

Table 1. Pharmaceutical Options for Central Poststroke Pain

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

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

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