

Table 2. Promising immunomodulatory agents for adjunctive immunotherapy of MTB and other mycobacterial infections

Agents	Remarks	References
1. Heat-killed <i>M. vaccae</i> (SRL 172)	Efficacious in increasing treatment outcome of standard chemotherapy of TB patients, presumably by converting a pathogenic form of immune response to a protective response and switching host mycobacterial immunity toward Th1 responses	Stanford, 1990, 1994 1995, 2001, 2004 Dlugovitzky, 1999 Johnson, 2000
2. $1\alpha,25$ -Dihydroxyvitamin D ₃ (calcitriol)	Potentiation of M Φ anti-MTB activity and RNI producing ability in vitro and in vivo	Denis, 1991 Rockett, 1998 Waters, 2004
3. Glucosaminyl MDP	Potentiation of host resistance to MTB infection in mice and reduction of spontaneous relapse following chemotherapy	Venkataprasad, 1997
4. ATP and its analogues	Potentiation of M Φ activity against MTB and <i>M. bovis</i> BCG via P2X ₇ or P2Y receptors	Lammas, 1997 Sikora, 1999 Kusner, 2000, 2001 Stober, 2001 Fairbairn, 2001 Saunders, 2003
5. Glucocorticoid inhibitors Dehydroepiandrosterone 16 α -bromoepiandrosterone	Recovery of host Th1 response in the advanced stages of MTB infection Enhancement bacterial elimination in MTB-infected mice	Hernandez-Pando, 1998, 2005
6. DNA vaccine expressing MTB HSP65 or IL-12	Potentiation of host resistance to MTB infection in mice, elimination of MTB organisms after chemotherapy, and switching host immune response from Th2 type to Th1 type	Lowrie, 1999
7. Poloxamer CRL-1072	Potentiation of M Φ anti-MTB and -MAC activity and RNI producing ability	Jagannath, 1999, 2000
8. Imidazoquinoline derivative S28463	Potentiation of host resistance to <i>M. bovis</i> BCG infection in mice and enhancement of M Φ RNI production in collaboration with IFN- γ	Moisan, 2001
9. α -Galactosylceramide	Potentiation of host anti-MTB resistance through activation of CD1d-restricted NKT cells, which in turn inhibit intramacrophage growth of MTB	Chackarian, 2002 Gansart, 2003
10. Transfer factor	Recovery of Th1 response of MTB-infected mice in the advanced stages of infection Increase in survival of infected mice	Fabra, 2004
11. Plasmid DNA encoding HSP65	Efficacious in shortening the duration of anti-TB drug regimen of TB patients and preventing relapse of latent MTB infection	Silva, 2005

MDP: muramyl dipeptide