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1 BACKGROUND

1.1 About this document

Under the Policy Directive 2020_024 an Accredited Registered Nurse (ARN) employed in a NSW Publicly Funded Sexual Health Services may supply, and/or administer sexually transmissible infection therapies to eligible patients and sexual partners.

MEDICATION PROTOCOLS IN THIS DOCUMENT MUST EXCLUSIVELY BE USED WITH NSW Health Policy Directive RN Supply and Administration of STI Therapies in Publicly Funded Sexual Health Services BY AN ACCREDITED REGISTERED NURSE

1.2 Issue and approval of Medication Protocols

Issue date: 14th DECEMBER 2022

Dr Nathan Ryder
Head, NSW STIPU Programs Unit

Signature: 

Bruce Battye
NSW Ministry of Health, Acting Chief Pharmacist
(Pharmaceutical regulatory approval only)

Signature: 

Professor David Lewis
Chair of the NSW Health PFSHS Directors group

Signature: 

1.3 Key definitions

Accredited Registered Nurse (ARN)	A registered nurse who has successfully completed requisite education and training to supply and administer sexually transmissible infection therapies and accredited under the NSW Health Sexual Health Services Standard Operating Procedures Manual.
Administer	The decision to give a medication, giving the medication (such as by mouth, topically or by injection) then documenting that the medication has been given
Amsel's criteria (modified)	In the presence of thin white/grey homogenous discharge a diagnosis is made if 2 of following criteria are present: 1. Vaginal fluid raised pH (pH>4.5) using pH paper 2. Genital malodour or Amine test where available 3. Clue cells on high vaginal gram stain as reported by laboratory or visualised during onsite microscopy (most specific).
Contact tracing	The process of identifying relevant contacts of a person with an infectious disease for the purpose of partner notification.
Diagnostic criteria	An accepted set of standards to determine diagnosis at point of care.
Employed within Publicly Funded Sexual Health Service (PFSHS)	Registered Nurses currently employed within public sexual health service in NSW (including Justice Health sexual heath registered nurses).
Genital site	Encompasses urethral, cervical or vaginal sites of infection.
Long-acting reversible contraception (LARC)	a group of contraception methods that provide very effective, long acting and reversible contraception
Medical record	Patient's medical record within PFSHS. This can be paper based, electronic or a hybrid.
Must	Indicates a mandatory action requiring compliance.
Non-gonococcal urethritis (NGU)	A condition of the penile urethra. NGU is confirmed by examination of a Gram stained

	smear of urethral discharge with greater than 4 polymorphonuclear cells per high power microscopic field (> 4 PMN/HPM) and no Gram-negative diplococci present.
Partner notification	When partners are informed of their possible exposure to an STI and provided information on how to access testing and treatment.
Presumptive treatment	Refers to the administration of antibiotics when the diagnosis is considered likely, but before the results of confirmatory tests are available. Also referred to as epidemiological treatment.
Publicly Funded Sexual Health Service (PFSHS)	Publicly funded sexual health services are available across NSW and provide a range of medical, counselling and health promotion services to those most at risk of HIV/AIDS and sexually transmissible infections on site or via community outreach services.
Retest	Undertaken to detect reinfection.
Should	Indicates obligation, duty or correctness of an action to be followed unless there are sound reasons for taking a different course of action.
Supply	In this document to 'supply' means the provision of a medication for take-home use.
Syndromic management	Identification of consistent groups of symptoms and easily recognised signs leading to the provision of treatment that will deal with the majority or most serious organisms responsible for producing the identified syndrome.
Syndromic management of penile urethritis	Approach to clinical care where no onsite microscopy is available, and patient reports urethral discharge or dysuria. Note gonorrhoea is likely if copious and purulent urethral discharge is noted on examination or symptoms have rapidly escalated in severity over days.
Test of Cure	Assessing for treatment failure, i.e. persistence of infection despite treatment.

Uncomplicated	Status of condition; symptoms present for less than 7 days including: • urethral discharge, • vaginal discharge, • genital itch or • dysuria, and no additional symptoms such as: • intermenstrual bleeding (IMB), • post-coital bleeding (PCB), • lower pelvic pain, • dyspareunia, • fever, • testicular pain, • breaks in skin or ulceration, • anal discharge or bleeding, • anal pain or • tenesmus.

1.4 Updating of Medication Protocols

Medication Protocols under NSW Health Policy Directive: RN Supply and Administration of STI Therapies in Publicly Funded Sexual Health Services align with the Australian STI management guidelines for use in primary care and/or eTG complete. Therapies authorised by the NSW Secretary of Health for Accredited Registered Nurses to supply and/or administer will require a biannual review and updates will be approved by the Head, NSW STI Programs Unit (STIPU), NSW Ministry of Health, Chief Pharmacist and Chair of the NSW Health PFSHS Directors group.
https://stipu.nsw.gov.au/sop/medicationprotocols/

PFSHS will be notified immediately of changes to the protocol.

2. Medication Protocols summary table

STI Diagnosis or indication for use	Antimicrobial treatment	Site or Stage	Use in Sexual Contacts	Protocol
Chlamydia	Doxycycline 100 mg 12-hourly for 7 days orally	Pharyngeal Genital, Rectal	Yes (non-pregnant only)	3.4
	Azithromycin 1 g as a single dose, orally	Pharyngeal Genital	Yes	3.1 3.2
NGU	Doxycycline 100 mg twice daily for 7 days, orally	Urethral	No	3.4
	Azithromycin 1 g as a single dose, orally		No	3.1
Gonorrhoea	Ceftriaxone 500 mg as a single dose, by intramuscular injection **plus** Azithromycin 2 g as a single dose, orally	Pharyngeal	No	3.3
	Ceftriaxone 500 mg as a single dose, by intramuscular injection **plus** Azithromycin 1 g as a single dose, orally	Genital, Rectal	Yes	3.3
Trichomoniasis Bacterial Vaginosis	Metronidazole 400 mg twice daily for 7 days, orally	Genital	Trichomoniasis only	3.5 3.6
	Metronidazole 2 g as a single dose, orally			
Syphilis	Benzathine benzylpenicillin 2.4 MU (1.8 g) IMI, given as 2 injections containing 1.2 MU (0.9 g)	Primary Secondary early latent	Yes	3.7
	Benzathine benzylpenicillin 2.4 MU (1.8 g) IMI, given as 2 injections containing 1.2 MU (0.9 g) weekly for 3 weeks	Late latent/unknown duration	No	

HIV non-Occupational Post-Exposure Prophylaxis	Tenofovir disoproxil* /emtricitabine 300mg/200mg, daily for 28 days, orally	N/A	N/A	3.8
HIV Pre-exposure Prophylaxis for people	Tenofovir disoproxil* /emtricitabine 300mg/200mg, daily for 90 days, orally	N/A	N/A	3.9
	Two tablets of Tenofovir disoproxil* / emtricitabine 300mg/200mg 2 – 24 hours before potential sexual exposure to HIV, then Tenofovir disoproxil* / emtricitabine 300mg/200mg every 24 hours until 48 hours after most recent potential sexual exposure to HIV			
Herpes Simplex Virus	Valaciclovir 500mg, twice a day for 5 days, orally	Initial episode	No	3.10
	Valaciclovir 500mg, twice a day for 3 days, orally	Recurrence		
Candidal vulvovaginitis	Fluconazole 150 mg, as a single dose, orally	N/A	No	3.11
Emergency contraception	Levonorgestrel 1.5 mg, as a single dose, orally	N/A	N/A	3.12

