9. Curran MP, Keating GM. Mycophenolate sodium delayed release: prevention of renal transplant rejection. *Drugs* 2005; **65:** 799–805.
10. Manzia TM, *et al.* Use of mycophenolate mofetil in liver transplantation: a literature review. *Transplant Proc* 2005; **37:** 2616–17.
11. Ciancio G, *et al.* Review of major clinical trials with mycophenolate mofetil in renal transplantation. *Transplantation* 2005; **80** (suppl 2): S191–S200.
12. Srinivas TR, *et al.* The impact of mycophenolate mofetil on long-term outcomes in kidney transplantation. *Transplantation* 2005; **80** (suppl 2): S211–S220.
13. Kobashigawa JA, Meiser BM. Review of major clinical trials with mycophenolate mofetil in cardiac transplantation. *Transplantation* 2005; **80** (suppl 2): S235–S243.
14. Kaplan B. Enteric-coated mycophenolate sodium (Myfortic): an overview of current and future use in transplantation. *Drugs* 2006; **66** (suppl 2): 1–8.
15. Kobashigawa JA, *et al.* Similar efficacy and safety of enteric-coated mycophenolate sodium (EC-MPS, Myfortic) compared with mycophenolate mofetil (MMF) in de novo heart transplant recipients: results of a 12-month, single-blind, randomized, parallel-group, multicenter study. *J Heart Lung Transplant* 2006; **25:** 935–41.
16. Zimmerhackl LB, *et al.* Mycophenolate mofetil (Cellcept) in pediatric renal transplantation. *Transplant Proc* 2006; **38:** 2038–40.
17. Schmeding M, *et al.* Mycophenolate mofetil in liver transplantation—is monotherapy safe? *Clin Transplant* 2006; **20** (suppl 17): 75–9.

Pemphigus and pemphigoid. Mycophenolate mofetil has been used successfully in the treatment of pemphigus and pemphigoid (p.1582), both with prednisolone[1-3] and alone.[4] In a randomised, non-blinded study,[5] adjuvant mycophenolate mofetil was found to be as effective as adjuvant azathioprine; corticosteroid-sparing effects were similar and there was a trend towards fewer adverse effects with mycophenolate.

1. Enk AH, Knop J. Mycophenolate is effective in the treatment of pemphigus vulgaris. *Arch Dermatol* 1999; **135:** 54–6.
2. Williams JV, *et al.* Use of mycophenolate mofetil in the treatment of paraneoplastic pemphigus. *Br J Dermatol* 2000; **142:** 506–8.
3. Powell AM, *et al.* An evaluation of the usefulness of mycophenolate mofetil in pemphigus. *Br J Dermatol* 2003; **149:** 138–45.
4. Bredlich R-O, *et al.* Mycophenolate mofetil monotherapy for pemphigus vulgaris. *Br J Dermatol* 1999; **141:** 934.
5. Beissert S, *et al.* A comparison of oral methylprednisolone plus azathioprine or mycophenolate mofetil for the treatment of pemphigus. *Arch Dermatol* 2006; **142:** 1447–54.

Polymyositis and dermatomyositis. Mycophenolate mofetil has been reported to be of benefit in refractory cases of polymyositis and dermatomyositis (p.1510), allowing for tapering of corticosteroid doses.[1-3] Despite benefit in 6 out of 10 patients in another study,[4] 3 patients developed opportunistic infection, which was fatal in 1 case. While acknowledging that other factors may have had a role in this, the authors advised caution in the use of mycophenolate in dermatomyositis.

1. Gelber AC, *et al.* Mycophenolate mofetil in the treatment of severe skin manifestations of dermatomyositis: a series of 4 cases. *J Rheumatol* 2000; **27:** 1542–5.
2. Majithia V, Harisdangkul V. Mycophenolate mofetil (CellCept): an alternative therapy for autoimmune inflammatory myopathy. *Rheumatology (Oxford)* 2005; **44:** 386–9.
3. Edge JC, *et al.* Mycophenolate mofetil as an effective corticosteroid-sparing therapy for recalcitrant dermatomyositis. *Arch Dermatol* 2006; **142:** 65–9.
4. Rowin J, *et al.* Mycophenolate mofetil in dermatomyositis: is it safe? *Neurology* 2006; **66:** 1245–7.

