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

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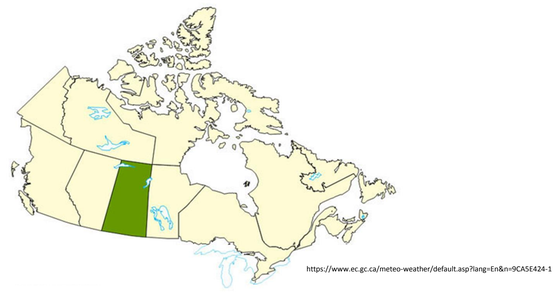
INTRODUCTION

- 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[1,2]
- All Saskatchewan residents are eligible for provincial health insurance coverage; approximately 90% are eligible for prescription drug coverage[3]
- Dimethyl fumarate was the first oral disease-modifying therapy (DMT) approved for formulary coverage as a first-line agent (Box 1)



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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

Box 1. Criteria for Coverage of Dimethyl Fumarate Under the Saskatchewan Drug Plan

- Have clinical definite relapsing and remitting multiple sclerosis

and

- Have had at least two documented attacks of MS during the previous two years (an attack is defined as the appearance of new symptoms or worsening of old symptoms, lasting at least 24 hours in the absence of fever, preceded by stability for at least one month)

and

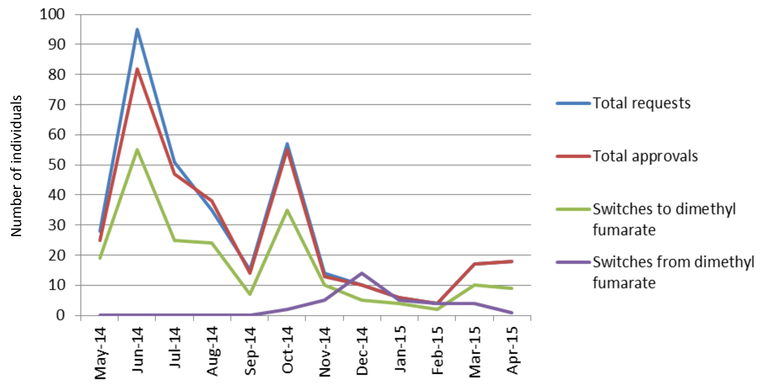
- Are fully ambulatory for 100 metres without aids (EDSS 5.5 or less)

or

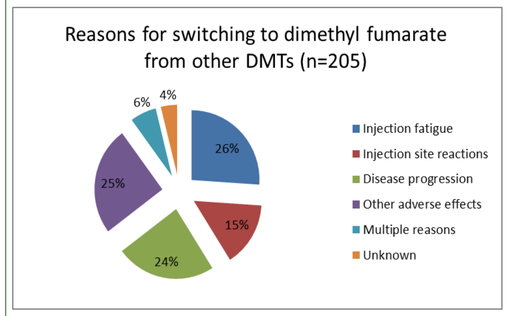
- Hold existing coverage for another first-line DMT from the provincial drug plan (in the case of a switch request)

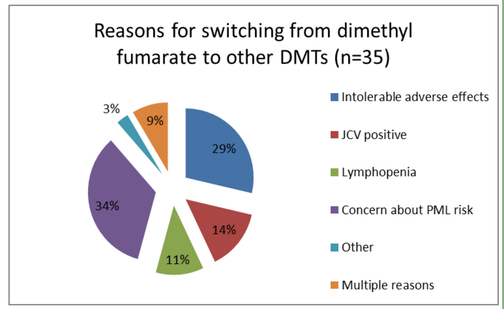
RESULTS

- 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



- 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

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