

Hospital Pharmaceuticals Review
PTAC, Hospital Pharmaceuticals Subcommittee & Anti-Infective
Subcommittee minutes for web publishing

Infections therapeutic group

PTAC and Subcommittee of PTAC minutes are published in accordance with the *Terms of Reference for the Pharmacology and Therapeutics Advisory Committee (PTAC) and PTAC Subcommittees 2008*.

This document contains minutes relevant to the consultation document of 25 September 2012 relating to products in the Infections therapeutic group.

Note that this document is not a complete record of the relevant PTAC and Subcommittee meetings; only the relevant portions of the minutes relating PTAC and its Subcommittees advice on the review of Hospital Pharmaceuticals are included.

Contents

Hospital Pharmaceuticals Subcommittee – 7 June 2011	2
Hospital Pharmaceuticals Subcommittee – 5 July 2011	21
Anti-Infective Subcommittee – 22 February 2012	22
Anti-Infective Subcommittee – 3 March 2012	27
Anti-Infective Subcommittee – 31 May 2012	35
Hospital Pharmaceuticals Subcommittee – 5 June 2012	38
Pharmacology and Therapeutics Advisory Committee – 2 & 3 August 2012	41

Hospital Pharmaceuticals Subcommittee – 7 June 2011

1 Antibacterials

- 1.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Antibacterials heading.
- 1.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

Aminoglycosides

- Amikacin
 - Inj 250 mg per ml, 2 ml
- Gentamicin sulphate
 - Inj 10 mg per ml, 1 ml
 - Inj 40 mg per ml, 2 ml
- Neomycin
 - Tab 500 mg
- Paromomycin
 - Cap 250 mg
- Streptomycin
 - Inj 1 g
- Tobramycin
 - Inj 40 mg per ml, 2 ml
 - Inj 100 mg per ml, 5 ml

Carbapenems

- Ertapenem
 - Inj 1 g
- Imipenem with cilastatin
 - Inf 500 mg with 500 mg cilastatin
- Meropenem
 - Inj 500 mg
 - Inj 1 g

Cephalosporins and cephamycins (first generation)

- Cefalexin monohydrate
 - Cap 500 mg
 - Grans for oral liq 125 mg per 5 ml
 - Grans for oral liq 250 mg per 5 ml
- Cefazolin sodium
 - Inj 500 mg
 - Inj 1 g

Cephalosporins and cephamycins (second generation)

- Cefaclor monohydrate
 - Cap 250 mg
 - Grans for oral liq 125 mg per 5 ml
- Cefoxitin sodium
 - Inj 1 g
- Cefuroxime axetil
 - Tab 250 mg
- Cefuroxime sodium
 - Inj 750 mg
 - Inj 1.5 g

Cephalosporins and cephamycins (third generation)

- Cefotaxime
 - Inj 500 mg
 - Inj 1 g
- Ceftazidime
 - Inj 500 mg
 - Inj 1 g
 - Inj 2 g
- Ceftriaxone sodium
 - Inj 500 mg
 - Inj 1 g
 - Inj 2 g

Cephalosporins and cephamycins (fourth generation)

- Cefepime
 - Inj 1 g
 - Inj 2 g

Macrolides

- Azithromycin
 - Tab 500 mg
 - Oral liq 200 mg per 5 ml
- Clarithromycin
 - Tab 250 mg
 - Tab 500 mg
 - Grans for oral liq 125 mg per 5 ml
 - Inf 500 mg
- Erythromycin ethyl succinate
 - Grans for oral liq 200 mg per 5 ml
 - Grans for oral liq 400 mg per 5 ml
 - Tab 400 mg
- Erythromycin lactobionate
 - Inj 1 g

- Roxithromycin
 - Tab 150 mg
 - Tab 300 mg

Other Antibiotics

- Aztreonam
 - Inj 1 g
- Chloramphenicol
 - Inj 1 g
- Clindamycin hydrochloride
 - Cap 150 mg
- Clindamycin phosphate
 - Inj 150 mg per ml, 4 ml
- Colistin sulphomethate (colestimethate)
 - Inj 150 mg per ml, 1 ml
- Co-trimoxazole
 - Inj trimethoprim 80 mg and sulphamethoxazole 400 mg per 5 ml
 - Oral liq trimethoprim 40 mg and sulphamethoxazole 200 mg per 5 ml
 - Tab trimethoprim 80 mg and sulphamethoxazole 400 mg
- Fusidic acid
 - Crm 2%
 - Oint 2%
 - Tab 250 mg
- Hexamine hippurate
 - Tab 1 g
- Hydrogen peroxide
 - Crm 1%
- Linezolid
 - Tab 600 mg
 - Oral liq 20 mg per ml
 - Inf 2 mg per ml, 300 ml
- Mupirocin
 - Oint 2%
 - Nasal oint 2%
- Nitrofurantoin
 - Tab 50 mg
 - Tab 100 mg
- Silver sulphadiazine
 - Crm 1%
- Sulfadiazine sodium
 - Tab 500 mg
- Teicoplanin
 - Inj 400 mg
- Trimethoprim
 - Tab 100 mg
 - Tab 300 mg
- Vancomycin
 - Inj 50 mg per ml, 10 ml

Penicillins

- Amoxicillin
 - Cap 250 mg
 - Cap 500 mg
 - Grans for oral liq 125 mg per 5 ml
 - Grans for oral liq 250 mg per 5 ml
 - Inj 250 mg
 - Inj 500 mg
 - Inj 1 g
- Amoxicillin clavulanate
 - Grans for oral liq amoxicillin 125 mg with potassium clavulanate 31.25 mg per 5 ml
 - Grans for oral liq amoxicillin 250 mg with potassium clavulanate 62.5 mg per 5 ml
 - Inj amoxicillin 500 mg with potassium clavulanate 100 mg
 - Inj amoxicillin 1000 mg with potassium clavulanate 200 mg
 - Tab amoxicillin 500 mg with potassium clavulanate 125 mg
- Benzathine benzylpenicillin
 - Inj 1.2 mega u per 2.3 ml (900 mg)
- Benzylpenicillin sodium (penicillin G)
 - Inj 1 mega u (600 mg)
- Flucloxacillin sodium
 - Cap 250 mg
 - Cap 500 mg
 - Grans for oral liq 125 mg per 5 ml
 - Grans for oral liq 250 mg per 5 ml
 - Inj 250 mg
 - Inj 500 mg
 - Inj 1 g
- Phenoxymethylpenicillin (penicillin V)
 - Cap potassium salt 250 mg
 - Cap potassium salt 500 mg
 - Grans for oral liq 125 mg per 5 ml
 - Grans for oral liq 250 mg per 5 ml
- Piperacillin with tazobactam
 - Inj 4 g with tazobactam 0.5 g
- Procaine penicillin
 - Inj 1.5 mega u
- Ticarcillin with clavulanic acid
 - Inj 3 g with clavulanic acid 0.1 mg

Quinolones

- Ciprofloxacin
 - Inf 2 mg per ml, 100 ml
 - Oral liq 250 mg per 5 ml
 - Oral liq 500 mg per 5 ml
 - Tab 250 mg
 - Tab 500 mg
 - Tab 750 mg

- Moxifloxacin hydrochloride
 - Inf 400 mg per 250 ml
 - Tab 400 mg
- Norfloxacin
 - Tab 400 mg

Tetracyclines

- Demeclocycline hydrochloride
 - Cap 150 mg
- Doxycycline
 - Tab 100 mg
 - Inj 5 mg per ml, 20 ml
- Tigecycline
 - Inj 50 mg

- 1.3 The Subcommittee considered that, although daptomycin injection (350 mg) was not in common use in DHB hospitals, that it was an important treatment option, and should be included in a national PML. The Subcommittee recommended that the prescribing of daptomycin be subject to recommendation by ID physicians.
- 1.4 The Subcommittee noted that several smaller dose amikacin syringes were currently in use in DHB hospitals (5 mg per ml, 5 ml; 5 mg per ml, 10 ml and 15 mg per ml, 5 ml) and considered that one, but not both, of the 5 mg per ml products should be included in a national PML. The Subcommittee requested feedback from ID physicians on this matter.
- 1.5 The Subcommittee recommended that the prescribing of amikacin be subject to recommendation by ID physicians.
- 1.6 The Subcommittee noted that the following pharmaceuticals are not widely used in DHB hospitals, and recommended that they not be included in a national PML:
- Netilmicin
 - Piperacillin
 - Temocillin
 - Gatifloxacin
 - Levofloxacin
 - Lyme cycline
 - Doripenem
 - Cefradine
 - Cefamandole
 - Cefpirome
 - Cefpodoxime
- 1.7 The Subcommittee noted that cefuroxime sodium 250 mg injection is not widely used in DHB hospitals, and considered that it did not need to be included in a national PML.
- 1.8 The Subcommittee noted that cefotaxime 2 g injection is not widely used in DHB hospitals, and considered that it did not need to be included in a national PML.

