Pneumocystis Jirovecii

First Line

Co-trimoxazole PO 480mg od for 3 months.

On a case by case basis, individual patients (prior immunosuppression burden, persistent leucopaenia and previous opportunistic infection) may be judged to be higher risk of PJP and prophylaxis extended to 6 months or longer.

If documented allergy to co-trimoxazole consider desensitisation regimen a soon as patient able to tolerate oral medicines post-transplant. This may be attempted in patients with a non-severe (grade 3 or less) co-trimoxazole reaction. It should not be attempted in patients with a grade 4 reaction to co-trimoxazole or other sulfa drugs. Toxicities can be graded as follows in Table 1.

Table 1: Grade 1-4 Co-trimoxazole toxicity

Toxicity	Clinical description
Grade 1	Erythema
Grade 2	Diffuse maculopapular rash, dry desquamation
Grade 3	Vesiculation, mucosal ulceration
Grade 4	Exfoliatie dermatitis, Stevens-Johnson syndreome or erythema multiforms, moist desquamation

If a minor reaction occurs during the desensitisation regimen, repeat the same step for an additional day and progress to next step if the reaction subsides. If the reaction worsens, stop desensitisation. Consider giving concurrent antihistamine (i.e. cetirizine 10mg once daily), commenced 1 day prior to starting the desensitisation regimen.

Table 2 – Co-trimoxazole desensitisation regimen

Step	Dose
Day 1	80mg sulfamethoxazole + 16mg trimethoprim (1ml oral suspension)

Day 2	160mg sulfamethoxazole + 32mg trimethoprim (2ml oral suspension)
Day 3	240mg sulfamethoxazole + 48mg trimethoprim (3ml oral suspension)
Day 4	320mg sulfamethoxazole + 64mg trimethoprim (4ml oral suspension)
Day 5	400mg sulfamethoxazole + 80mg trimethoprim ie 1 x 480mg tablet

Co-trimoxazole oral suspension is 400mg sulfamethoxazole + 80mg trimethoprim/5ml.

Second Line

Dapsone PO 100mg OD. Consider dose reduction to 50mg OD in severe renal dysfunction (creatinine clearance <10ml/min). Alternatives such as atovaquone are also available. It is suggested to discuss with Microbiology if second line agents are required.

After late treatment of Acute Rejection: Prophylaxis should be re-instigated for at least 3 months after late treatment with either pulsed IV methlyprednisolone or ATG.