

[Open Peer Review on Qeios](#)

# Autologous Anti-PSMA Gene-Modified T-Lymphocytes

National Cancer Institute

## Source

National Cancer Institute. *Autologous Anti-PSMA Gene-Modified T-Lymphocytes*. NCI Thesaurus. Code C78197.

Autologous prostate specific membrane antigen (PSMA) gene-modified T lymphocytes with potential antineoplastic activity. Human autologous T-lymphocytes are isolated and transduced ex vivo with a retrovirus encoding a chimeric immune receptor (CIR) consisting of an antibody fragment against PSMA fused with signaling domains of the T cell. Upon reintroduction into the patient, autologous anti-PSMA gene-modified T-cells bind to PSMA-expressing prostate cancer cells, which may result in specific cytotoxic T-lymphocyte (CTL) tumor cell killing.