3. Medication Protocols

3.1. Azithromycin supply and administration for treatment of uncomplicated genital or pharyngeal chlamydia and/or treatment of chlamydia in sexual contacts

Indications	1. Second line antibiotic treatment of laboratory confirmed pharyngeal or genital chlamydia 2. Presumptive antibiotic treatment of sexual contacts of genital, rectal or pharyngeal chlamydia of up to with exposure within past 6 months
Drug	Azithromycin, anti-infective macrolide
Presentation	Tablets: 500 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist. • Hypersensitivity or allergy to azithromycin, erythromycin, any other macrolide antibiotic, or to any of the inactive ingredients in the product information (PI). • Concomitant medications known to prolong the QT interval (see MIMS online for more details).
Pregnancy Category	B1; Recommended treatment in pregnancy
Dose and frequency	Azithromycin 1 g as a single dose, orally
Supply and administration	• Oral • Best taken with food • If taking antacids, take them at least one hour before or two hours after azithromycin • If vomiting occurs within 2 hours of administration, then retreatment is recommended. May be administered within a service or the medication may be supplied via pre-labelled stock for take home use outside the service
Drug Interactions*	• Antacids - not to be taken concurrently (see Supply and administration above) • Cyclosporin • Warfarin

	• Digoxin • Medications known to prolong the QT interval e.g. some antiarrhythmics (amiodarone, disopyramide, sotalol), some antipsychotics (amisulpride, droperidol, haloperidol, ziprasidone), some antidepressants (citalopram, escitalopram, fluoxetine, tricyclics) and some anti-infectives and antineoplastics. *See AMH Macrolides for more detailed information
Adverse Effects relevant to STI treatment	Common: nausea, vomiting, diarrhoea, abdominal pain and cramps, Candida spp. infections Infrequent: rash, headache Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	Rule out symptoms indicating **pelvic inflammatory disease (PID)** (fever, chills, nausea and vomiting, pelvic pain, dyspareunia, intermenstrual or post-coital bleeding). Rule out symptoms indicating **epididymitis** (scrotal pain or swelling).
Patient Education	Advise the patient to avoid sex (oral, vaginal or anal sex) for 7 days after commencement of treatment and until both they and their current partner/s have been treated. Seek medical advice if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. Advise patient that re-testing for genital chlamydia to detect re-infection is recommended at **3 months**. In pregnant women, test of cure is recommended 4 weeks post completion of the treatment. Consider providing patient with relevant Consumer Medicine Information and/or chlamydia factsheet https://stipu.nsw.gov.au/resources/patient-resources/.
Contact Tracing	Australian Contact Tracing Guidelines: Chlamydia Australian STI Management Guidelines for use in Primary Care: Chlamydia – Contact Tracing

	Patient delivered partner therapy should be considered for heterosexual index patients whose partners are unlikely to seek chlamydia testing or treatment, or with repeat infections whose partners have not been treated see 3.2
Related Documents and References	Medication Administration/Supply Checklist Australian STI Management Guidelines for use in Primary Care: Chlamydia Australian Contact Tracing Guidelines: Chlamydia MIMS Online October 2022 https://www.mimsonline.com.au/ Australian Medicines Handbook July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/macrolides/azithromycin Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.2. Azithromycin supply for treatment of uncomplicated chlamydia in recent heterosexual contacts of pharyngeal or genital chlamydia supplied through patient delivered partner therapy (PDPT)

Indication	Presumptive antibiotic treatment of sexual contacts within the past 6 months of heterosexual patients with pharyngeal or genital chlamydia; to be supplied through patient delivered partner therapy.
Drug	Azithromycin; anti-infective macrolide
Presentation	Tablets: 500 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	Use of patient delivered partner therapy is not recommended in the following patients: • Those who identify as men who have sex with men (MSM) • Those who have been concurrently diagnosed with another STI • Those who have experienced recent sexual assault Patient delivered partner therapy is not recommended if the patient reports the following conditions in their partner/s: • Known hypersensitivity or allergy to azithromycin, erythromycin, any other macrolide or ketolide antibiotic, or to any of the inactive ingredients in the product • Concomitant medications known to prolong the QT interval (see Drug Interactions below) • Partners with symptoms of PID or epididymo-orchitis • Partners who may have rectal chlamydia infection
Pregnancy Category	B1; Recommended treatment in pregnancy
Dose and frequency	Azithromycin 1 g as a single dose, orally
Supply and administration	Administration: • Oral • May be taken with food • If taking antacids, take them at least one hour before or two hours after azithromycin • If vomiting occurs within 2 hours of administration, then retreatment is recommended.

	Supply: • Supply in pre-labelled Patient Delivered Therapy packs • Packs must include hard copy patient and partner information sheets. https://playsafe.health.nsw.gov.au/sti-treatment/chlamydia-treatment-partner/
Drug Interactions*	• Antacids - not to be taken concurrently (see Supply and administration above) • Cyclosporin • Warfarin • Digoxin • Medications known to prolong the QT interval e.g. some antiarrhythmics (amiodarone, disopyramide, sotalol), some antipsychotics (amisulpride, droperidol, haloperidol, ziprasidone), some antidepressants (citalopram, escitalopram, fluoxetine, tricyclics) and some anti-infectives and antineoplastics. *See AMH Macrolides for more detailed information
Adverse Effects Relevant to STI Treatment	Common: nausea, vomiting, diarrhoea, abdominal pain and cramps, Candida spp. infections Infrequent: rash, headache Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	Purpose of PDPT is to eliminate chlamydia from recent sexual contacts who are unable or unlikely to seek clinical services in a timely manner to prevent re infection of the index case and reduce further transmission. Chlamydia is often asymptomatic including among sexual contacts. Refer to NSW Sexual Health Standard Operating Procedure - PDPT
Patient Education	Provide the patient with PDPT Patient Infosheet and the PDPT Partner Infosheet advising patient to pass it on to the partner with the medication. Review with patient all relevant information related to medication administration and common medication adverse effects to pass on to partner.

