**OBJECTIVE:** First trimester bleeding is associated with miscarriage and preterm birth for which progesterone has been suggested to improve outcomes. The objective of our study was to evaluate the effect of progesterone treatment throughout pregnancy on preventing miscarriage and preterm birth in pregnancies with first trimester bleeding.

**STUDY DESIGN:** Multicenter double-blind placebo controlled randomized trial comparing vaginally administered Micronized Progesterone 200mg nightly from presentation until 34 weeks of pregnancy with an identically appearing placebo. Subjects with vaginal bleeding and a live intrauterine pregnancy under 14 weeks gestation, cervical insufficiency, recurrent pregnancy loss, or bleeding unrelated to placentation were excluded. Primary outcome was the occurrence of a live term pregnancy. Secondary outcomes included adverse maternal and newborn events and time to miscarriage / birth. Chi square analyses were used to compare proportions and Mann-Whitney tests were used to compare time-to-event outcomes.

**RESULTS:** 549 subjects were recruited and randomized of which 16 withdrew or were lost to follow-up leaving 264 subjects in the progesterone group and 269 subjects in the placebo group. Baseline characteristics were comparable in both groups. As compared to subjects in the placebo group, the number of subjects having a live term birth among those in the progesterone group was 197 (74.6%) vs 190 (70.6%), p = 0.30, respectively. There were no differences in a live birth among those in the progesterone group as compared to those in the placebo group (74.6%) vs 70.6%, p = 0.65, respectively. There were no differences in adverse maternal or newborn outcomes, or in time-to-event for miscarriage or birth between the two groups.

**CONCLUSION:** Progesterone prescribed throughout pregnancy is not effective in preventing miscarriage or prematurity in subjects presenting with first trimester vaginal bleeding in context of a live intrauterine pregnancy.

**Clinical Outcomes Following Implementation of a Penicillin Allergy Referral Program**

**OBJECTIVE:** Beta-lactam antibiotics are often used peripartum, posing a challenge for women with reported penicillin allergy. Allergy verification testing is rarely performed during pregnancy, even though most women do not have a true allergy. The implementation of an allergy evaluation program during pregnancy requires multidisciplinary coordination and resources, and limited data exist regarding its impact on clinical outcomes. We sought to evaluate a hospital-wide multidisciplinary initiative that was developed in August 2020 to identify, refer, evaluate, and test penicillin allergy during pregnancy, and assess its association with clinical outcomes.

**STUDY DESIGN:** A retrospective cohort study was performed of all women with a penicillin allergy documented in the hospital electronic medical record who delivered between 9/1/20-7/25/21. Data were abstracted by chart review. Women referred for penicillin allergy evaluation were compared to women who were not. Outcomes including alternate antibiotic (clindamycin or vancomycin) use were assessed. Bivariate analyses were performed.

**RESULTS:** Of 518 women with documented penicillin allergy, 133 (26%) were referred, of which 110 (83%) were evaluated. 86 (78%) women were tested with skin test and/or oral amoxicillin challenge, and all but one (85/86) passed. Those referred had overall similar baseline characteristics to those who were not (Table 1). Referred women were significantly less likely to receive alternative antibiotics during their delivery hospitalization. The frequencies of other adverse outcomes were less in those referred, but these associations did not reach statistical significance (Table 2).

**CONCLUSION:** This study documents the feasibility, safety, efficacy and clinical benefit of a penicillin allergy referral program during pregnancy. Of referred women, 64% were cleared of their penicillin allergy. Referred patients were less likely to receive alternate antibiotics, a practice which likely results in more targeted and cost-effective care in the setting of confirmed penicillin allergy.