Next-Generation Monoclonal Antibody Therapy Targeting High-Risk Tumors

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OTHER INFORMATION

KEYWORDS

Antibody, Hepatocellular

Carcinoma, Non-Small Cell

Lung Cancer

CATEGORIZED AS

- **Medical**
  - Disease: Cancer
  - Therapeutics

RELATED CASES

2020-136-0

TECHNOLOGY DESCRIPTION

This monoclonal antibody is designed to target a novel cell surface marker that is upregulated in a range of prognostically poor, high-risk cancers. The therapeutic approach leverages dual mechanisms of action (MOA): antibody-dependent cellular cytotoxicity (ADCC) and direct tumor cell killing. Preclinical studies have demonstrated promising efficacy in hepatocellular carcinoma (HCC), non-small cell lung cancer (NSCLC), multiple myeloma, lymphoma, and other aggressive cancers. With its unique target expression profile and ability to address refractory disease, this innovative therapy has the potential to redefine cancer treatment paradigms.

COMPETITIVE ADVANTAGES

- **Broad Therapeutic Potential:** Effective as a monotherapy or in combination with existing cancer treatments, making it versatile across multiple indications.
- **Target Specificity:** Focused on a novel cell surface marker that is highly upregulated in relapsed CNS lymphoma and other common, high-risk tumors.
- **Proven Preclinical Efficacy:** Demonstrated robust anti-tumor activity in vitro and in mouse models of HCC, with compelling proof-of-concept results.
- **Mechanism of Action (MOA):** Dual pathways of tumor elimination through ADCC and direct cell killing, enhancing therapeutic potency.
- **Addressing Unmet Needs:** Designed to tackle refractory and high-risk cancers that lack effective treatment options, providing hope for patients with limited alternatives.

STAGE OF DEVELOPMENT

This novel monoclonal antibody has completed extensive proof-of-concept studies, including in vitro validation and preclinical testing in mouse models of hepatocellular carcinoma. The target expression has been confirmed in patient samples of relapsed CNS lymphoma and other prognostically poor cancers, providing critical translational relevance.

RELATED MATERIALS

PATENT STATUS

Patent Pending

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