- 1.9 The Subcommittee noted that linezolid 250 mg tablet is not widely used in DHB hospitals, and considered that it did not need to be included in a national PML.
- 1.10 The Subcommittee noted that doxycycline 50 mg tablet is not widely used in DHB hospitals, and is not fully funded in the Pharmaceutical Schedule, and considered that it did not need to be included in a national PML.
- 1.11 The Subcommittee noted that doxycycline 10 mg per ml, 10 ml injection is not widely used in DHB hospitals, and considered that it did not need to be included in a national PML. Members noted that this delivered the same total dose as the 5 mg per ml, 20 ml injection.
- 1.12 The Subcommittee noted that tobramycin 10 mg per ml, 2 ml injection is not widely used in DHB hospitals, and considered that it did not need to be included in a national PML.
- 1.13 The Subcommittee considered that as tobramycin nebuliser solution was not subsidised in the Pharmaceutical Schedule, and did not have a niche use within hospitals, that it should not be included in a national PML.
- 1.14 The Subcommittee noted that erythromycin lactobionate 300 mg injection had been discontinued, and considered that it did not need to be included in a national PML.
- 1.15 The Subcommittee noted that mupirocin 400 mg injection is not widely used in DHB hospitals, and considered that it did not need to be included in a national PML.
- 1.16 The Subcommittee noted that, as pivemecillinam is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 1.17 The Subcommittee noted that PTAC had previously considered the listing of levofloxacin in the Pharmaceutical Schedule as a second-line treatment of H. Pylori infection, and considered that levofloxacin should be included in a national PML if it becomes subsidised in the Pharmaceutical Schedule.
- 1.18 The Subcommittee recommended that the prescribing of tobramycin, ertapenem, aztreonam and ticarcillin with clavulanic acid be subject to recommendation by ID physicians.
- 1.19 The Subcommittee recommended that the prescribing of streptomycin and colistin sulphomethate (colestimethate) be subject to recommendation by respiratory physicians or ID physicians.
- 1.20 The Subcommittee considered that the restrictions applying to carbapenems would be important, and requested advice from the Anti-Infective Subcommittee on how these should be restricted.
- 1.21 The Subcommittee recommended that the prescribing of chloramphenicol injection be subject to recommendation by ID physicians.
- 1.22 The Subcommittee noted that minocycline tablets and capsules are not fully funded in the Pharmaceutical Schedule, and considered that as they did not have a niche use within hospitals that they should not be included in a national PML. However, the Subcommittee requested advice from the Anti-Infective Subcommittee on whether

there was a need for minocycline to be included in a national PML before making a recommendation on this.

- 1.23 The Subcommittee considered that the listing of tigecycline, teicoplanin, piperacillin with tazobactam, cefotaxime and ceftazidime should be subject to restricted uses, and requested advice from the Anti-Infective Subcommittee on this issue.
- 1.24 The Subcommittee noted that paromomycin cap 250 mg was important for treatment of cryptosporidium, particularly in transplant patients. The Subcommittee requested advice from the Anti-Infective Subcommittee as to how to define appropriate groups or restrictions.
- 1.25 The Subcommittee considered that restrictions would need to apply to azithromycin 500 mg. The Subcommittee requested advice from the Anti-Infective Subcommittee on this issue.
- 1.26 The Subcommittee considered that restrictions would need to apply to moxifloxacin, and considered that it should have both a restricted indication and the requirement for recommendation by ID physicians. The Subcommittee requested advice from the Anti-Infective Subcommittee on this issue.
- 1.27 The Subcommittee considered that restrictions would need to apply to linezolid, and considered that it should have both a restricted indication and the requirement for recommendation by ID physicians. Members considered that it may be appropriate to restrict its use to vancomycin-resistant *Staphylococcus aureus*. The Subcommittee requested advice from the Anti-Infective Subcommittee on this issue.
- 1.28 The Subcommittee noted that amoxicillin paediatric drops were not in common use in DHB hospitals, and would likely not continue to be fully funded in the Pharmaceutical Schedule, and considered that these did not need to be included in a national PML.
- 1.29 The Subcommittee noted that fusidic acid injection was not in use in hospitals or in the community, and recommended that it not be included in a national PML. The Subcommittee requested advice from the Anti-Infective Subcommittee as to whether non-inclusion would be an issue.
- 1.30 The Subcommittee considered that prescribing of clarithromycin should be restricted, potentially to *Mycobacterium Avium Intracellulare* Complex and *H. Pylori*, however members considered that implementing this restriction in hospitals may be difficult as clarithromycin is not tightly restricted at present in all DHBs. The Subcommittee requested the view of the Anti-Infective Subcommittee on this issue.
- 1.31 The Subcommittee noted that erythromycin stearate was used in many, but not all DHB hospitals, and that it was not fully funded in the Pharmaceutical Schedule. The Subcommittee considered that erythromycin sterate was not essential if erythromycin ethyl succinate was available, and recommended that it not be included in a national PML. The Subcommittee requested the view of the Anti-Infective Subcommittee on this issue.
- 1.32 The Subcommittee noted that lincomycin injection was in use in DHB hospitals when clindamycin injection was not available, and considered that it did not need to be included in a national PML. Members noted however that lincomycin has also been used in Auckland for storing heart valves, and requested further information on this issue.

- 1.33 The Subcommittee considered that, as fosfomycin is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML. However, the Subcommittee requested the view of the Anti-Infective Subcommittee on this issue.
- 1.34 The Subcommittee noted that it may be useful to have oral liquid formulations of cefuroxime and trimethoprim, and recommended that PHARMAC explore whether these are available.
- 1.35 The Subcommittee noted that clindamycin oral liquid is not widely used in DHB hospitals, but considered that further information was required before making a recommendation on this. The Subcommittee requested the view of the Anti-Infective Subcommittee on the need for an oral liquid formulation of clindamycin.
- 1.36 The Subcommittee noted that sulfadiazine sodium is used for the treatment of toxoplasmosis, and considered that PHARMAC should consider listing it in the Pharmaceutical Schedule for this purpose.
- 1.37 The Subcommittee recommended that the prescribing of teicoplanin injection be subject to recommendation by ID physicians.
- 1.38 The Subcommittee noted that the Anti-Infective Subcommittee had recommended that vancomycin capsules be listed in the Pharmaceutical Schedule for compounding into an oral liquid due to palatability issues with making an oral liquid formulation from vancomycin injection. Members noted that Hutt Valley DHB prepares an oral liquid form of vancomycin from the injection that is considered to be palatable, and would share this formulation with other hospital pharmacies.

2 Antifungals

- 2.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Antifungals heading.
- 2.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

Allylamines

- Terbinafine
 - Tab 250 mg

Beta-glucan synthase inhibitors

- Caspofungin
 - Inf 50 mg
 - Inf 70 mg

Imidazoles

- Clotrimazole
 - Crm 1%
 - Vaginal crm 1% with applicator
 - Vaginal crm 2% with applicator
- Ketoconazole
 - Shampoo 2%
 - Tab 200 mg
- Miconazole
 - Oral gel 20 mg per g
- Miconazole nitrate
 - Crm 2%
 - Vaginal crm 2% with applicator

Other antifungals

- Ciclopiroxolamine
 - Nail soln 8%

Polyene antimycotics

- Amphotericin B
 - Inf 50 mg
 - Lozenges 10 mg
- Amphotericin B (liposomal)
 - Inf 50 mg
- Amphotericin buffer solution
 - Inj 1.5 ml
- Nystatin
 - Cap 500,000 u
 - Crm 100,000 u per g
 - Oral liq 100,000 u per ml
 - Tab 500,000 u
 - Vaginal crm 100,000 u per 5 g with applicator(s)

Pyrimidine analogues

- Flucytosine
 - Cap 500 mg

Triazoles

- Fluconazole
 - Cap 50 mg
 - Cap 150 mg
 - Cap 200 mg
 - Oral liq 50 mg per 5 ml
 - Inf 2 mg per ml, 50 ml
- Itraconazole
 - Cap 100 mg

- 2.3 The Subcommittee considered that, although itraconazole oral liquid (10 mg per ml) was not in wide use in DHB hospitals, it was an important treatment option, and should be included in a national PML. The Subcommittee considered that itraconazole oral liquid did not need to be listed in the Pharmaceutical Schedule, as it is primarily used for prophylaxis of neutropenia, not in paediatrics.
- 2.4 The Subcommittee noted that voriconazole (50 mg tablet, 200 mg tablet, 200 mg infusion and 40 mg per ml oral liquid) is widely used amongst tertiary centres, and recommended that it be included in a national PML. The Subcommittee recommended that the use of voriconazole needs to be restricted, and requested that the Anti-Infective Subcommittee provide advice on this issue. The Subcommittee noted that PTAC has reviewed an application for listing of voriconazole in the Pharmaceutical Schedule, and requested that the Haematology Society of New Zealand help provide draft Special Authority restrictions. The Subcommittee noted that restrictions for it in a national PML and in the Pharmaceutical Schedule should be aligned.
- 2.5 The Subcommittee considered that, as amorolfine 5% nail soln is not fully subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 2.6 The Subcommittee considered that, as terbinafine 1% cream and 1% gel are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.
- 2.7 The Subcommittee noted that bifonazole 1% cream is not in wide use in DHB hospitals and is not subsidised in the Pharmaceutical Schedule. The Subcommittee recommended that it not be included in a national PML.
- 2.8 The Subcommittee noted that clotrimazole 10% vaginal cream is not in wide use in DHB hospitals and is not subsidised in the Pharmaceutical Schedule. The Subcommittee recommended that it not be included in a national PML.
- 2.9 The Subcommittee noted that clotrimazole 1% solution is not fully subsidised in the Pharmaceutical Schedule. The Subcommittee recommended that it not be included in a national PML.
- 2.10 The Subcommittee noted that clotrimazole pessaries are not subsidised in the Pharmaceutical Schedule, although have previously been subsidised. The Subcommittee recommended that these not be included in a national PML unless they were re-listed in the Pharmaceutical Schedule.
- 2.11 The Subcommittee considered that, as econazole nitrate 1% cream and 1% foaming solution are not fully subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.
- 2.12 The Subcommittee considered that, as ketoconazole 2% cream and 1% shampoo are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.
- 2.13 The Subcommittee considered that, as miconazole nitrate 2% dusting powder and 2% spray powder are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.

