

Start Recovering Now



Enhances Stroke Recovery and
Supports Neurological Functions

Stroke has a devastating impact on millions of lives

Stroke is the leading cause of adult disability worldwide

Over 7 million individuals make only a partial recovery. Sufferers are merely left to cope, experiencing hurdles in the simplest daily activities, including problems getting about, visual deficits and communication difficulties.

A dramatic burden on the families and healthcare systems

Attending a stroke survivor poses a challenge. Family internal dynamics are altered when having someone not being able to perform his/her role as it was. On top of all that comes the financial stretch of professional care.



The negative impact may be minimised if the stroke sufferer gets to recover gradually.

Neurorestorative treatments bring new hope

Hyper acute intravenous thrombolysis benefits will continue to be available only to a minority of patients as only a narrow time window constraint is available to salvage the threatened neuronal tissues.

Neurorestorative treatments bring further recovery potential to patients and are available without time window constraints.

These therapeutic agents support the repair and restoration of impaired neurological functions by mechanisms including:

- Triggering proliferation, differentiation and migration of neural cells
- Stimulating the formation of new neuronal circuits

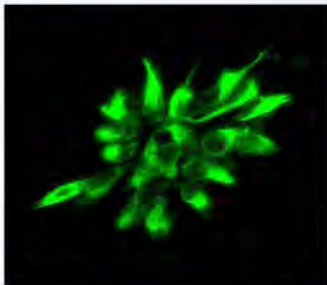


Pharmacology of NeuroAiD™

NeuroAiD™ stimulates the secretion of BDNF **x2.5**

BDNF expression level increased by a 2.5-fold effect after 6 weeks of treatment with NeuroAiD™ in rodent models. ($p < 0.01$)

Brain-Derived Neurotrophic Factor (BDNF) is a growth factor which activates neurogenesis.



NeuroAiD™ increases proliferation of stem cells **x3**

After two days of treatment, low density cultures treated with NeuroAiD™ show increase by 3-fold of radiating clusters of Nestin-positive progenitors. ($p < 0.01$)

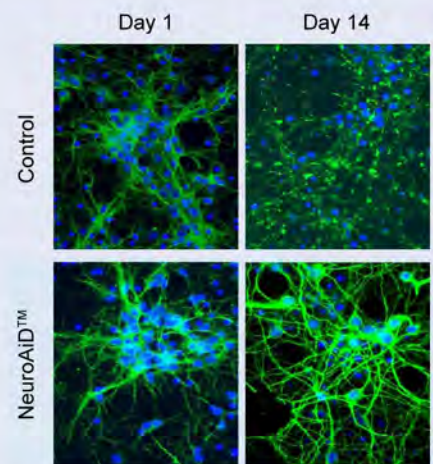
Nestin is an intermediate filament protein that is implicated in the growth of the axons.

NeuroAiD™ promotes neurites outgrowth and synaptogenesis

On Day-14, in neuronal cell cultures treated with NeuroAiD™, epifluorescence shows a spectacular increase of DCX, GAP43 and Synaptotagmin expressions, providing evidence that NeuroAiD™ triggers:

- Neurogenesis
- Neurites outgrowth
- Synaptogenesis

DCX is a microtubule-associated protein specifically expressed in neuronal precursors and in areas of continuous neurogenesis in adult brain. GAP43 is a growth associated protein determinant in the regulation of neurite outgrowth, growth cone guidance and synaptic plasticity. Synaptotagmin is a synaptic vesicle protein involved in synaptogenesis and synapse function.



Resulting in a fertile environment for creation of new neuronal circuits.

Key clinical efficacy and safety data of NeuroAiD™

Achieve independence **x2.4**

Patients on NeuroAiD™ have 2.4 times more chances to achieve independence after one month of treatment. (p = 0.007)

Trial on 605 patients within 2 weeks to 6 months post ischemic stroke. Independence is defined as being able to take care of oneself and speak freely.



Patients reaching independence with NeuroAiD™ (out of 1000)



Outcome: Reduction of motor disabilities

□ Control ■ NeuroAiD™

Recover motor deficits **+25%**

Patients on NeuroAiD™ show a 25% higher recovery.

Trial on 605 patients within 2 weeks to 6 months post ischemic stroke. The recovery of disability points is measured on a normalised 0-5 points scale before and after the treatment.

(A) WMD = -0.36, 95% CI = -0.61, -0.10, p = 0.006
(B) WMD = -0.32, 95% CI = -0.59, -0.06, p = 0.02

Source: Stroke, Chen C. et al, (NeuroAiD™) DJ, a Traditional Chinese Medicine, in Poststroke Recovery; (2009; 40 : 859-863).