	Encourage the partner to seek medical assistance directly (either by making a recommendation to the patient present or attempting to contact the partner by telephone). Advise the patient to avoid sex (oral, vaginal, or anal sex) for 7 days after both they and their current partner/s have been treated for chlamydia. Advise the patient that partners who have been provided PDPT for treatment of presumptive chlamydia should seek testing for other STIs.
Contact Tracing	Partners who are supplied treatment for chlamydia by patient delivered partner therapy should inform any additional sexual contacts to seek testing for chlamydia and other STIs.
Documentation	The registered nurse must also document the following: • A notation that the medication was given to the patient to give to the partner/s (include number of partners that medication was provided for) • The name and dose of medication • Quantity of PDPT medication packs supplied • Date of supply • First and last name of each partner the medication is intended for • Partner/s address or mobile number or email address. This information can recorded in the medication section of the patient's medical record or a separate log detailing contacts for which medication was provided and linked through the patient's medical record number.
Related Documents and References	https://playsafe.health.nsw.gov.au/treatment/pdpt PDPT Patient Infosheet PDPT Partner Infosheet Australian STI Management Guidelines for use in Primary Care: Chlamydia December 2021 MIMS Online October 2022 https://www.mimsonline.com.au/ Australian Medicines Handbook July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/macrolides/azithromycin

	Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.3. Ceftriaxone administration and azithromycin supply and administration for treatment of uncomplicated gonorrhoea, syndromic management of uncomplicated penile urethritis where gonorrhoea likely and/or treatment of gonorrhoea in recent sexual contacts

Indications	1. Antibiotic treatment of a patient with uncomplicated pharyngeal, genital or rectal gonococcal infection. 2. Antibiotic treatment of a patient as syndromic management of uncomplicated urethritis where gonorrhoea is likely and onsite microscopy is not available 3. Presumptive antibiotic treatment of a patient presenting as a sexual contact of a person with a gonococcal infection in the past 8 weeks.	
Drugs	Ceftriaxone, a broad spectrum cephalosporin antibiotic PLUS Azithromycin, an anti-infective macrolide antibiotic	
Presentation	**Ceftriaxone**	Powder for injection: 500 mg, 1 g per vial
	Azithromycin	Tablets: 500 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	**Ceftriaxone**	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist. • Known allergy to the cephalosporin class of antibiotics or a major allergy to penicillin (anaphylaxis, angioneurotic oedema, urticaria). • History of antibiotic-associated pseudomembranous colitis. • History of gastrointestinal disease (particularly colitis) or severe renal impairment (e.g. dialysis). • Lignocaine should not be used as a diluent for intramuscular injection in patients who are hypersensitive to lignocaine.
	Azithromycin	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist. • Hypersensitivity or allergy to azithromycin, erythromycin, any other

		macrolide antibiotic, or to any of the inactive ingredients in the product information (PI). • Concomitant medications known to prolong the QT interval (see Drug Interactions below).
Pregnancy Category	**Ceftriaxone**	B1; Recommended treatment in pregnancy
	Azithromycin	B1; Recommended treatment in pregnancy
Dose and frequency Genital or rectal	**Ceftriaxone**	Ceftriaxone 500 mg as a single dose, by intramuscular injection **plus**
	Azithromycin	Azithromycin 1 g as a single dose, orally
Dose and frequency Pharyngeal	**Ceftriaxone**	Ceftriaxone 500 mg as a single dose, by intramuscular injection **plus**
	Azithromycin	Azithromycin 2 g as a single dose, orally
Supply and administration and	**Ceftriaxone**	Deep intramuscular injection into ventrogluteal muscle (1st line choice – see references) in lignocaine solution 1% to reduce pain at the injection site. Dissolve the contents of 500 mg vial in 2 mL of lignocaine 1% solution If using a 1 gram vial of ceftriaxone for IM injection, add 3.5 mL of 1% lignocaine and administer 2 mL of the reconstituted solution. Product is for single use in one patient only. Discard any residue. A second person should check the preparation and administration of injectable medication wherever practicable.
	Azithromycin	Oral; may be taken with food; If taking antacids, take them at least one hour before or two hours after azithromycin

		May be administered within a service or the medication may be supplied via pre-labelled stock for take home use outside the service.
Drug Interactions*	**Ceftriaxone**	No drug interactions of particular concern *See AMH Cephalosporins for more detailed information
	Azithromycin	• Antacids - not to be taken concurrently (see Supply and administration above) • Cyclosporin • Warfarin • Digoxin • Medications known to prolong the QT interval e.g. some antiarrhythmics (amiodarone, disopyramide, sotalol), some antipsychotics (amisulpride, droperidol, haloperidol, ziprasidone), some antidepressants (citalopram, escitalopram, fluoxetine, tricyclics) and some anti-infectives and antineoplastics. *See AMH Macrolides for more detailed information
Adverse Effects relevant to STI treatment	**Ceftriaxone**	Common or infrequent: diarrhoea, nausea, vomiting, pain and inflammation at injection site, rash, hypersensitivity/allergy Rare: Pseudomembranous colitis
	Azithromycin	Common: nausea, vomiting, diarrhoea, abdominal pain and cramps Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	Rule out symptoms indicating **PID** (complaints of fever, chills, nausea, and vomiting, bilateral lower pelvic pain, intermenstrual or post-coital bleeding). Rule out symptoms indicating **epididymo-orchitis** (complaints of scrotal pain or swelling). Rule out symptoms indicating **proctitis** if rectal infection (complaints of frequent urge to defecate, rectal pain, tenesmus, itching, rectal discharge or bleeding).	

	A culture must be taken from all patients at the infected site(s) with NAAT positive *Neisseria gonorrhoeae* results prior to treatment. Procedure outlined in the NSW Sexual Health Services Standard Operating Procedures – Clinical Management Individual Infections For syndromic management, undertake STI testing per standard of practice as outlined in the NSW Sexual Health Standard Operating Procedures – Syndromes.
Patient Education	Advise the patient to avoid sex (oral, vaginal or anal sex) for 7 days after both they and their current partner/s have been treated for gonorrhoea. Seek medical advice if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. Follow up is advised if symptoms do no not resolve within 7 days Advise patient to undertake retesting or Test of Cure (TOC) for gonorrhoea as required by NSW Sexual Health SOP or local procedure.

Site	Test of Cure (TOC)
Pharyngeal	2-4 weeks post treatment
Rectal	2-4 weeks post treatment
Endocervical or vulvovaginal	2-4 weeks post treatment
Penile urethral	Not recommended
Retest 3 months after exposure to gonorrhoea	

For syndromic management of urethritis where gonorrhoea likely:

- Advise patient they may need to return for additional antibiotic treatment once aetiology confirmed.
- TOC/Re-testing advice will depend on confirmed aetiology.

Consider providing patient with relevant Consumer Medicine Information and a gonorrhoea factsheet https://stipu.nsw.gov.au/resources/patient-resources/

Contact Tracing	Australian STI Management Guidelines for use in Primary Care December 2021: Gonorrhoea – See Contact Tracing Australian Contact Tracing Guidelines: Gonorrhoea Australian STI Management Guidelines for use in Primary Care December 2021: Urethritis - penile -See Contact Tracing Australian Contact Tracing Guidelines: Non-Gonococcal Urethritis
Related Documents and References	Medication Supply/Administration Checklist Australian STI Management Guidelines for use in Primary Care December 2021: Gonorrhoea MIMS Online October 2022 https://www.mimsonline.com.au/ Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/macrolides/azithromycin https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/cephalosporins/ceftriaxone Isseven, Seda Dere and Tulay Sagkal Midilli. “A Comparison of the Dorsogluteal and Ventrogluteal Sites Regarding Patients’ Levels of Pain Intensity and Satisfaction following Intramuscular Injection.” (2020). https://www.semanticscholar.org/paper/A-Comparison-of-the-Dorsogluteal-and-Ventrogluteal-Isseven-Midilli/6de74aaf44d3b80c09d673260370febcf62d4bb6 Şimşek, Aynur. (2020). Using the ventrogluteal site for intramuscular injection. The Anatolian Journal of Family Medicine. 10.5505/anatoljfm.2020.84755. https://pubmed.ncbi.nlm.nih.gov/15871375/ Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.4. Doxycycline supply for treatment of uncomplicated chlamydia in non-pregnant/non-lactating patients and/or treatment of non-gonococcal urethritis (NGU) and/or treatment of non-pregnant/non-lactating patients presenting as a sexual contacts of a patient with chlamydia.

