Programme: Horizon Europe

Project Start Date: 01/01/2023

Project Duration: 72 months

Project ID: 101071386
Call for proposals: ERC-2022-SYG
Coordinator: ACADEMISCH ZIEKENHUIS LEIDEN
Project participants: 3
Project website: https://glycanswitch.com/
Project value: 9,997,500.00€
Genos contribution: 2,487,500.50€

GlycanSwitch

Glycans as Master Switches of B Cell Activity in Autoimmunity

Glycosylation is a post-translational modification process that involves the addition of sugar molecules to proteins. In the immune system, glycosylation plays an essential role in regulating the interactions between immune cells and their environment. In the case of antibodies, glycosylation at the fragment antigen-binding (Fab) region affects the antigen-binding affinity of antibodies and may lead to the development and progression of autoimmune diseases. The ERC-funded GlycanSwitch project aims to investigate the cellular mechanisms underlying Fab glycosylation and its effects on the immune system. Researchers will focus on the glycosylation of the B cell receptor and its role in the selection and activation of autoreactive B cells. Project findings will provide the groundwork for targeted therapies against autoimmunity