

**Conclusion** From these epidemiological data there is no evidence that MSM with HIV are at greater risk of DS/AMR NG compared to those without HIV. Whole genome sequencing will assist further investigations to explore relatedness of isolates and understand whether distinct populations of NG are spread more efficiently within sexual networks of HIV-positive MSM.

#### 012.4 PREVALENCE OF *MYCOPLASMA GENITALIUM* AND MACROLIDE RESISTANCE IN ASYMPTOMATIC MEN WHO HAVE SEX WITH MEN (MSM) ATTENDING A SEXUAL HEALTH CENTRE

<sup>1</sup>Tim Rh Read, <sup>2</sup>Christopher K Fairley, <sup>3</sup>Gerald Murray, <sup>3</sup>Jennifer Danielewski, <sup>3</sup>Jenny Su, <sup>2</sup>Michelle Doyle, <sup>2</sup>David Lee, <sup>2</sup>Anthony Snow, <sup>4</sup>Suzanne Garland, <sup>4</sup>Sepehr Tabrizi, <sup>5</sup>Elisa Mokany, <sup>5</sup>Litty Tan, <sup>1</sup>Eric P Chow, <sup>2</sup>Marcus Y Chen, <sup>1</sup>Catrina S Bradshaw. <sup>1</sup>Monash University, Australia; <sup>2</sup>Melbourne Sexual Health Centre, Alfred Health, Australia; <sup>3</sup>Murdoch Children's Research Institute, Australia; <sup>4</sup>Department of Microbiology and Infectious Diseases, The Royal Women's Hospital, Australia; <sup>5</sup>SpeeDx Pty Ltd, Australia

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**Introduction** There are limited data on the prevalence of *M. genitalium* and macrolide resistance in asymptomatic MSM. Due to limited availability, testing for *M. genitalium* has generally been for symptomatic patients, such as men with non-gonococcal urethritis (NGU) and proctitis. Recent data from Melbourne Sexual Health Centre (MSHC) show MSM are over-represented among men with *M. genitalium* urethritis and that macrolide resistant *M. genitalium* is almost twice as common among MSM, as among heterosexual men (76% vs 39%). In order to inform practice guidelines we undertook a screening study in asymptomatic MSM, to obtain accurate prevalence and resistance estimates.

**Methods** One thousand consecutive consenting MSM attending MSHC without symptoms of NGU or proctitis, not known to be contacts of MG, are tested and given a short questionnaire on behavioural risk factors and recent antimicrobial therapy. First pass urine and an anorectal swab are tested by polymerase chain reaction (ResistancePlus MG test, SpeeDx, Australia) for the presence of *M. genitalium* and for macrolide resistance mutations (MRM).

**Results** From 23 August to 15 December 2016, 401/1000 (40%) MSM have been recruited. *M. genitalium* was detected in 30 of 401 MSM [prevalence 7.5% (95% confidence interval (CI): 5.1%, 10.5%)]; 20 rectal [rectal prevalence 5.0% (95%CI: 3.1%, 7.6%)] and ten urethral infections [urethral prevalence 2.5% (95%CI: 1.2%, 4.5%)]. MRM were detected in 25 of 30 infections [83.3% (95%CI: 65.3%, 94.4%)]. MRM were detected in 18/20 rectal [90% (95%CI: 68.3%, 98.8%)] and 7/10 urethral [70% (95%CI: 34.8%, 93.3%)] infections. Estimates will be updated in June 2017.

**Conclusion** MSM without urethral and rectal symptoms attending a sexual health centre in Melbourne have a high prevalence of *M. genitalium*, and over 80% have macrolide resistance mutations. Rectal infections are twice as common as urethral. To our knowledge this study will provide the largest urethral and rectal estimates of *M. genitalium* infection and macrolide resistance in MSM and will inform future screening guidelines.

