

compare overall hospital costs between the two cohorts, controlling for differences in variable distribution. **RESULTS:** From 9234 patients who met the inclusion criteria, 4972 patients (53.8%) were prescribed warfarin and 5727 (62.0%) were females. Overall rate of secondary diagnosis of VTE was 0.08% (seven of 9241 patients; two enoxaparin and five warfarin patients). Apart from LOS ($p = 0.8089$), NSD ($p = 0.2421$), and gender ($p = 0.4223$), distribution of age ($p < 0.0001$) and in-hospital deaths ($p = 0.0045$) were found to be significantly different between the two cohorts. Overall mean hospital costs were found to be different ($p < 0.0001$) (\$11,723.3 for warfarin patients versus \$11,963.9 for enoxaparin patients), after controlling for significant differences. Enoxaparin patients incurred higher Medical/Surgical supplies (\$616.7) and drugs/pharmacy (\$312.1) expenses, while warfarin patients incurred more on Operating-and-Recovery rooms (\$766.4), Medical/Surgical acute units (\$487.3), and Laboratory (\$39.6). **CONCLUSIONS:** Overall rate of secondary diagnosis of VTE is very low for orthopedic patients given prophylaxis; however, warfarin prophylaxis showed a higher rate. Enoxaparin demonstrated a better clinical outcome, but warfarin was significantly less expensive. Further research is needed to reconcile the clinical versus financial outcome findings from these analyses.

ENDOCRINE DISORDERS

PENI

COST SAVINGS ASSOCIATED WITH FINER DOSING INCREMENTS THROUGH THE USE OF NORDITROPIN NORDIFLEX® IN THE UNITED STATES

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Fixed dosing increments in injectable devices may lead to potential inefficiencies such as overdosing in weight-based regimens. Finer dosing increments can reduce product wastage and translate into cost savings. **OBJECTIVE:** To compare overdosage and wastage (therefore cost) due to Norditropin NordiFlex® 5 mg to that of other somatropin (human growth hormone, rDNA origin) delivery systems (Norditropin NordiPen® 5 mg, Genotropin® 5 mg, Humatrope® 6 mg, and Nutropin® 10 mg) in children. **METHODS:** Total recommended daily dose of somatropin was calculated over a range of body weights and weight-based (mg/kg) dosing regimens. Only body weights resulting in a daily dose up to the maximum allowable dose for each delivery system were considered. The amount of product dispensed at each dose was determined based on dosing increments for each delivery system. Dosing increments for Norditropin NordiFlex® were 0.025 mg, compared to 0.05–0.2 mg for other delivery systems. The amount of somatropin administered by Norditropin NordiFlex® and associated annual costs were compared with other somatropin delivery systems. Drug costs were based on current wholesale acquisition costs (WAC). **RESULTS:** At a daily dose of 0.030 mg/kg, product wastage in Norditropin NordiFlex® was 5.3%, 3.8%, 3.8%, and 1.8% lower than Humatrope®, Nutropin®, Genotropin® and Norditropin NordiPen®, respectively. The annual cost due to Norditropin NordiFlex® was estimated at \$14,580, and was \$811, \$570, \$390, and \$265 lower than Humatrope®, Nutropin®, Genotropin®, and Norditropin NordiPen®, respectively. Greater savings (7.3%) were seen in lower body-weight groups. At a higher daily dose of 0.043 mg/kg, product wastage (and corresponding annual cost) in Norditropin NordiFlex® was 6.1% (\$1006), 4.2% (\$684), 4.2% (\$491), and 2.2% (\$358)

lower than Humatrope®, Nutropin®, Genotropin®, and Norditropin NordiPen® respectively. **CONCLUSION:** Compared to other delivery systems, Norditropin NordiFlex® reduces overdosage and wastage of growth hormone, consequently resulting in meaningful cost savings.

PEN2

COST-UTILITY OF NORDITROPIN® (R-DNA SOMATROPIN) IN CHILDREN WITH GROWTH HORMONE DEFICIENCY

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About 20,000 children in the US receive somatropin (human growth hormone, rDNA origin) for the treatment of growth hormone deficiency (GHD), with approximately 4000 new cases annually. While the cost-effectiveness of somatropin for the treatment of GHD has been assessed in the UK, to our knowledge no estimates for the US have been reported. **OBJECTIVE:** To generate estimates of cost-effectiveness/utility of Norditropin® (r-DNA somatropin) in the treatment of GHD in children. **METHODS:** A decision-analytic model of the epidemiology and treatment of GHD in children was developed. Treatment of GHD was assessed in two hypothetical cohorts compared to no treatment—treatment with Norditropin® 0.030 mg/kg/day from ages five through 16 years, and treatment from ages three through 18 years. Costs included those related to drug acquisition, endocrinologist consultations, and primary care office visits. Estimates of patient weight by age and sex were derived from published literature, as was the proportion of patients achieving normal height through Norditropin® treatment and pre/post-treatment patient utilities. Cost-effectiveness/utility was estimated over patients' expected lifetimes, and was stated alternatively as discounted (3% per annum) US dollars per normal height year (NHY) gained, and cost per quality adjusted life-year (QALY) gained. Multivariate sensitivity analyses were conducted to ensure robustness of the model. **RESULTS:** The cost-effectiveness and cost-utility of treating children from ages five through 16 years with Norditropin® was estimated at \$8909 per NHY gained and \$36,955 per QALY gained, respectively. Treatment of children from ages three through 18 years was estimated to cost \$9277 per NHY gained and \$42,556 per QALY gained. Findings were relatively insensitive to variation in most model parameters. **CONCLUSION:** For both age cohorts, the cost-effectiveness/utility of Norditropin® in the treatment of GHD compares favorably to well-accepted threshold values. Thus, Norditropin® represents excellent value for money for the treatment of GHD in children.

PEN3

HEALTH STATUS VALUES (UTILITIES) FOR THE SWEDISH POPULATION: A MODEL BASED ON THE EQ-5D ASSESSMENT OF ACTUAL HEALTH STATE, USING JACKKNIFE METHOD AND MULTIPLE REGRESSION ANALYSIS

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OBJECTIVE: To derive health status values (utilities) for the Swedish population. **METHODS:** EQ-5D data were collected through a mailing survey to a random sample ($n = 2990$) of the Swedish population (response rate 65%: complete data on 1741 (49.4% males; mean age 48.4)). The model was estimated using the Jackknife method and multiple regression analysis. The full sample was randomly divided into 10 parts of approximately the