

[Open Peer Review on Qeios](#)

Autologous Tumor Cell Proteoliposome Chronic Lymphocytic Leukemia Vaccine

National Cancer Institute

Source

National Cancer Institute. *Autologous Tumor Cell Proteoliposome Chronic Lymphocytic Leukemia Vaccine*. NCI Thesaurus. Code C112206.

An autologous chronic lymphocytic leukemia cancer vaccine consisting of patient-specific membrane proteins directly extracted from patient autologous tumor cells and incorporated into liposomes along with Interleukin 2 (IL-2) to produce membrane-patched proteoliposomes, with potential immunostimulating and antineoplastic activities. After subcutaneous injection of the autologous tumor cell proteoliposomes chronic lymphocytic leukemia vaccine, liposomes deliver the encapsulated tumor antigens into the cytosol of antigen presenting cells (APCs). Subsequently, the APCs process the antigens and present antigen-derived peptides to the immune system. This may enhance recognition of tumors by the immune system, and activate both cytotoxic CD8+ T cells and CD4+ helper T cells against tumor cells. IL-2 is incorporated into the vaccine to leverage its ability to expand activated T cells.