

Cerebrolysin® as an Adjunct Therapy to Mechanical Thrombectomy

Staszewski, J., Dębiec, A., Strilciuc, S. et al. Efficacy of Cerebrolysin Treatment as an Add-On Therapy to MT in Patients with Acute Ischemic Stroke Due to Large Vessel Occlusion in Anterior Circulation: Results of a 3-Month Follow-up of a Prospective, Open Label, Single-Center Study. Transl. Stroke Res. (2025).

Cerebrolysin enhances safety and efficacy of recanalization treatment

- Significant improvement of functional independence
- Reduction of hemorrhagic complications
- Early recovery
- Reduced therapeutical costs
- Regained independence

Cerebrolysin[®]

Reconnecting Neurons. Empowering for Life.

Challenges in Acute Ischemic Stroke (AIS) Treatment

- Mechanical thrombectomy (MT) and neurovascular imaging (CT, MRI) have improved AIS care.
- Despite recanalization success rates exceeding > 80 %, functional independence at 3 months remains low.
- The risk of secondary intracerebral hemorrhage (sICH) following endovascular thrombectomy (EVT) can be as high as 40 %, and even asymptomatic cases may negatively impact neurological recovery and overall outcomes.

Futile Recanalization: Good vessel reopening ≠ good outcomes

Causes

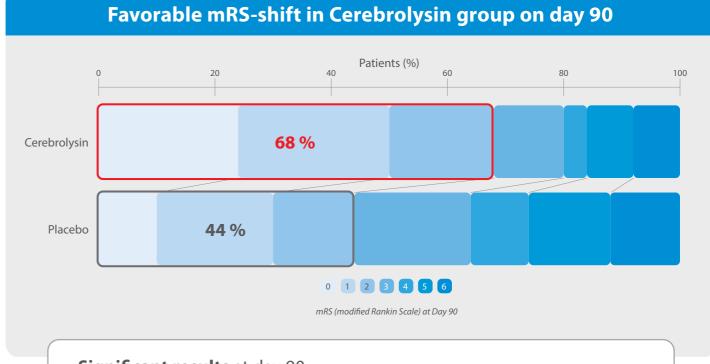
- Reperfusion injury
- Oxidative stress
- Calcium overload triggering neuronal apoptosis or necrosis
- Inflammation
- Microvascular failure (no-reflow)
- Blood-brain barrier (BBB) disruption
- → cerebral edema & sICH

Cerebrolysin

- Reduction of oxidative stress
- Reduction of calcium overload
- Reduction of apoptosis
- Reduction of inflammation
- Reduction of microvascular failure
- Reduction of BBB disruption



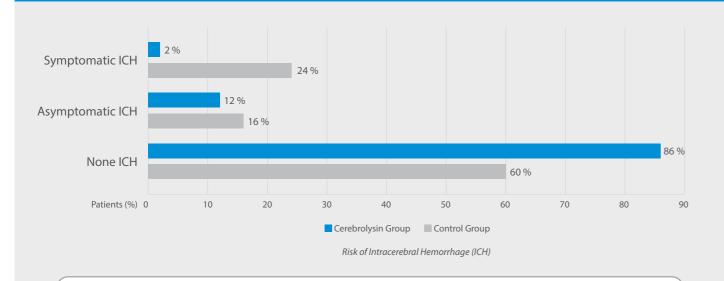
Significant Improvement of Functional Independence



- Significant results at day 90
- **68** % **of patients** gained functional independence (mRS 0-2) in Cerebrolysin group
- Only 44 % reached the same level in the placebo group
- Even **greater benefits** in patients receiving **bridging r-tPA** (80 % vs. 48 %)
- Enhanced capacity to mitigate proinflammatory state associated with diabetes

Reduction of Hemorrhagic Complications

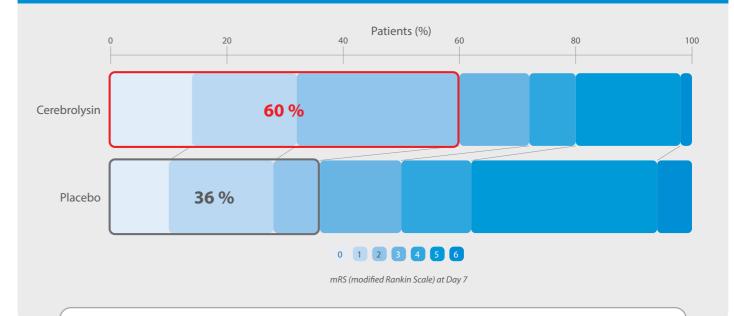
Significantly lower risk of any secondary ICH in Cerebrolysin group



- Only 14% with hemorrhagic complication in Cerebrolysin group vs. 40% in control group
- Only 2 % of patients with symptomatic ICH in Cerebrolysin group vs. 24 % in control group

Early Recovery

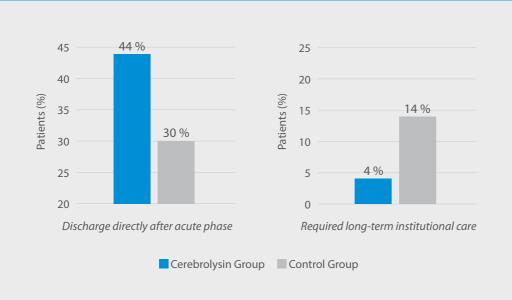
Early recovery confirmed by mRS in Cerebrolysin group on day 7



- Significantly better results on day 7 in Cerebrolysin group
- No significant improvement observed in control group
- 60 % of Cerebrolysin patients achieved functional independence (mRS 0-2) already by day 7
- Only 36% reached the same level in placebo group

Reduced Therapeutic Costs





- **High economic costs,** associated with long-term care, could be reduced in Cerebrolysin group
- 44 % of Cerebrolysin patients were **discharged home directly after the acute phase,** compared to only 30 % in the placebo group
- Only 4% required **long-term institutional care** in Cerebrolysin group vs. 14% in placebo group

Regained Independence

Improved mobility



- **Significant higher Barthel Index** (BI) in Cerebrolysin group on day 30 and 90
- Mobility score improvement was more than doubled in Cerebrolysin group (7 vs. 3 points)
- Improved mobility plays a key role in regaining patient independence

Start with Cerebrolysin® as early as possible after moderate-severe AIS

- Early administration significantly improves outcomes
- Neuroprotective effects extend beyond 72 hours through enhanced neuroplasticity
- Recommended by the EAN/EFNR and other neurological societies!

Daily dosage	Initiation of treatment	Treatment Duration
30 ml	as soon as possible	10 – 21 days



Titel: Efficacy of Cerebrolysin Treatment as an Add-On Therapy to Mechanical Thrombectomy in

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Author: Staszewski et al., 2025

Journal: Springer Nature - Translational Stroke Research