

NEUROTOXICITY

TREMORS

- **Switching to the extended release formulation of tacrolimus (LCP-TAC)** can ameliorate conventional (IR-TAC)-induced tremor.
- LCP-TAC, once-daily, extended-release formulation of tacrolimus, has a reduced C max compared to twice-daily, immediate-release. ^{[3] [4]}

INSOMNIA (GENERAL MANAGEMENT)

- In Patients with isolated sleep-onset insomnia: a **nonbenzodiazepine BZRA** (**all except middle-of-the-night and extended-release zolpidem**) a DORA, or the melatonin agonist, ramelteon
- In Patients with sleep-maintenance or mixed insomnia: a nonbenzodiazepine BZRA (**all except zaleplon**), a DORA, or low-dose doxepin (for sleep-maintenance only) ^[5]

SEIZURES

- Discontinuation of tacrolimus may be required.
- Alternative therapies may conclude: conversion to cyclosporine, sirolimus, or belatacept. ^[6]

^[3]- Morgan J, Langone A, Nigro V, Mehta S, Sethi K. Tacrolimus-Induced Tremor: Switching from Immediate-Release (IR-TAC) to LCP-Tacro Extended-Release Tacrolimus (LCPT) Reduces Tremor and Improves Quality of Life (P4.072). Neurology. 2014;82(10 Supplement).

^[4]- Langone A, Steinberg SM, Gedaly R, Chan LK, Shah T, Sethi KD, et al. Switching Study of Kidney Transplant Patients with Tremor to LCP-Tacro (STRATO): an open-label, multicenter, prospective phase 3b study. Clin Transplant [Internet]. 2015 Sep 1 [cited 2021 Nov 14];29(9):796. Available from: /pmc/articles/PMC4755036/

^[5]- Pharmacotherapy for insomnia in adults - UpToDate [Internet]. [cited 2021 Nov 14]. Available from: <https://www.uptodate.com/contents/pharmacotherapy-for-insomnia-in-adults#H4115465959>

^[6]- Mecadon K. Managing Side Effects of Immunosuppressants.

