WITH ORAL COMBINATION THERAPY (OCT) RECAP-DM STUDY**

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OBJECTIVES: Diabetic patients are at CHD greater risk than the general population. Therefore these patients will benefit from optimal care based on CHD risk evaluation. We assessed the potential impact of risk factors (RF) management on the cardiovascular (CV) risk among T2DM population. METHODS: A retrospective cohort study was conducted in Spain (2006–2007). Patients were aged ≥30 years at time of T2DM diagnosis and had added sulphonylurea or PPARγ agonist to previous metformin. Patient RFs were assessed for attainment of guideline-defined optimal values. The data for these patients correspond to their last available measurements before add-on therapy. Five-year CV risk was estimated with a
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DIABETES/ENDOCRINE DISORDERS—Cost Studies

PDB13

REMBURSEMENT OF LONG-ACTING INSULIN ANALOGS IN POLAND: A BUDGET IMPACT ANALYSIS

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OBJECTIVES: The aim of the analysis was to estimate the budget impact of including long-acting insulin analogs (LAA) in the reimbursement list. METHODS: The reimbursement list in Poland currently includes several human insulin products, but LAA are not reimbursed, therefore only few patients receive them. This analysis was performed from the public payer perspective (National Health Fund). A 5-year time horizon was adopted. Prognosis was based on the assumption that basal insulin sales will increase in the same way as in the past 12 years in Poland. Percent of market share in basal insulin market were estimated based on other European countries. Four different reimbursement scenarios were considered: Scenario 1 (100% reimbursement of LAA for all insulin-treated patients) and scenario 2 (50% reimbursement for all insulin-treated patients), scenario 3 (100% reimbursement for special patient population) and scenario 4 (50% reimbursement for special patient population). Special patient population was defined as patients who did not obtain the desired metabolic effect with their currently used insulin regimen and/or experienced recurrent hypoglycaemia, particularly nocturnal. RESULTS: In case of 100% reimbursement of LAA (scenario 1), the expenditures for basal insulin will increase by 19,598 mln PLN in 2007 and by 52,403 mln PLN in 2011. In scenario 2, the expenditure will increase by 3663 mln PLN and 8,01 ml ln PLN in 2007 and 2011 respectively. In scenario 3, the expenditure will increase by 11,072 mln PLN and 41,812 mln PLN in 2007 and 2011 respectively. In scenario 4 the expenditure will increase by 2970 mln PLN and 6589 mln PLN in 2007 and 2011 respectively. CONCLUSIONS: This analysis shows that 100% reimbursement of LAA for all insulin-treated patients (scenario 1) will be associated with the highest increase in drug expenditure. In Scenarios 2–4, expenditure will rise to a smaller extend due to restriction to special patient population and/or co-payment.

PDB14

LARGE IMPACT OF ANTIDIABETIC DRUG TREATMENT AND HOSPITALIZATIONS ON ECONOMIC BURDEN OF DIABETES MELLITUS IN THE NETHERLANDS DURING 2000 TO 2004

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OBJECTIVES: To estimate the burden of diabetes mellitus (DM) and its complications in The Netherlands. METHODS: The PHARMO Record Linkage System comprised among others linked drug dispensing, hospital and clinical laboratory data from approximately 2.5 million individuals in The Netherlands. Patients with DM were included in the study cohort during 2000–2004 if they used antidiabetic drugs or had HbA1c ≥6.5 mmol/l or had a hospitalisation for DM or a diabetic complication in the measurement year or in the preceding year. Controls free of diabetes were 1:1 matched to patients with diabetes, on birth year, zip code and gender. Complications (hospitalisations and dispensings for cardiovascular disease/eye problems/amputations) were classified into stages. Complications attributed to DM were estimated as complication stages 1 and 2 among patients minus those among controls. Drug costs