TO IDENTIFY THE INCIDENCE AND PREVALENCE OF IDIOPATHIC INFLAMMATORY MYOPATHIES AMONG COMMERCIALLY INSURED AND MEDICAID ENROLLED POPULATIONS

OBJECTIVES: To identify the incidence and prevalence of idiopathic inflammatory myopathies (IMs) among commercially insured and Medicaid enrollee populations in the US, using administrative claims data. IMs are a rare group of autoimmune syndromes characterized by chronic muscle inflammation and muscle weakness with no known cause. Little is known about their incidence and prevalence.

METHODS: Medical claims with an IIM diagnosis (ICD-9-CM 710.3 [dermatomyositis (DM)], 710.4 [polymyositis (PM)], 712.81 [interstitial myositis]) were retrospectively examined in the MarketScan® databases to identify age- and gender-adjusted annual IIM incidence and prevalence for 2004-2008. Sensitivity analysis was performed for evidence of a specialist visit (rheumatologist/ neurologist/ dermatologist) systemic corticosteroid or immunosuppressant use, or muscle biopsy.

RESULTS: A total of 2990 incident patients between 2004 and 2008 (67% female, 17% Medicaid enrollees, 27% aged ≥65 years) were identified. Overall adjusted IIM incidence for 2004-2008 for commercial and Medicaid supplement groups combined were 4.27 cases (95% CI, 4.09-4.44) and for Medicaid, 5.23 (95% CI 4.74-5.72) per 100,000 person-years (py). Disease sub-type incidence rates per 100,000-py were 1.52 (95% CI 1.42-1.63) and 1.70 (1.42-1.97) for DM, 2.46 (2.33-2.59) and 3.53 (3.13-3.94) for PM, and 0.73 (0.66-0.81) and 0.78 (0.58-0.97) for interstitial myositis for the commercial/Medicare and Medicaid cohorts respectively. Annual incidence fluctuated over time with the base MarketScan® populations. There were 7,155 prevalent patients, with annual prevalence ranging from 20.62 to 25.32 per 100,000 for commercial/Medicare (83% of prevalent cases) and from 15.35 to 32.74 per 100,000 for Medicaid. Sensitivity analysis reduced the incidence rates and prevalence by 20-40%.

CONCLUSIONS: This study found higher IIM incidence and prevalence than historical small population based reports. Employer turnover, miscoding and misdiagnosing, care seeking behavior, and fluctuations in database membership over time limit inferences. Future analyses need to confirm the incidence and prevalence of IIMs in the US population.