Conclusions

- Among the 665 pregnancy outcomes reported worldwide, 9 were in the UK/Ireland. Four birth defects have been reported worldwide, 1 of which occurred in the UK/Ireland. Consistent with previous reports, there was no statistically significant difference in birth outcomes, based on data from an interim analysis of the ongoing TecGistry: An Interim Analysis of the Dimethyl Fumarate Pregnancy Exposure Registry in the UK and Ireland (n=665

• The rate of spontaneous abortions from the interim analysis was similar to the rate observed in the international TecGistry: An Interim Analysis of the Dimethyl Fumarate Pregnancy Exposure Registry (n=665

• The rate of birth defects from the interim analysis was similar to the rate observed in the TecGistry: An Interim Analysis of the Dimethyl Fumarate Pregnancy Exposure Registry (n=665

• Final results, including additional enrolment in the UK/Ireland, will provide information for women concerning DMF use during pregnancy.

• Networks of MS specialists throughout the UK/Ireland continue to be valuable in identifying and referring potential patients into this registry.

Introduction

- Delayed-release dimethyl fumarate (DMF, also known as gastro-resistant DMF) demonstrated strong efficacy and a favourable benefit-risk profile in Phase 3 trials of patients with relapsing-remitting multiple sclerosis (MS).

- Nearly two-thirds of patients with MS are women, many of them in their childbearing years.

- Available data from clinical trials and post-marketing reports have not demonstrated any safety signals with DMF exposure during pregnancy; however, experience remains limited.

- In clinical trials, no increased risk of fetal abnormalities or adverse pregnancy outcomes was observed; pregnancy outcomes have been reported in 23 DMF-treated patients by as of 30 March 2017: n=13 (37%) live births, n=10 (30%) spontaneous abortions and n=14 (42%) elective terminations.

- Given the limited available data at the time of approval, the DMF product label recommends using DMF during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Methods

Patients and Registry Design

- This prospective observational registry is anticipated to enrol a minimum of 300 pregnant women with MS (Figure 1); this interim analysis included data as of 26 March 2017.

- The object of this paper is to report on pregnancy outcomes in patients enrolling in the registry from the UK/Ireland.

- All registry centres and lead investigators are listed in Table 3.

Patient Demographics and DMF Exposure

- As of 24 April 2018, 220 women (13 from the UK/Ireland) were enrolled in the registry; mean (SD) age was 32 (4) years (Table 1).

- Globally, 23 women discontinued from the registry, 54% due to loss of follow-up, 7 due to consent withdrawal and 2 due to other; 50 have a pregnancy in progress or had a pregnancy with an unknown outcome (Figure 2).

- Earliest DMF exposure occurred in the first 100 (93, 103) weeks before conception or at any time during pregnancy, as are prospectively evaluated for:

- Live birth (premature birth and full-term birth);

- Pregnancy loss (elective or therapeutic pregnancy terminations, spontaneous abortions and fetal death, including stillbirth);

- Ectopic and molar pregnancies, birth defects or congenital anomalies (suggested minor abnormalities) occurring at ≥52 weeks of age, any infant death occurring at ≥52 weeks of age and any maternal death occurring ≥12 weeks post delivery.

- Potential birth defects are adjudicated by an external pathology expert. Other negative pregnancy outcomes will be similarly ascertained on the sample size permits.

Results

- Gestational age was classified based on World Health Organization or country-specific growth charts, if available.

- The presence of birth defects and spontaneous abortions and 50% CIs for the registry population were calculated for this interim analysis.

Objectives

- An interim analysis of pregnancy outcomes in an ongoing international registry (TecGistry: An Interim Analysis of the Dimethyl Fumarate Pregnancy Exposure Registry in the UK and Ireland) is reported as of 24 April 2018.

- The objectives of this interim analysis were to:

- Determine the rate of spontaneous abortions from the interim analysis was similar to the rate observed in the TecGistry: An Interim Analysis of the Dimethyl Fumarate Pregnancy Exposure Registry (n=665

- This prospective observational registry is anticipated to enrol a minimum of 300 pregnant women

- Known pregnancy

- Pregnancy goes to term

- Ectopic pregnancy

- Spontaneous abortion

- Terminated pregnancy

- Elective or therapeutic pregnancy

- Premature delivery

- Full-term delivery

- Early (<37th week) premature delivery

- Late (37th–38th week) premature delivery

- Live birth

- Stillbirth (≥32 weeks before term)

- Spontaneous abortion, n (%)

- Elective or therapeutic pregnancy

- Termination

- Premature delivery

- Live birth

- Stillbirth (≥32 weeks before term)

- Spontaneous abortion

- Other

- Monozygous

- Polyzygous

- Spontaneous abortion

- Elective or therapeutic pregnancy

- Term

- Preterm

- Early (<37th week)

- Late (37th–38th week)

- Late (>38th week)

- Live birth

- Stillbirth (≥32 weeks before term)

- Spontaneous abortion

- Elective or therapeutic pregnancy

- Term

- Preterm

- Early (<37th week)

- Late (37th–38th week)

- Late (>38th week)

- Live birth

- Stillbirth (≥32 weeks before term)

- Spontaneous abortion

- Elective or therapeutic pregnancy

- Term

- Preterm

- Early (<37th week)

- Late (37th–38th week)

- Late (>38th week)

- Live birth

- Stillbirth (≥32 weeks before term)

- Spontaneous abortion

- Elective or therapeutic pregnancy

- Term

- Preterm

- Early (<37th week)

- Late (37th–38th week)

- Late (>38th week)

- Live birth

- Stillbirth (≥32 weeks before term)

- Spontaneous abortion

- Elective or therapeutic pregnancy

- Term

- Preterm

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- Late (37th–38th week)

- Late (>38th week)

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- Spontaneous abortion

- Elective or therapeutic pregnancy

- Term

- Preterm

- Early (<37th week)

- Late (37th–38th week)

- Late (>38th week)

- Live birth