

The effective treatment after TBI

• Strong clinical data

Confirmed by evidence based reviews

Recommendation in guidelines



Reconnecting Neurons. Empowering for Life.

Evolutionary pathway of Cerebrolysin



- The evidence has continuously improved and ultimately lead to inclusion in evidence-based guidelines.
- Cerebrolysin is the only evidence based pharmacological agent in brain trauma recovery.

Cerebrolysin – Effective treatment after TBI demonstrated



Rigorous preclinical studies confirm the benefits of Cerebrolysin

Zhang & Chopp 2013

The study examined the effects of Cerebrolysin on functional recovery after traumatic brain injury in rats.

The adhesive removal test was used to evaluate somatosensory deficits.

Cerebrolysin resulted in a significant improvement in removal time compared to the control group, indicating better somatosensory recovery.

Zhang & Chopp 2015

In a histological analysis of rats after mTBI, the long-term effects of treatment with Cerebrolysin on neuroblasts and neurogenesis were investigated and a significant increase number of neuroblasts were measured.

Cerebrolysin improves neurogenesis, social interest and cognitive function parameters.

Alzoubi 2018

Radial arm water maze test in rats was used to examine spatial learning and memory. In Cerebrolysin treated rats, the number of errors was significantly reduced.

Cerbrolysin shows protective effect!

Cerebrolysin significantly prevents posttraumatic-stress disorder induced short- and long term memory impairment.

Zhang & Chopp 2019

Cerebrolysin-treated rats showed significantly and robustly improved long-term cognitive functional recovery as measured by social interaction, Morris water maze, novel object recognition, and odor recognition tests.

Cerebrolysin improves longterm sensorimotor functional recovery after TBI.

Patient cases confirms Cerebrolysin's therapeutic effects



Real-world scenarios demonstrate Cerebrolysin's efficacy on patients cognitive function.

Trimmel et al. 2022

In two cases of severe TBI (a high-speed motor vehicle accident and ski accident with a fall from heights) with an unfavorable outcome probability, but a combined treatment with Cerebrolysin led to positive outcomes.

A treatment with Cerebrolysin is a promising approach that may improve neurological outcome after sTBI.

Previglinano and M.A. Soto

Cerebrolysin shows to improve cognitive performance in a patient following a serious car accident, with a GCS 4.

The patient was severely impaired and his improvement after the Cerebrolysin treatment positively surprising.

A.Tomczak, M. Michalak, K.Kulesza

This case highlights the importance of long-term therapy with Cerebrolysin.

The course of the case clearly confirms its position as the preferred pharmacological treatment option for patients with severe traumatic brain injury.

Cerebrolysin's effectiveness clinically validated and proven



Extensive clinical trials validate Cerebrolysin's efficacy and safety profile, providing concrete evidence of its benefits.

CAPTAIN II – Muresanu et al.

A large randomized, double-blind, placebocontrolled clinical trial shows early treatment effects using a multidemensional approach.

Further Cerebroylsin significantly reduced depression and improved memory and concentration.

Treat as soon as possible!

Lucena et al.

A multi-cencter, retrospective study on severe TBI patients showing that a Cerebrolysin treatment reduces the hospital stay about 7 days.

A consistent improvement, enhancement of patient mobility and faster recovery rates are further benefits.



Data from comprehensive meta-analyses confirm Cerebrolysin's positive outcomes, supporting confidence in its therapeutic potential.

CAPTAIN META-ANALYSIS Vester J.C. et al.

The Captain meta-analysis included 2 clinical trials (phase IIIb/IV prospective, randomized, doubleblind, placebo-controlled).

Results shows benefits of a Cerebrolysin add-on therapy for moderate-severe TBI:

- Higher chance of survival
- The effective treatment after TBI
- Save lives
- Early recovery
- Better quality of life

Efficacy and benefits confirmed by independent committees

Evidenced Based Review (ERABI)

Independent systematic reviews by leading experts confirm that Cerebrolysin is effective in improving attention deficits.

The review confirms that:

- Cerebrolysin improves attention
- Is the only evidenced based agent in brain trauma
- Cerebrolysin recommended agent for attention improvement after TBI
- Takes care of the main consequences of TBI attention and concentration deficits



Recognition and mentioning of Cerebrolysin in the high rated INCOG guidelines underscore its status as a trusted and evidenced-based recommended intervention.

"... RCT level of evidence suggest the potential benefit of Cerebrolysin therapy after moderate to severe TBI."



CONCLUSION

The evidence of Cerebrolysin has continuously improved and finally resulted in its mentioning in evidence-based guidelines.

Cerebrolysin is the sole pharmacological agent supported by evidence for brain trauma recovery.



Titel: INCOG 2.0 Guidelines for Cognitive Rehabilitation Following Traumatic Brain Injury, Part III: ExecutiveFunctions

Website: https://pubmed.ncbi.nlm.nih.gov/36594859/



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ABBREVIATED PRESCRIBING INFORMATION – Cerebrolysin. Name of the medicinal product: Cerebrolysin - Solution for injection. Qualitative and quantitative composition: One ml contains 215.2 mg of Cerebrolysin concentrate in aqueous solution. List of excipients: Sodium hydroxide and water for injection. Therapeutic indications: For treatment of cerebrovascular disorders. Especially in the following indications: Senile dementia of Alzheimer's type. Vascular dementia. Stroke. Craniocerebral trauma (commotio and contusio). Contraindications: Hypersensitivity to one of the components of the drug, epilepsy, severe renal impairment. Marketing Authorization Holder: EVER Neuro Pharma GmbH, A-4866 Unterach Only available on prescription and in pharmacies. More information about pharmaceutical form, posology and method of administration, special warnings and precautions for use, interaction with other medicinal products and other forms of interaction, fertility, pregnancy and lactation, effects on ability to drive and use machines, undesirable effects, overdose, pharmacodynamics properties, pharmacokinetic properties, preclinical safety data, incompatibilities, shelf life, special precautions for storage, nature and contents of the container and special precautions for disposal is available in the summary of product characteristics. (Reference SPC-CCDS Version 2.0/03.06.2016)