Indication	1. Antibiotic treatment of uncomplicated pharyngeal, genital and ano-genital rectal chlamydia in non-pregnant/non-lactating patients. 2. Antibiotic treatment of uncomplicated NGU confirmed by microscopy or syndromic management where onsite microscopy is not available and gonorrhoea unlikely. 3. Presumptive antibiotic treatment of non-pregnant /non-lactating patients presenting as a sexual contacts of a patient with chlamydia within 6 months.
Drug	Doxycycline; anti-infective tetracycline
Presentation	Tablets: 100 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Known hypersensitivity to tetracyclines • Concurrent use of oral retinoids • Concurrent use of Vitamin A • Use in pregnancy or lactation • History of increased intracranial hypertension • History of photosensitivity • Concurrent use of antacids and iron preparations
Pregnancy Category	D; Drugs which have caused, are suspected to have caused or may be expected to cause, an increased incidence of human fetal malformations or irreversible damage.
Dose and frequency	Doxycycline 100 mg twice daily for 7 days, orally
Supply and administration	• Oral • Best taken after food or milk • Take with plenty of water (at least 100 mL) and remain upright for an hour after doxycycline
Drug Interactions*	• Antacids and iron preparations - not to be taken concurrently • Warfarin • Oral contraceptives (see Nursing Implications below)

	• Penicillin • Anticonvulsants (phenytoin, carbamazepine, barbiturates) - see • Vitamin A and oral retinoids (see Contraindications above) *See AMH Tetracyclines for more detailed information
Adverse Effects Relevant to STI Treatment	Common: nausea, vomiting, diarrhoea, epigastric burning; tooth discolouration, enamel dysplasia; photosensitivity (depends on tetracycline, dose and degree of sun exposure) Infrequent: rash, stomatitis, fungal overgrowth Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	For rectal chlamydia: • Rule out symptoms indicating **proctitis** (complaints of the frequent urge to defecate, rectal pain, tenesmus, itching, rectal discharge or bleeding). • Lymphogranuloma venereum (LGV) is a rare condition in Australia; an increase has been observed in MSM. It usually presents with symptoms of severe proctitis as above. For NGU • Rule out symptoms indicating **epididymo-orchitis** (complaints of scrotal pain or swelling). • For syndromic management, undertake STI testing per standard of practice as outlined in the NSW Sexual Health Standards Operating Procedures – Syndromes: Urethritis. • Non-liver enzyme-inducing antibiotics such as tetracyclines do not reduce the effectiveness of CHCs [Combined Hormonal Contraceptives] and additional contraceptive protection is no longer advised for concurrent use despite the warnings in the Product Information. • For anyone who can become pregnant, confirm and document patient is using a reliable method of birth control (e.g. hormonal, copper intrauterine device, consistent condom use in place) or undertake and record a negative urine hCG pregnancy test.

Patient Education	Advise the patient to avoid sex (oral, vaginal or anal sex) for 7 days after commencement of treatment for both themselves and their current partner/s have been treated. Seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. Report any skin reactions if sun exposure as doxycycline can cause skin to be more sensitive to sun. Avoid sun exposure especially between the hours of 10am to 3pm. If sun exposure wear protective clothing and sunscreen SPF+30. Avoid alcohol as can decrease the serum levels of doxycycline in the blood. Advise patient re-testing for chlamydia, if detected, is recommended at 3 months to exclude re-infection. For NGU • Advise patient to return for medical review if symptoms persist or recur after completing treatment. • For syndromic management of NGU, advise patient they may need to return for additional antibiotic treatment once aetiology confirmed. • Re-testing for NGU advice will depend on confirmed aetiology. Consider providing patient with relevant Consumer Medicine Information and a chlamydia or NGU (Urethritis) factsheet https://stipu.nsw.gov.au/resources/patient-resources/
Contact Tracing	Australian STI Management Guidelines for use in Primary Care: Chlamydia –See Contact Tracing Australian STI Management Guidelines for use in Primary Care December 2021: Urethritis - penile -See Contact Tracing

	Australian Contact Tracing Guidelines: Chlamydia Australian Contact Tracing Guidelines: Non-Gonococcal Urethritis
Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian STI Management Guidelines for use in Primary Care December 2021: Urethritis - penile Australian STI Management Guidelines for use in Primary Care: Chlamydia Australian Contact Tracing Guidelines: Non-Gonococcal Urethritis Australian Contact Tracing Guidelines: Chlamydia Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/tetracyclines/doxycycline Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.5. Metronidazole supply and administration for treatment of trichomoniasis and/or treatment of trichomoniasis in recent sexual contacts

Indications	1. Antimicrobial for treatment of trichomoniasis (by NAAT or microscopy) 2. Antimicrobial for treatment of suspected trichomoniasis in recent sexual contacts (past 30 days) of patients with trichomoniasis
Drug	Metronidazole; nitroimidazole antibiotic
Presentation	Tablets: 400 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Hypersensitivity or allergy to imidazoles or to any of the inactive ingredients in the product • Unable to avoid concurrent alcohol for 24 hours after treatment. • Current or history of Blood dyscrasias/disorders • Active organic CNS disease • Check for liver disease: metabolites may accumulate in severe hepatic impairment – may need to reduce dose; MO consult • Lactation – oral metronidazole may affect taste of breast milk, consider intra vaginal treatment; MO consult required.
Pregnancy Category	B2 Single-dose treatment with metronidazole recommended for all symptomatic pregnant patients
Dose and frequency	
Recommended	Metronidazole 400 mg twice daily for 7 days, orally
Alternative	Metronidazole 2 g as a single dose, orally
Supply and administration	• Oral • Swallow tablets whole with a glass of water • Take with or after food • Avoid alcohol during treatment and for 24 hours after finishing treatment May be administered within a service or the medication may be supplied via pre-labelled stock for take home use outside the service.

Drug Interactions*	• Alcohol - during treatment and for 24 hours afterwards (*see* Nursing Implications below) • Disulfiram (Antabuse®) - do not use metronidazole within 2 weeks of disulfiram. • Warfarin or other medicines used to prevent blood clots • Lithium • Phenytoin • Phenobarbitone • Cimetidine • Cyclosporin • Some anticancer drugs (e.g. carmustine, cyclophosphamide, 5-fluorouracil, busulfan) *See AMH Metronidazole for more detailed information
Adverse Effects Relevant to STI Treatment	Common: nausea, anorexia, abdominal pain, vomiting, diarrhoea, metallic taste, CNS effects (eg dizziness, headache) Infrequent: furry tongue, glossitis, stomatitis, paraesthesia Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	Alternative treatment should only be used at patient request or if an assessment is made that recommended dose and frequency may lead to adherence difficulties If TV detected on urine or high vaginal samples results must be confirmed by NAAT before initiating treatment. It is recommended that all cases of *Trichomonas vaginalis* infection in pregnant people are discussed with a medical officer. Whilst treatment for symptomatic trichomoniasis in pregnancy is recommended if symptoms present (malodourous vaginal discharge – often profuse and frothy; vaginal itch or soreness), this may not be the case for asymptomatic pregnant people.
Patient Education	Advise the patient to avoid sex (oral, vaginal or anal sex) for 7 days after both they and their current partner/s have been treated. Seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing.

