

Table 11.1 Medications Used to Treat Amyotrophic Lateral Sclerosis

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
Riluzole (Rilutek)	Used to inhibit glutamate release and slow neuronal damage and loss of function	50 mg twice/day	Cog: ++ S: +++ A: ++ Motor: +++ D: ++ Com: ++ F: +++	Hypertonia, fatigue, depression, dizziness, somnolence, paresthesias, postural hypotension, gastrointestinal disturbance, hypertension.
Baclofen (Lioresal)	Spasticity	5 mg 3 times/day	Cog: ++ S: +++ A: ++ Motor: +++ D: ++ Com: ++ F: +++	Oral: Initial sedation, muscle weakness, ataxia, orthostatic hypotension, fatigue, headache, nausea, dizziness. Confusion and hallucinations reported in the elderly or those with history of stroke. Intrathecal: Chronic constipation, hypotonia, somnolence, headache, vomiting, paresthesias.
Tizanidine (Zanaflex)	Spasticity	4-8 mg by mouth every 8 h as needed, maximum dose of 36 mg/day	Cog: ++ S: +++ A: ++ Motor: +++ D: ++ Com: ++ F: +++	Sedation, hypotension, dizziness, gastrointestinal upset. Starting with a very low dose and titrating slowly may reduce or eliminate side effects such as sedation, xerostomia, and dizziness.
Dextromethorphan-quinidine (Nuedexta) 20/10 mg combination capsules	Emotional lability	Start at 1 capsule by mouth/day for 7 days and then 1 capsule every 12 h	Cog: + S: + A: 0 Motor: + D: ++ Com: 0 F: +	Diarrhea, dizziness, cough, vomiting, asthenia, peripheral edema, flatulence. Avoid with medications that increase serotonin levels.
Pseudoephedrine (Sudafed)	Sialorrhea	30-60 mg every 4 h as needed	Cog: + S: 0 A: ++ Motor: + D: ++ Com: 0 F: ++	Difficulty urinating, dizziness, headache, nausea, nervousness, restlessness, sleeplessness, stomach irritation.
Trihexyphenidyl (Artane)	Sialorrhea	3-6 mg/day in 3 divided doses	Cog: ++ S: ++ A: ++ Motor: ++ D: ++ Com: ++ F: ++	Mild nausea, vomiting, dry mouth, blurred vision, dizziness, dry eyes, constipation, nervousness, cognitive impairment, sedation, urinary retention, abdominal pain, diarrhea, dyspepsia, ataxia, confusion.
Botulinum toxin type B	Sialorrhea	2500 units to salivary glands	Cog: + S: ++ A: + Motor: ++ D: +++ Com: + F: +	Anxiety, back pain, dizziness, drowsiness, dry eyes, dry mouth, flu-like symptoms, headache, increased cough, indigestion, nausea, neck pain, reactions at injection site (pain, redness, swelling, or tenderness), runny nose, sensitivity to light, sweating, stomach upset, weakness of the muscles at or near injection site.

From L. Carl, J. Gallo, and P. Johnson, 2014, *Practical Pharmacology in Rehabilitation: Effect of Medication on Therapy* (Champaign, IL: Human Kinetics).

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
Guaifenesin (Robitussin)	Used to loosen mucus from the airways	200-400 mg every 4 h as needed	Cog: + S: + A: 0 Motor: + D: + Com: 0 F: +	Dizziness, drowsiness, stomach upset.

Cog = cognition; S = sedation; A = agitation or mania; Motor = discoordination; D = dysphagia; Com = communication; F = falls.

The likelihood rating scale for encountering the side effects is as follows: 0 = Almost no probability of encountering side effects. + = Little likelihood of encountering side effects. +/++ = Low probability of encountering side effects; however, probability increases with increased dosage. ++ = Medium likelihood of encountering side effects. +++ = High likelihood of encountering side effects, particularly with high doses. ++++ = Highest likelihood of encountering side effects; best to avoid in at-risk patients.