Pregnancy and Infant Outcomes with Interferon Beta: Data from the European Interferon Beta Pregnancy Registry and MS Preg study conducted in Finland and Sweden
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Objective: To assess the prevalence of pregnancy and infant outcomes in interferon-beta (IFNβ) exposed pregnant women with multiple sclerosis (MS) from European IFNβ pregnancy registry and Nordic health registers.

Background: Women with MS are often diagnosed and treated at childbearing age. Earlier studies suggest that MS and IFNβ exposure do not adversely affect pregnancy outcomes; however, data has been limited. To address this, a European IFNβ pregnancy registry was established and a population-based cohort study (MS Preg study) was conducted with data from Nordic health registers in Finland and Sweden.

Design/Methods: In the European registry, pregnant women identified themselves to the Marketing Authorization Holders (Bayer, Biogen, Merck, Novartis) or healthcare professionals as exposed to IFNβ shortly before conception, or anytime during pregnancy. In Finland and Sweden, women treated with IFNβ within three months prior to or during pregnancy were considered as exposed. Collected pregnancy outcomes included congenital anomalies, spontaneous abortions, elective terminations, ectopic pregnancies, stillbirths and live births. The prevalence of pregnancy outcomes in IFNβ-exposed women in the European registry and the Nordic data are presented, alongside a cohort of women from the Nordic dataset with MS but unexposed to MS treatment.

Results: A total of 948 and 875 IFNβ-exposed pregnancies with known pregnancy outcomes were collected from the European registry (Eur) and the Nordic registers, respectively. Similar prevalences of spontaneous abortions (10.7% Eur; 7.9% Nordic vs. 11.1%), live births with congenital anomalies (1.8% Eur; 1.8% Nordic vs. 3.3%) and ectopic pregnancies (0.4% Eur; 1.5% Nordic vs. 2.9%) were found in the IFNβ-exposed pregnancies versus the non-exposed cohort; in line with rates from the general population. Additional analyses on pregnancy outcomes will be presented.

Conclusions: The European IFNβ pregnancy registry showed no evidence that IFNβ exposure before conception and/or during pregnancy adversely affected pregnancy or infant outcomes; consistent with data collected from the Nordic registers.