Utilization and Switch Patterns with Dimethyl Fumarate in a Publicly-Funded Drug Plan: the First Year

Charity Evans PhD¹, Darren Nickel PhD², Karlene Britton², Katherine Knox MD²

INTRODUCTION

- Saskatchewan is a Canadian province with a relatively stable population of 1.13 million
- The prevalence of MS in Saskatchewan is estimated at 340/100,000 – one of the highest rates worldwide
- All Saskatchewan residents are eligible for provincial health insurance coverage; approximately 90% are eligible for prescription drug coverage
- Dimethyl fumarate was the first oral disease-modifying therapy (DMT) approved for formulary coverage as a first-line agent (Box 1)

OBJECTIVES

- To describe the utilization patterns (initiations and switches) of dimethyl fumarate
- To explore the reasons for switching to and from dimethyl fumarate

METHODS

- Data were collected from the Saskatchewan MS Drugs Program, which processes all publicly-funded DMT requests monthly, including new applications and switch requests
- Data collection was from May 1, 2014 (first day of dimethyl fumarate formulary approval) to April 30, 2015
- Reasons for switches are provided by the prescribing physician and are documented for each request
- Descriptive statistics are reported

RESULTS

- As of April 30, 2015, 902 individuals were approved for DMT coverage through the Saskatchewan MS Drugs Program
- From May 1, 2014 – April 30, 2015, 350 applications were received for dimethyl fumarate, and 328 (93.7%) met criteria and were approved
  - 123/328 (37.5%) were new starts
  - 205/328 (62.5%) were switches from other DMTs
- Data collection was from May 1, 2014 (first day of dimethyl fumarate formulary approval) to April 30, 2015

48.3% and 80.5% of switches to dimethyl fumarate occurred within the first 3 and 6 months, respectively, from the time of formulary approval

CONCLUSIONS

- Utilization of dimethyl fumarate in a publicly-funded system began immediately after formulary approval, with the majority of applications being switches from other DMTs
- Switches in the first six months were all from other DMTs to dimethyl fumarate; switches from dimethyl fumarate to other DMTs began after 6 months
- Further long-term examination into utilization of newly approved DMTs may help identify previously unrecognized adverse effects, and guide MS management and future policy

REFERENCES