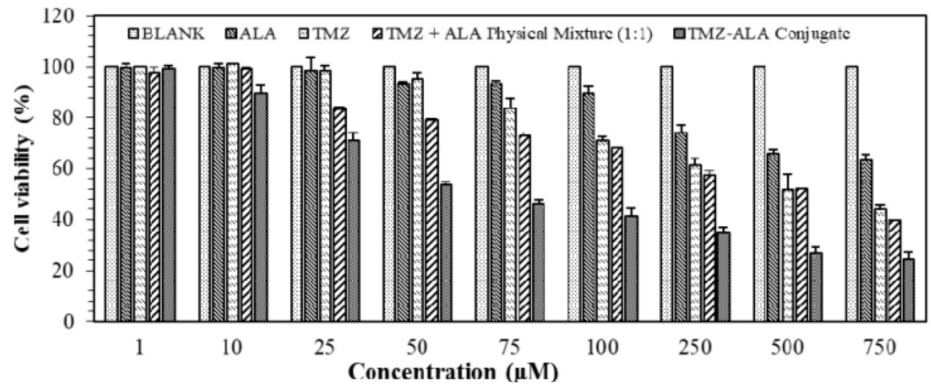


GRANTED

(IN393113)

A drug conjugate and method of preparation thereof



NEED

Glioblastoma treatment faces significant challenges due to poor drug delivery and resistance. What if a self-assembling drug conjugate could efficiently deliver chemotherapy directly to brain tumors?

MARKET ANALYSIS

The glioblastoma drug delivery market is expected to grow at a CAGR of 10.5%, reaching \$3.5 billion by 2033. The need for effective drug delivery systems in cancer treatment drives this demand. (Source: Market Research Future, 2023)

TECHNOLOGY OVERVIEW

This invention provides a drug conjugate using alpha-lipoic acid and temozolomide linked by hydrazine. The conjugate self-assembles into nano-sized micelles for effective delivery in glioblastoma treatment, improving therapeutic outcomes by targeting the tumor directly.

Target Industries

1) Pharmaceutical Industry for advanced cancer therapies. 2) Biotech Companies developing nanomedicines. 3) Oncology Research institutions exploring targeted drug delivery systems.

TECHNOLOGY KEY FEATURES

1) Alpha-lipoic acid (ALA) as lipid moiety. 2) Temozolomide (TMZ) as active agent. 3) Hydrazine link for conjugation. 4) Self-assembling micelles in nano-size range. 5) Targeted drug delivery for glioblastoma treatment.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure)

[Read more here](#)

Technology is available for licensing/ co-development.

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