

What can GVHD Teach Us about the Graft versus Reservoir Effect?

Leslie S. Kean MD, PhD



Seattle Children's[®]
HOSPITAL • RESEARCH • FOUNDATION

FRED HUTCHINSON
CANCER RESEARCH CENTER

A LIFE OF SCIENCE



UNIVERSITY of
WASHINGTON

WANPRC
WASHINGTON NATIONAL PRIMATE RESEARCH CENTER

Summary for the Community:

- *Key questions of research:*

- How can we harness the immune system after transplant to help eradicate HIV?

- *Key findings and take-home message:*

- After transplant, T cells undergo a transition to favor those of the “Th17” type. These may be the most important cells for the graft-versus-viral reservoir effect.

- *Why is this important and how is this related to cure?*

- If we are to understand the reasons that the Berlin Patient was cured, we need to understand how his donor T cells may have helped clear the HIV reservoir. To do this, we must understand how T cells are activated after transplant.

- *Why should we be excited about this?*

- These experiments get us closer to understanding the ways that T cells can target recipient cells after transplant. The more we know about this, the more we can engineer these T cells to clear the viral reservoir. These results also show that donor T cells can get into the brain after transplant. This may be important for clearing the central nervous system reservoir.