response to response during the titration period was estimated using the predicted treatment effects estimated by a published matched-pair, adjusted-indirect comparison (MAIC), mean change in ADHD-RS-IV total score from baseline to endpoint was the efficacy outcome. The incidence rates of adverse events were based on those observed in the clinical trials included in the MAIC. Analyses were conducted on a per-patient level and a Canadian Ministry of Health (MoH) perspective over a 1-year time horizon with weekly cycles. Deterministic and probabilistic sensitivity analyses (PSA) were conducted to assess the robustness of the base-case results. RESULTS: Compared with ATX, GXR was a dominant strategy (lower cost and improved efficacy) from a societal perspective, while it was associated with an incremental cost-effectiveness ratio (ICER) of $57,866/QALY from a Canadian MoH perspective. Results of the PSA indicated that the ICER for GXR was below the $50,000 willingness to pay threshold 61.3% of the simulations from a societal and a Canadian MoH perspective, respectively.

CONCLUSIONS: This analysis found that GXR was cost-effective relative to ATX from a societal and perspectives in the treatment of children and adolescents with ADHD in Canada.

PMH32 COST-EFFECTIVENESS OF GUANFACINE EXTENDED-RELEASE AS AN ADJUNCTIVE THERAPY TO A LONG-ACTING STIMULANT VERSUS LONG-ACTING STIMULANT MONOTHERAPY FOR THE TREATMENT OF ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER IN CANADA Lachaine J1, Sticikova V1, Mathurin K1
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OBJECTIVES: Attention-deficit/hyperactivity disorder (ADHD) is a common chronic condition that affects children, adolescents, and adults. The global prevalence rates were inadequate response to stimulant medication, a combination therapy of stimulants and adjunctive medication may improve the control of ADHD symptoms, reduce the risk of dose-limiting adverse events, and improve treatment adherence. The objective was to assess the economic impact of guanfacine extended-release (GXR) in combination with long-acting stimulants compared to long-acting stimulant monotherapy in children and adolescents with ADHD from a Canadian perspective. METHODS: A Markov model was developed to assess the cost-effectiveness of GXR in combination with a long-acting stimulant compared to long-acting stimulant monotherapy. Health states were defined based on the Global Impression of Severity (normal, mild, moderate, and severe). Transition probabilities were calculated based on patient-level data from a published study. Long-acting stimulants available in Canada were considered in the base-case model: amphetamine mixed salts, methylphenidate, HCl formulations, and lisdexamfetamine dimesylate. Analyses were conducted from both a Canadian Ministry of Health (MoH) and a societal perspective over a 1-year time horizon with weekly cycles. Deterministic and probabilistic sensitivity analyses (PSA) were conducted to assess the robustness of the base-case results. RESULTS: Compared to long-acting stimulant monotherapy, GXR with a long-acting stimulant was associated with incremental cost-effectiveness ratios of $23,720/QALY and $11,845/QALY from a Canadian MoH and a societal perspective, respectively. PSA of GXR as an adjunctive therapy to long-acting stimulants showed that it remains a cost-effective strategy in 100% of the simulations from both perspectives in numerous sensitivity analyses, according to a willingness to pay of $50,000/QALY. CONCLUSIONS: This study demonstrates that GXR as an adjunctive therapy to a long-acting stimulant is a cost-effective strategy compared to long-acting stimulant monotherapy in the treatment of children and adolescents with ADHD in Canada.

PMH33 COMPARISON OF RE-HOSPITALIZATION, EMERGENCY ROOM VISITS, AND HOSPITAL COSTS AMONG PATIENTS WITH SCHIZOPHRENIA RECEIVING PALIPERIDONE PALMITE OR ORAL ANTIPSYCHOTICS IN AN INPATIENT SETTING Lafaille J1, Gittner AM1, Fortier J1, Mosser E2, Fautenaux J2, Dub MS1, Leboeuf P3
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OBJECTIVES: This real-world retrospective study aims at comparing re-hospitalization patterns and costs among patients with schizophrenia receiving paliperidone palmitate (PP) or oral antipsychotics (AP) in an inpatient setting. METHODS: Hospital discharge and billing records from the Premier Perspective Comparative Hospital Database were analyzed for adult patients who had a schizophrenia-related hospitalization with either PP or oral AP treatment (index hospitalization) between 1/2009 and 3/2012 and no evidence of prior treatment with other long-acting AP. Inverse probability of treatment weights (IPTW) based on propensity scores were used to weight cohorts in order to reduce confounding. Patients treated with PP during their index hospitalization were compared to those treated with oral AP in terms of re-hospitalizations and ER visits using the Andersen-Gill Cox extension of multivariate Cox proportional hazard models. Hospital costs (re-hospitalizations, ER, and hospital outpatient visits) of patients treated with PP were compared to those of patients treated with oral AP using a multivariate generalized linear model with a regression approach. IPTW was required to have a weight below 10 and recent weights were used in the analysis and the observation period length. RESULTS: After applying IPTW, weighted mean age was 43.4 years for PP (N=374, N weighted=19,526) and 45.6 years for oral AP (N=374, N weighted=19,548). 53.9% of PP patients vs 57.2% of oral AP patients. The risk of all-cause re-hospitalizations or ER visits was significantly lower for the PP cohort compared to theoral AP cohort (hazard ratio [HR], 95%CI: 0.61 [0.59, 0.63] p<0.001). Similarly, hospital costs six months after index hospitalization were lower for the PP cohort compared to the oral AP cohort (19.7% lower). Conclusions: Compared with oral AP, the subgroup matching adjustment was associated with the remainder considered “low-cost.” Patient characteristics and health care costs were compared between high-cost and low-cost patients using chi-squared tests and Wilcoxon rank-sum tests. RESULTS: 9,291 patients diagnosed with opioid abuse were identified and included in the sample. Low-cost patients (53.6%) were younger (42.5 vs 36.1, p<0.001) and more likely to be female (55.9% vs 42.9%, p<0.001). They had a higher comorbidity burden at baseline, as reflected in the Charlson Comorbidity Index (0.8 vs 0.5, p<0.001). High-cost patients also had higher rates of non-opioid substance abuse diagnoses (12.4% vs 8.9%, p<0.001) and psychiatric