OBJECTIVES: To identify the factors which drive the CE of pharmacological smoking cessation therapies (SCTs) between Netherlands, Germany, Sweden, United Kingdom, Belgium and France. METHODS: The BENESCO model was used to estimate the life-time benefits of smoking cessation. The model follows a cohort of smokers making a single quit attempt using nicotine replacement therapy (NRT), bupropion, varenicline or no pharmacology. The factors investigated were age- and gender-specific smoking prevalence, demography, overall mortality, epidemiology and costs of smoking-related diseases, utilities, resource use and unit costs of SCTs, discount rates and percentage of smokers making a quit attempt. The Netherlands was used as reference. We systematically replaced Dutch model parameters by country-specific values. The influence of the factors was expressed as the change in incremental net monetary benefit (INMB), using a willingness-to-pay (WTP) of 20,000 Euro per QALY. Factors were ranked on their impact. RESULTS: The INMB of NRT versus unaided cessation varies from 0.38 million per 1000 quit attempts in Germany to 1.54 million in Belgium. The INMB was influenced most by smoking prevalence, discount rates, epidemiology and then utilities. The change in INMB of NRT versus unaided cessation due to smoking prevalence varied from −57% to +48%. The change due to discount rates ranged from −65% to +62% compared to the Netherlands. The rank order of the factors depended on the threshold value. At a WTP of 1,000 Euro, the ranking was resource use, smoking prevalence, costs of illnesses and then discount rates. Rankings were largely similar for the other comparisons. CONCLUSIONS: Although each pharmacotherapy had very positive INMBs there were significant differences across countries, which were primarily related to choice of discount rate and smoking prevalence. Methodological choices can have a big influence on CE results.

POSTER SESSION II

CANCER—Clinical Outcomes Studies

THIRD-GENERATION AROMATASE INHIBITORS VS TAMOXIFEN IN THE TREATMENT OF EARLY AND ADVANCED BREAST CANCER: A SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS

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OBJECTIVES: To compare the efficacy of third-generation aromatase inhibitors (AIs) with tamoxifen in the treatment of early and advanced breast cancer (EBC and ABC) in randomised controlled trials (RCTs). METHODS: Systematic review of CENTRAL, EMBASE, MEDLINE, for RCTs comparing tamoxifen with anastrozole, exemestane, or letrozole. Searching was restricted to English-language publications and was completed in March 2008. Mortality and relapse data were extracted for EBC studies at 2 and 5 years post randomisation. For ABC, primary outcomes were disease progression and response. Meta-analysis was conducted with a fixed effects model using the Mantel-Haenszel method. Summary effect estimates (Relative Risk [RR]) with 95% confidence intervals (95%CI) were calculated (negative outcomes, e.g. mortality, favour AIs when RR < 1.0; positive outcomes, e.g. clinical benefit, favour AIs when RR > 1.0). RESULTS: The literature search identified 2417 papers, 15 provided data on 9 RCTs comparing third-generation AIs with tamoxifen. The results for ABC presented a range of findings in favour of AIs at 2 and 5 years with statistically significant outcomes at 2 years: all cause mortality (RR 0.86, 95%CI: 0.77, 0.97); contralateral recurrence (RR 0.53, 95%CI: 0.38, 0.74); distant recurrence (RR 0.75, 95%CI: 0.67, 0.84); local recurrence (RR 0.80, 95%CI: 0.66, 0.96); and 5 years: contralateral recurrence (RR 0.57, 95%CI: 0.42, 0.76); distant recurrence (RR 0.86, 95%CI: 0.78, 0.94); local recurrence (RR 0.64; 95%CI: 0.48, 0.87). For ABC there were significant differences between AIs and tamoxifen for: clinical benefit (RR1.19, 95%CI:1.09, 1.3); complete response (RR 1.82, 95%CI:1.22, 2.73); objective response (RR 1.58, 95%CI: 1.28, 1.97); partial response (RR1.2, 95%CI 1.02, 1.41) and disease progression (RR0.83, 95%CI:0.76, 0.92). Adjusted indirect comparison of individual AIs were conducted with no significant differences identified. CONCLUSIONS: Treatment with third-generation AIs rather than tamoxifen provides significantly better outcomes for ABC and for EBC at two and five years follow up.