Cardiometabolic risk factors such as type 2 diabetes or dyslipidaemia have become an increasing problem in the developed countries. Rimonabant 20 mg is a novel treatment in conjunction with diet and exercise for obese and overweight patients with associated cardiometabolic risk factors such as type 2 diabetes or dyslipidaemia. In the double blinded RCT RIO-Europe (n = 1508) and RIO-Diabetes (n = 1047), rimonabant was shown to improve weight, waist circumference, HDL-cholesterol, TG, HbA1c and other cardiometabolic risk factors in overweight and obese patients with or without T2DM. The study inclusion criteria correspond to Danish treatment guidelines. OBJECTIVE: To analyse the cost-effectiveness of rimonabant as a supplement to diet and exercise in a Danish setting. METHODS: A Markov model (RAINBOW), evaluating scenarios of 2 and 10 years of treatment in a Danish setting, was used to evaluate cost-effectiveness based on the RIO-Europe and RIO-Diabetes study. Modelled outcomes were cost per QALY and LYG. Danish cost and epidemiological data were applied. RESULTS: Depending on the treatment length (2 or 10 years) and whether the patients were obese with or without diabetes, the cost per QALY gained was between €11,182 and €13,164, while the cost per LYG was between €13,734 and €39,004. These ratios are within the limits which are normally considered to be cost-effective. CONCLUSIONS: Rimonabant in conjunction with diet and exercise can be a in overweight or obese patients with dyslipidaemia or type 2 diabetes.

Abstracts

POB3 BURDEN OF ILLNESS OF ABDOMINAL OBESITY: A RETROSPECTIVE CHART REVIEW
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OBJECTIVES: Abdominal obesity is a major risk factor for cardiovascular disease (CVD), diabetes, and related mortality. Little information is available on the economic burden of abdominal obesity. Therefore, the objective of this study was to assess the current medical resource use in patients with abdominal obesity in Belgium. METHODS: Data on resource utilization were retrospectively (1/8/2004–31/7/2005) collected by general practitioners (GP) in patients aged ≥45 with abdominal obesity and either a history of CVD- or diabetes, or either ≥ 2 CVD risk factors (hypertension, dyslipidaemia, impaired glucose tolerance). GPs were selected based on setting (urban-rural) and geographical region (north-south). Cost analysis was performed for the whole sample, and for 2 subpopulations: patients with a history of CVD or diabetes (64%) and patients without a CVD-history or diabetes. Both costs related and not related to obesity were included. The perspective of the health care payer was taken. RESULTS: 403 patients were studied. Mean age was 61.2 (St.Err. 0.5), females represented 63.26% of the patients. The overall cost per year for the entire sample was €1738 (St.Err. €129) including all costs related and not related to obesity. Excluding the costs not related to obesity the yearly cost was €995 (St.Err. €90). For the group of patients with a history of CVD or diabetes these costs were €2109 (St.Err. €182) and €1252 (St.Err. €130) respectively. For the subgroup of patients without a history of CVD nor diabetes these costs were €1099 (St.Err. €138) and €534 (St.Err. €82). CONCLUSIONS: This retrospective chart review shows that patients with abdominal obesity have a considerable cost, especially in the presence of CVD or diabetes but also if multiple cardiovascular and/or metabolic risk factors are present. Fifty-seven percent of the total cost of care is related to the patient’s obesity.

POB4 USING CLAIMS DATA TO UNDERSTAND THE COSTS OF DIFFERENT HEALTH STATES FOR PATIENTS WITH CARDIOMETABOLIC RISK
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OBJECTIVES: In order to evaluate the costs of different health states for patients with cardiometabolic risk, a study was performed to operationalize these health states, to identify individuals from a claims database and assign them to the health states. METHODS: Claims data of a German sickness fund with 1.5 million beneficiaries were used for the years 2000 to 2004. Only patients aged 18–80 years were included who were continuously covered by the health insurance during this period. Health states were composed of different attributes (diabetes mellitus with/without micro- or macrovascular complication, hypertension, hypercholesteremia, hypertriglyceridemia, coronary heart disease, obesity), each of them being transposed into appropriate ATC codes or ICD-10 codes (inpatient, outpatient, sick leave diagnosis). Patients were selected from the database according to their health state pattern. RESULTS: Out of n = 774,132 beneficiaries (62% male), n = 736,653 (95%) could be assigned to one of the defined health states. Most of them (58%) were allocated to the health state without any of the defined attributes. 27% had 1 to 4 cardiometabolic risk factors, but no diabetes. Four percent had no diabetes, but had already experienced cardiovascular diseases such as myocardial infarction and/or stroke. 6% matched one of the diabetes related health states. CONCLUSION: Typical limitations of any analysis performed on the basis of claims data should be borne in mind. These comprise lack of diagnostic accuracy and incomplete knowledge of the patients’ case histories and clinical measures for severity of illness. Nonetheless, claims data provide useful information for economic modelling, as they derive from a naturalistic setting and allow an unbiased view on health care delivery and utilization under real-life conditions. This can determine the authenticity of economic models.