	Discuss interaction with alcohol. Advise to avoid alcohol including any medication with alcohol (i.e. cough syrup) on the day of treatment and for 24 hours after taking single dose treatment. Consider providing patient with relevant Consumer Medicine Information and a trichomoniasis factsheet https://stipu.nsw.gov.au/resources/patient-resources/
Contact Tracing	Australian STI Management Guidelines for use in Primary Care: Trichomoniasis –See Contact Tracing Australian Contact Tracing Guidelines: Trichomoniasis
Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian STI Management Guidelines for use in Primary Care December 2021: Trichomonas Australian Contact Tracing Guidelines: Trichomoniasis Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/other-antibacterials/metronidazole Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.6. **Metronidazole supply for treatment of bacterial vaginosis**

Indication	1. Antimicrobial for treatment of bacterial vaginosis per modified Amsel's criteria 2. Antimicrobial for treatment of bacterial vaginosis in pregnant women if symptoms present. 3. Antimicrobial treatment for women with symptoms undergoing termination of pregnancy
Drug	Metronidazole; nitroimidazole antibiotic
Presentation	Tablets: 200mg and 400 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Hypersensitivity or allergy to imidazoles or to any of the inactive ingredients in the product • Unable to avoid concurrent alcohol for 24 hours after treatment. • Current or history of blood dyscrasias/disorders • Active organic CNS disease • Check for liver disease: metabolites may accumulate in severe hepatic impairment – may need to reduce dose; MO consult • Lactation – oral metronidazole may affect taste of breast milk, consider intra vaginal treatment; MO consult required.
Pregnancy Category	B2 Treatment is recommended for all pregnant women with symptoms
Dose and frequency	
Recommended	Metronidazole 400 mg twice daily for 7 days, orally
Alternative	Metronidazole 2 g as a single dose, orally
Supply and administration	• Orally • Swallow tablets whole with a glass of water • Take with or after food • Avoid alcohol during treatment and for 24 hours after finishing treatment
Drug Interactions	• Alcohol - during treatment and for 24 hours afterwards (see Patient Education) • Disulfiram (Antabuse®) - do not use metronidazole within 2 weeks of disulfiram. • Warfarin or other medicines used to prevent blood clots

	• Lithium • Phenytoin • Phenobarbitone • Cimetidine • Cyclosporin • Some anticancer drugs (e.g. carmustine, cyclophosphamide, 5-fluorouracil, busulfan)
Adverse Effects Relevant to STI Treatment	Common: nausea, anorexia, abdominal pain, vomiting, diarrhoea, metallic taste, CNS effects (eg dizziness, headache) Infrequent: furry tongue, glossitis, stomatitis, paraesthesia Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	Alternative dose and frequency should only be used at patient request or if an assessment is made that recommended dose and frequency may lead to adherence difficulties For detailed information around sampling/laboratory procedures refer to NSW Sexual Health Standard of Practice Manual Section Laboratory Procedures and HIV and STI testing. Amsel's criteria is outlined in definition section of document. Bacterial vaginosis is associated with increased risk of spontaneous abortion, premature labour and PID. Rule out symptoms indicating **PID** (complaints of fever, chills, nausea and vomiting, bilateral lower pelvic pain, IMB or PCB). In symptomatic pregnant women, if patient presents with symptoms beyond usual BV presentation described then seek consultation with MO.
Patient Education	Advise patient to seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. Discuss factors that can disrupt normal vaginal flora such as douching as this can lead to replacement with high

	concentrations of anaerobic bacteria leading to bacteria vaginosis (BV). Discuss increased risk of candida with use of medication. Advise patient to follow up if sore mouth, white mouth or tongue develops while taking or soon after stopping medication. Also if vaginal itching or discharge develops. Discuss interaction with alcohol. Advise to avoid alcohol including any medication with alcohol (i.e. cough syrup) on the day of treatment and for 24 hours after taking single dose treatment. Consider providing patient with relevant Consumer Medicine Information and a bacterial vaginosis factsheet https://stipu.nsw.gov.au/resources/patient-resources/
Contact Tracing	Not required. Assess current female sexual partners as BV is common in female sex partners
Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian STI Management Guidelines for use in Primary Care December 2021: Bacterial vaginosis Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/other-antibacterials/metronidazole Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.7. Benzathine benzylpenicillin supply for treatment of primary, secondary and early latent syphilis and sexual contacts of early or unknown duration syphilis

Indication	1. Antimicrobial for treatment of primary, secondary, or early latent syphilis diagnosed and documented in the patient's medical record 2. Antimicrobial for treatment of late latent or unknown duration syphilis diagnosed and documented in the patient's medical record 3. Presumptive antibiotic treatment of patients* presenting as a sexual contact of early or unknown syphilis stage. *Patient presenting not as contacts but only with signs and symptoms suspected to be infectious syphilis must be discussed with a medical officer and treated via a medical officer drug order.
Drug	Benzathine benzylpenicillin tetrahydrate, penicillin antibiotic
Presentation	Benzathine benzylpenicillin 2.4 MU (1.8 g) IMI, Stat, given as 2 injections containing 1.2 MU (0.9 g)

Contraindications
The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration
	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist (Symptoms of rash or painless sore >7 days are exempt with a confirmed syphilis diagnosis)
	• Previous hypersensitivity or allergic reaction to any of the penicillins
	• History of antibiotic-associated pseudomembranous colitis
	• Pregnancy
	• Signs and symptoms of neurosyphilis: unexplained neurological symptoms or signs including visual changes, tinnitus, deafness, severe headache
	  ○ trouble balancing
	  ○ a loss of coordination
	  ○ incontinence
	  ○ an altered walk

Pregnancy Category	A: Considered to be safe, benzathine benzylpenicillin should be used during pregnancy if clinically indicated
Dose and frequency	

