Objective: The objective of this analysis is cost-effective- ness comparison of bupropion SR in the treatment of tobacco dependence versus: placebo, nicotine replacement therapy (NRT), bupropion SR used in combination with NRT (BUPR+NRT). METHODS: The efficacy analysis was carried in accordance with guidelines for systematic review basing on credibility criteria of the Cochrane Collaboration—Cochrane Reviewers’ Handbook and Evidence Based Medicine. Cost analysis included direct costs from payer’s extended perspective (public resources and the patient), collected in Poland. Sensitivity analysis was performed, with consideration of the variable costs of NRT. RESULTS: The results of meta-analyses showed a statistically significant increase of successful attempts of tobacco cessation with the use of bupropion versus placebo by 10.7% per year (ARR). Bupropion also shows a statistically significant superiority in relation to NRT. The odds ratio of one year-long abstinence with the use of bupropion versus NRT is 2.0 [CI 95% (1.2–3.4)]. The economic analysis has shown that the most cost-effective is bupropion used in combination with medical advice. The cost of maintaining abstinence with the use of bupropion versus NRT is 2.0 €/person-year, and the cost of medical advice has not been considered in the analysis. CONCLUSIONS: It may be stated that bupropion is a medicinal product statistically significantly more effective versus placebo and NRT in the treatment of nicotine dependence. Bupropion is a cost-effective technology, where the cost for LYG is significantly lower than the cost-effectiveness threshold (€10362,69/dialytherapy/patient per year).

RESPIRATORY DISORDERS—Cost Studies

**PRP16**

COST-EFFECTIVENESS OF BUPROPION SR IN THE TREATMENT OF TOBACCO DEPENDENCE

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**Objective:** The objective of this analysis is cost-effectiveness comparison of bupropion SR in the treatment of tobacco dependence versus: placebo, nicotine replacement therapy (NRT), bupropion SR used in combination with NRT (BUPR+NRT). **METHODS:** The efficacy analysis was carried in accordance with guidelines for systematic review basing on credibility criteria of the Cochrane Collaboration—Cochrane Reviewers’ Handbook and Evidence Based Medicine. Cost analysis included direct costs from payer’s extended perspective (public resources and the patient), collected in Poland. Sensitivity analysis was performed, with consideration of the variable costs of NRT. **RESULTS:** The results of meta-analyses showed a statistically significant increase of successful attempts of tobacco cessation with the use of bupropion versus placebo by 10.7% per year (ARR). Bupropion also shows a statistically significant superiority in relation to NRT. The odds ratio of one year-long abstinence with the use of bupropion versus NRT is 2.0 [CI 95% (1.2–3.4)]. The economic analysis has shown that the most cost-effective is bupropion used in combination with medical advice. The cost of maintaining abstinence for the lifetime as a result of the use of bupropion in combination with medical advice, calculated for one patient, is €294870; cost for LYG is €14743.5; cost for QALY is €109223 (2002 average exchange rate: €1 = 3.86 PLN). The least favourable is NRT. The technology being the combination of NRT and bupropion has intermediate cost-effectiveness results. The cost of medical advice has not been considered in the analysis. **CONCLUSIONS:** It may be stated that bupropion is a medicinal product statistically significantly more effective versus placebo and NRT in the treatment of nicotine dependence. Bupropion is a cost-effective technology, where the cost for LYG is significantly lower than the cost-effectiveness threshold (€10362,69/dialytherapy/patient per year).
RESPIRATORY DISORDERS—Quality of Life Studies

OBJECTIVES: Health Related Quality of Life (HRQL) following lung transplantation (LGTX) becomes more important with increased life expectancy. Analyses are often hampered by a relatively large number of patients who drop out, due to their condition or death. This problem of missing values is of real importance, and cannot be neglected. In the present study the change in HRQL before and after LGTX was analysed as a function of several predictors, assuming that the probability of missing only depended on the observed measurements (Missing at Random).

METHODS: Between 1992 and 2002, 415 patients completed one or more self-administered HRQL questionnaires before and up to 63 months after LGTX. The questionnaires were sent by mail on a regular basis. In this study we focus on one dimension of the energy Nottingham Health Profile. A multi-level model was used to analyse the changes in this dimension as a function of several predictors. Since multi-level structures do not require balanced data to obtain efficient estimates, all patients who completed at least one questionnaire were taken into account.

RESULTS: The dimension energy of the NHP improved significantly after LGTX. This remained more or less constant up to 63 months after LGTX. The predictors “age” and “the presence of Bronchiolitis Obliterans Syndrome (BOS)” appeared to have a significant influence. For pre- and post-transplantation patients, the scores on the dimension energy increased with age. This means that older patients have more restrictions regarding energy than younger patients. After the onset of BOS, patients experienced significantly more restrictions in the NHP energy measure.

CONCLUSION: There are considerable improvements regarding the NHP dimension energy after lung transplantation. Age and BOS are highly significant predictors. The improvements are maintained during long-term follow-up.