Cost-effectiveness of escitalopram versus venlafaxine in second-line treatment of major depressive disorder (MDD) in Sweden

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OBJECTIVES: The present cost-effectiveness analyses compare escitalopram versus duloxetine in second-line treatment in patients with major depressive disorder (MDD), making on efficient second-line therapy choice. METHODS: A decision model was based on second-line MDD treatment patterns (6-month timeframe). Effectiveness outcomes were sustained remission (the Montgomery-Asberg Depression Rating Scale (MADRS) < 10) at 2 months, sustained all the end of 6 months, and high quality-adjusted life years (QALY). Total cost included health care and absenteeism costs. Clinical inputs were derived from pooled analysis of randomized clinical trials on the second-line patients subgroup. Health care resource utilization was assessed from a Swedish observational cohort (HEADS) and UK General Practice Research Database (GPRD). Utility estimates were based on HEADS and US panel survey. Unit costs were from standard sources. Due to unavailability of generic venlafaxine unit cost, it was assumed equal to that of a escitalopram in Scenario 1, and 5% of the brand venlafaxine cost. RESULTS: Over 6 months, the sustained remission rates (for escitalopram and 38% for SNRAs (18% difference, 95% Credibility Interval (CrI) 0.8% to 32.9%)). The incremental QALY for escitalopram versus both comparators was 0.024 (95% CrI 0.0006 to 0.042). Per patient savings with escitalopram versus venlafaxine were €70 USD (95% CrI €689 to €4481) in Scenario 1 and €536 USD (95% CI €5685 to €4588) in Scenario 2. Versus duloxetine, savings were USD165, 95% CI (€670 to €4554). With willingness to pay 42,500 USD (equivalent to 350,000 SEK) per QALY, escitalopram was cost effective versus venlafaxine with probabilities 86% and 61.7% in Scenarios 1 and 2, respectively, and with 85.4% probability versus duloxetine. CONCLUSIONS: Escitalopram is cost-effective versus venlafaxine and duloxetine in second-line treatment of MDD in Sweden. The higher sustained remission rate and QALYs are associated with cost savings and support use of escitalopram following failure of first-line treatment.

The cost burden of treatment resistance in patients with depression

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OBJECTIVES: Many patients on antidepressants are not responsive to first-line therapy (‘treatment-resistant’ depression (TRD)) and can undergo switches and optimizations to discover a beneficial therapeutic regimen. While patients with more complex forms of TRD have higher costs than non-TRD patients, little is known about the cost effects for patients along a gradient of TRD classifications (from moderate to complex). METHODS: Patients aged 18–64 years in employer-sponsored plans with at least 90 days of continuous medical and prescription coverage and at least one antidepressant prescription were found in the 2000–2006 MarketScan Database (n = 78,476). An MGH TRD scale value (range from 0 to 16.5) was calculated for each patient and a value exceeding 3.5 indicated TRD. Twelve-month direct medical and prescription drug expenditures for patients with TRD (n = 22,593) were compared to expenditures among an equal number of propensity-score matched patients with non-TRD depression. Propensity scores were estimated via demographic characteristics and case-mix. Generalized linear models (gamma family and log link) controlled for demographic variables and case-mix factors. RESULTS: Average 12-month direct medical care and prescription drug expenditures were almost 40% higher for TRD ($5470 compared to matched non-TRD patients ($6813) (p < 0.01). A one-unit increase in TRD score was associated with a $772 increase in annual costs (p < 0.01). Compared with a matched group of non-TRD patients, annual costs for patients were higher in each

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Direct costs of patients with treatment resistant and non-treatment resistant major depressive disorder

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OBJECTIVES: Compare direct (medial and drug) costs between privately insured U.S. employees with major depressive disorder (MDD) who had treatment-resistant depression (TRD) and matched antidepressant-treated MDD controls without TRD. METHODS: Employers with >1 inpatient or >2 outpatient/other MDD diagnoses (ICD-9-CM: 296.2, 296.3) during 2004–2006, ages 18–64 years, were selected from claims database. Employees who initiated a third antidepressant following 2 antidepressant treatments of adequate dose and duration were classified as TRD-likely (n = 2,534). The index date was the date of first antidepressant. Control group was an age and gender matched cohort of randomly chosen antidepressant-treated employees with MDD without TRD. All were required to have continuous health coverage during the 6-month pre-index (baseline) and 12-month post-index (study period). McNemar tests were used to compare baseline comorbidities. Wilcoxon signed-rank tests were used to compare annual per patient direct costs from third party payer perspective during the study period. Mental health (MH) related costs were identified from claims with MH disorder diagnoses (ICD-9-CM: 290–291) or MH-related drug costs. RESULTS: TRD-likely employees with MDD were on average 49.2 years old and 60.7% were women. Compared with controls, TRD-likely employees had significantly higher rates of MH disorders, chronic pain, fibromyalgia, but few differences in comorbidities included in the Charlson Comorbidity Index. Average direct annual costs were significantly higher for TRD-likely employees ($10,136) compared with controls ($7,793), $2,393 difference, p < 0.0001. Average MH-related costs were higher among TRD-likely employees ($2,714) compared with controls ($1,256), p < 0.0001; the MH-related cost difference of $1,458 accounted for 62.3% of the direct cost difference. MH-related cost differences were attributable to differences in drug 52.9% outpatient (929.3), inpatient (12.9%), costs. CONCLUSIONS: TRD-likely employees with MDD had higher all-cause and MH-related direct costs compared with matched MDD controls. Excess costs of TRD-likely patients are underestimated when looking only at MH-related costs.

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Direct costs in older patients with depression treated and untreated with antidepressant therapy

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OBJECTIVES: Compare comorbidities profiles and direct costs in older patients with depression treated or untreated with antidepressants and matched controls without depression. METHODS: Administrative claims from a multi-specialty medical group

MGH score category: 3.5–4.4, 26.4% 5.5–6.6, 44.6% 6.6–7.5, 17.1% all (p < 0.01). CONCLUSIONS: TRD is a costly disorder and merits consideration as interventions are developed to manage the burden of disease and improve productivity. Even patients with less complex forms of TRD have costs far in excess of those without TRD. Dichotomous definitions of TRD may not be adequate; a gradient from moderate to complex TRD may be more useful for providers and insurers.