

PureTech announces issuance of patent to support its LYT-200 product candidate

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PureTech Health, an advanced biopharmaceutical company developing novel medicines for dysfunctions of the Brain-Immune-Gut (BIG) axis, today announced that the United States Patent and Trademark Office (USPTO) has issued U.S. Patent No. 10,344,091 to support the Company's internal immuno-oncology product candidate, LYT-200. The patent covers compositions of matter directed to fully human anti-galectin-9 antibodies, which PureTech intends to develop for historically difficult-to-treat cancers including pancreatic, colorectal, and cholangiocarcinoma, among other cancer types. PureTech intends to file an investigational new drug (IND) application for LYT-200 in the first half of 2020.

"PureTech's galectin-9 antibody has been designed to address the challenges encountered with current immuno-oncology treatments due to redundancies in the immunosuppressive tumour microenvironment. Our now patented antibody composition leverages a new mechanism of action to disrupt the immunosuppressive environment, potentially enabling the body's immune system to attack cancers that have historically been hard to treat," said Joe Bolen, Ph.D., chief scientific officer of PureTech. "This patent provides important coverage for our immuno-oncology proGalectin-9, gram, and we look forward to continuing the development of LYT-200 to address the tremendous patient need that exists."

Galectin-9 induces robust immunosuppression that allows tumours to evade immune system attack. It is a foundational immune modulator that is expressed in the tumour microenvironment, on tumour cells, and in the blood of cancer patients, globally inducing and maintaining immunosuppression in cancer. High galectin-9 expression has been demonstrated in a number of patient tumour samples, including those that do not respond well to current checkpoint inhibitors. By blocking galectin-9, PureTech's potentially first-in-class, fully human, monoclonal antibody is designed to intercept the immunosuppressive pathways that galectin-9 stimulates, potentially enabling an immune-mediated response against tumours. While existing therapies have not been sufficiently effective in the treatment of aggressive tumours, PureTech's approach has shown favourable drug properties and safety in pre-clinical models, and it is being explored as both a single-agent and in combination with other modalities for cancer treatment, including other immunotherapies and chemotherapies.

About LYT-200

PureTech's immuno-oncology program, LYT-200, is a fully human, potentially first-in-class, IgG4 monoclonal antibody designed to target galectin-9, which is a fundamental immunosuppressive mechanism in hard-to-treat cancers such as pancreatic, colorectal, and cholangiocarcinoma, among other tumour types. LYT-200 has demonstrated proof-of-concept in both mouse and preclinical human cancer models, indicating that targeting galectin-9 activates T cells in tumours and reduces tumour growth, which could significantly extend survival. These data suggest that LYT-200 has strong potential to be used as both a monotherapy and in combination with existing immuno-oncology therapies. PureTech intends to file an investigational new drug (IND) application for LYT-200 in the first half of 2020.

About PureTech

PureTech is an advanced biopharmaceutical company developing highly differentiated medicines for dysfunctions of the Brain-Immune-Gut (BIG) axis. The Company has gained deep insights into the connection between these systems and the resulting role in diseases that have been resistant to established therapeutic approaches. By harnessing this emerging field of human biology, PureTech is developing new categories of medicines with the potential to have a great impact on people with serious disorders.

PureTech is advancing a rich pipeline of innovative therapies with an unbiased, nimble, and capital-efficient R&D model across its affiliates and its internal R&D pipeline. PureTech's pipeline comprises more than two dozen product candidates, including several clinical-stage programs, one product that has been cleared by the US Food and Drug Administration (FDA), and a second product candidate that has been filed with the FDA for review. The PureTech pipeline includes ground-breaking platforms and therapeutic candidates that were developed in collaboration with some of the world's leading experts.

PureTech's internal pipeline is centered on lymphatic targeting and tissue-selective immunomodulation for the potential treatment of immune and central nervous system disorders, lymphatic conditions, and cancers. The company is advancing multiple platforms to enable oral administration of therapies directly into the lymphatic system, regulate lymphatic flow and function, and target immunosuppressive mechanisms in oncology.