Primary biliary cirrhosis. Despite initial reports[1] of benefit with mycophenolate mofetil in the treatment of primary biliary cirrhosis (p.2408), a small study found no clinical benefit when it was given to patients with incomplete responses to ursodeoxycholic acid.[2]

1. Jones EA. Rationale for trials of long-term mycophenolate mofetil therapy for primary biliary cirrhosis. *Hepatology* 2002; **35:** 258–62.
2. Talwalkar JA, *et al.* Mycophenolate mofetil for the treatment of primary biliary cirrhosis in patients with an incomplete response to ursodeoxycholic acid. *J Clin Gastroenterol* 2005; **39:** 168–71.

Psoriasis. Mycophenolate mofetil has proved successful in some cases of psoriasis (p.1583) refractory to conventional therapies,[1-3] and topical application (as a 2% cream) has been investigated.[4]

1. Grundmann-Kollmann M, *et al.* Treatment of chronic plaque-stage psoriasis and psoriatic arthritis with mycophenolate mofetil. *J Am Acad Dermatol* 2000; **42:** 835–7.
2. Geilen CC, *et al.* Mycophenolate mofetil as a systemic antipsoriatic agent: positive experience in 11 patients. *Br J Dermatol* 2001; **144:** 583–6.
3. Zhou Y, *et al.* Mycophenolate mofetil (CellCept) for psoriasis: a two-center, prospective, open-label clinical trial. *J Cutan Med Surg* 2003; **7:** 193–7.
4. Wohlrab J, *et al.* Topical application of mycophenolate mofetil in plaque-type psoriasis. *Br J Dermatol* 2001; **144:** 1263–4.

Rheumatoid arthritis. Mycophenolate mofetil has been tried in rheumatoid arthritis (p.11); reports suggest it may effectively suppress synovial inflammation.[1]

1. McMurray RW, Harisdangkul V. Mycophenolate mofetil: selective T cell inhibition. *Am J Med Sci* 2002; **323:** 194–6.

Sarcoidosis. Mycophenolate mofetil has been used as an adjunct in the successful treatment of patients with mucocutaneous sarcoidosis (p.1512)[1] and neurosarcoidosis.[2] It was reported to have a significant corticosteroid-sparing effect in an adolescent with renal involvement,[3] and was effective in a case of severe, relapsing, corticosteroid-dependent gastrointestinal sarcoidosis.[4]

1. Kouba DJ, *et al.* Mycophenolate mofetil may serve as a steroid-sparing agent for sarcoidosis. *Br J Dermatol* 2003; **148:** 147–8.
2. Chaussenot A, *et al.* Neurosarcoïdose et mycophénolate mofétil. *Rev Neurol (Paris)* 2007; **163:** 471–5.
3. Moudgil A, *et al.* Successful steroid-sparing treatment of renal limited sarcoidosis with mycophenolate mofetil. *Pediatr Nephrol* 2006; **21:** 281–5.
4. O'Connor AS, *et al.* Pancreatitis and duodenitis from sarcoidosis: successful therapy with mycophenolate mofetil. *Dig Dis Sci* 2003; **48:** 2191–5.

Scleroderma. There are reports of response to mycophenolate in patients with scleroderma (p.1817).

References.

1. Nihtyanova SI, *et al.* Mycophenolate mofetil in diffuse cutaneous systemic sclerosis—a retrospective analysis. *Rheumatology (Oxford)* 2007; **46:** 442–5.
2. Vanthuyne M, *et al.* A pilot study of mycophenolate mofetil combined to intravenous methylprednisolone pulses and oral low-dose glucocorticoids in severe early systemic sclerosis. *Clin Exp Rheumatol* 2007; **25:** 287–92.
3. Shenin M, *et al.* The use of mycophenolate mofetil for the treatment of systemic sclerosis. *Endocr Metab Immune Disord Drug Targets* 2008; **8:** 11–14.

