

ESZTER VÉGH



National Academy of Scientist Education, 1st year

University of Debrecen
Faculty of Medicine, 1st year

YEAR OF BIRTH

2006

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

University of Debrecen

SZENT-GYÖRGYI MENTOR

Árpád Szöőr

JUNIOR MENTOR

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SPECIALIZATION

Theoretical medical sciences

SECONDARY SCHOOL

Árpád Tóth Secondary Grammar School

NAME OF TEACHER

Gőz József,
Várallyainé Balázs Judit,
Kiss Andrea

LANGUAGES

English/C1
German/B2

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

The aim of the research is to develop BiTE CAR NK cells, which are genetically modified natural killer cells capable of direct tumor recognition via a chimeric antigen receptor, while enhancing local immune activation through the secretion of a bispecific T-cell/NK-cell engager (BiTE). The clinical application of conventional bispecific antibody therapies is currently limited by their short half-life, systemic toxicity, and the immunosuppressive nature of the tumor microenvironment. An NK cell-based approach offers a safer alternative while maintaining potent cytotoxic activity. CAR NK cells that continuously secrete BiTEs are expected to achieve enhanced antitumor efficacy with reduced systemic side effects, consequently laying the foundation for a novel, “living drug”-type immunotherapeutic platform with strong clinical translatability.

AMBITIONS AND CAREER GOALS

During my participation in the NTA program, I aim to acquire comprehensive knowledge in the field of scientific research. In the long term, I plan to pursue a career that combines both clinical practice and research.

HONORS AND PRIZES

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PUBLICATIONS

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