NeuroAid

Previous studies on Danqi Piantan Jiaonang (DPJ, NeuroAid), a traditional Chinese medicine, in stroke patients showed promising results.

The exact mechanism is not well understood, initial laboratory studies suggest improvements in brain neuroplasticity and neuroprotection [1].

Treatments were shown to induce neurogenesis in rodent and human cells, promote cell proliferation as well as neurite outgrowth and stimulate the development of a dense axonal and dendritic network [2].

Perhaps it can represent a novel therapeutic strategy after cardiac arrest with a clinically interesting time window of protection [3].

Trials

The NeuroAiD Safe Treatment (NeST) Registry [4].

A double-blind, placebo-controlled, randomized, multicenter study to investigate CHInese Medicine Neuroaid Efficacy on Stroke recovery (CHIMES Study) [5].

The pooled analysis of 2 trials of DJ approved in China, shows good tolerability and superiority of DJ over another traditional Chinese medicine also approved for stroke. A large double-blind randomized clinical trial is required to further assess the safety and efficacy of DJ [6] [7].

Early trials of Neuroaid, performed in China on 605 patients in 2000, established its safety and demonstrated a positive effect on the recovery of independence and motor functions. Patients receiving Neuroaid were found to be 2.4 times more likely to achieve independence at 1 month after stroke than the control group [8] [9].

Safety trials showed that Neuroaid, taken either alone or in combination with aspirin, does not modify hemostasis, hematology and biochemistry in normal subjects and stroke patients [10].

Longer-term laboratory safety data show no differences between MLC601 and placebo, confirming the safety of MLC601 in acute stroke patients receiving a 3-month treatment [11].

CHIMES Study

The CHInese Medicine NeuroAiD Efficacy on Stroke recovery (CHIMES) study was an international randomized double-blind placebo-controlled trial of MLC601 (NeuroAiD) in subjects with cerebral infarction of intermediate severity within 72 h. CHIMES-E (Extension) aimed at evaluating the effects of the initial 3-month treatment with MLC601 on long-term outcome for up to 2 years.

While the benefits of a 3-month treatment with MLC601 did not reach statistical significance for the primary endpoint at 2 years, the odds of functional independence defined as mRS ≤1 was significantly increased at 6 months and persisted up to 18 months after a stroke [12].

Patients who have moderately severe strokes and longer onset to treatment time (OTT) demonstrate better treatment effects with MLC601. These factors can guide patient selection in future trials [13].

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