Systemic lupus erythematosus. Mycophenolate mofetil by mouth plus prednisolone, given for 12 months, was found to be as effective as oral cyclophosphamide plus prednisolone, for 6 months, followed by azathioprine plus prednisolone for 6 months,[1] in the treatment of Chinese patients with diffuse proliferative *lupus nephritis* (see Systemic Lupus Erythematosus, p.1513). However, some[2,3] have cautioned about generalising these findings to other patients since mycophenolate was compared with oral and not intravenous pulsed cyclophosphamide, which is considered the standard of care in those with diffuse proliferative disease. Patients with poorer prognoses were also considered to have been excluded or underrepresented in the study, and follow-up was short. However, in a 24-week unblinded study[4] oral mycophenolate mofetil was more effective in inducing complete remission than intermittent intravenous cyclophosphamide when used as induction therapy for active lupus nephritis and appeared to be better tolerated. Also, there have been reports of benefit with mycophenolate mofetil in patients with various forms of refractory lupus nephritis, including proliferative disease and membranous nephropathy,[5-7] and some consider it a good therapeutic alternative.[8,9] A review[10] concluded that limited data support induction with cyclophosphamide followed by maintenance with azathioprine or mycophenolate; in selected patients induction with mycophenolate is a reasonable alternative. Meta-analyses concluded that daily oral mycophenolate mofetil, in average or median doses of 1 to 2 g, was more effective than pulsed intravenous or oral cyclophosphamide,[11] and that mycophenolate reduced the risk of failure to induce remission during induction therapy when compared with cyclophosphamide.[12] However, the role of racial and ethnic differences in lupus remain poorly understood, and enrolment of varying ethnic populations in studies can significantly affect results of therapy.[13] Furthermore, it has been pointed out that subjects in studies included in one meta-analysis had relatively preserved renal function, and results cannot be generalised to patients with moderate to severe renal impairment and rapidly progressive glomerulonephritis.[14] While acknowledging data of mycophenolate use in children are limited, another review[15] concluded that from data in adults, mycophenolate is an acceptable alternative to intravenous cyclophosphamide in the induction phase for newly diagnosed patients with mild to moderate nephritis and intact renal function; it may also be suitable if there is concern about a patient's future fertility. However, the optimal dose and length of induction treatment with mycophenolate are still unknown.

Mycophenolate mofetil has been used to control extra-renal manifestations of SLE,[16,17] although it was ineffective in a small number of patients with severe refractory cutaneous disease.[18] Oral mycophenolate sodium 1.44 g daily has been reported to be effective in the treatment of patients with subacute cutaneous lupus erythematosus resistant to standard therapy.[19]

1. Chan TM, *et al.* Efficacy of mycophenolate mofetil in patients with diffuse proliferative lupus nephritis. *N Engl J Med* 2000; **343:** 1156–62.
2. Falk RJ. Treatment of lupus nephritis—a work in progress. *N Engl J Med* 2000; **343:** 1182–3.
3. Karassa FB, Isenberg DA. Efficacy of mycophenolate mofetil in patients with diffuse proliferative lupus nephritis. *N Engl J Med* 2001; **344:** 382–3. Correction. *ibid.*; 1176.
4. Ginzler EM, *et al.* Mycophenolate mofetil or intravenous cyclophosphamide for lupus nephritis. *N Engl J Med* 2005; **353:** 2219–28.
5. Kingdon EJ, *et al.* The safety and efficacy of MMF in lupus nephritis: a pilot study. *Lupus* 2001; **10:** 606–11.
6. Kapitsinou PP, *et al.* Lupus nephritis: treatment with mycophenolate mofetil. *Rheumatology (Oxford)* 2004; **43:** 377–80.
7. Spetie DN, *et al.* Mycophenolate therapy of SLE membranous nephropathy. *Kidney Int* 2004; **66:** 2411–15.
8. Ginzler EM, Aranow C. Mycophenolate mofetil in lupus nephritis. *Lupus* 2005; **14:** 59–64.
9. Pisoni CN, *et al.* Mycophenolate mofetil in systemic lupus erythematosus: efficacy and tolerability in 86 patients. *J Rheumatol* 2005; **32:** 1047–52.
10. Lenz O, *et al.* Defining the role of mycophenolate mofetil in the treatment of proliferative lupus nephritis. *Drugs* 2005; **65:** 2429–36.
11. Moore RA, Derry S. Systematic review and meta-analysis of randomised trials and cohort studies of mycophenolate mofetil in lupus nephritis. *Arthritis Res Ther* 2006; **8:** R182.
12. Walsh M, *et al.* Mycophenolate mofetil for induction therapy of lupus nephritis: a systematic review and meta-analysis. *Clin J Am Soc Nephrol* 2007; **2:** 968–75.
13. Dooley MA. Mycophenylate [sic] mofetil: what role in the treatment of lupus? *Lupus* 2006; **15:** 179–82.
14. Contreras G, Sosnov J. Role of mycophenolate mofetil in the treatment of lupus nephritis. *Clin J Am Soc Nephrol* 2007; **2:** 879–82.
15. Paredes A. Can mycophenolate mofetil substitute cyclophosphamide treatment of pediatric lupus nephritis? *Pediatr Nephrol* 2007; **22:** 1077–82.
16. Karim MY, *et al.* Mycophenolate mofetil for systemic lupus erythematosus refractory to other immunosuppressive agents. *Rheumatology (Oxford)* 2002; **41:** 876–82.
17. Pisoni CN, *et al.* Mycophenolate mofetil and systemic lupus erythematosus: an overview. *Lupus* 2005; **14** (suppl): s9–s11.
18. Pisoni CN, *et al.* Skin manifestations of systemic lupus erythematosus refractory to multiple treatment modalities: poor results with mycophenolate mofetil. *Clin Exp Rheumatol* 2005; **23:** 393–6.
19. Kreuter A, *et al.* Mycophenolate sodium for subacute cutaneous lupus erythematosus resistant to standard therapy. *Br J Dermatol* 2007; **156:** 1321–7.

