

Precision Cancer Treatment with Targeted Platinum Agents

Technology Description:

The technology of platinum-based anticancer agents and their targeted conjugates involves the development of innovative compounds and delivery systems to improve the effectiveness and specificity of cancer treatment. Platinum-based agents, such as platinum (II) complexes, have demonstrated anticancer activity by interfering with DNA replication and cell division. However, their clinical utility is limited by systemic toxicity and resistance mechanisms. To overcome these challenges, targeted conjugates are designed by attaching platinum-based agents to specific targeting moieties, such as antibodies or peptides, which selectively recognize and bind to cancer cells. This enables the delivery of platinum directly to tumor cells, increasing therapeutic efficacy while minimizing damage to healthy tissues.

Inventors:

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Applications:

- Improved Efficacy.
- Reduced Side Effects.
- Overcoming Drug Resistance.

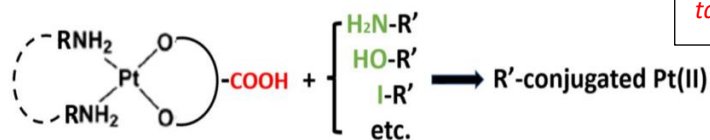
Benefits:

- **Enhanced Efficacy:** Targeted conjugates allow for the selective delivery of platinum-based agents to cancer cells, increasing their concentration at the tumor site. This targeted approach improves the drug's efficacy by maximizing its cytotoxic effects on cancer cells while minimizing damage to healthy tissues.
- **Selective Targeting:** The ability to attach targeting moieties, such as antibodies or peptides, to platinum-based agents enables selective targeting of cancer cells. This enhances the specificity of treatment, ensuring that the drug primarily interacts with cancer cells while sparing healthy cells.
- **Reduced Systemic Toxicity:** Targeted conjugates help minimize off-target effects by delivering the drug specifically to cancer cells, reducing toxicity to healthy tissues and organs. This can result in a better tolerability profile and improved quality of life for patients undergoing treatment.

Patent Status:

Patent pending.

Conjugate diamine Pt (II) complex with cancer targeted drugs



For more information:

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