

### Background

The understanding of axSpA has evolved rapidly over time resulting in improved recognition of the disease. Unfortunately, for women with axSpA there is limited data available on pregnancy outcomes in this population. The Ankylosing Spondylitis Registry of Ireland (ASRI) is a source of epidemiological data on axSpA in Ireland. The aim of this study was to examine the prevalence of pregnancy and fetal complications in women with axSpA.

### Objective

To examine the prevalence of pregnancy and fetal complications in women with axSpA.

### Methods

The ASRI records information on baseline demographics, imaging, medications, patient outcomes and comorbidities. A dedicated section within the ASRI collects data on pregnancy, fertility and breastfeeding. For enrolment patients must have been diagnosed with axSpA by a Rheumatologist and meet the ASAS classification criteria for axSpA. Informed consent was obtained from all patients, with ethical approval obtained from local hospital ethics committees.

### Results

In total, 220 females were enrolled in the ASRI, representing 24.3% of participants. Mean age of females was 43.9 years, with a mean disease duration of 18 years and mean delay to diagnosis 7.9 years. 68.6% (151) had radiographic axSpA, while 31.4% (69) had non-radiographic disease.

77 women with axSpA reported a total of 259 pregnancies resulting in 210 live births. Of these pregnancies 45.2% (117) were uncomplicated and 54.8% (142) were complicated, with 15.1% (39) encountering multiple complications (figure 1). Miscarriage prevalence was high affecting 18.9% (49) of pregnancies in 37.7% (29) of women.

Of the live births, the most common pregnancy complication was preterm birth in 15.2% (32) followed by caesarean section in 11.9% (25), while the most common fetal complication was NICU admission in 14.3% (30) (figure 2). 11 women (14.3%) reported difficult conceiving with 6 (7.8%) seeking a fertility specialist consultation. Breastfeeding prevalence was low, reported in only 38.6% (81) of live births.