- 2.14 The Subcommittee considered that, as miconazole nitrate 2% lotion and 2% tincture are not fully subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.
- 2.15 The Subcommittee considered that, as miconazole nitrate with zinc ointment is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 2.16 The Subcommittee considered that, as ciclopiroxolamine 1% cream is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 2.17 The Subcommittee considered that, as ciclopiroxolamine 1% solution is not fully subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 2.18 The Subcommittee noted that flucytosine cap 100 mg, 2 mg per ml, 50 ml injection and 10 mg per ml, 250 ml infusion were not widely used in hospitals and were difficult to obtain. The Subcommittee recommended that they not be included in a national PML.
- 2.19 The Subcommittee recommended that the prescribing of itraconazole liquid, caspofungin and intravenous amphotericin would need to be restricted, and requested the advice of the Anti-Infective Subcommittee on this issue.
- 2.20 The Subcommittee recommended that prescribing of flucytosine (cap 500 mg) be restricted to recommendation by ID physicians.
- 2.21 The Subcommittee considered that PHARMAC should give consideration to the listing of a fluconazole oral liquid preparation in the Pharmaceutical Schedule.
- 2.22 The Subcommittee deferred making a recommendation on the listing of posaconazole in a national PML. Members noted that PTAC is currently reviewing this agent, and considered that it would be appropriate to wait until that process is complete before making a recommendation.
- 2.23 The Subcommittee recommended that the use of voriconazole needs to be restricted, and requested that the Anti-Infective Subcommittee provide advice on this issue. The Subcommittee noted that PTAC has reviewed an application for listing of voriconazole in the Pharmaceutical Schedule, and requested that the Haematology Society of New Zealand help provide draft Special Authority restrictions. The Subcommittee noted that restrictions for it in a national PML and in the Pharmaceutical Schedule should be aligned.
- 2.24 The Subcommittee noted that supplies of non-liposomal amphotericin 50 mg infusion were becoming difficult to obtain.

3 Antimycobacterials

- 3.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Antimycobacterials heading.
- 3.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and

recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

Antileprotics

- Dapsone
 - Tab 25 mg
 - Tab 100 mg

Antituberculotics

- Ethambutol hydrochloride
 - Tab 100 mg
 - Tab 400 mg
- Isoniazid
 - Tab 100 mg
- Isoniazid with rifampicin
 - Tab 100 mg with rifampicin 150 mg
 - Tab 150 mg with rifampicin 300 mg
- Pyrazinamide
 - Tab 500 mg
- Rifabutin
 - Cap 150 mg
- Rifampicin
 - Cap 150 mg
 - Cap 300 mg
 - Tab 600 mg
 - Oral liq 100 mg per 5 ml
 - Inf 600 mg
- Cycloserine
 - Cap 250 mg
- Para-aminosalicylic acid
 - Granules 4 g

- 3.3 The Subcommittee considered that, although clofazamine (cap 50 mg) is not widely used, it is considered to be a standard treatment option for leprosy, and should be included in a national PML.
- 3.4 The Subcommittee noted that hospitals typically obtained free supplies of antileprotic packs containing clofazamine from the World Health Organisation via the Ministry of Health.
- 3.5 The Subcommittee considered that although protionamide (tab 250 mg) is not widely used, it is considered to be standard second-line treatment for tuberculosis, and should be included in a national PML. The Subcommittee requested the advice of the Anti-Infective Subcommittee as to restrictions.
- 3.6 The Subcommittee noted that ethionamide is not widely used in DHB hospitals, and is not subsidised in the Pharmaceutical Schedule. The Subcommittee recommended that it not be included in a national PML.

4 Antiparasitics

- 4.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Antiparasitics heading.
- 4.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

Anthelmintics

- Albendazole
 - Tab 200 mg
- Ivermectin
 - Tab 3 mg
- Mebendazole
 - Oral liq 100 mg per 5 ml
 - Tab 100 mg

Antiprotozoals

- Artemether with lumefantrine
 - Tab 20 mg with lumefantrine 120 mg
- Artesunate
 - Inj 60 mg vial
- Atovaquone with proguanil hydrochloride
 - Tab 250 mg with proguanil hydrochloride 100 mg
- Mefloquine hydrochloride
 - Tab 250 mg
- Metronidazole
 - Topical gel 0.75%
 - Tab 200 mg
 - Tab 400 mg
 - Oral liq benzoate 200 mg per 5 ml
 - Suppos 500 mg
 - Inf 5 mg per ml, 100 ml
- Ornidazole
 - Tab 500 mg
- Pentamidine isethionate
 - Inj 300 mg
- Primaquine phosphate
 - Tab 7.5 mg
- Pyrimethamine
 - Tab 25 mg

Ectoparasitocides

- Gamma benzene hexachloride
 - Crm 1%

- Malathion (maldison)
 - Lotn 0.5%
 - Shampoo 1%
 - Permethrin
 - Crm 5%
 - Lotn 5%
- 4.3 The Subcommittee recommended that prescribing of all malaria treatments be subject to recommendation by ID physicians.
- 4.4 The Subcommittee considered that albendazole should be available in the Pharmaceutical Schedule for treatment of hydatids.
- 4.5 The Subcommittee considered that, as ivermectin 6 mg tablets are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML. The Subcommittee noted that the Discretionary Community Supply listing for ivermectin was for 6 mg tablets, and recommended that this be changed to 3 mg tablets.
- 4.6 The Subcommittee considered that, as mebendazole 100 mg chocolate squares are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.
- 4.7 The Subcommittee considered that, as pyrantel embonate is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 4.8 The Subcommittee considered that, as metronidazole vaginal gel 0.75%, topical gel 0.5% and 1 g suppositories are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they should not be included in a national PML.
- 4.9 The Subcommittee noted that tinidazole is no longer in common use in DHB hospitals, and considered that it did not need to be included in a national PML.
- 4.10 The Subcommittee considered that, as malathion with permethrin spray is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 4.11 The Subcommittee considered that, as malaleuca oil is not subsidised in the Pharmaceutical Schedule, and as it does not have a niche use within hospitals, it should not be included in a national PML.
- 4.12 The Subcommittee considered that praziquantel should be included in a national PML, but considered that it would not be necessary for both tablet strengths (500 mg and 600 mg) to be included, and requested feedback from clinicians as to which would be preferred.
- 4.13 The Subcommittee considered that further information was needed before making a recommendation on levamisole. The Subcommittee requested feedback from ID physicians on the indications for which it is used, and whether there should be any restrictions around its use.
- 4.14 The Subcommittee noted that artesunate is likely to be used in preference to parenteral quinine in the future.

- 4.15 The Subcommittee considered that further information was needed before making a recommendation in relation to chloroquine phosphate (tab 250 mg), and requested feedback from ID physicians on the need for this in the treatment of malaria. Members noted that the Subcommittee has previously requested information on this agent from rheumatologists.
- 4.16 The Subcommittee noted that it has previously made a recommendation to list hydroxychloroquine phosphate tab 200 mg in a national PML.
- 4.17 The Subcommittee considered that a parenteral form of quinine should be listed in a national PML, but was uncertain as to which of the two currently available preparations (hydrochloride or dihydrochloride) should be included. The Subcommittee requested further information on these agents before making a recommendation.
- 4.18 The Subcommittee noted that sodium stibogluconate and nitazoxanide were used occasionally, but were not regularly required, but considered that they should be included in a national PML.

5 Antiretrovirals

- 5.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Antiretrovirals heading.
- 5.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

Non-nucleosides reverse transcriptase inhibitors

- Efavirenz
 - Tab 50 mg
 - Tab 200 mg
 - Tab 600 mg
- Etravirine
 - Tab 100 mg
- Nevirapine
 - Oral suspension 10 mg per ml
 - Tab 200 mg

Nucleosides reverse transcriptase inhibitors

- Abacavir sulphate
 - Oral liq 20 mg per ml
 - Tab 300 mg
- Abacavir sulphate with lamivudine
 - Tab 600 mg with lamivudine 300 mg
- Didanosine [DDI]
 - Cap 125 mg
 - Cap 200 mg
 - Cap 250 mg

- Cap 400 mg
- Emtricitabine
 - Cap 200 mg
- Lamivudine
 - Oral liq 10 mg per ml
 - Tab 150 mg
- Stavudine
 - Cap 30 mg
 - Cap 40 mg
 - Powder for oral soln 1 mg per ml
- Zidovudine [AZT]
 - Cap 100 mg
 - Inf 10 mg per ml, 20 ml
 - Oral liq 10 mg per ml
- Zidovudine [AZT] with lamivudine
 - Tab 300 mg with lamivudine 150 mg

Protease inhibitors

- Atazanavir sulphate
 - Cap 150 mg
 - Cap 200 mg
- Darunavir
 - Tab 300 mg
 - Tab 400 mg
 - Tab 600 mg
- Indinavir
 - Cap 200 mg
 - Cap 400 mg
- Lopinavir with ritonavir
 - Oral liq 80 mg with ritonavir 20 mg per ml
 - Tab 100 mg with ritonavir 25 mg
 - Tab 200 mg with ritonavir 50 mg
- Ritonavir
 - Tab 100 mg
 - Oral liq 80 mg per ml

Strand transfer inhibitors

- Raltegravir potassium
 - Tab 400 mg

- 5.3 The Subcommittee recommended that an oral liquid formulation of efavirenz should be included in a national PML, and considered that PHARMAC should consider this for listing in the Pharmaceutical Schedule.
- 5.4 The Subcommittee considered that enfuvirtide was in declining use, and did not need to be included in a national PML.
- 5.5 The Subcommittee noted that stavudine 20 mg capsules were being discontinued, and considered that it was not necessary for these to be included in a national PML.

