

Table 1. Pharmaceutical Options for Central Poststroke Pain

Medication Class & Specific Agents	Initial Dosing	Mechanism of Action	Significant Side Effects	Other Considerations
Antidepressants				
<i>Tricyclic Antidepressants (TCAs)</i>				
Amitriptyline	10-25 mg HS	Blocks presynaptic reuptake of serotonin and norepinephrine	<ul style="list-style-type: none"> • Anticholinergic side effects • Cardiovascular effects including conduction abnormalities and orthostatic hypotension • Acute angle closure glaucoma • CNS depression • Hyponatremia (SIADH) • Bleeding risk* 	<ul style="list-style-type: none"> • Potentially inappropriate / use with caution in age > 65 per BEERS criteria • Reduced clearance with hepatic impairment • Caution if seizure disorder
<i>Selective serotonin reuptake inhibitors (SSRIs)</i>				
Fluvoxamine	25-50 mg daily	Blocks presynaptic reuptake of serotonin only	<ul style="list-style-type: none"> • CNS depression • Serotonin syndrome • Narrow angle glaucoma • Sexual dysfunction • Hyponatremia (SIADH) • Bleeding risk* 	<ul style="list-style-type: none"> • Potentially inappropriate / use with caution in age > 65 per BEERS criteria • Strong inhibitor CYP1A2 • Pharmacogenetic considerations (CYP2D6 genotype) • Reduced clearance with hepatic impairment • Caution if seizure disorder
<i>Serotonin/norepinephrine reuptake inhibitors (SNRIs)</i>				
Duloxetine	30 mg daily	Strongly blocks reuptake of serotonin and norepinephrine, weakly blocks reuptake of dopamine	<ul style="list-style-type: none"> • Orthostatic hypotension • Hepatotoxicity • Serotonin syndrome • Sexual dysfunction • Hyponatremia (SIADH) • Acute angle closure glaucoma • Bleeding risk* 	<ul style="list-style-type: none"> • Potentially inappropriate / use with caution in age > 65 per BEERS criteria • Avoid in hepatic impairment • Caution if seizure disorder
Anticonvulsants				
Gabapentin	100-300 mg 1-3 X daily	Binds voltage gated calcium channels which may modulate excitatory neurotransmission	<ul style="list-style-type: none"> • CNS and respiratory depression • Rare hypersensitivity reactions (immediate and delayed) • Psychiatric symptoms including suicidal ideation / tendencies[†] 	<ul style="list-style-type: none"> • Adjust dosing if renal impairment • Potential for drug dependency

Pregabalin	25-150 mg / day (divided doses)	Binds voltage gated calcium channels which may modulate excitatory neurotransmission	<ul style="list-style-type: none"> • CNS and respiratory depression • Rare hypersensitivity reactions (delayed) • Psychiatric symptoms including increased risk suicidal ideation / tendencies[†] • Peripheral edema • Angioedema • Psychiatric symptoms • Visual symptoms • Weight gain 	<ul style="list-style-type: none"> • Adjust dosing if renal impairment • Potential for drug dependency
Lamotrigine	25 mg daily with gradual titration	Inhibits release of glutamate and inhibits voltage-sensitive sodium channels	<ul style="list-style-type: none"> • CNS depression • Serious skin rashes including Stevens-Johnson Syndrome • Blood dyscrasias • Aseptic meningitis • Hemophagocytic lymphohistiocytosis • Suicidal ideation / tendencies[†] 	<ul style="list-style-type: none"> • Class Ib antiarrhythmic activity; relevant medication interactions and considerations for cardiac monitoring • Adjust dosing for renal and hepatic impairment
Carbamazepine	200-400 mg daily in 2-4 doses	Modulates voltage-gated sodium channels, decreases neuronal activity; structurally similar to TCAs	<ul style="list-style-type: none"> • CNS depression • Serious skin rashes including Stevens-Johnson Syndrome (increased risk with variant HLA-B*1502 allele) • Blood dyscrasias • Cardiac effects including arrhythmia • Hepatotoxicity • Hypersensitivity reactions • Hyponatremia (SIADH) • Neuropsychiatric effects including ataxia • Suicidal ideation / tendencies[†] 	<ul style="list-style-type: none"> • Mildly anticholinergic • Use with caution if renal or hepatic impairment • Genetic screening for variant HLA-B*1502 allele if at risk • Potentially inappropriate / use with caution in age > 65 per BEERS criteria • Possibly associated with teratogenic effects • CYP interactions
Opioids				
Tramadol	25-50 mg Q4-6 hours PRN	Binds μ -opiate receptors in the CNS; also blocks serotonin and norepinephrine reuptake	<ul style="list-style-type: none"> • CNS depression • Respiratory depression • Constipation • Hyponatremia • Seizures • Serotonin syndrome • Hypotension 	<ul style="list-style-type: none"> • Risk for addiction, abuse, and misuse • CYP interactions • Adjust dosing if renal or hepatic impairment • Long term use associated with suppression of hypothalamic-pituitary-adrenal axis • Pharmacogenetic considerations (CYP2D6 genotype) • Potentially inappropriate / use

				with caution in age > 65 per BEERS criteria
<p><i>* Note that TCAs, SSRIs, and SNRIs may increase bleeding risk due to inhibition of serotonin-mediated platelet function.</i></p> <p><i>† All anticonvulsants carry a warning for increased suicidal ideation and tendencies based on a meta-analysis.</i></p> <p><i>Lexicomp Online, Lexi-Drugs. Waltham, MA: UpToDate, Inc.; July 22, 2023. https://online.lexi.com. Accessed July 23, 2023.</i>¹⁷</p>				