



Edaravone 30 mg/ 20 mL

# **FASTER RESPONSE, BETTER RECOVERY**



### "Safety of Edaravone in acute ischemic stroke: A systematic review and meta-analysis" 1

This systematic review and meta-analysis encompassed randomized controlled trials and observational studies, exploring the use of Edaravone with standard stroke treatment versus standard stroke treatment alone among patients with AIS.

#### **Primary outcome:** Mortality

Secondary outcomes: Neurologic safety outcomes (intracerebral hemorrhage, hemorrhagic transformation) and systemic safety outcomes (renal and hepatic impairment, other adverse drug reactions).

- Fifteen studies, including a total of 15,654 participants were analyzed. Of these, 81.5% received Edaravone.
- Edaravone was administered intravenously, typically at a dose of 30 mg twice a day for 3 to 14 days.
- The administration window for Edaravone ranged from within 24 to 72 hours after stroke onset.
- Some investigators opted to administer it immediately after alteplase infusion.

### Results:

- Edaravone treatment was associated with a significantly reduced risk of mortality compared to control (RR 0.63, p<0.00001).
- · Among ischemic stroke patients given reperfusion therapy, Edaravone treatment was associated with lower risk of intracerebral hemorrhage, symptomatic intracerebral hemorrhage and hemorrhagic transformation, however results were not statistically significant.

## Clinical Effects of Early Edaravone Use in Acute Ischemic Stroke Patients Treated by Endovascular Reperfusion Therapy <sup>2</sup>

99

In this retrospective observational study in Japan, patients with acute ischemic stroke treated by emergent endovascular reperfusion therapy were identified and dichotomized by whether *Edaravone was used within 2 days of admission*.

**Primary outcome:** Functional independence (defined as a score of 0, I, or 2 on the mRS) at hospital discharge.

**Secondary outcomes:** In-hospital mortality and ICH occurring after admission. **Results:** 

Of *II508* patients eligible for analysis, *I028I* (89.3%) received edaravone therapy.

Outcomes		Control Group (n=1227)	Edaravone Group (n=10 281)	Adjusted Odds Ratio (95% CI)	P Value
Primary outcome	Functional independence at hospital discharge	318 (25.9%)	3320 (32.3%)	1.21 (1.03 – 1.41)	0.019
Secondary outcomes	In-hospital mortality	213 (17.4%)	1013 (9.9%)	0.52 (0.43-0.62)	<0.001
	ICH after admission	33 (2.7%)	147 (1.4%)	0.55 (0.37 - 0.82)	0.003

This retrospective suggested **combination therapy with edaravone** and endovascular reperfusion therapy could be a **promising therapeutic strategy** in acute ischemic stroke.

- 1: Badillo, S. P. J. and J. C. Navarro (2023). "Safety of edaravone in acute ischemic stroke: A systematic review and meta-analysis." Neurology Asia 28(I).
- 2: Enomoto, M., et al. (2019). "Clinical effects of early edaravone use in acute ischemic stroke patients treated by endovascular reperfusion therapy." Stroke 50(3): 652-658.



Unit 404, Official 4th Floor, North Tower-Rosemall Complex, West Hemmat Highway, Tehran, Iran www.zistdaru.com info@zistdaru.com info@zistdaru.ir Postal Code: |4987||712 Tel: +982|4824|000