Our 'Patient First' Approach to Biotherapeutics Research

Our biotherapeutics research is inspired by patients, driven by science and powered by our dedicated community of scientists.

We are applying our deep understanding of disease biology to design a diverse range of novel modalities and platform technologies that are the foundation for the next generation of life-changing biotherapeutics for patients.



Bispecific Antibody

Bispecific antibodies engage two disease targets with one molecule. While standard antibodies have two arms that bind to the same target antigen, bispecifics are engineered with two distinct binding domains, each targeting a different antigen



Antibody Drug Conjugate

Antibody-drug conjugates are a class of targeted biotherapeutic agent for treating cancer. Unlike conventional chemotherapy treatment which is delivered systemically, ADCs deliver the chemotherapy directly to the tumor cell via a linker attached to an antibody.



Monoclonal Antibody

Monoclonal antibodies engage only one (mono) disease target. They are engineered to mimic the body's natural antibodies which selectively target disease-causing substances and aid in destroying them, and can be used in the treatment of disorders, as well as cancers.

Gene Therapy

Human gene therapy focuses on

the modification or manipulation

of genes to treat or cure disease. This

can be done by replacing a

disease-causing gene with a healthy

copy of the gene, inactivating a

disease-causing gene that is not

functioning properly or introducing

a new or modified gene into the

body to help treat a disease.



Thrombolytic Protein

Tissue plasminogen activator (tPA) is a serine protease found on endothelial cells that line blood vessels and is essential for dissolving blood clots. It catalyzes the conversion of plasminogen to plasmin, the major enzyme responsible for clot breakdown.



T-cell Engager

T-cell engagers are a type of bispecific antibody that supports the body's immune cells in being able to 'find and destroy' cancerous cells. They are engineered to bind to both T cells and tumor cells, creating a bridge that enables the T cells to deliver cytotoxic proteins into the tumor cells to trigger their destruction.



Oncolytic Virus

Oncolvtic viruses are viruses that specifically replicate in cancer cells and thereby destroy cancer tissue but do not harm normal cells.



Cancer Vaccine

Therapeutic cancer vaccines are designed to combat existing disease using a patient's own immune defenses to mount an attack against cancer cells by improving T-cell priming and instructing I cells to recognize the tumor.





Nanobody

Nanobodies are a novel class of therapeutic proteins based on single-domain antibody fragments that also contain the unique structural and functional properties of naturally occurring heavy chain antibodies They offer potential advantages in stability and better tissue penetration.

