



Cancer Treatment Uses Ornithine Decarboxylase Inhibitor (20110052, Dr. Zigang Dong, Dr. Ann Bode)

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Ornithine Decarboxylase for Cancer Treatment

A method to inhibit ornithine decarboxylase that is suitable for use as a pharmaceutical for the treatment of cancer has been developed. The compound has been shown to be effective at ornithine decarboxylase inhibition potentially without the hearing loss associated with eflornithine. This invention provides a method for treating cancer as well as a method for inhibiting initial cancer development.

Ornithine Decarboxylase in Cancer Prevention

Molecules called polyamines play large roles in the growth of cancers. One specific polyamine, ornithine decarboxylase, has increased activities in neoplastic tissues, and thus has previously been identified as target for cancer prevention. Current methods of ornithine decarboxylase inhibition involving the polyamine eflornithine have been associated with excessive toxicity resulting in hearing loss in humans. A need exists for improved methods of cancer inhibition, specifically a method of ornithine decarboxylase inhibition with decreased toxicity and enhanced pharmacologic properties.

BENEFITS OF METHOD TO INHIBIT ORNITHINE DECARBOXYLASE:

- Unlike previous technologies which focus solely on preventative care, this technology focuses on treatment of cancer
- Method inactivates ODC functions in the treatment of cancer
- No hearing loss likely to occur during treatment with this pharmaceutical

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