#### 012.5 FACTORS ASSOCIATED WITH ANTIMICROBIAL RESISTANT GONORRHOEA INFECTIONS IN MEN WHO HAVE SEX WITH MEN: CASE-CONTROL STUDY

<sup>1</sup>Nicola Low, <sup>2</sup>Bertisch B, <sup>3</sup>Hauser C, <sup>2</sup>Kluschke M, <sup>4</sup>Kasraian S, <sup>5</sup>Egli-Gany D, <sup>5</sup>Smid J, <sup>6</sup>Unemo M, <sup>4</sup>Endimiani A, <sup>4</sup>V Donà, <sup>3</sup>Furrer H. <sup>1</sup>Institute of Social and Preventive Medicine, University of Bern, Switzerland; <sup>2</sup>Checkpoint Zurich, Switzerland; <sup>3</sup>Department of Infectious Diseases, Bern University Hospital, Switzerland; <sup>4</sup>Institute for Infectious Diseases, University of Bern, Switzerland; <sup>5</sup>Institute of Social and Preventive Medicine, University of Bern, Switzerland; <sup>6</sup>Department of Laboratory Medicine, Microbiology, Örebro University, Sweden

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**Introduction** Strategies to identify antimicrobial resistance (AMR) and improve antibiotic stewardship to control the spread of AMR in *Neisseria gonorrhoeae* (NG) are urgently needed. As part of a project to develop a point-of-care (POC) test for AMR in NG, we investigated factors that could help identify infections due to antibiotic resistant NG.

**Methods** We enrolled men who have sex with men (MSM) at sexual health centres in Zurich and Bern, Switzerland, from May 2015 to June 2016. All had samples taken for NG detection from urethra, rectum and pharynx. In culture positive specimens we obtained minimum inhibitory concentrations (MICs) using Etest for ciprofloxacin, ceftriaxone, cefixime and spectinomycin (EUCAST AMR breakpoints) and azithromycin (EuroGASP, >2 mg/L). We collected clinical data and patients completed an online questionnaire. We compared cases (positive NG culture and AMR) with controls (NG and no AMR) with odds ratios (OR) and 95% confidence intervals (CI). We used multivariable logistic regression in MSM with complete data for all included variables.

**Results** Of 230 MSM enrolled, 117 had a positive NG culture. There were 46 (39%) cases with resistant NG (ciprofloxacin, n=45, azithromycin, n=1) and 71 controls. Clinical findings did not differ between cases and controls. Cases were more likely than controls to have had sex outside Switzerland in the previous 3 months (OR 2.2, 95% CI 1.0–4.7, p=0.05), to have received oral sex (OR 5.6, 95% CI 0.7–46.8, p=0.08) and to have concurrent partnerships (OR 2.2, 95% CI 0.8–6.5, p=0.11). In multivariable analysis (39 cases, 54 controls), the association with sex abroad remained (OR 2.0, 95% CI 0.9–4.8, p=0.10), controlling for concurrency.

**Conclusion** In this population of MSM in Switzerland, AMR in NG might be more common in MSM who have sex abroad and who receive oral sex, possibly from asymptomatic pharyngeal NG. No clinical factors distinguished AMR from non-AMR NG infections in MSM. Strategies such as development of POC tests that detect AMR are needed to conserve last-line antibiotic treatment for NG.

#### 012.6 QUALITY ASSESSMENT OF THE ENHANCED GONOCOCCAL ANTIMICROBIAL SURVEILLANCE PROGRAM IN THAILAND, 2015–2016

<sup>1</sup>Emily Weston, <sup>2</sup>Sirirat Lertpruek, <sup>2</sup>Jaray Tongtoyai, <sup>1</sup>Prisana Buasakul, <sup>1</sup>Wichuda Sukwicha, <sup>1</sup>Wanee Chonwattana, <sup>3</sup>Emily Weston, <sup>4</sup>Eileen Dunne, <sup>5</sup>Pachara Sirivongrangsana. <sup>1</sup>Bangkok STIs Centre, Bureau of Aids/Tb/STIs, Dept of Disease Control, Thailand Ministry of Health, Bangkok, Thailand; <sup>2</sup>HIV/STD Research Program, Thailand Ministry of Health, US Centres For Disease Control Collaboration, Bangkok, Thailand; <sup>3</sup>Division of STD Prevention, US Centres For Disease Control and Prevention, Atlanta, USA; <sup>4</sup>Division of HIV/AIDS Prevention, US Centres For Disease Control and Prevention, Atlanta, USA; <sup>5</sup>Department of Disease Control and Prevention, Thailand Ministry of Health, Bangkok, Thailand

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