

AXE IMMUNOPATHOLOGIE

Invité de Nicolas Chomont

Victor Appay, Ph. D.

Team Vulnerability and Ageing of the Immune System
ImmunoConcept Laboratory
Université de Bordeaux, INSERM, Bordeaux, France

Induction of functionally optimal T cell responses in people living with HIV

Résumé :

HIV-1 establishes chronic infection, exhausting cellular immune defences and necessitating life-long antiretroviral treatment (ART). The functional and regenerative capabilities of HIV-specific CD8⁺ T cells, and how to induce CD8⁺ T cells with optimal functional attributes in the setting of anti-HIV-1 therapeutic approaches after long-term ART are unknown. We investigated the extent to which the capacity to induce competent antigen specific CD8⁺ T cells was restored and could be enhanced in long-term ART PLWH. To this end, we characterized antigen-specific CD8⁺ T cells from ART treated PLWH and used an in vitro T cell priming approaches to study their induction. We found that long-term therapeutic suppression of viral replication was associated with the capacity to induce new antigen-specific CD8⁺ T cell populations in PLWH, highlighting the resilience of the immune system after long-term ART, which has broad implications for the development of therapeutic interventions against HIV-1. Moreover, the use of the stimulator of interferon genes (STING) agonist cGAMP enabled the induction of CD8⁺ T cells with optimal functionally properties directly from PLWH, which may thus represent a promising therapeutic approach to bolster antiviral CD8⁺ T cells in HIV-1 cure strategies.

Le mardi 19 septembre 2023 à 11 h

CENTRE DE RECHERCHE DU CHUM

Pavillon R
5^e étage, Amphithéâtre R05.212-B
900, rue Saint-Denis
Montréal (QC) H2X 0A9

L'AUDACE DE
CHERCHER
PLUS LOIN

Information : Élodie Kodjo elodie.kodjo.chum@ssss.gouv.qc.ca