- 5.6 The Subcommittee noted that ritonavir cap 100 mg is currently being replaced by the tablet formulation.
- 5.7 The Subcommittee considered that the listing of antiretrovirals in a national PML should be subject to restrictions that are in line with the restrictions on these products in the Pharmaceutical Schedule.

6 Antivirals

- 6.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Antivirals heading.
- 6.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

Hepatitis B

- Adefovir dipivoxil
 - Tab 10 mg
- Entecavir
 - Tab 0.5 mg
- Lamivudine
 - Oral liq 5 mg per ml
 - Tab 100 mg
- Tenofovir disoproxil fumarate
 - Tab 300 mg

Herpesviridae

- Aciclovir
 - Crm 5%
 - Inf 25 mg per ml, 10 ml
 - Tab dispersible 200 mg
 - Tab dispersible 400 mg
 - Tab dispersible 800 mg
- Cidofovir
 - Inj 75 mg per ml, 5 ml
- Foscarnet sodium hexahydrate
 - Inf 24 mg per ml, 250 ml
- Ganciclovir
 - Inf 500 mg
- Valaciclovir
 - Tab 500 mg
- Valganciclovir
 - Tab 450 mg

Influenza

- Influenza vaccine
 - Inj
 - Oseltamivir
 - Cap 75 mg
 - Oral liq 12 mg per ml
- 6.3 The Subcommittee considered that the listing of adefovir dipovoxil, entecavir, lamivudine, tenofovir disoproxil fumarate and valaciclovir in a national PML should be subject to restrictions that are in line with the restrictions on each of these products in the Pharmaceutical Schedule.
- 6.4 The Subcommittee considered that, as entecavir tab 1 mg are not subsidised in the Pharmaceutical Schedule, and as they do not have a niche use within hospitals, they not be included in a national PML.
- 6.5 The Subcommittee noted that ganciclovir 250 mg capsules are not widely used in DHB hospitals, and noted that these had been superseded by the availability of valganciclovir. The Subcommittee recommended that these not be included in a national PML.
- 6.6 The Subcommittee noted that palivizumab is not widely used in DHB hospitals, and is not subsidised in the Pharmaceutical Schedule. The Subcommittee recommended that it not be included in a national PML.
- 6.7 The Subcommittee noted that aciclovir 5% cream is not subsidised in the Pharmaceutical Schedule, and considered that it would be appropriate for this to be listed in a national PML without also being funded in the community.
- 6.8 The Subcommittee recommended that the prescribing of cidofovir be subject to recommendation by ENT physicians or ID physicians.
- 6.9 The Subcommittee noted that the Transplant Immunosuppressant Subcommittee has recommended that valganciclovir be listed in the Pharmaceutical Schedule, and agreed with this recommendation. The Subcommittee considered that the restrictions for this in a national PML and the Pharmaceutical Schedule should be aligned, but deferred a recommendation on that restriction pending outcome of an upcoming review by PTAC of a submission by the Haematology Society.
- 6.10 The Subcommittee noted that there is use of vaccines other than influenza vaccine within hospitals. The Subcommittee noted that PHARMAC's scope has historically excluded vaccines, but considered that exclusion of these from the scope of the PML would be problematic.

7 Immune Modulators

- 7.1 The Subcommittee reviewed the information from DHB hospitals and PHARMAC in relation to products under the Immune Modulators heading.
- 7.2 The Subcommittee noted that the following pharmaceuticals are commonly used in DHB hospitals and/or are fully subsidised in the Pharmaceutical Schedule and recommended they be included in a national preferred medicines list (PML) without need for further prioritisation:

- Interferon alpha-2a
 - Inj 3 m iu prefilled syringe
 - Inj 4.5 m iu prefilled syringe
 - Inj 6 m iu prefilled syringe
 - Inj 9 m iu prefilled syringe
 - Inj 18 m iu prefilled syringe
- Interferon alpha-2a with ribavirin
 - Inj 18 m iu multidose cartridge with ribavirin tab 200 mg
- Interferon alpha-2b
 - Inj 18 m iu, 1.2 ml multidose pen
 - Inj 30 m iu, 1.2 ml multidose pen
 - Inj 60 m iu, 1.2 ml multidose pen
- Pegylated interferon alpha-2a
 - Inj 135 µg prefilled syringe
 - Inj 180 µg prefilled syringe
- Pegylated interferon alpha-2a with ribavirin
 - Inj 135 µg prefilled syringe with ribavirin tab 200 mg
 - Inj 180 µg prefilled syringe with ribavirin tab 200 mg

7.3 The Subcommittee considered that the listing of pegylated interferon alpha-2a products in a national PML should be subject to restrictions that are in line with the restrictions on these products in the Pharmaceutical Schedule.

7.4 The Subcommittee considered that further advice was needed before making a recommendation on the listing of interferon gamma in a national PML. Members noted that interferon gamma is used in Auckland, and requested more information on the indications for which it is used, and the perceived benefits of this treatment.

Hospital Pharmaceuticals Subcommittee – 5 July 2011

8 Matters Arising

- 8.1 The Subcommittee noted that lincomycin is considered to be a standard anti-infective agent in the storage of heart valves at Auckland DHB, and recommended that it be included in a national PML.
- 8.2 The Subcommittee noted that it had deferred making a recommendation on the listing of fusidic acid injection in a national PML, and noted that this was recently used in Waikato at the request of clinicians at Starship hospital.
- 8.3 The Subcommittee noted that interferon alpha-2a inj 4.5 m iu and inj 18 m iu, and interferon alfa-2a with ribavirin are no longer subsidised in the Pharmaceutical Schedule, and considered that there was not a need for these to be included in a national PML.
- 8.4 The Subcommittee noted that it had previously deferred a recommendation on the inclusion of interferon gamma in a national PML. Members noted that this is indicated to reduce the frequency of infection in patients with chronic granulomatous disease, and that it has been used in Auckland DHB for this purpose. The Subcommittee recommended that interferon gamma (inj 100 µg in 0.5 ml vial) be included in a national PML.

Anti-Infective Subcommittee – 22 February 2012

9 Antimycobacterials

9.1 The Subcommittee reviewed a series of recommendations by the Hospital Pharmaceuticals Subcommittee in regards to which pharmaceuticals relevant to antimycobacterial treatment should be included in a national Preferred Medicines List (PML). The Subcommittee also reviewed the responses and comments on the draft recommendations that PHARMAC had received from relevant colleges and professional societies. Except where specific comment has been made, the Subcommittee agreed with the recommendations of the Hospital Pharmaceuticals Subcommittee.

Antileprotics

9.2 In relation to dapsona and clofazamine, the Subcommittee recommended that these products be restricted to Infectious Disease physicians, Clinical Microbiologists and Dermatologists in both the Hospital and Community settings

Antituberculotics

9.3 In relation to cycloserine, ethambutol hydrochloride, isoniazid, isoniazid with rifampicin, para-aminosalicylic acid, prothionamide and pyrazinamide the Subcommittee recommended that these products be restricted to Infectious Disease physicians, Clinical Microbiologists and Respiratory physicians in both the Hospital and Community settings.

9.4 In relation to prothionamide the Subcommittee recommended this be available through community pharmacy, with the same restriction that applies to the other antituberculotics.

9.5 In relation to rifabutin the Subcommittee recommended that this be restricted to Infectious Disease physicians, Clinical Microbiologists, Respiratory physicians and Gastroenterologists in both the Hospital and Community settings.

9.6 In relation to rifampicin the Subcommittee recommended this be restricted to Infectious Disease physicians, Clinical Microbiologists, Paediatricians, Dermatologists, Respiratory Physicians and Public Health clinicians in both the Hospital and Community.

9.7 In relation to rifampicin the Subcommittee recommended that the following restriction be applied in the community outside of the prescriber type restriction using a protocol for recurrent staphylococcus infection, potentially using the following restriction:

“For confirmed recurrent *Staphylococcus aureus* infection in combination with other effective anti-staphylococcal antimicrobial based on susceptibilities”.

9.8 In relation to ethionamide the Subcommittee considered that there was no requirement to include this pharmaceutical, but noted that if prothionamide was not available that access would be required.

9.9 In relation to capreomycin the Subcommittee considered there was no requirement to include this pharmaceutical in the PML, but there would possibly be one or two exceptional circumstances applications per annum.

10 Antiparasitics

Anthelmintics

- 10.1 With respect to albendazole the Subcommittee considered this should be restricted to Infectious Disease physicians and Clinical Microbiologists. The Subcommittee noted that albendazole should be available on discharge for short term treatment of strongyloidiasis, toxocariasis, ancylostomiasis, neurocysticercosis and schistosomiasis.
- 10.2 With respect to albendazole the Subcommittee considered this should be listed in the Community Pharmaceutical Schedule for the treatment of hydatids with a six month Special Authority with renewal.
- 10.3 With respect to ivermectin the Subcommittee considered that this is restricted to Infectious Disease physicians, Dermatologists and Clinical Microbiologists. The Subcommittee noted its previous recommendation regarding ivermectin for scabies in the community.
- 10.4 With respect to ivermectin the Subcommittee considered that this should be available in the community under Special Authority or on discharge for short term treatment of filariasis, cutaneous larva migrans (creeping eruption) and strongyloidiasis.
- 10.5 The Subcommittee noted that levamisole is not used as an anti-infective agent, and recommended that PHARMAC seek the advice of renal physicians as to the use of this medication.
- 10.6 With respect to praziquantel the Subcommittee considered that as the 600 mg presentation was undergoing registration in New Zealand that this would be the preferred presentation on the PML. Members considered that this should be available in the community for worm infestations.

