

Comparative infection of autologous primary T cells and monocytes derived DCs using cell-free virus preparation, viral biofilm, pseudotyped-virus or viral synapse

Sandrine Alais, H el ene Dutartre, Renaud Mahieux

► **To cite this version:**

Sandrine Alais, H el ene Dutartre, Renaud Mahieux. Comparative infection of autologous primary T cells and monocytes derived DCs using cell-free virus preparation, viral biofilm, pseudotyped-virus or viral synapse. *Retrovirology*, BioMed Central, 2014, 11 (Suppl 1), pp.P99. <inserm-00924976>

HAL Id: inserm-00924976

<http://www.hal.inserm.fr/inserm-00924976>

Submitted on 7 Jan 2014

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destin ee au d ep ot et  a la diffusion de documents scientifiques de niveau recherche, publi es ou non,  emanant des  tablissements d'enseignement et de recherche fran ais ou  trangers, des laboratoires publics ou priv es.



POSTER PRESENTATION

Open Access

Comparative infection of autologous primary T cells and monocytes derived DCs using cell-free virus preparation, viral biofilm, pseudotyped-virus or viral synapse

Sandrine Alais, H el ene Dutartre[†], Renaud Mahieux^{*†}

From 16th International Conference on Human Retroviruses: HTLV and Related Viruses
Montreal, Canada. 26-30 June 2013

HTLV-1 infected T cells and blood dendritic cells (DCs) can be found in HTLV-1 carriers. It is currently believed that T cell infection requires cell-cell contact, while DCs could also be infected with cell-free virus. However, a comparative study using different modes of viral preparation for infecting human primary autologous T and DC cells has not been performed. Supernatant from HTLV-1 chronically infected T cells, cell conjugates between HTLV-1 infected cells and target cells, or purified viral biofilm were used side-by-side to infect autologous human primary lymphocytes and monocytes-derived dendritic cells. To monitor the early steps of viral infection, we also used pseudotyped viruses carrying either the HTLV-1 or the VSV envelopes. Infection was then followed by flow cytometry, ELISA, immunofluorescence, real-time PCR and alu-PCR. Our first data show that, depending on the source of viruses, lymphocytes have distinct susceptibility to HTLV-1 infection. The impact of the viral source in the spread of HTLV-1 infection will be discussed.

Published: 7 January 2014

doi:10.1186/1742-4690-11-S1-P99

Cite this article as: Alais et al.: Comparative infection of autologous primary T cells and monocytes derived DCs using cell-free virus preparation, viral biofilm, pseudotyped-virus or viral synapse.

Retrovirology 2014 11(Suppl 1):P99.

* Correspondence: renaud.mahieux@ens-lyon.fr

† Contributed equally

Oncog en se R etrovirale, label « Ligue Nationale Contre le Cancer », CIRI, Labex Ecofect, INSERM U1111-CNRS UMR5308, Universit  Lyon-1, Ecole Normale Sup rieure, Lyon, Cedex 07, France

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit

