AC model for Australian men aged 15–29, and 1.9x higher in women. Neither model agreed perfectly with the empirical prevalence estimates; the LW model tended to be closer in younger age-categories and the AC model closer in older age-categories. The AC model was closer to empirical estimates in men than women.

**Conclusion** Substantial differences were observed between chlamydia prevalence estimates produced by the two models. These findings have important implications for researchers, policymakers and healthcare professionals, as estimation methods must be robust before they are used to inform public health policy, e.g. assessing the impact of chlamydia-control interventions. Health care systems and associated surveillance systems vary by country, and work to understand the reasons for the models’ differences is planned, including applying the models to English data, in collaboration with the Universities of Bern, New South Wales, and Otago.

**Disclosure** No significant relationships.

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**ASSESSMENT OF TUBAL FACTOR INFERTILITY ATTRIBUTABLE TO CHLAMYDIA WITH PGP3 SEROLOGY**

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**Background** Our recent case-control study explored the Chlamydia trachomatis population attributable fraction (PAF) for tubal factor infertility (TFI) using an elementary body enzyme-linked immunosorbent serological assay (EB-ELISA) or a commercially available (Medac) major outer membrane protein ELISA to measure prior chlamydial infection. We examined data from this study using a Pgp3 enhanced ELISA (Pgp3).

**Methods** In this study of women with TFI by hysterosalpingogram (cases) and non-TFI infertility (controls) in two U.S. infertility clinics, we assessed anti-C. trachomatis seropositivity by Pgp3. We then assessed the association between chlamydia seropositivity and TFI using adjusted odds ratios (aOR) along with 95% confidence intervals (CI) stratified by race. Finally, the adjusted chlamydia TFI PAF (aPAF) and 95% CI based on the Pgp3 assay were estimated.

**Results** All black (n=107) and 618 of 620 non-black women had Pgp3 results. Seropositivity frequency by Pgp3 was 66% (95% CI 52–80%) for black cases, 72% (60–83%) for black controls, 26% (19–33%) for non-black cases, and 15% (12–18%) for non-black controls. Pgp3 was not associated with TFI among black women (aOR 1.1 [95% CI 0.4–3.3]). Among non-black women, Pgp3 seropositivity was associated with TFI (aOR 1.8 [95% CI 1.1–3.0]) adjusting for clinic, age, income, trichomonas, and endometriosis. Using Pgp3 and adjusting for the same variables, chlamydia TFI aPAF was 12% (95% CI 1–22%) in non-black women.

**Conclusion** Among non-black women, Pgp3 ELISA seropositivity was associated with TFI. Assays to estimate chlamydia TFI PAF merit further investigation, especially in black women. Chlamydidal TFI may be prevented in all women by early identification and treatment of chlamydia.

**Disclosure** No significant relationships.