Antiprotozoals

- 10.7 With respect to artemether with lumefantrine, artesunate, atovaquone with proguanil hydrochloride, mefloquine hydrochloride, nitazoxanide, pentamidine isethionate, primaquine phosphate and sodium stibogluconate the Subcommittee considered these should be restricted to Infectious Disease physicians and Clinical Microbiologists.
- 10.8 With respect to pyrimethamine the Subcommittee considered this should be restricted to Infectious Disease physicians, Clinical Microbiologists and obstetricians.
- 10.9 The Subcommittee considered that prescriber-level restrictions would not be necessary for ornidazole.
- 10.10 With respect to pyrimethamine the Subcommittee considered this should be listed in the community under Special Authority for the treatment of toxoplasmosis in patients with HIV, for pregnant patients for the term of the pregnancy and for infants with congenital toxoplasmosis until 12 months of age.
- 10.11 With respect to primaquine the Subcommittee considered this should be available in the community for vivax or ovale malaria for up to 21 days of treatment.

- 10.12 With respect to chloroquine phosphate the Subcommittee recommended this be included on the PML and restricted to Infectious Disease physicians and Clinical Microbiologists.
- 10.13 With respect to quinine dihydrochloride and quinine hydrochloride the Subcommittee considered that either or both could be listed on the PML, restricted to Infectious Disease physicians and Clinical Microbiologists.
- 10.14 The Subcommittee noted that the Hospital Pharmaceuticals Subcommittee had not considered the inclusion of spiramycin 500 mg. The Subcommittee recommended that this be included in a national PML, and that it be restricted to Infectious Disease physicians, Clinical Microbiologists and Obstetricians

11 Antiretrovirals

- 11.1 The Subcommittee recommended that all antiretroviral agents be restricted to Named Antiretroviral prescribers.

Fusion inhibitors

- 11.2 The Subcommittee considered that, while there did not appear to be a current need for enfuvirtide, it was likely to be required again in the future, and so should be included in a national PML.

Non-Nucleoside Reverse Transcriptase Inhibitors

- 11.3 The Subcommittee considered that an oral liquid form of efavirenz should be listed in the Community under the same restriction applying to all other antiretrovirals

12 Antifungals

Imidazoles

- 12.1 The Subcommittee recommended that ketoconazole tablets be restricted to Infectious Disease physicians and Clinical Microbiologists. The Subcommittee noted that there may be a need to extend this to include Dermatologists, and recommended PHARMAC seek Dermatology input into this matter.
- 12.2 The Subcommittee noted that econazole nitrate foaming solution is partially subsidised in the community, and recommended that PHARMAC seek an opinion from the Dermatology Subcommittee as to whether this should be fully funded.

Polyene antimycotics

- 12.3 The Subcommittee recommended that amphotericin B infusions be restricted to Infectious Disease physicians, Clinical Microbiologists, Haematologists, Oncologists, Transplant Specialists and Respiratory physicians.
- 12.4 With respect to both injectable presentations of amphotericin B the Subcommittee recommended that it be restricted to use in proven or probable invasive fungal infection under an established protocol, with use for possible invasive fungal infection being limited to a multidisciplinary team including Infectious Disease physicians or Clinical Microbiologists and other specialities as appropriate.

Triazoles

- 12.5 The Subcommittee considered that all forms of fluconazole should be restricted to Senior Medical Officers.
- 12.6 With respect to itraconazole the Subcommittee considered that this be restricted to Infectious Disease physicians, Clinical Microbiologists and Clinical immunologists.
- 12.7 The Subcommittee recommended that itraconazole oral liquid should be subsidised in the community for congenital immune deficiency under a Special Authority with a six month renewal.

Other antifungals

- 12.8 With respect to caspofungin the Subcommittee considered this should be restricted to Infectious Disease physicians, Clinical Microbiologists, Haematologist, Oncologists, Transplant Specialists and Respiratory physicians.
- 12.9 With respect to caspofungin the Subcommittee noted that anidulafungin or micafungin would be appropriate substitutes depending on price.
- 12.10 With respect to flucytosine the Subcommittee considered this should be restricted to Infectious Disease physicians and Clinical Microbiologists.
- 12.11 With respect to terbinafine cream the Subcommittee noted this could be considered for listing in the Community if it was cost neutral to the other funded topical treatments.

13 Voriconazole

- 13.1 The Subcommittee noted the November 2010 PTAC relating to voriconazole, particularly the request for Special Authority criteria for invasive aspergillus and resistant candidiasis.
- 13.2 The Subcommittee considered the difficulty in community funding for invasive aspergillus revolved around possible infections rather than proven or probable cases. Members noted that the threshold for initiating treatment for invasive aspergillus would depend on the underlying disease state and how immunocompromised the patient was.
- 13.3 The Subcommittee noted that typically a patient would be initiated in hospital and this treatment would be required for discharge and therefore the treatment decision would be made prior to applying for the community funding.
- 13.4 The Subcommittee considered that a multidisciplinary team should be used to evaluate possible invasive aspergillus infections prior to initiation of treatment and recommended that this be a restriction on the PML for injectable amphotericin B and voriconazole. The Subcommittee further recommended that the multidisciplinary team include Infectious Disease physicians or Clinical Microbiologists and any other relevant consultant.
- 13.5 The Subcommittee considered the previous prophylaxis treatment, if any, would be an important consideration prior to initiating voriconazole due to potential cross resistance.

- 13.6 The Subcommittee considered that for proven or probable invasive aspergillus a Special Authority should allow one month of treatment with a renewal as follows:

Application from Haematologist or Infectious Disease Physician
Approvals valid for one month for patients meeting the following criteria

- 1) Patient is immunocompromised
- 2) Patient has proven or probable invasive aspergillus infection

Renewal
Approvals valid for one month for patients meeting the following criteria

- 1) Patient remains immunocompromised
- 2) Patient continues to require treatment for proven or probable invasive aspergillus infection

- 13.7 The Subcommittee considered that for possible invasive aspergillus infection a Special Authority as follows would be appropriate

Application from Haematologist or Infectious Disease Physician
Approvals valid for one month for patients meeting the following criteria

- 1) Patient is immunocompromised
- 2) Patient has possible invasive aspergillus infection
- 3) Applicant is part of a multidisciplinary team including Infectious Disease physician

Renewal
Approvals valid for one month for patients meeting the following criteria

- 1) Patient remains immunocompromised
- 2) Patient continues to require treatment for possible invasive aspergillus infection

- 13.8 The Subcommittee considered that voriconazole should be funded for resistant candidiasis infections and other moulds, such as *Fusarium* spp. or *Scedosporium* spp.

- 13.9 The Subcommittee considered that the following Special Authority for resistant candidiasis infections and other moulds would be appropriate

Application from Haematologist or Infectious Disease Physician
Approvals valid for one month for patients meeting the following criteria

- 1 Patient is immunocompromised, and
- 2 either
 - 2.1 Patient has fluconazole resistant candidiasis or
 - 2.2 Patient has mould strain such as *Fusarium* spp. and *Scedosporium* spp
- 3 Applicant is part of a multidisciplinary team including Infectious Disease physician

Renewal
Approvals valid for one month for patients meeting the following criteria

- 1) Patient is immunocompromised, and
- 2) Either
 - 3.1 Patient continues to require treatment for resistant candidiasis or
 - 3.2 Patient continues to require treatment for one of the following mould strains..
- Applicant is part of a multidisciplinary team including Infectious Disease physician+

- 13.10 The Subcommittee endorsed PTACs high priority for listing of voriconazole for invasive aspergillus and resistant candidiasis and recommended listing for mould infection with a high priority.

Anti-Infective Subcommittee – 3 March 2012

14 Posaconazole

- 14.1 The Subcommittee noted the November 2010 PTAC minute regarding the funding of posaconazole for prophylaxis of invasive aspergillus in immunocompromised patients. Members noted that the clinical opinion on when to use posaconazole for prophylaxis was based on the heterogeneity of patient risks notably environmental and clinical diagnosis and different clinical approaches. The Subcommittee noted that the risk of aspergillus infection differs between DHB hospitals due to environmental factors, for example filtration systems, construction work etc.
- 14.2 The Subcommittee considered there was a clinical need to have accurate information technology infrastructure in the hospital setting to monitor outcomes and audit the effectiveness of treatments including use of posaconazole for aspergillus prophylaxis.
- 14.3 The Subcommittee considered that posaconazole prophylaxis would be very effective in highly immunocompromised patients at high risk for infection such as patients with acute myeloid leukemia (AML) and selected patients undergoing bone marrow transplant (BMT).
- 14.4 The Subcommittee considered that patients receiving treatment for acute lymphoblastic leukemia (ALL) were not at such a high risk and that invasive fungal infections were handled differently. Members considered that these patients should be treated in rooms with HEPA filtration and given fluconazole prophylaxis with an invasive fungal infection being treated with liposomal amphotericin.
- 14.5 The Subcommittee considered that patients undergoing solid organ transplantation did not commonly require posaconazole prophylaxis early post transplant. Members noted that posaconazole was not well absorbed early post transplant. Members considered there may be a place for posaconazole prophylaxis for selected high risk patients.
- 14.6 The Subcommittee noted the recommendations of Slavin et al (Internal Medicine Journal 2008; 38: 468-476) for antifungal prophylaxis in patients with haematological malignancy or profound neutropenia lasting more than 10 days. Members considered that posaconazole prophylaxis would be appropriate for patients with AML undergoing intensive induction, or re-induction, chemotherapy, or high dose consolidation chemotherapy.
- 14.7 The Subcommittee considered that the risk factors for AML patients should be reviewed following induction. The Subcommittee considered that the cost effectiveness of primary prophylaxis would vary in certain situations and that unrestricted use may have significant cost implications. The Subcommittee considered it may be more appropriate to recommend posaconazole prophylaxis during consolidation cycles for those patients scheduled to proceed to allogeneic stem cell transplant and that those patients who were not likely to receive a transplant may not require ongoing prophylaxis during consolidation treatment.
- 14.8 The Subcommittee recommended that posaconazole should be listed on the Pharmaceutical Schedule for the prophylaxis of aspergillus, with high priority, subject to Special Authority criteria as follows:

Initial Application from Haematologist or Infectious Disease Physician
Approvals valid for 6 weeks for patients meeting the following criteria:

Both:

- 1 Either:
 - 1.1 Patient has acute myeloid leukemia; or
 - 1.2 Patient is planned to receive a stem cell transplant and is at high risk for aspergillus infection; and
- 2 Patient is to be treated with high dose Remission Induction therapy

Renewal Application from Haematologist or Infectious Disease Physician
Approvals valid for 6 weeks for patients meeting the following criteria:

Both

- 1 Patient has previously received posaconazole prophylaxis during Remission Induction therapy; and
- 2 Any of the following:
 - 2.1 Patient is to be treated with high dose Remission Re-induction therapy; or
 - 2.2 Patient is to be treated with high dose Consolidation therapy; or
 - 2.3 Patient is receiving a high risk stem cell transplant.

- 14.9 The Subcommittee considered that approximately 150 patients per annum would be eligible for posaconazole prophylaxis during induction/re-induction therapy.
- 14.10 The Subcommittee noted that current practice was to try to transplant all high risk AML patients. The Subcommittee also noted that some intermediate risk AML patients would also be considered for transplant and therefore approximately 30-40% of all AML patients would be considered for transplant. The Subcommittee considered that this would equate to 40-50 patients nationally being eligible for posaconazole prophylaxis during transplant and consolidation per annum.
- 14.11 The Subcommittee recommended that more accurate figures be requested regarding numbers of eligible cases nationally from the Haematology Society of Australia & New Zealand (HSANZ). The Subcommittee recommended that this minute be circulated to HSANZ for comment and to request proposals for indications/cases that would be recommended for primary prophylaxis with posaconazole.

15 Antivirals

- 15.1 The Subcommittee reviewed a series of recommendations by the Hospital Pharmaceuticals Subcommittee regarding antiviral pharmaceuticals to be included on the national Preferred Medicines List (PML). The Subcommittee also reviewed responses and comments on the draft recommendations that PHARMAC had received from relevant colleges, individuals and professional societies. Except where specific comment has been made, the Subcommittee agreed with the recommendations of the Hospital Pharmaceuticals Subcommittee.
- 15.2 Members noted that the Australasian Society for Infectious Diseases (ASID) had suggested that prescribing restrictions for some products include clinical virologists. The Subcommittee noted that there were no clinical virologists who could prescribe in New Zealand, and as such they should be not consulted for prescribing advice.

Hepatitis B

- 15.3 The Subcommittee considered that no patient should currently be using adefovir monotherapy for treatment of Hepatitis B. The Subcommittee considered that all

patients who were receiving adefovir monotherapy or adefovir plus lamivudine should be considered for tenofovir monotherapy.

- 15.4 Members noted that the current Special Authority for adefovir does not make it clear that patients could be changed to tenofovir. Members considered that a joint education campaign should be undertaken with PHARMAC and the New Zealand Society of Gastroenterology to encourage these patients to be switched.
- 15.5 The Subcommittee considered that criterion 7 of the the Special Authority for funding of entecavir “Not co-infected with HCV, HIV or HDV; and” was not strong enough, members recommended that this criteria should be amended state “Patient has been tested for HIV, HCV and HDV and is not co-infected; and”
- 15.6 The Subcommittee noted that certain patients on entecavir with renal failure may develop lacticacidosis and this could result in them requiring an emergency liver transplant. The Subcommittee considered that there may be 4 to 5 such patients per annum who would need to be switched to tenofovir tenofovir treatment. Members recommended that funding for these patients should be considered under the Named Patient Pharmaceutical Assessment scheme.

Herpesviradae

- 15.7 The Subcommittee noted that the Hospital Pharmaceuticals Subcommittee had recommended that aciclovir cream be included in a national PML. The Subcommittee considered there was no evidence to support the use of aciclovir cream and, and recommended that it not be included in the PML.
- 15.8 The Subcommittee considered that any restrictions relating to valganciclovir of the PML should match those proposed for its listing in the community.
- 15.9 The Subcommittee considered that foscarnet sodium hexahydrate and ganciclovir should be restricted to Infectious Disease Physician or Clinical Microbiologist.

Influenza

- 15.10 The Subcommittee considered that oseltamivir should be in the PML subject to local area guidelines.
- 15.11 The Subcommittee considered that there may be a role for zanamavir in immunocompromised patients with influenza resistant to oseltamivir. The Subcommittee recommended that PHARMAC invite a funding application from the supplier for its inclusion on the PML. Members noted that individuals could still be considered for funding under the Named Patient Pharmaceutical Assessment scheme.

Respiratory Syncytial Virus

- 15.12 The Subcommittee considered that the cost effectiveness of palivizumab was poor and recommended that palivizumab not be included on the PML. Members noted that there was interest in this product from the Paediatric Society, and recommended that PHARMAC invite a funding application from the Society for its inclusion on the PML. Members noted that individuals could still be considered for funding under the Named Patient Pharmaceutical Assessment scheme.

Immune Modulators

- 15.13 The Subcommittee noted that ribavirin tablets may be required in the future for use in triple therapy for hepatitis C.
- 15.14 The Subcommittee noted the Paediatric Society response regarding IV ribavirin and considered that IV ribavirin was required for paediatric transplant patients and recommended this be included in the PML.

16 Antibacterials

- 16.1 The Subcommittee reviewed a series of recommendations by the Hospital Pharmaceuticals Subcommittee regarding antibacterial treatments to be included in a national Preferred Medicines List (PML). The Subcommittee also reviewed responses and comments from relevant colleges, individuals and professional societies. Except where specific comment has been made, the Subcommittee agreed with the recommendations of the Hospital Pharmaceuticals Subcommittee.

Aminoglycosides

- 16.2 The Subcommittee recommended that amikacin should be restricted to Infectious Disease Physicians, Clinical Microbiologists and Respiratory Physicians.
- 16.3 The Subcommittee noted that the restrictions applying to gentamicin in the community were outdated and considered that it was no longer practice in New Zealand to prescribe gentamicin for cystic fibrosis or prophylaxis of endocarditis. Members considered that gentamicin had a place in treatment for complicated urinary tract infections in the community and recommended widening funded access. The Subcommittee recommended that the restriction applying to gentamicin in the community should be amended as follows (additions in bold, deletion in strikethrough):
- a) Only if prescribed for a dialysis ~~or cystic fibrosis patient or for prophylaxis of endocarditis~~ **or complicated urinary tract infection**; and
 - b) the prescription is endorsed accordingly.
- 16.4 The Subcommittee recommended that PHARMAC staff seek the advice of Renal Physicians with respect to the need for gentamicin use in dialysis.
- 16.5 The Subcommittee recommended that PHARMAC seek the advice of Intensivists and Surgeons as to the requirement for neomycin to be included on the PML.
- 16.6 The Subcommittee considered that paromomycin should be restricted to Infectious Disease Physicians and Clinical Microbiologists. The Subcommittee recommended that paromomycin should be funded in the community for cryptosporidium infection on the recommendation of an Infectious Disease Physician or Clinical Microbiologist.
- 16.7 The Subcommittee recommended that streptomycin should be restricted to Infectious Disease Physicians, Clinical Microbiologists and Respiratory Physicians.
- 16.8 The Subcommittee recommended that PHARMAC seek the advice of Renal Physicians regarding the need for tobramycin to be funded for dialysis patients.

- 16.9 The Subcommittee recommended that tobramycin 100 mg per 5 ml injection should be funded in the community for cystic fibrosis patients with the following restriction

‘Only if prescribed for cystic fibrosis patient and the prescription is endorsed accordingly’.

- 16.10 The Subcommittee considered that all the current strengths of amikacin were required on the PML and should remain funded.
- 16.11 The Subcommittee recommended that capreomycin not be included on the national PML at this time but noted that there would likely be some Named Patient Pharmaceutical Assessment applications for this pharmaceutical.

Carbapenems

- 16.12 The Subcommittee recommended that ertapenem, imipenem with cilastatin and meropenem should be restricted to Infectious Disease physicians and Clinical Microbiologists.
- 16.13 The Subcommittee noted that there was no requirement for doripenem to be included in the PML. Members noted that this would remain available under the Named Patient Pharmaceutical Assessment scheme.

Cephalosporins and cephamycins (first generation)

- 16.14 The Subcommittee considered that the restriction applying to cefazolin in the community should be amended as follows (additions in bold, deletion in strikethrough):
- Subsidised only if prescribed for ~~dialysis or cystic fibrosis patient~~ **cellulitis in accordance with a DHB protocol** and the prescription is endorsed accordingly

Cephalosporins and cephamycins (second generation)

- 16.15 The Subcommittee considered there was no clinical requirement for cefoxitin sodium inj 1 g to remain listed in the community.
- 16.16 The Subcommittee considered that there was no clinical requirement for cefuroxime sodium 750 mg inj and 1.5 g inj to remain listed in the community.
- 16.17 The Subcommittee recommended that no restriction be placed on cefuroxime sodium inj 750 mg and inj 1.5 g on the PML.

Cephalosporins and cephamycins (third generation)

- 16.18 The Subcommittee recommended that no restriction be placed on cefotaxime inj 500 mg and 1 g in the PML.
- 16.19 The Subcommittee recommended that ceftazidime inj 500 mg, inj 1g and inj 2g be restricted to Infectious Disease physicians, Clinical Microbiologists, Respiratory physicians, Haematologists and Oncologists on the PML.
- 16.20 The Subcommittee considered that restrictions would not be necessary for ceftriaxone sodium injections.

Cephalosporins and cephamycins (fourth generation)

- 16.21 The Subcommittee recommended that cefepime inj 1 g and inj 2 g be restricted to Infectious Disease physicians, Clinical Microbiologists, Haematologists and Oncologists on the PML.

Macrolides

- 16.22 The Subcommittee recommended that clarithromycin tab 250 mg, tab 500 mg and grans for oral liquid 125 mg per 5 ml be restricted as per the community listing. The Subcommittee recommended that clarithromycin inf 500 mg be restricted as per the community restrictions, with an additional provision to use it for community acquired pneumonia.
- 16.23 The Subcommittee noted an application from Dr Best for azithromycin for pertussis and neonatal ophthalmia and that PHARMAC would be presenting this to PTAC at its May 2012 meeting.
- 16.24 The Subcommittee recommended that PHARMAC staff seek an alternative liquid macrolide for paediatric use and suggested either roxithromycin dispersable tablets, clarithromycin liquid or azithromycin liquid.
- 16.25 The Subcommittee noted that if the price per unit of azithromycin was comparable to roxithromycin there would be no reason to maintain the restrictions in the community. The Subcommittee recommended that PHARMAC tender this product for open listing.

Penicillins

- 16.26 The Subcommittee noted that there was no requirement for benzathine benzylpenicillin inj to have a specific Discretionary Community Supply (DCS) listing as it was listed without restriction in the community.
- 16.27 The Subcommittee noted that there was no requirement for benzylpenicillin sodium inj to have a specific Discretionary Community Supply (DCS) listing as it was listed without restriction in the community.
- 16.28 The Subcommittee recommended that piperacillin with tazobactam inj be restricted to Infectious Disease physicians, Clinical Microbiologists, Respiratory physicians, Haematologists and Oncologists on the PML.
- 16.29 The Subcommittee recommended that ticarcillin with clavulanic acid inj be restricted to Infectious Disease physicians, Clinical Microbiologists, Respiratory physicians, Haematologists and Oncologists on the PML.
- 16.30 The Subcommittee considered that pivmecillin tab 200 mg tabkets should only be listed on the PML if it was listed in the Pharmaceutical Schedule. Members noted that pivmecillin would be required for extended-spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae if fosfomycin was not available.

Quinolones

- 16.31 The Subcommittee recommended that ciprofloxacin be restricted to Infectious Disease physicians and Clinical Microbiologists on the PML. The Subcommittee reiterated its advice from the 22 February 2012 meeting regarding the use of ciprofloxacin in the community.

16.32 The Subcommittee recommended that moxifloxacin be restricted to the indications covered under the Special Authority restriction in the community and that prescribing be limited to, or on the recommendation of, Infectious Disease physicians and Clinical Microbiologists.

16.33 The Subcommittee recommended that PHARMAC consider amending the restriction for norfloxacin as follows (additions in bold)

For urinary tract infection with proven resistance to a first line agent, or where a first line agent has failed.

Maximum of 6 tablets per prescription unless recommended by a specialist

16.34 The Subcommittee recommended retaining a Specialist recommendation for norfloxacin.

Tetracyclines

16.35 The Subcommittee recommended restricting tigecycline inj 50 mg to Infectious Disease physicians and Clinical Microbiologists on the PML.

16.36 The Subcommittee was not aware of any niche uses for minocycline 50 mg tab or 100 mg caps within hospitals, but recommended that the advice of the Dermatology Subcommittee also be sought on this matter.

Other Antibiotics

16.37 The Subcommittee recommended restricting aztreonam inj 1 g to Infectious Disease physicians and Clinical Microbiologists in the PML.

16.38 The Subcommittee recommended restricting chloramphenicol inj 1 g to Infectious Disease physicians and Clinical Microbiologists in the PML. The Subcommittee noted that an oral chloramphenicol would be beneficial and recommended PHARMAC seek a supplier.

16.39 The Subcommittee recommended that clindamycin caps 150 mg be restricted to Infectious Disease physicians and Clinical Microbiologists in the PML.

16.40 The Subcommittee recommended that clindamycin Inj 150 mg per ml, 4 ml be restricted to Infectious Disease physicians and Clinical Microbiologists in the PML, and recommended amending the community restriction to this also.

16.41 The Subcommittee recommended that colistin sulphomethate inj be restricted to Infectious Disease physicians, Clinical Microbiologists and Respiratory Physicians in the PML.

16.42 The Subcommittee recommended that daptomycin inj 350 mg, fusidic acid tab 250 mg, lincomycin inj 300 mg per ml, 2 ml, and linezolid tab 600 mg, oral liquid 20 mg per ml and inf 2 mg per ml, 300 ml be restricted to Infectious Disease physicians and Clinical Microbiologists in the PML.

16.43 The Subcommittee recommended that sulfadiazine sodium tab 500 mg should be listed on the Pharmaceutical Schedule for treatment of toxoplasmosis as per the DCS restrictions. The Subcommittee recommended that this be restricted to Infectious Disease physicians, Clinical Microbiologists and Obstetricians in the PML.

- 16.44 The Subcommittee noted that a liquid preparation of trimethoprim would be beneficial.
- 16.45 The Subcommittee recommended that PHARMAC amend the restriction applying to vancomycin inj 50 mg per ml, 10 ml to include treatment of clostridium difficile following metronidazole failure. The Subcommittee recommended restricting vacomycin inj 50 mg per ml, 10 ml to Infectious Disease physicians and Clinical Microbiologists in the PML.
- 16.46 The Subcommittee considered that clindamycin hydrochloride oral liq 75 mg per 5 ml should be included on the PML and restricted to Infectious Disease physicians and Clinical Microbiologists.
- 16.47 The Subcommittee noted that quinupristin with dalfopristin could be applied for under the Named Patient Pharmaceutical Assessment scheme.
- 16.48 The Subcommittee recommended fosfomycin grans 3 g sachet should be listed on the PML only if listed on the Pharmaceutical Schedule. The Subcommittee noted that this was preferred to pivmecillinam for extended-spectrum beta-lactamase (ESBL) - producing Enterobacteriaceae urinary tract infections.
- 16.49 The Subcommittee noted that fusidic acid inj 50 mg per ml, 10 ml could be applied for under the Named Patient Pharmaceutical Assessment scheme.

Anti-Infective Subcommittee – 31 May 2012

17 Cidofovir

- 17.1 The Subcommittee noted that the previous recommendation made for cidofovir in relation to a national Preferred Medicines List (PML) was not recorded, and PHARMAC staff were seeking the advice of the Subcommittee on potential prescribing restrictions.
- 17.2 The Subcommittee considered that cidofovir should be subject to recommendation by Infectious Disease Physicians, Clinical Microbiologists, Otolaryngologists and Oral Surgeons.

18 Voriconazole

- 18.1 The Subcommittee noted that the minute of the previous discussion relating to voriconazole did not include reference to Clinical Microbiologists. The Subcommittee recommended that Clinical Microbiologists should be included in the restriction for proven or probable invasive fungal infection for voriconazole, but not included in the possible fungal infection restriction for voriconazole.

19 Posaconazole

- 19.1 The Subcommittee noted that the minute of the previous discussion relating to posaconazole did not include reference to Clinical Microbiologists. The Subcommittee considered there was no requirement to include Clinical Microbiologists in this prescribing restriction.
- 19.2 The Subcommittee recommended that the Special Authority for posaconazole should include re-induction therapy as follows (changes from previous recommendation in bold):

Initial Application from Haematologist or Infectious Disease Physician

Approvals valid for 6 weeks for patients meeting the following criteria:

Both:

3 Either:

3.1 Patient has acute myeloid leukemia; or

3.2 Patient is planned to receive a stem cell transplant and is at high risk for aspergillus infection; and

4 Patient is to be treated with high dose Remission Induction therapy **or re-induction therapy**

Renewal Application from Haematologist or Infectious Disease Physician

Approvals valid for 6 weeks for patients meeting the following criteria:

Both

3 Patient has previously received posaconazole prophylaxis during Remission Induction therapy; and

4 Any of the following:

4.1 Patient is to be treated with high dose Remission Re-induction therapy; or

4.2 Patient is to be treated with high dose Consolidation therapy; or

4.3 Patient is receiving a high risk stem cell transplant.

20 Spiramycin

- 20.1 The Subcommittee noted that spiramycin was considered to be a first line agent for prophylaxis of toxoplasmosis in pregnant patients. The Subcommittee noted that for probable toxoplasmosis infection, a combination of pyrimethamine and sulphadiazine was considered to be first line treatment.
- 20.2 The Subcommittee considered that Infectious Disease Physicians and Clinical Microbiologists did not have experience in prescribing of spiramycin in this patient group and therefore should not be included in the restriction in a national PML. The Subcommittee recommended that spiramycin should be restricted to Maternal Fetal Medicine Specialists.
- 20.3 The Subcommittee considered that maternal foetal medicine physicians and maternal foetal medicine obstetricians should also be included in the restriction for pyrimethamine and sulphadiazine in a national PML.

21 Moxifloxacin

- 21.1 The Subcommittee noted its previous recommendation for moxifloxacin, namely that it should be restricted to Infectious Disease Physicians and Clinical Microbiologists. The Subcommittee noted the Named Patient Pharmaceutical Assessment (NPPA) applications for moxifloxacin since this recommendation. The Subcommittee noted that it was likely that into the future if a pharmaceutical was initiated in accordance with the PML restriction it was likely that treatment would be continued in the community.
- 21.2 The Subcommittee considered that moxifloxacin should be restricted in the hospital setting as there were many indications that moxifloxacin should not be used for, such as Legionella.
- 21.3 The Subcommittee considered that moxifloxacin should be available in a national PML for the following indications:
- tuberculosis (as per the community Special Authority criteria);
 - mycobacterium avium-intracellulare complex (as per the community Special Authority criteria);
 - immunocompromised patients with pneumonia that is unresponsive to first line treatment; and
 - pneumococcal pneumonia or other invasive disease highly resistant to other antibiotics.
- 21.4 The Subcommittee noted that PHARMAC should monitor usage of moxifloxacin nationally and provide this data to the Australasian Infectious Disease Society (New Zealand branch) to allow clinicians to peer review practice at different DHB hospitals.
- 21.5 The Subcommittee recommended that moxifloxacin be restricted to Infectious Disease Physicians and Clinical Microbiologists as well as the proposed restrictions.

22 Norfloxacin

- 22.1 The Subcommittee considered that the restriction for norfloxacin tablets in the hospital should reflect the community listing. The Subcommittee recommended that norfloxacin be restricted in a national PML to “uncomplicated urinary tract infection unresponsive to a first line agent or with proven resistance to first line agents.”

Hospital Pharmaceuticals Subcommittee – 5 June 2012

23 Review of Infections Recommendations

- 23.1 The Subcommittee reviewed its previous recommendations in relation to products in the Infections group, feedback from other organisations, and recommendations from the Anti-Infective Subcommittee.

Antiparasitics

- 23.2 The Subcommittee noted that it had previously deferred making a recommendation in relation to levamisole, and noted the feedback in relation to this. The Subcommittee recommended that PHARMAC seek a view on the need for this from Renal Physicians.
- 23.3 The Subcommittee noted that it had previously deferred making a recommendation in relation to praziquantel pending feedback on the dose required. The Subcommittee recommended that the 600 mg tablet be included in a national PML, and that the 500 mg tablet be excluded.
- 23.4 The Subcommittee noted that it had previously deferred making a recommendation in relation to chloroquine phosphate, and noted that the Anti-Infective Subcommittee had recommended that it be included in a national PML.
- 23.5 The Subcommittee noted that the Anti-Infective Subcommittee had recommended the inclusion of spiramycin in a national PML.

Antiretrovirals

- 23.6 The Subcommittee noted that it had previously recommended excluding enfuvirtide from a national PML, and noted that the Anti-Infective Subcommittee had recommended that it be included as the future need for this is unknown.

Antimycobacterials

- 23.7 The Subcommittee noted the Anti-Infective Subcommittee's recommendations in relation to prescribing restrictions for antituberculous agents. Members noted that isoniazid and rifampicin are used for patients at risk of tuberculosis reactivation due to biologic agents. The Subcommittee recommended that the prescriber restrictions for these be extended to include dermatology and internal medicine.

Antifungals

- 23.8 The Subcommittee noted that the Anti-Infective Subcommittee had recommended that ketoconazole be subject to a prescriber restriction. The Subcommittee considered that such a restriction was not necessary.
- 23.9 The Subcommittee noted that it had previously recommended against including econazole nitrate foaming solution in a national PML. Members noted that the Dermatology Subcommittee had considered that there were some benefits from this over other topical options, such as ketaconazole shampoo. The Subcommittee recommended that econazole nitrate foaming solution be included in a national PML.

23.10 The Subcommittee noted the Anti-Infective Subcommittee's recommendations in relation to prescribing restrictions for amphotericin B, voriconazole and posaconazole.

23.11 The Subcommittee noted the Anti-Infective Subcommittee's recommendations in relation to prescribing restrictions for caspofungin. The Subcommittee recommended that the prescribing restrictions for caspofungin match those proposed for amphotericin B.

Antivirals and Immune Modulators

23.12 The Subcommittee noted that the Anti-Infective Subcommittee had recommended excluding aciclovir cream from a national PML due to lack of evidence of benefit. The Subcommittee noted that aciclovir cream is widely used in DHB hospitals and recommended that it be included.

23.13 The Subcommittee noted that it had previously recommended including oseltamivir in a national PML. Members noted that, other than through Ministry of Health pandemic stocks, this was not subsidised in the community. The Subcommittee recommended that this be excluded from a national PML.

23.14 The Subcommittee noted the Anti-Infective Subcommittee's recommendations in relation to prescribing restrictions for valganciclovir.

23.15 The Subcommittee noted that the Anti-Infective Subcommittee had recommended that ribavirin injection be included in a national PML. The Subcommittee recommended that this be subject to recommendation by Infectious Disease Physicians, Clinical Microbiologists and Transplant Physicians.

Antibacterials

23.16 The Subcommittee noted that it had previously recommended including neomycin in a national PML. The Subcommittee noted that this was no longer available, and recommended that it not be included.

23.17 The Subcommittee recommended that tobramycin be subject to recommendation by Infectious Disease Physicians, Clinical Microbiologists and Respiratory Physicians.

23.18 The Subcommittee noted that it had deferred making a recommendation in relation to amikacin syringes. The Subcommittee recommended that all three forms of amikacin syringe (25 mg in 5 ml, 50 mg in 10 ml, 75 mg in 5 ml) be included in a national PML.

23.19 The Subcommittee noted that the Anti-Infective Subcommittee had recommended that ceftazidime, cefepime, piperacillin with tazobactam and ticarcillin with clavulanic acid be subject to prescriber restrictions that included Oncologists and Haematologists. The Subcommittee considered that it was not necessary to specify Oncologists and Haematologists in these restrictions, as such use would be under protocol, and therefore provided for already.

23.20 The Subcommittee noted the Anti-Infective Subcommittee's recommendation in relation to prescribing restrictions for clarithromycin. The Subcommittee recommended that these restrictions be as follows:

Clarithromycin 250 mg tablet and oral liquid

1. Atypical mycobacterial infection; or
2. Mycobacterium tuberculosis infection where there is drug resistance or intolerance to standard pharmaceutical agents.

Clarithromycin 500 mg tablet

1. Helicobacter pylori eradication.

Clarithromycin infusion

1. Atypical mycobacterial infection; or
2. Mycobacterium tuberculosis infection where there is drug resistance or intolerance to standard pharmaceutical agents; or
3. Community-acquired pneumonia (clarithromycin is not to be used as the first line macrolide).

- 23.21 The Subcommittee noted that it had previously recommended against including erythromycin stearate in a national PML. Members noted that while this is used as a prokinetic agent, erythromycin ethyl succinate could be used as an alternative.
- 23.22 The Subcommittee noted the Anti-Infective Subcommittee's recommendation in relation to an indication based prescribing restriction for moxifloxacin.
- 23.23 The Subcommittee noted that the Anti-Infective Subcommittee's recommendation in relation to prescribing restrictions for norfloxacin. Members noted that from a resistance perspective, it would not be worth restricting norfloxacin without also restricting other quinolones.
- 23.24 The Subcommittee noted that it had previously deferred making a recommendation in relation to minocycline. The Subcommittee recommended that the 50 mg tablet be included in a national PML, but that the 100 mg capsule be excluded.
- 23.25 The Subcommittee noted that the Anti-Infective Subcommittee's recommendation in relation to prescribing restrictions for clindamycin. Members noted that clindamycin is used in treating cellulitis and that such a restriction may prove problematic, although members also noted that this would generally be covered by antimicrobial guidelines. Members noted that the same situation would likely apply to the use of vancomycin for C. difficile infection.
- 23.26 The Subcommittee recommended that teicoplanin be subject to recommendation by Infectious Disease Physicians and Clinical Microbiologists.

Pharmacology and Therapeutics Advisory Committee – 2 & 3 August 2012

24 Hospital Pharmaceuticals Review - Infections

- 24.1 The Committee considered a list of pharmaceuticals under consideration for use in DHB hospitals under the Infections heading, including advice from the Hospital Pharmaceuticals Subcommittee and the Anti-Infective Subcommittee. Except where indicated, the Committee agreed with the recommendations by the subcommittees.
- 24.2 The Committee recommended that the prescriber restrictions for chloroquine phosphate and mefloquine hydrochloride be extended to include dermatologists and rheumatologists.
- 24.3 The Committee recommended that the prescriber restrictions for itraconazole be extended to include dermatologists.
- 24.4 The Committee agreed with the recommendation of the Hospital Pharmaceuticals Subcommittee that the prescribing restrictions for caspofungin should be aligned with amphotericin B.
- 24.5 The Committee recommended that aciclovir cream not be included in a national PML.
- 24.6 The Committee considered that use of piperacillin with tazobactam, ticarcillin with clavulanic acid, ceftazidime and cefepime within oncology, haematology and respiratory medicine is protocol-driven, and as such these specialities would not need to be included in the prescriber restrictions for these agents.
- 24.7 The Committee recommended that teicoplanin be subject to recommendation by infectious diseases physicians and clinical microbiologists.