

# JUMPING TO THE SECOND-LINE: TREATMENT OUTCOMES IN PEOPLE WITH MACROLIDE-RESISTANT MYCOPLASMA GENITALIUM WHO USE PRISTINAMYCIN OR SITAFLOXACIN AS FIRST-LINE THERAPY

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## Background:

In the absence of fluoroquinolone resistance assays, guidelines for first-line therapy recommend sequential monotherapy with doxycycline and moxifloxacin (MFX) in macrolide-resistant *Mycoplasma genitalium* (M. gen) infection with cure in 92% (95% CI 88.1%–94.6%). When MFX cannot be used, second-line therapy is considered.

We looked at treatment outcomes of sequential doxycycline and pristinamycin or sitafloxacin in clients who were MFX (M. gen) treatment naive in a sexual health clinic in Sydney, which receives community referrals and where testing was indicated for clients with STI syndromes or sexual contacts. There have been known MFX supply shortages within the last five years.

## Methods:

A retrospective case series analysed pristinamycin and sitafloxacin use for macrolide-resistant M. gen between May 2017 and May 2021. The data was analysed using descriptive statistics and Fisher's exact test.

## Results:

101 clients were treated in the study period: 25 (25%) were excluded due to undocumented test of cure (TOC); 38 (38%) had MFX first-line therapy; and 6 (6%) for other reasons. Treatment outcomes of 32 clients were analysed, 10 (31%) given pristinamycin and 22 (69%), sitafloxacin. MFX was not given as 4 (12%) had contraindications; 4 (12%), not in stock; and 24 (75%), no reason documented, however, consultation dates fall during MFX shortages. The sample included 8 (25%) cis females, 24 (75%) cis males, 18 (56%) reported MSM. Overall cure rate was 78%, 95% for sitafloxacin and 40% for pristinamycin ( $p=0.0014$ ). No significance was found between outcome and each gender, site of infection, nor symptoms at TOC.

## Conclusion:

Results show the clinical effectiveness of sitafloxacin or pristinamycin as alternative first-line therapy and that sitafloxacin has comparable cure rates to MFX. This may inform clinicians' drug choice when MFX is not available or contraindicated. Larger prospective studies are required to further explore findings.

## Disclosure of Interest Statement:

None