weeks, with flattening of the lesions on the glans. All lesions were noted by the patient to have cleared after four weeks of imiquimod use, and only post-inflammatory hyperpigmentation was noted at his review after six weeks. Minimal side effects were noted by the patient except for transient itch.

**Discussion** We report our first case of penile Bowenoid papulosis responding to imiquimod monotherapy, and is the 5th reported case to date. Our case demonstrates one of the most rapid clinical clearance within six weeks, after only four weeks of imiquimod application. Other treatment modalities like electrocurettage, 5-fluorouracil or topical interferon have all been associated with recurrence. Immunomodulatory treatment for this condition appears safe and efficacious, with the added convenience of being patient administered.

**Background** Recent clinical trials have reported high repeat infection rates (12%-14%) following 1 g azithromycin. These data suggest that single-dose azithromycin may be inadequate, but high repeat infections rates could also be explained by exposure to an original or new partner or retesting before DNA clearance. The purpose of this study was to examine the origins of repeat CT infections among men.

**Methods** Men diagnosed with Ct by Gen-Probe Apta Combo 2 at STD clinics in New Orleans, and Jackson, Mississippi were re-tested an average of 6 weeks after treatment with single-dose azithromycin. Detailed sexual behaviour histories were collected at baseline and follow-up via computer-assisted/self-administered interview and MLST genotyping was performed.

**Results** Of 367 men with Ct, 222 returned for a follow-up visit (mean of 45 days post-baseline (s.d. 13)) and 14/217 (6.5%) were positive. Of the 14, 56% reported sexual re-exposure to a baseline partner, 14% reported sexual exposure to a new partner, 7% reported sexual exposure to both, and 43% denied sexual re-exposure. Thus far MLST genotyping completed for 3 baseline- and-up positive pairs. Two pairs with the same genotype (E/99) reported sexual re-exposure to a baseline partner and the pair with a new genotype reported sexual exposure to a new partner (D/19 to C/15).

**Conclusion** Early repeat infection rate among men with Ct in this study was lower than recently reported and about half could be explained by sexual re-exposure. Rates in the other two studies may have been inflated by high re-exposure rates or premature testing using NAAT since many of the participants were tested before 3 weeks. Studies that examine repeat infections should consider re-exposure/new exposure and retest when DNA clearance is assured. Our data does not support high treatment failure rates for 1 g azithromycin treatment of Ct.
substantial synergistic and/or additive effects (34%), without any observed antagonistic effects. Nevertheless, the results of in vitro antimicrobial synergy testing need to be interpreted with some caution, because these may not absolutely correspond to the in vivo situation.

**Conclusion** This study demonstrates in vitro synergy between several of the antimicrobials currently used or potentially considered for dual antimicrobial therapy of gonorrhoea and this is also the first study using Etst as an objective, easily performed and reproducible in vitro method for dual antimicrobial synergy testing of *N. gonorrhoeae*. Such method might be crucial if susceptibility testing for combination antimicrobial therapy will be performed prior to treatment of gonorrhoea.

**P2.088** **N. GONORROHEAE ANTIMICROBIAL RESISTANCE IN URUGUAY: PERIOD 2010 – 2011**


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**Background** The increasing antimicrobial resistance in *N. gonorrhoeae* threatens the effectiveness of single-dose treatment compromising the control of the infection.

Recent reports of third generation cephalosporins and azithromycin resistance coupled with the already described frequent ciprofloxacin resistance makes it mandatory to monitor the local susceptibility patterns.

**Methods** Susceptibility by agar dilution technique to ciprofloxacin, azithromycin, ceftriaxone, penicillin and tetracycline was performed to 59 and 56 isolates received in 2010 and 2011 respectively. GASP - LAC MIC interpretative criteria standards were used. Beta-lactamase production was detected by chromogenic cephalosporin method.

**Results** In 2011 CIM 90 shifted for ciprofloxacin (8-fold), azithromycin (4-fold) and ceftriaxone (2-fold). The rates of resistant isolates reached 28% and 10% for ciprofloxacin and azithromycin respectively. All the isolates tested were susceptible to ceftriaxone.

Isolates showing resistance to one drug frequently shared resistance or decreased susceptibility to other antibiotics.

One isolate showed decreased susceptibility to ceftriaxone (CIM 0.125 mg/L) and ciprofloxacin (CIM 0.5 mg/L), resistance to azithromycin (CIM 2 mg/L) and is a TRNG.

**Conclusions** In 2011 an overall increase in either resistance, decreased susceptibility and multidrug resistance was observed. These observed increasing antimicrobial resistance and multidrug resistance to first line treatment antibiotics is worrisome and reinforces the need of continuous surveillance.

**P2.090** **MULTI-DOSE CEFIXIME FOR REDUCED SUSCEPTIBILITY GONORREA: A PHARMACOKINETIC MODEL**


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**Background** Gonococcal minimal inhibitory concentrations (MIC) to 3rd generation-cephalosporins have been rising worldwide. New treatments for resistant gonococci are urgently needed. We developed pharmacokinetic models to assess whether multiple doses of 600mg or 800mg of cefixime would achieve serum levels sufficient to treat gonococcal isolates with elevated cefixime MICs (≥0.5 µg/mL).

**Methods** Based on published data, we assumed 800mg of cefixime has a peak total concentration (Cmax) of 4.9 µg/mL, an elimination half-life of 3.5 hours, and a volume of distribution of 32 L. We extrapolated a 600mg dose Cmax as the midpoint (4.25 µg/mL) between the 400mg Cmax (3.7 µg/mL) and 800mg. We created simulation models to identify regimens which could achieve total serum cefixime concentrations that exceed 4 times the MIC for over 20 hours, a previously proposed criterion for defining pharyngeal gonorrhea treatment regimens. We also assessed the pharmacokinetics of free serum cefixime concentrations assuming a 30% unbound fraction, an alternative criterion for gonorrhoea therapy.

**Results** Simulations suggest that 600mg or 800mg every 12 hours for two doses would achieve total serum cefixime levels sufficient to...