# CARDIOVASCULAR

## HYPERTENSION

→ **Dihydropyridine calcium channel blockers (amlodipine and nifedipine)** are considered the first-line treatment of choice and are preferred over non-dihydropyridine calcium channel blockers (diltiazem and verapamil) since they are cytochrome inhibitors (CYP3A/4) which can elevate tacrolimus levels.[1]

→ **Diuretics** are useful for those with edema and hyperkalemia. .[1]

## QT PROLONGATION

→ **Stop** the administration of tacrolimus until normal serum trough levels are achieved and tachycardia cease by administering **calcium channel blockers such as amiodar**one till the stabilization of the patient rhythm. [2]

## TACHYCARDIA

→ **Beta blockers** are used until the patient is stabilized. [3]

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[1]- Kidney transplantation in adults: Hypertension after kidney transplantation – UpToDate [Internet]. [cited 2021 Nov 14]. Available from: https://www.uptodate.com/contents/kidney-transplantation-in-adults-hypertension-after-kidney-transplantation?search=Cyclosporine and tacrolimus nephrotoxicity&topicRef=7357&source=see_link#H17

[2]- Hodak SP, Moubarak JB, Rodriguez I, Gelfand MC, Alijani MR, Tracy CM. QT prolongation and near fatal cardiac arrhythmia after intravenous tacrolimus administration: a case report. Transplantation [Internet]. 1998 Aug 27 [cited 2021 Nov 14];66(4):535–7. Available from: https://pubmed.ncbi.nlm.nih.gov/9734501/

[3]- Sinus tachycardia related to tacrolimus after kidney transplantation in children and young adults - PubMed [Internet]. [cited 2021 Nov 14]. Available from: https://pubmed.ncbi.nlm.nih.gov/27735797/