Early syphilis (primary, secondary, early latent) and sexual contacts	Benzathine benzylpenicillin 2.4 MU (1.8 g) IMI, Stat, given as 2 injections containing 1.2 MU (0.9 g)
Late syphilis or syphilis of unknown duration (late latent > 2 years)	Benzathine benzylpenicillin 2.4 MU (1.8 g) IMI, given as 2 injections containing 1.2 MU (0.9 g) weekly for 3 weeks
Supply and administration	For anyone who can become pregnant, confirm and document patient is using a reliable method of birth control (e.g. hormonal, copper intrauterine device, consistent condom use in place) or undertake and record a negative urine hCG pregnancy test. Because of the high concentration of suspended material in this product, the needle may be blocked if the injection is not made at a slow, steady rate. Administer by 2 deep, intramuscular injection into the ventrogluteal(1st line choice – see refences) or dorsogluteal muscle Do not inject into or near a nerve. Injection into or near a nerve may result in permanent neurological damage Administration in the anterolateral thigh is not recommended due to the adverse effects observed and vascularity of this region.
Drug Interactions*	Tetracyclines may antagonise the bactericidal effect of penicillin and concurrent use of these drugs should be avoided if possible. The rate of excretion of the penicillins is decreased by concomitant administration of probenecid which prolongs, as well as increases, blood levels of the penicillins *See AMH Penicillins for more detailed information
Adverse Effects Relevant to STI Treatment	Common: injection site pain, nausea, vomiting, blurred vision, dizziness Jarisch-Herxheimer reaction is a common reaction to treatment in patients with primary and secondary syphilis. It occurs 6-12 hours after commencing treatment and is an

	unpleasant reaction of varying severity with fever, headache, malaise, rigors and joint pains, and lasts for several hours. Symptoms are controlled with analgesics and rest. Patients should be alerted to the possibility of this reaction and reassured accordingly Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	Patients should be advised to monitor for rash and swelling while remain in the clinic for 15 minutes post administration Advise of possible Jarisch-Herxheimer reaction when treating contact, primary or secondary syphilis Advise no sexual contact for 7 days after 1st treatment is administered. Advise no sex with partners from the last 3 months (primary syphilis), 6 months (secondary syphilis) or 12 months (early latent) until the partners have been tested and treated if necessary. Contact tracing and presumptive treatment of partners where last contact was within 3 months All people treated as a contact of syphilis should be tested and if positive assessed regarding any additional treatment and other management required
Patient Education	Advise patient to seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. Advise for future syphilis testing some tests will remain positive for life but this is not always an indication of treatment failure or re-infection. Because of this it is useful for patients to advise the testing clinician of a past treated syphilis diagnosis.
Contact Tracing	Australian STI Management Guidelines for use in Primary Care December 2021: Syphilis – See Contact Tracing Australian Contact Tracing Guidelines: Syphilis

Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian STI Management Guidelines for use in Primary Care December 2021: Syphilis Australian Contact Tracing Guidelines: Syphilis Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antibacterials/penicillins/benzathine-benzylpenicillin?menu=hints Isseven, Seda Dere and Tulay Sagkal Midilli. "A Comparison of the Dorsogluteal and Ventrogluteal Sites Regarding Patients' Levels of Pain Intensity and Satisfaction following Intramuscular Injection." (2020). https://www.semanticscholar.org/paper/A-Comparison-of-the-Dorsogluteal-and-Ventrogluteal-Isseven-Midilli/6de74aaf44d3b80c09d673260370febcf62d4bb6 Şimşek, Aynur. (2020). Using the ventrogluteal site for intramuscular injection. The Anatolian Journal of Family Medicine. 10.5505/anatoljfm.2020.84755. https://pubmed.ncbi.nlm.nih.gov/15871375/ Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.8. Tenofovir disoproxil* /emtricitabine supply as Post-Exposure Prophylaxis (PEP) after Non-Occupational exposure to HIV

Indication	1. Possible or known exposure to HIV in the last 72 hours based on recommendations of the Post-Exposure Prophylaxis after Non-Occupational and Occupational Exposure to HIV: Australian National Guidelines **Note** If 3 drug PEP is indicated this should not delay the commencement of tenofovir disoproxil* /emtricitabine under this medication protocol but a medical consultation for a 3rd drug must be arranged as soon as possible.
Drug	Tenofovir disoproxil/emtricitabine – Antiviral agent
Presentation	co-formulated tablets containing 300 mg tenofovir disoproxil* and 200 mg emtricitabine
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Previous hypersensitivity or allergic reaction to Tenofovir disoproxil* /emtricitabine • Must not be administered to children or adolescents under the age of 18 years • Should not be administered concomitantly with other medicinal products containing any of the same active components • Known Hepatitis B chronic infection • Known chronic kidney disease • Known cirrhosis • Known osteoporosis • Pregnancy
Pregnancy Category	B3 - If patient is pregnant, they must be assessed by an authorised s100 prescriber and are excluded from medication protocol supply
Dose and frequency	Tenofovir disoproxil* /emtricitabine 300mg/200mg daily for 28 days, orally
Supply and administration	Advise to take the same time each day with food, if possible, as optimises the absorption of tenofovir
Drug Interactions	**Antivirals** • Ledipasvir/sofosbuvir • Sofosbuvir/velpatasvir • Sofosbuvir/velpatasvir/voxilaprevir

Drug Interactions (continued)	• Sofosbuvir **Analgesics** • Aspirin • Celecoxib • Diclofenac • Ketorolac • Mefenamic acid • Meloxicam • Naproxen • Nimesulide • Piroxicam **Antiarrhythmics** • Amiodarone • Quinidine **Antibacterials** • Amikacin • Capreomycin • Clarithromycin • Gentamicin • Kanamycin • Piperacillin • Streptomycin • Sulfadiazine • Tazobactam • Vancomycin **Anticonvulsants** • Topiramate **Antidepressants** • Lithium **Anti-diabetics** • Canagliflozin **Antifungals** • Amphotericin B • Fluconazole • Flucytosine • Itraconazole • Ketoconazole • Posaconazole • Voriconazole **Antiprotozoals** • Meglumine antimoniate • Pentamidine

Adverse Effects Relevant to STI Treatment	Common: nausea, diarrhoea, headache, dizziness, insomnia, abnormal dreams, rash Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction) Nephrotoxicity
Nursing Implications and requirements	PEP appears to be most effective when administered as soon as possible after exposure. If 3 drug PEP is indicated this should not delay the commencement of tenofovir disoproxil* /emtricitabine but a medical consultation for a 3rd drug must be arranged as soon as possible. People taking PEP warrant careful assessment of the context of risk behaviour and should prompt consideration for PrEP Before supplying PEP Nursing staff must have performed documentation and testing as per NSW Sexual Health SOP, local clinic guidelines and / or Post-Exposure Prophylaxis after Non-Occupational and Occupational Exposure to HIV: Australian National Guidelines
Patient Education	Advise: • Seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. • PEP provides high levels of protection but does not prevent 100% of infections • the importance of adherence for efficacy • the potential side effects of treatment and possible drug interactions • measures for preventing re-exposure to HIV • follow-up HIV and STI testing as per NSW Sexual Health SOP, local clinic PEP policy or Post-Exposure Prophylaxis after Non-Occupational and Occupational Exposure to HIV: Australian National Guidelines • HIV seroconversion signs and symptoms
Contact Tracing	N/A
Related Documents and References	Medication Supply/Administration Checklist ASHM Post-Exposure Prophylaxis (PEP) www.pep.guidelines.org.au Consumer Medicine Information

	http://www.tga.gov.au/consumer-medicines-information-cmi

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3.9. Tenofovir disoproxil* /emtricitabine supply as Pre-Exposure Prophylaxis (PrEP) for initiation and continuation

