Hepatocellular carcinoma (HCC) is the most frequent type of primary malignancy of the liver and the sixth most common cancer in the world, with a total incidence of 259,561 new cases in 2019. Its high severity makes it the third leading cause of cancer mortality worldwide, with a one-year relative survival less than 50%.

RlmAb, first-in-class antibody that reverts tumor induced immune tolerance by targeting M2 macrophages in solid cancers

OVERVIEW

Hepatocellular carcinoma (HCC) is the most frequent type of primary malignancy of the liver and the sixth most common cancer in the world, with a total incidence of 259,561 new cases in 2019. Its high severity makes it the third leading cause of cancer mortality worldwide, with a one-year relative survival less than 50%.

PROJECT

Sector: Oncology: Immunotherapy
R&D direction: Treatment for solid cancers
Stage of development: TRL3–4
Scientific leader: Dr. Mª Rosa Sarrias
Clinical Advisor: Dr. Marga Sala, MD

PRODUCT

Potential indications: Treatment for HCC and solid cancers
Mechanism of action: mAbs to reprogram macrophage polarization
Market size: 740K cases per year
Market value: €830M per year

IP PROTECTION

Patent at National Phase

NEEDS

The overall level of unmet need in HCC and other solid tumors is high due to its severity and low survival. Results from several clinical trials demonstrate that immune-based therapies improve outcomes for these patients, but there is an urgent need to develop new drugs and treatments to achieve full protection.

Tumor associated macrophages (TAMs) acquire a tolerogenic state (M2) that allows tumor progression and protects them from chemotherapy, radiotherapy or T-cell directed immunotherapy. Accordingly, the presence of TAM correlates with poor prognosis in a wide variety of cancers, including HCC, and TAM targeting is emerging as a promising therapeutic strategy.

SOLUTION

RlmAb is an immunotherapy treatment based on monoclonal anti-CD5L antibody for HCC and other solid cancers.

This treatment aims to reprogram tumor–associated macrophages (TAM) from their anti-inflammatory, tumor promoting state (M2) to a more tumor killing, pro-inflammatory profile (M1).

KEY ADVANTAGES

- New target for immuno-oncology: CD5L
- Novel mechanism of action
- First-in-class monoclonal antibody
- Potentially complementary or superior to current treatments or other immunotherapies
- Applicable for other types of solid tumors
- Less adverse events compared to other TAM targeted strategies

CONTACT US!

innovation@igtp.cat - Innovation & Business Development Unit
mrsarrias@igtp.cat - Scientific Leader