patterns, costs, life expectancy, and discount rates. Patients with both an infection and at least one acute organ dysfunction diagnosis (ICD-10) recorded were selected from Huddinge university hospital in Sweden (n = 55). Direct costs for drugs, intensive care, and general wards up to 28 days, and to final discharge were determined according to the hospital resource and cost assignment system (2002 prices). The cost of DAA was based on the average use in the trial and the Swedish price 2002. **RESULTS:** The cost-effectiveness ratio of an adjunct drotrecogin alfa (activated) compared with standard therapy alone in the base case including patients with failure in at least two organs was €19,500 per QALY based on Swedish data. The corresponding figure was €13,700 when results were transferred by the exchange rate. Higher ICU costs in Sweden compared to UK account for 45% of the difference whereas higher life expectancy among the UK patients account for 55%. **CONCLUSIONS:** Drotrecogin alfa (activated) is cost-effective when compared to other accepted Health care interventions in Sweden. Local data application is important but does in this case not change the overall conclusion.

PIN21

BUDGET IMPACT ANALYSIS OF UNIVERSAL VARICELLA VACCINATION IN GERMANY

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OBJECTIVES: The dynamic infectious disease model EVITA (Economic Varicella VaccInation Tool for Analysis) has shown cost-effectiveness of universal varicella vaccination of children in Germany (Banz et al. 2003). However, affordability proves to be an additional hurdle. The aim of this analysis is to examine budget impacts of universal varicella vaccination from a payers' perspective. **METHODS:** EVITA was used to analyse budget impacts over 30 years (price level of 2002). Future costs were not discounted to show the full budget impact in future years. Targeted age-group for vaccination are children aged 1 year. Because in Germany no liability of vaccination for Kindergarten or school entry exists unlike in several US-states, we conservatively assumed coverage to increase linear from 7% to a maximum of 85% within 9 years and remain constant afterwards. These projected figures correspond to the slowest uptake in US-states in the first 6 years of universal varicella vaccination. **RESULTS:** Without vaccination, annual varicella costs amount to €72.6 million (23% outpatient, 25% inpatient, 52% work loss of parents staying at home to care for their sick child). Vaccination costs rise (proportional to coverage) from €3.9 to a maximum of €37.4 million and account at maximum for 0.03% of total payers' health care budget. Compared to no vaccination, varicella-related costs, i.e. varicella and vaccination cost, increase by 12% in the first 3 years. Then, savings through reduced morbidity occur which offset vaccination costs after 5 years. Over 30 years, average annual costs are reduced by 32% to €49.7 million. **CONCLUSIONS:** Varicella vaccination has a small impact on health care costs and does not influence insurance premiums. For a short time, investment in varicella vaccination causes additional costs, which are low compared to annual varicella costs. Reduced morbidity leads rapidly to savings. In the longer term significant net-savings occur.

PIN22

MODELLING THE COST-EFFECTIVENESS OF THE VARICELLA VACCINE IN PORTUGAL

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A safe, effective vaccine for chickenpox (varicella zoster) is available. However, some countries do not consider varicella vaccination a priority when compared with other childhood infectious diseases. It is important to Portuguese health policy to determine the economic value of vaccinating healthy children against chickenpox. **OBJECTIVE:** To estimate the cost-effectiveness of universal varicella vaccination compared with vaccination on demand. Design: Cost-utility analysis. Data sources: Costs were estimated from government sources (Administração Regional de Saúde de Lisboa e Vale do Tejo); vaccine efficacy data and utility values were derived from reports of clinical studies published in the peer-reviewed literature. Target Population: Portuguese children age 15 month. Time Horizon: Ten years. Perspective: Societal. Interventions: Universal vaccination as part of the National Vaccination Programme or the current situation in which vaccination is given on demand to children whose parents request it or can afford to pay for it. Outcomes measures: Costs, quality-adjusted life years (QALYs), cases of chickenpox prevented, and average cost-effectiveness ratios. Results of Base-Case Analysis: The average cost-effectiveness ratio proved to be dominant for the universal program compared with the actual situation. The cost per QALY is €16 or for each case prevented of €23. On demand vaccination is dominated by a the universal vaccination option, costing more and resulting in fewer QALYs and cases of chickenpox prevented. No substantive alteration of the base-case was noticed in a sensitivity analysis. **CONCLUSIONS:** A universal varicella vaccination program would be expected to improve quality of life and reduce the health care expenditures when used in young children.