Indication	1. Patient requests PrEP 2. Patient has HIV risk as per ASHM PrEP Guidelines 3. Patient is currently taking PrEP
Drug	Tenofovir disoproxil* /emtricitabine – Antiviral agent
Presentation	co-formulated tablets containing 300 mg tenofovir disoproxil* and 200 mg emtricitabine
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Previous hypersensitivity or allergic reaction to Tenofovir disoproxil* /emtricitabine • Must not be administered to children or adolescents under the age of 18 years • Should not be administered concomitantly with other medicinal products containing any of the same active components • Known Hepatitis B chronic infection • Known history of renal impairment or history of kidney injury or structural abnormality • Clients who's last eGFR < 70 • On-going use of nephrotoxic drugs (e.g. Nonsteroidal anti-inflammatory drugs, Lithium. Recommend to use IBM Micromedex ® Drug Interactions) • Pregnancy **For On- demand dosing**: • any patient who is not a cisgendered man who has sex with men **AND** • Any person who has undergone bariatric surgery
Pregnancy Category	B3 - If patient is pregnant, they must be assessed by an authorised s100 prescriber and are excluded from medication protocol supply
Dose and frequency	
Daily	Tenofovir disoproxil* / emtricitabine 300mg/200mg daily for 90 days, orally
On-demand*	Two tablets of Tenofovir disoproxil* / emtricitabine 300mg/200mg 2 – 24 hours before potential sexual exposure to HIV, then Tenofovir disoproxil* / emtricitabine

*for cisgender men who have sex with men only	300mg/200mg every 24 hours until 48 hours after most recent potential sexual exposure to HIV.
Supply and administration	Advise to take the same time each day with food, if possible, as optimises the absorption of tenofovir
Drug Interactions	**Antivirals** • Ledipasvir/sofosbuvir • Sofosbuvir/velpatasvir • Sofosbuvir/velpatasvir/voxilaprevir • Sofosbuvir **Analgesics** • Aspirin • Celecoxib • Diclofenac • Ketorolac • Mefenamic acid • Meloxicam • Naproxen • Nimesulide • Piroxicam **Antiarrhythmics** • Amiodarone • Quinidine **Antibacterials** • Amikacin • Capreomycin • Clarithromycin • Gentamicin • Kanamycin • Piperacillin • Streptomycin • Sulfadiazine • Tazobactam • Vancomycin **Anticonvulsants** • Topiramate **Antidepressants** • Lithium **Anti-diabetics** • Canagliflozin **Antifungals** • Amphotericin B

	• Fluconazole • Flucytosine • Itraconazole • Ketoconazole • Posaconazole • Voriconazole **Antiprotozoals** • Meglumine antimoniate • Pentamidine
Adverse Effects Relevant to STI Treatment	Common: nausea, diarrhoea, headache, dizziness, insomnia, abnormal dreams, rash Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction) Nephrotoxicity
Nursing Implications	Before supplying PrEP Nursing staff must have performed documentation and testing as per NSW Sexual Health SOP, local clinic guidelines and / or ASHM PrEP guidelines If patient reports having bariatric surgery consultation with a medical officer should before providing on demand PrEP
Patient Education	Advise: • Seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing. • the importance of adherence for efficacy and missed dose protocol • Potential side effects of treatment and possible drug interactions • Follow-up 3 monthly HIV and STI testing • Condom use • Discuss safer injecting practices, if applicable
Contact Tracing	N/A
Related Documents and References	Medication Supply/Administration Checklist ASHM PrEP guidelines https://www.ashm.org.au/hiv/prep/ Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.10. Valaciclovir supply for treatment of primary or recurrent Herpes Simplex Virus episode

Indication	1. Treatment of clinical episodes of first episode or recurrent genital herpes simplex virus (HSV) infections
Drug	Valaciclovir - Antiviral agent
Presentation	Valaciclovir 500mg tablets
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Previous hypersensitivity or allergic reaction to valaciclovir, aciclovir or any component of the formulation • Patients reporting reduced renal function (>60 eGFR) • Pregnancy
Pregnancy Category	B3 - There is limited data on the use of valaciclovir in pregnancy. Valaciclovir should not be supplied if the patient is pregnant and must be referred to an authorised prescriber
Dose and frequency	
Primary episode	Valaciclovir 500mg, twice a day for 5 days, orally
Recurrent episode	Valaciclovir 500mg, twice a day for 3 days, orally
Supply and administration	Dosing should begin as early as possible. For recurrent episodes of genital herpes, this should ideally be during the prodromal period or immediately following the appearance of the first signs or symptoms
Drug Interactions	Valaciclovir should only be combined with other nephrotoxic medicinal products with caution, especially in subjects with impaired renal function. This applies to concomitant administration with: ○ Aminoglycoside ○ Organoplatinum compounds ○ Iodinated contrast media ○ Methotrexate ○ Pentamidine ○ Foscarnet ○ Ciclosporin ○ Tacrolimus

	Probenecid and cimetidine reduce valaciclovir renal clearance (no dosage adjustment necessary). In patients over 60 years of age, concurrent use of diuretics increases plasma levels of valaciclovir very significantly.
Adverse Effects Relevant to STI Treatment	Common: nausea, vomiting, stomach pain headache and dizziness Infrequent: agitation, vertigo, renal impairment Rare: hypersensitivity (e.g. anaphylaxis, severe skin reaction)
Nursing Implications	All cases of first episode genital herpes should be followed up at 72 hours. if lesions are still developing, or existing lesions are slow to heal, the patient should be asked to return and given a further 5 days of valaciclovir treatment If patient re-presents with outbreaks or reports psychosexual complications of the diagnosis should be referred to a authorised prescriber for suppressive therapy
Patient Education	Advise patient to seek medical advice immediately if signs of an allergic reaction (rare) such as rash, swelling, difficulty breathing Patients should be advised to avoid intercourse when symptoms are present even if treatment with an antiviral has been initiated Treatment does not cure genital herpes or completely eliminate the risk of transmission Psychosocial impact of diagnosis can be profound but is often based on misinformation. Providing facts about high community prevalence (70%-80% HSV1 and 12-15% HSV2) and largely mild clinical effect Concerns about a current relationship may be addressed with knowledge that transmission can occur from someone unaware they have the infection and symptoms can also occur for the first time some days or years after acquisition

	Refer patients and / or their partners to a counselling or Sexual Health Infolink (1800 451 624) for support if they are unable to accept the diagnosis, are significantly distressed by the diagnosis, or anxious about having the infection when tested negative
Contact Tracing	Contact tracing is not recommended for HSV infections.
Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian STI Management Guidelines for use in Primary Care December 2021: Genital herpes simplex virus (HSV) Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antivirals/guanine-analogues/valaciclovir Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.11. Fluconazole supply for treatment of vaginal candidiasis

Indication	1. Antifungal treatment of clinically diagnosed vaginal candidiasis
Drug	Fluconazole; antifungal agent
Presentation	Tablet: 150 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • Known hypersensitivity to fluconazole, to related azole compounds or to any of its excipients • Known Pregnancy or breastfeeding • Less than 18 years of age • Coadministration of other drugs known to prolong the QT interval and which are metabolised via the enzyme CYP3A4 • Concomitant use of Erythromycin, Cisapride, Terfenadine, Astemizole, Pimozide, Quinidine, Olaparib, Anticoagulants
Pregnancy Category	D; Drugs which have caused, are suspected to have caused or may be expected to cause, an increased incidence of human fetal malformations or irreversible damage. There have been reports of spontaneous abortion and congenital abnormalities in infants whose mothers were treated with 150 mg of fluconazole as a single or repeated dose in the first trimester.
Dose and frequency	Fluconazole 150 mg as a single dose, orally May be administered within a service or the medication may be supplied via pre-labelled stock for take home use outside the service
Supply and administration	Oral, with or without food May be administered within a service or the medication may be supplied via pre-labelled stock for take home use outside the service
Drug Interactions*	Coadministration of Fluconazole can increase the effects of: • Benzodiazepines • Calcium channel blockers

