

Mammalian target of rapamycin (mTOR) inhibitors

Mammalian target of rapamycin (mTOR) inhibitors

The mTOR inhibitors rapamycin and everolimus act by binding to and inhibiting a cytoplasmic kinase enzyme complex called mTOR. This prevents intracellular signalling from the IL-2 receptor. The downstream effect is arrest of T-cell division at the G1-S phase. The cell cycle effects of mTOR inhibitors are not limited to lymphocytes and their side-effect profile includes severe mouth ulceration, poor wound healing and lymphocele formation. This limits the use of mTOR inhibitors in the first few weeks post transplantation. However, mTOR inhibitors are not nephrotoxic and they may be used 3 /uni00A0 months or more after transplantation as an alternative to CNIs to minimise CNI-associated renal dysfunction.

Revision #1

Created 2025-12-31 15:31:39 UTC by Omar Ayman

Updated 2025-12-31 15:31:39 UTC by Omar Ayman