to the reference assay, clinical sensitivity of the three commercial kits for the detection of resistance was ranging between 89.1% and 100% and clinical specificity was ranging between 93.2 and 97.7%, with no statistical significant difference. Testing additional urogenital specimens will allow to specify these percentages.

Conclusion The launch of three sensitive and specific commercial kits for the detection of MG and macrolide resistance will be useful to guide the choice of therapy.

Disclosure No significant relationships.

P610

MYCOPLASMA GENITALIUM IN CLIENTS VISITING TWO DUTCH STI CLINICS: VERY HIGH PREVALENCE AND RESISTANCE TO AZITHROMYCIN

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10.1136/sextrans-2019-sti.678

Background Associations between *Mycoplasma genitalium* (MG) and male urethritis and pelvic inflammatory disease are reported frequently. The recent prevalence of MG among clients of Dutch STI clinics is unknown. Treatment is hampered by resistance to azithromycin.

Methods Urogenital samples from 939 men who have sex with women (MSW), 1025 men who have sex with men (MSM) and 1273 women were included at the STI clinics of Amsterdam and the Hague. Also anal samples from all MSM and from 984 women were included. TMA assays (Aptima, Hologic) were used to detect MG, *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG). Azithromycin resistance was tested using a new qPCR with LNA probes and confirmed by 23SrRNA gene sequencing.

Results The overall MG prevalence among STI clients was 19.9% in MSM, 8.4% in MSW and 12.5% in women. Prevalence for all risk groups was higher in STI clients in Amsterdam than in the Hague. MG-positivity was detected in 8.4% urines of MSW and 6.9% of MSM. In women, MG was found in 11.0% of vaginal samples. Of the anal samples of MSM 15.4% and of women 10.0% were MG positive. Among MG-positive MSM 67.5% and among MG-positive women 16.1% were MG-positive in the anal sample only. MG and NG were associated in men ($p < 0.001$), but not MG and CT. Detected azithromycin resistance was very high: 34/50 (68%) of urines, 48/81 (59%) of anal samples and 37/75 (49%) of vaginal samples.

Conclusion MG is highly prevalent in Dutch STI clinic clients and resistance frequency to azithromycin is very high. In MSM, isolated anal MG is common, but frequently missed if left untested. Anal MG in women is also common, but testing vaginal MG detects most cases. In men, NG and MG infections are associated. Information on clinical relevance of MG and azithromycin resistance is urgently needed.

Disclosure No significant relationships.

P611

HIGH SEROPREVALENCE OF MYCOPLASMA GENITALIUM IN THE GENERAL ADULT POPULATION OF GERMANY

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10.1136/sextrans-2019-sti.679

Background *Mycoplasma genitalium* (MG) is one of the most common bacterial sexually transmitted infections (STI). Nevertheless, knowledge about the immune response is scarce and seroprevalence has only been assessed in selected populations. In HIV-negative blood donors seroprevalence was 5.5%, in patients with pelvic inflammatory disease 17%. We estimated MG seroprevalence in the general adult population in Germany.

Methods We retrospectively analysed sera of the population-based German National Health Interview and Examination Survey 1998 for MG antibodies using a pre-validated, multiplex, fluorescent bead-based assay. To avoid cross-reactivity, two unconserved regions of adhesion proteins, MgPaN and rMgPa were chosen as antigens. The thresholds for seropositivity were set at 1000 median fluorescence intensity units by visual inspection of inflection points. Overall seropositivity for MG was defined as concomitant seropositivity for both antigens. To assure representativeness, survey weights were applied for calculation of prevalence and 95% confidence intervals (CI). Design-based F was computed as test of independence.

Results Sera of 6038 participants were analysed. Participants were aged 17–79 years (y) (median 44y), 51% were female. Overall weighted seroprevalence was 6.5% (95%CI: 5.7–7.3%), and by age-group 17–19y 0.3% (0.1–1.5%), 20–24y 1.9% (0.9–3.8%), 25–29y 6.7% (4.6–9.8%), 30–39y 9.1% (7.4–11.1%), 40–49y 10.8% (8.9–13.0%), 50–59y 4.5% (3.4–5.9%), 60–69y 3.3% (2.2–5.1%), and 70–79y 4.6% (2.9–7.4%). In the age-group 20–29y, women had a higher seroprevalence (7.5%, 95%CI: 5.0–11.1%) than men (2.1%, 95%CI: 1.1–4.0%; $p = 0.001$).

Conclusion Compared to other studies, our results for MG seroprevalence in the general adult population in Germany are plausible.

The earlier increase in women is similar to the pattern in other STI such as *Chlamydia trachomatis* infection. Seroprevalence dropped in participants aged 50 or more but remained stable at a low level until old age, indicating long antibody persistence or continuous sexual interactions in parts of the population. However, longitudinal studies are necessary to clarify immunological processes.

Disclosure No significant relationships.

P612

ANTIMICROBIAL SUSCEPTIBILITY DATA OF MYCOPLASMA GENITALIUM STRAINS ISOLATED IN JAPAN

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10.1136/sextrans-2019-sti.680

Background The initial culturing of *Mycoplasma genitalium* from clinical specimens is still difficult and the antimicrobial susceptibility data of *M. genitalium* strains have not been