	• Celecoxib • Cyclosporin • Cyclophosphamide • Fentanyl • Methadone • Halofantrine • Nonsteroidal anti-Inflammatory drugs (NSAIDs) • Oral hypoglycaemic agents • Losartan • Ibrutinib • HMG-CoA reductase inhibitors • Phenytoin • Prednisone • Rifabutin • Saquinavir • Sirolimus • Sulfonylureas • Tacrolimus • Theophylline • Tofacitinib • Tolvaptan • Vinca alkaloids • Vitamin A • Warfarin • Zidovudine • Carbamazepine *See AMH Azoles for more detailed information
Adverse Effects Relevant to STI Treatment	Common: gastrointestinal upsets, headache, Abnormal vision, dizziness, vertigo, Back pain, myalgia Infrequent: anorexia, fatigue Rare: Torsade de pointes, QT prolongation, Hepatic toxicity
Nursing Implications	If recurrent acute candidal vulvovaginitis (defined as four or more acute episodes of candidal vulvovaginitis in a year, with at least two of these episodes confirmed by microscopy or culture) are documented or reported a fungal culture should be collected and patient booked for medical review

	Risk factors for candidal vulvovaginitis should be documented such as: • Pregnancy • Diabetes mellitus • Treatment with broad-spectrum antibiotics • Chemotherapy • Vaginal foreign body • Contraceptives
Patient Education	Use a soap substitute such as a sorbolene based wash to clean the vulval area. Advise the patient not to use internally and not to use more than once daily Use an emollient to moisturise the vulval skin Wear breathable underwear Avoid applying topical irritants such as perfumed products or douching Sexual transmission has negligible significance in the aetiology of vulvovaginal candidiasis. Sex partners do not need to be examined and treated
Contact Tracing	N/A
Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian STI Management Guidelines for use in Primary Care December 2021: Candidiasis Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/anti-infectives/antifungals/azoles/fluconazole Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

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3.12. Levonorgestrel supply as emergency contraception

Indication	For use in people with a vagina within 72 hours of vaginal intercourse in the following situations: 1. Unprotected intercourse 2. Concerns about possible contraceptive failure 3. Incorrect use of contraceptives 4. Sexual assault without contraception coverage
Drug	levonorgestrel; contraceptive agent
Presentation	Tablet: 1.5 mg
Contraindications The drug information provided is to act as a guide only, for further information reference should be made to the full product info available on MIMS or the Australian Medicines Handbook If contraindications, precautions or interactions are present refer to MO before administration	• Failure to meet all eligibility criteria per Medication Supply/Administration Checklist • History of allergy or hypersensitivity to progestogen • Unexplained vaginal bleeding • Current breast cancer • Unprotected intercourse > 72 hrs earlier in same menstrual cycle • Suspected pregnancy/ pregnancy • Severe Hypertension (>180/110) • Diabetes Mellitus with nephropathy • Retinopathy • Neuropathy • History of ischaemic heart disease, stroke, severe hepatic dysfunction, or past History Breast Cancer
Pregnancy Category	D; not to be used during an existing or suspected pregnancy
Dose and frequency	levonorgestrel 1.5 mg as a single dose, orally
Supply and administration	Oral, with or without food
Drug Interactions*	The metabolism of levonorgestrel can be enhanced by: • Drugs which induce CYP3A4, • Barbiturates • Phenytoin • Carbamazepine • Herbal medicines containing Hypericum perforatum (St. John's wort), • Rifampicin • Ritonavir rifabutin • Griseofulvin Celecoxib

	*See AMH Progestogens for more detailed information
Adverse Effects Relevant to STI Treatment	Common: menstrual irregularity, prolonged bleeding, spotting, amenorrhoea, breast tenderness, depression, acne Infrequent: nausea, vomiting, headache, dizziness, lethargy Rare: cholestatic jaundice, decreased libido, androgenic effects (hirsutism, greasy hair), hypersensitivity (eg anaphylactic or skin reaction)
Nursing Implications	Vomiting within 2 hours of ECP will require a repeat dose Conditions associated with malabsorption may impair efficacy Repeat use; People who present for repeated courses of ECP should be counselled about alternative methods of contraception, including the benefits of long acting reversible contraception (LARC)
Patient Education	Explain individual risk of pregnancy, mode of action of medication, efficacy of medication, potential side effects and menstruation patterns following medication Discuss ongoing contraception for remainder of cycle and ongoing long-term contraceptive methods such as LARC Provide contact details for further contact/follow up if needed
Contact Tracing	N/A
Related Documents and References	Medication Supply/Administration Checklist MIMS Online October 2022 https://www.mimsonline.com.au/ Australian Medicines Handbook, July 2022 https://amhonline.amh.net.au.acs.hcn.com.au/chapters/obstetric-gynaecological-drugs/drugs-contraception/progestogens/levonorgestrel

	Consumer Medicine Information http://www.tga.gov.au/consumer-medicines-information-cmi

Local Nurse Protocol Authorisation:

Date approved by _____LHD Drug and Therapeutics Committee: **Review Date:**

4 APPENDIX LIST

1. RN Supply and Administration of STI Therapies Checklist

1. RN Supply and Administration of STI Therapies Checklist

- ☐ Patient is14 years of age and over (18 years for Tenofovir disoproxil* /emtricitabine or Fluconazole supply)
- ☐ Reports no chills, body aches or flu like symptoms?
- ☐ Reports no IMB, PCB, pelvic pain, dyspareunia, fever, testicular pain, and breaks in skin or ulceration or rectal discharge or bleeding, anal pain or tenesmus?
- ☐ Reports no urethral discharge, vaginal discharge, genital itch or dysuria for more than seven days?
- ☐ Reports no previous allergy, reaction or hypersensitivity to relevant medication?
- ☐ Drug specific protocols have been met and no contraindications including drug interactions as outlined on relevant medication protocol?
- ☐ Pulse is above 50 and below 120 beats per minutes?
- ☐ Current temperature is above 35.5 and below 38.5 degrees Celsius?
- ☐ Check NSW STIPU website to ensure correct treatment is used as per Medication Protocols under NSW Health Policy Directive RN Supply and Administration of STI Therapies in Publicly Funded Sexual Health Services.

If the above is not met consultation with a medical officer must be sought.

Education

- ☐ Advised no unprotected intercourse until medication complete.
- ☐ Provided information on how to take medications including drug interactions.
- ☐ Informed of common side effects associated with medication.
- ☐ Advised when to seek medical advice in case of allergic reaction or adverse events related to medication.
- ☐ Advised of expected symptom resolution (if symptoms present).
- ☐ Advised timing of test of cure and/or retest per medication protocol.
- ☐ Contact tracing and STI testing of sexual contacts undertaken per medication protocol and NSW Sexual Health Standards Operating Procedures Manual– HIV and STI Testing and HIV and STI Partner Notification.