POB5 A MODELED COST-EFFECTIVENESS EVALUATION OF SIBUTRAMINE THERAPY IN A HIGH RISK OBSESE POPULATION
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OBJECTIVES: Obesity is a major risk factor for type 2 diabetes, cardiovascular disease and stroke. Moderate weight loss of 5–10% is proven to be beneficial, but often difficult to achieve with diet/exercise alone. The addition of sibutramine can reduce and maintain weight loss through increased satiety and enhanced resting metabolic rate. This study reviews the safety, efficacy and cost-effectiveness of sibutramine with diet/exercise in obese patients. METHODS: A patient level analysis was conducted of 23 RCTs of sibutramine with diet/exercise compared with diet/exercise alone. Dichotomous outcomes (proportion of patients losing ≥5% body weight) and multivariate risk factor-adjusted continuous means (BMI, SBP, DBP, HbA1c and lipids) were calculated. Least squares regression models were developed to determine the relationship between BMI change and cardio-
vascular risk factors used in the economic model. A Markov decision-analytic model using the Monte-Carlo simulation was employed to examine cost-effectiveness. Hypothetical patients were subject to risk of type 2 diabetes, CVD and stroke. Diabetic patients were at added risk of amputation, blindness and renal failure. Simulation of events was performed using the Framingham Heart Study and the UK Prospective Diabetes Study. RESULTS: Significant clinical benefits were demonstrated with sibutramine and diet/exercise compared with diet/exercise alone: proportion of patients achieving ≥5% weight loss (51.6 vs 22.3% respectively; p < 0.0001), BMI (−1.65 [−1.97, −1.34] kg/m²; p < 0.0005), absolute weight (−3.84 [−5.18, −2.49] kg; p < 0.0005), HDL (4.07 [1.50, 6.65] mmol/L; p = 0.002) and triglycerides (−12.17 [−21.82, −2.52]; p = 0.013). Small increases in blood pressure (1–3 mmHg) and heart rate (4–5 beats/minute) were observed. Sibutramine was a cost-effective addition to diet/exercise (approximately AUD$40,000 per additional QALY). Sensitivity analyses demonstrated the model to be robust. CONCLUSIONS: Sibutramine is a safe, effective, and cost-effective intervention in the prevention of obesity-related complications through weight loss and weight maintenance.

IN EUROPE, HOW REPRESENTATIVE ARE OVERWEIGHT/OBESE SUBJECTS RECRUITED VIA THE INTERNET?

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For observational studies derived from Internet based cohorts, the representativeness of demographic, behavioral and health characteristics of subjects is not well-established in European countries. OBJECTIVES: To compare distributions of self-reported characteristics of subjects recruited via Internet in Germany & UK to a national representative sample in each country. METHODS: PROCEED is a multinational observational cohort of overweight & obese subjects (body mass index >25 kg/m²) recruited through an existing Internet panel in Germany & the UK in 2005. Eligibility criteria were: age 35–75; not pregnant; willing to lose weight in the next year and weight <180 kg. Recruitment was stratified to balance gender and overweight and obese categories. Baseline demographics and selected health and behavior characteristics of the PROCEED cohort were compared with estimates from a relevant subset (same age, BMI and not pregnant) of two National Surveys (1998 GNHIS and 2003 HSE). PROCEED data were standardized for gender and BMI category in each of the national surveys. RESULTS: PROCEED subjects in Germany (n = 203) and the UK (n = 216) presented similar characteristics to each national survey population in terms of level of alcohol consumption, and prevalence of hypertension, high cholesterol and diabetes. More PROCEED subjects reported having college or higher education (22% versus 12% in Germany; 31% versus 15% in the UK), PROCEED subjects were also more likely to be single. The German PROCEED cohort had a higher proportion of current smokers compared to GNHIS data (48% versus 24%) while the UK PROCEED cohort was very similar to HSE data. CONCLUSIONS: Despite few differences in education level, marital and smoking status, most demographic and health characteristics were similar between the Internet cohort of overweight/obese subjects and the German and UK national surveys. The internet seems to be an appropriate tool for recruiting subjects in observational studies.