Administering muscle relaxants may facilitate mechanical distress syndrome (ARDS) is challenging and costly. Care of patients with acute respiratory distress syndrome (ARDS) is challenging and costly. Is cisatracurium cost effective for treating COPD? Although treatment options are limited, observational studies have shown that long-acting beta agonists (LABA) and/or inhaled corticosteroids (ICS) may prolong survival. We designed a Markov ICER computer model. The base case involved a 55-year-old man admitted to the ICU for ARDS and then paralyzed for 3.5 days. Patients were modeled to be in one of the following health states: ICU-intubated, ICU-extubated, hospital ward, long-term care, home, or death. Patient progression was divided into 3.5 day cycles over six months. One trial found the average recovery after cisatracurium to be one hour versus 6 hours with vecuronium. Approximately 27% of ICU patients paralyzed for 3.5 days would be expected to develop MYOPATHY within 7 days. However, it is not evident that cisatracurium reduces this incidence. RESULTS: Our modeling predicted the total cost for an ARDS patient to be $58,629. At 6 months: mortality = 43%, patients discharged home = 32%, in-hospital = 8%, and long term care facility = 17%. Using average wholesale prices, cisatracurium costs $599 for 3.5 days, versus $332 for vecuronium. The modeling suggests that cisatracurium is cost-effective (the ICER is < $35,000/QALY) if intubation time is reduced by 7%, or if ICU extubated time is reduced by 1.8%, or if the time the patient is in the ward is reduced by 2.3%. CONCLUSIONS: Incremental costs for cisatracurium are a very small portion of the total cost of care for ARDS patients. If cisatracurium use leads to very small reductions in ICU time, or ward length, it becomes a cost-effective intervention.

**ECONOMIC OUTCOMES OF TREATING CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH INHALED CORTICOSTEROIDS AND LONG-ACTING β-AGONISTS IN A HEALTH MAINTENANCE ORGANIZATION**

**PRP21**

**THE ECONOMIC IMPACT OF HOMEOPATHIC MANAGEMENT: THE FRENCH EXAMPLE**

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OBJECTIVE: Homeopathy is based on the principle of similitude, using at non-toxic doses, in a sick patient, medicinal substances of mineral, plant or animal origin, which, at toxic doses, are capable of triggering in healthy individuals a range of symptoms similar to those observed during the disease under consideration. Homeopathy is mainly employed in cases of ENT disease, anxiety disorders and sleep disorders. Today, in France, about 2 in every 10 physicians prescribe frequently or regularly some sort of homeopathic-based treatment. METHOD: HOMEEO is a longitudinal, prospective, observational programme. Three hundred patients with rhinitis chronic, treated either by homeopathic (HM) or allopathic management (AM), will be followed during 6 months. In this study, the level of resources used and patient satisfaction will be collected in order to provide confirmation of the economic relevance of reliance on homeopathic management versus allopathic management. RESULTS: At inclusion time, both groups expressed the same level of symptoms. There are no differences neither in the number nor in the type of symptoms due to their rhinitis chronic. Three months later, the chronic rhinitis symptoms are resolved within the same proportion for both groups. None symptoms have been better or badly resolved the one than the other. At 3 months, the SF-12 score on the physical dimension are the following HM 51.8, AM 47.9 (p < 0.05), the inclusion score being comparable between the two groups at inclusion induced that patients treated by a homeopathic management improved their QoL on this dimension. The quarterly cost of care for patients treated with allopathic management (€45.74) is 30% more expensive than the quarterly cost of care for patients treated with homeopathic management (€27). This difference is essentially due to a higher frequency of consultations and a more expensive mean medical prescription with the allopathic management. CONCLUSION: Reliance on homeopathic management appears to give rise to an annual reimbursement cost, which is half that induced by allopathic general practitioners.

**PRP22**

**IS CISATRACURIUM COST EFFECTIVE FOR NEUROMUSCULAR BLOCKADE IN THE ICU? A MARKOV COMPUTER SIMULATION STUDY**

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OBJECTIVES: Care of patients with acute respiratory distress syndrome (ARDS) is challenging and costly. Administering muscle relaxants may facilitate mechanical ventilation and improve oxygenation. After the relaxant is discontinued, some patients have delayed recovery of neuromuscular function, while other patients develop prolonged muscle weakness—acute quadriplegic myopathy syndrome (MYOPATHY). The objective of this study was to examine the incremental cost-effectiveness ratio (ICER) of cisatracurium versus using a traditional steroid based agent—vecuronium. METHODS: We designed a Markov ICER computer model. The base case involved a 55-year-old man admitted to the ICU for ARDS and then paralyzed for 3.5 days. Patients were modeled to be in one of the following health states: ICU-intubated, ICU-extubated, hospital ward, long-term care, home, or death. Patient progression was divided into 3.5 day cycles over six months. One trial found the average recovery after cisatracurium to be one hour versus 6 hours with vecuronium. Approximately 27% of ICU patients paralyzed for 3.5 days would be expected to develop MYOPATHY within 7 days. However, it is not evident that cisatracurium reduces this incidence. RESULTS: Our modeling predicted the total cost for an ARDS patient to be $58,629. At 6 months: mortality = 43%, patients discharged home = 32%, in-hospital = 8%, and long term care facility = 17%. Using average wholesale prices, cisatracurium costs $599 for 3.5 days, versus $332 for vecuronium. The modeling suggests that cisatracurium is cost-effective (the ICER is < $35,000/QALY) if intubation time is reduced by 7%, or if ICU extubated time is reduced by 1.8%, or if the time the patient is in the ward is reduced by 2.3%. CONCLUSIONS: Incremental costs for cisatracurium are a very small portion of the total cost of care for ARDS patients. If cisatracurium use leads to very small reductions in ICU time, or ward length, it becomes a cost-effective intervention.

**ECONOMIC OUTCOMES OF TREATING CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH INHALED CORTICOSTEROIDS AND LONG-ACTING β-AGONISTS IN A HEALTH MAINTENANCE ORGANIZATION**

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OBJECTIVES: There is growing recognition of the public health challenge posed by treating persons with chronic obstructive pulmonary disease (COPD). Although treatment options are limited, observational studies have shown that long-acting beta agonists (LABA) and/or inhaled corticosteroids (ICS) may prolong survival. We investigated the cost-effectiveness of competing strategies for treating COPD. METHODS: Subject-level cost and...