NeuroAiD™ is prescribed for stroke and TBI patients

- Severe and mild, ischemic and hemorrhagic strokes
- Acute and chronic stages of stroke
- Traumatic Brain Injury (TBI)

NeuroAiD™ has a well established safety profile

- Safety profile established in normal subjects, in acute and chronic stroke patients
- NeuroAiD™ does not modify ECG, haematological, haemostatic and biochemical parameters
- NeuroAiD™ has no interaction with aspirin, and is safe as an add-on treatment

Sources: Cerebrovascular Diseases, Gan R. et al, NeuroAiD™ Does Not Modify Hemostasis, Hematology and Biochemistry in Normal Subjects and Stroke Patients; (2008; 25 : 450-456). Cerebrovascular Diseases, Young S.HY, Safety profile of MLC 601 (NeuroAiD™) in Acute Ischemic Stroke Patients:: A Singaporean Substudy of the Chinese Medicine NeuroAiD™ Efficacy on Stroke Recovery Study; (2010; in press).

Key facts to remember about NeuroAiD™

Pharmacology

- ✓ Stimulate production of the growth factor BDNF
- ✓ Promote neurogenesis
- ✓ Increase neurites outgrowth and synaptogenesis
- ✓ Provide a better post stroke recovery of neurological functions

Efficacy

- ✓ 2.4 more chances to achieve independence
- ✓ 25% additional recovery of motor functions
- ✓ After three months, treatment can result in significant improvements in motor, speech, visual and cognitive functions

Safety

- ✓ Proven safe as an add-on treatment at acute and late stages of stroke recovery

Prescription

- ✓ NeuroAiD™ should be initiated as soon as possible after onset and up to 6 months post stroke
- ✓ Routinely prescribed for ischemic, hemorrhagic strokes and TBI patients
- ✓ Take 4 capsules, 3 times a day, for three months

References:

1. Heurteaux C, Gandin C, Borsotto M, Widmann C, Brau F, Lhuillier M, Onteniente B, Lazdunski M; Neuroprotective and neuroproliferative activities of NeuroAiD™ (MLC601, MLC901), a Chinese Medicine in vitro and in vivo; *Neuropharmacology* 2010; 58 : 987-1001.
2. Chen C, Venketasubramanian N, Gan R, Lambert C, Picard D, Chan B, Chan E, Bousser MG, Shi XM; Danqi Piantang Jiaonang (DJ), a Traditional Chinese Medicine, in Poststroke Recovery; *Stroke* 2009; 40: 859-863.
3. Gan R, Lambert C, Lianting J, Chan E, Venketasubramanian N, Chen C, Chan B, Samama M, Bousser MG; Danqi Piantan Jiaonang Does Not Modify Hemostasis, Hematology and Biochemistry in Normal Subjects and Stroke Patients; *Cerebrovascular Diseases* 2008; 25: 450-456.
4. Young S.HY, Zhao Y, Koh A, Singh R, Chan B.PL, Chang HM, Venketasubramanian N, Chen C. Safety profile of MLC 601 (NeuroAiD™) in Acute Ischemic Stroke Patients: A Singaporean Substudy of the Chinese Medicine NeuroAiD™ Efficacy on Stroke Recovery Study; *Cerebrovascular Diseases* 2010; in press.

Note:

NeuroAiD is a trademark of Moleac. MLC 601 and MLC 901 are two different proprietary formulae which have been shown to be equivalent in pharmacology and are referred to as NeuroAiD in this brochure.

Abbreviated Prescribing Information

NeuroAiD™ (MLC 601) Capsules 400mg

INDICATION

Post stroke recovery to improve motor and neurological functions.

DOSAGE AND METHOD OF ADMINISTRATION

Dosage: Take 4 capsules, 3 times a day, for 3 months.

METHOD AND ROUTE OF ADMINISTRATION

Oral administration. The capsules must be taken as a whole. Content can also be diluted in water, to be drunk or administered via gastric tube.

CONTRAINDICATION

The use of NeuroAiD™ in children, in pregnancy and lactating women is not well-established. No contraindication is known to date.

MONITORING

To date, no harmful interactions between NeuroAiD™ and other medicinal compound, or between NeuroAiD™ and prescription / OTC drugs have been observed.

As a routine precaution, patients on oral anti-coagulant are advised to have their INR monitored initially in a similar way as for any changes in their prescription.

STORAGE CONDITIONS

To be kept sealed and stored in a cool and dry place. Keep away from children.

PRESENTATION

The capsules are packed using aluminum blister sheet with 4 capsules per sheet. The available pack contains 9 blister sheets of 4 capsules.

Full Prescribing Information available on request from Moleac.



Innovative medicines for patients and physicians focus on safety, quality and clinical development. More information at www.moleac.net
Email : medical@moleac.net

Moleac Pte Ltd
11 Biopolis Way
Helios Building #09-08
Singapore 138667
Tel: +65 64789430
Fax: +65 64789435

Moleac Europe
Biopark Office
11, rue Watt
75013 Paris, France
Tel: +33 175772973
Fax: +33 175772978

