

Drug Interactions in the Treatment of Neuropathic Pain

Drug	Interaction	Drug	Interaction
Carbamazepine*	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a • May decrease effectiveness of oral contraceptives, thyroid medications, TCAs, and substrates CYP1A2^b, CYP2B6^c, CYP2C9^d and CYP3A4^e • Effects can be decreased by CYP3A4 inducers^f • Toxic effects can be increased by CNS depressants^a and SSRIs • Absolutely contraindicated with MAOIs 	Tramadol*	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a and SSRIs • Toxic effects can be increased by CNS depressants^a, SSRIs and TCAs
Duloxetine	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a, SSRIs and warfarin • May decrease effectiveness of TCAs • Effects can be decreased by CYP1A2 inducers^g • Toxic effects can be increased by CNS depressants^a and SSRIs • Absolutely contraindicated with MAOIs 	Tricyclic antidepressants*	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a, QTc-prolonging agents^h, SSRIs, St. John's wort, sulfonylureas, tramadol and warfarin • Effects can be decreased by carbamazepine and St. John's wort • Toxic effects can be increased by CNS depressants^a, duloxetine, QTc-prolonging agents^h, SSRIs and St. John's wort • Absolutely contraindicated with MAOIs
Oxycodone* (controlled release) and morphine*	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a, MAOIs and SSRIs • Effects can be decreased by CYP3A4 inducers^f • Toxic effects can be increased by CNS depressants^a 	Venlafaxine*	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a and SSRIs • Effects can be decreased by CYP3A4 inducers^f • Toxic effects can be increased by CNS depressants^a, CYP2D6 inhibitorsⁱ, CYP3A4 inhibitors^j and SSRIs • Absolutely contraindicated with MAOIs
Pregabalin and gabapentin	<ul style="list-style-type: none"> • May increase toxic effects of CNS depressants^a • Toxic effects can be increased by CNS depressants^a 		

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CNS=Central nervous system; CYP=Cytochrome P450; MAOIs=Monoamine oxidase inhibitors; SSRIs=Selective serotonin reuptake inhibitors; TCAs=Tricyclic antidepressants.

*Not FDA approved for neuropathic pain conditions.

^aCarbamazepine, gabapentin, opiates, pregabalin, tramadol, trazodone and TCAs.

^bDuloxetine, estrogens, flutamide, mirtazapine, propranolol and ropinirole.

^cBupropion, cyclophosphamide, efavirenz, promethazine and selegiline.

^dCelecoxib, dapsone, fluoxetine, fosphenytoin, glimepiride, glipizide, losartan, montelukast, phenytoin, tamoxifen, trimethoprim/sulfamethoxazole, trimethoprim and warfarin.

^eAlfuzosin, amiodarone, atorvastatin, calcitriol, citalopram, clonazepam, enalapril, estrogens, felodipine, ketoconazole, progesterones and tetracycline.

^fCarbamazepine, dexamethasone, efavirenz, fosphenytoin, phenytoin and St. John's wort.

^gCarbamazepine, phenobarbital and rifampin.

^hAmiodarone, azithromycin, clarithromycin, fluoxetine, haloperidol, risperidone and sotalol.

ⁱAmiodarone, celecoxib, cimetidine, clomipramine, desipramine, duloxetine, haloperidol, imipramine, isoniazid, ketoconazole, lidocaine, methadone, pioglitazone and sertraline.

^jAmiodarone, cimetidine, clotrimazole, cyclosporine, desipramine, diltiazem, efavirenz, erythromycin, fluconazole, grapefruit juice, haloperidol, metronidazole, sertraline, tetracycline and verapamil.

Adapted with permission from Lindsay TJ, Rodgers BC, Savath V, Hettlinger K. Treating diabetic peripheral neuropathic pain. Am Fam Physician 2010;82:151-8.