

INFECTION

BK VIRUS

Tacrolimus directly activates the replication of the BK polyomavirus via FK binding protein 12 kda (FKBP-12) [8]

Management:

- → Dose reduction by 25-50% targeting (tacrolimus 3-4 ng/ml)
- → Switching from tacrolimus to low-dose CsA in renal transplant recipients with BKVN is considered since CsA inhibits BKV replication [9]

[8]- Hirsch HH, Yakhontova K, Lu M, Manzetti J. BK Polyomavirus Replication in Renal Tubular Epithelial Cells Is Inhibited by Sirolimus, but Activated by Tacrolimus Through a Pathway Involving FKBP-12. Am J Transplant [Internet]. 2016 Mar 1 [cited 2021 Nov 14];16(3):821–32. Available from:

https://onlinelibrary.wiley.com/doi/full/10.1111/ajt.13541

[9]- Sawinski D, Goral S. BK virus infection: an update on diagnosis and treatment. Nephro Dial Transplant [Internet]. 2015 Feb 1 [cited 2021 Nov 15];30(2):209–17. Available from https://academic.oup.com/ndt/article/30/2/209/2337134