

## Cellmid patent for midkine protein allowed in the US

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**Singapore:** The US Patent and Trademark Office (USPTO) has issued notice of allowability for Cellmid's patent application, "Nitric oxide synthase activator" . This is a key midkine (MK) protein patent and fundamental to the company's program for the treatment of various forms of ischemia, including heart attack.

This patent covers yet another novel mechanism of action for MK that is beneficial to tissue recovery after ischemia, and it strengthens the Australian company's dominant intellectual property position across the MK space. The patent protects the use of MK to treat ischemic disorders, including heart attack.

This patent covers the stimulation of nitric oxide (NO) synthesis by MK injection. Nitric oxide is a key signalling molecule that mediates blood flow, vasodilation and angiogenesis (growth of new blood vessels).

In the context of a heart attack, all of these processes are desirable in the affected tissue to aid recovery. Midkine could be administered systemically to heart attack victims to release NO in order to assist in the recovery of the affected cardiac muscle. This patent complements Cellmid's other patent families that protect the use of MK to treat ischemic diseases, including the recently granted US patent, which was reported to the market on November 14, 2011.

Together these patents provide multiple therapeutic mechanisms by which MK can assist in the treatment of ischemia.

This patent is the fourth US patent allowance granted to Cellmid in the last nine months underpinning the company's robust intellectual property strategy in all areas of MK biology. Cellmid holds the most significant intellectual property portfolio related to MK worldwide, representing multiple product lines and commercialization opportunities.

Cellmid's patent portfolio currently includes 75 patents in 20 patent families, covering use of MK and anti-MK agents for therapeutic purposes in a number of diseases and the use of MK as a diagnostic marker in cancer and other disorders.