Figure 1: Frequency of Complications per Pregnancy

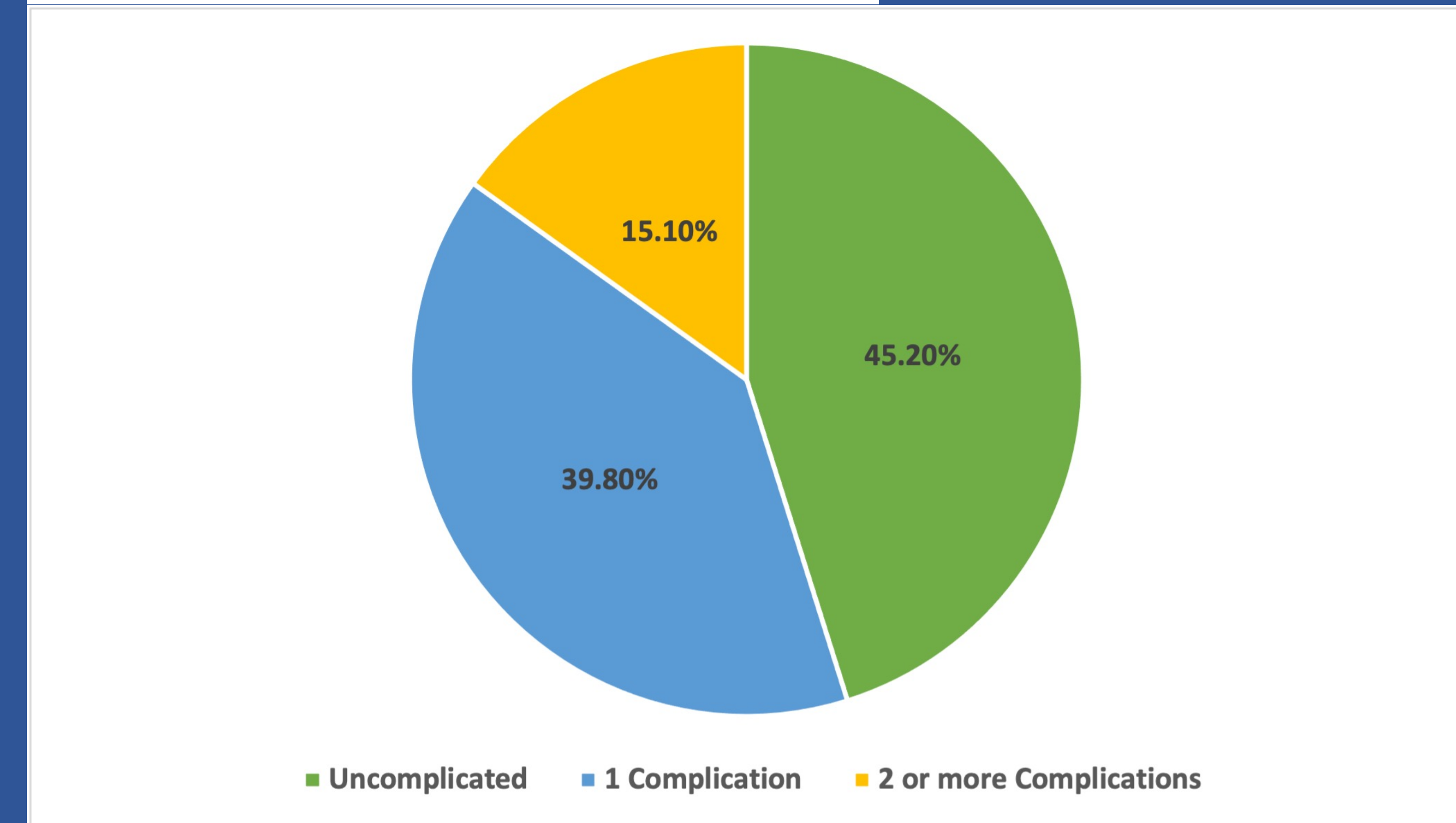
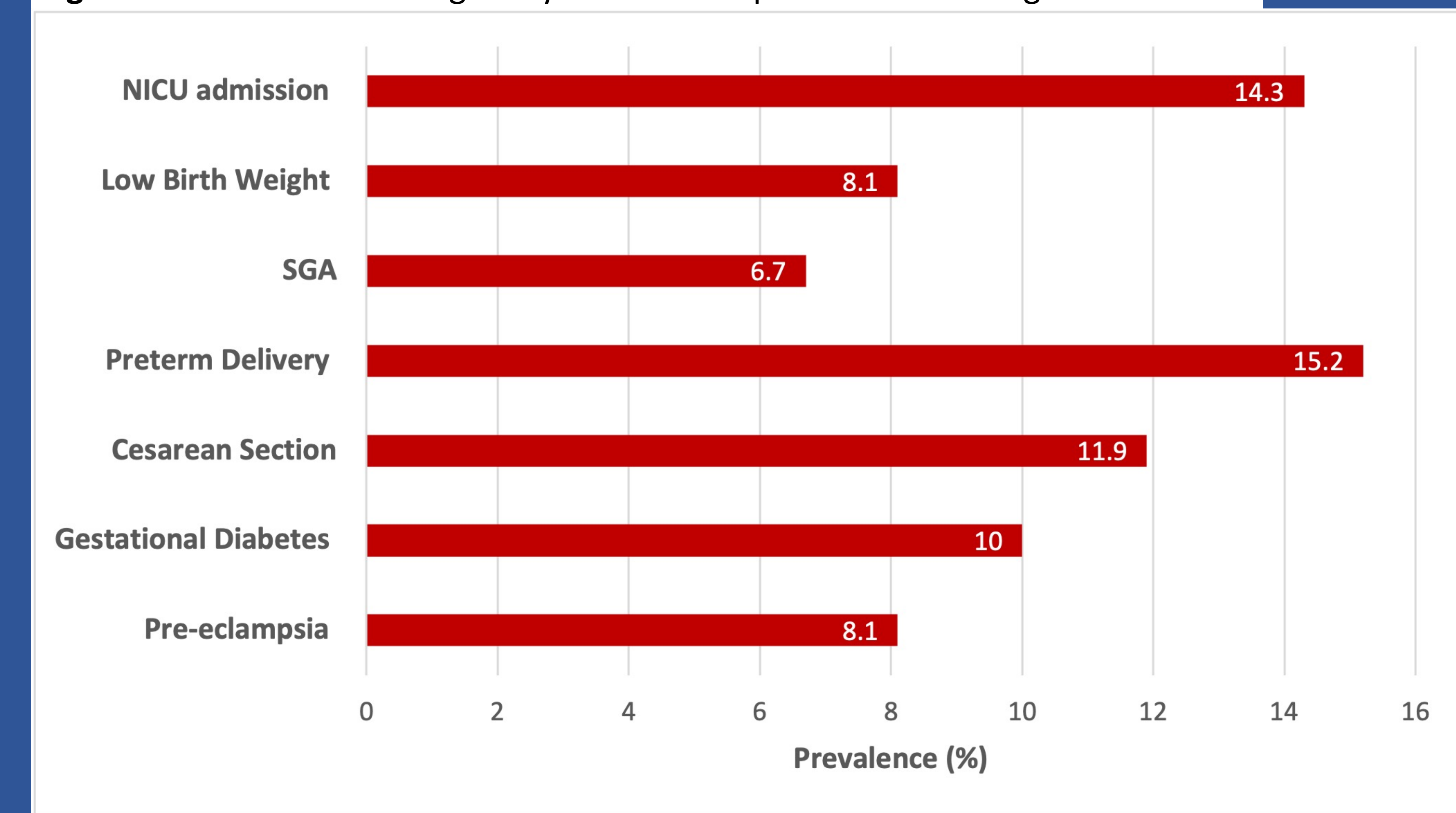


Figure 2: Prevalence of Pregnancy & Fetal Complications resulting in Live Births



### Conclusion

There is a high prevalence of pregnancy and fetal complications in women with axSpA. These results represent a preliminary analysis of outcomes in axSpA pregnancies collected via a large national registry. This provides much needed insight into the impact of axSpA on pregnancy, which can be used to improve monitoring and management of axSpA women during their pregnancies.