(S21) AGREEMENT BETWEEN MULTIPLE SCLEROSIS-RELATED VARIABLES IN MEDICAL CHARTS AND CLAIMS DATA

B.J. Chastek,1  M. Oleen-Burkey,2  M.V. Lopez-Bresnahan3

1i3 Innovus, Eden Prairie, MN; 2Teva Neuroscience, Kansas City, MO; 3i3 Research, Waltham, MA

Background: Health-care claims and medical charts provide complementary information with a degree of overlap. Objectives: To evaluate the agreement between data derived from medical charts of patients with multiple sclerosis (MS) and from a health-care claims database. Methods: This data source comparison was a secondary objective in a study utilizing both claims and linked medical chart data. Patients with MS were identified in a health-care claims database, and the claims and medical charts for a subset of this population were reviewed to extract information pertaining to disease-modifying therapy, corticosteroid therapy, MS-related procedures, and diagnosis and relapse dates. The agreement between the data sources for each type of information was identified. Results: From a total population of 11,326 MS patients in the claims database, 300 had their medical records reviewed. Among patients with claims for glatiramer acetate (n = 68), 95.6% also had it indicated in their charts. Claims agreed with charts for 91.8% of patients with a claim for intramuscular interferon beta-1a (IFNβ-1a) (n = 85), 81.8% of patients with a claim for subcutaneous IFNβ-1a (n = 55), and 87.5% of patients with a claim for IFNβ-1b (n = 48). Methylprednisolone was the most commonly indicated corticosteroid in both data sources, and among patients with evidence of a methylprednisolone prescription in the claims (n = 114), 66.7% also had a prescription indicated in their chart. Among patients with claims-based evidence of prednisone (n = 63), 49.2% had it noted in their charts. Most patients with claims-based evidence of MS-related procedures also had them indicated in their charts: 71.0% with magnetic resonance imaging (MRI), 81.0% with lumbar puncture, and 66.7% with evoked potential testing. For both diagnosis and relapse dates, at least half of the patients had perfect agreement. The mean difference between claims-based and chart-based diagnosis dates was 42.6 days, and between the date of chart-based relapse and relapse determined by a claims-based algorithm was 28.3 days. Conclusions: Claims appear to approximate chart data with regard to certain MS-related variables, such as dates and disease-modifying therapy, but the data sources also provide unique information that might be differentially suited to addressing diverse research questions.

Supported by: Teva Neuroscience, Kansas City, MO


Keywords: disease-modifying treatment in MS, relapse management in MS