Vasculitic syndromes. Mycophenolate mofetil has been tried in a number of the vasculitic syndromes, including Churg-Strauss syndrome (p.1501), polyarteritis nodosa and microscopic polyangiitis (p.1510), Takayasu's arteritis (p.1514), and Wegener's granulomatosis (p.1515).

Preparations

Proprietary Preparations (details are given in Part 3)

Arg.: CellCept; Imuxgen; Munotras; Myfortic; ***Austral.:*** CellCept; Myfortic; ***Austria:*** CellCept; Myfortic; ***Belg.:*** CellCept; Myfortic; ***Braz.:*** CellCept; Myfortic; Refrat†; ***Canad.:*** CellCept; Myfortic; ***Chile:*** CellCept; Myfortic; ***Cz.:*** CellCept; Myfenax; Myfortic; ***Denm.:*** CellCept; Myfortic; ***Fin.:*** CellCept; Myfortic; ***Fr.:*** CellCept; Myfortic; ***Ger.:*** CellCept; Myfortic; ***Gr.:*** CellCept; Myfortic; ***Hong Kong:*** CellCept; Myfortic; ***Hung.:*** CellCept; Myfortic; ***India:*** Cellmune; Mycept; ***Indon.:*** CellCept; Myfortic; ***Irl.:*** CellCept; Myfortic; ***Israel:*** CellCept; Myfortic; ***Ital.:*** CellCept; Myfortic; ***Jpn:*** CellCept; ***Malaysia:*** CellCept; Myfortic; ***Mex.:*** CellCept; Myfortic; ***Neth.:*** CellCept; Myfortic; ***Norw.:*** CellCept; Myfortic; ***NZ:*** CellCept; ***Philipp.:*** CellCept; Myfortic; ***Pol.:*** CellCept; Myfortic; ***Port.:*** CellCept; Myfortic; ***Rus.:*** Myfortic (Майфортик); ***S.Afr.:*** CellCept; Myfortic; ***Singapore:*** CellCept; ***Spain:*** CellCept; Myfortic; ***Swed.:*** CellCept; Myfortic; ***Switz.:*** CellCept; Myfortic; ***Thai.:*** CellCept; Myfortic; ***Turk.:*** CellCept; ***UK:*** CellCept; Myfortic; ***USA:*** CellCept; Myfortic; ***Venez.:*** CellCept; Myfortic.

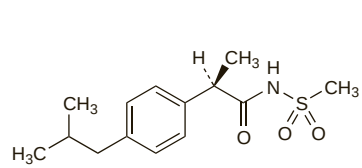
Reparixin *(USAN, rINN)*

DF-1681Y; Reparixina; Réparixine; Reparixinum; Repertaxin. (2*R*)-2-[4-(2-Methylpropyl)phenyl]-*N*-methylsulfonylpropanamide.

Репариксин

$C_{14}H_{21}NO_3S$ = 283.4.

CAS — 266359-83-5.



Reparixin Lysine *(rINNM)*

Reparixin L-Lysine; Reparixina lisina; Réparixine Lysine; Reparixinum Lysinum; Repertaxin L-Lysine. Reparixin compound with L-lysine (1:1); .

Репариксин Лизин

$C_{14}H_{21}NO_3S,C_6H_{14}N_2O_2$; = 429.6.

CAS — 266359-93-7.

Profile

Reparixin is an inhibitor of interleukin-8. Reparixin and reparixin lysine are under investigation for the prevention of delayed graft function in organ transplantation.