

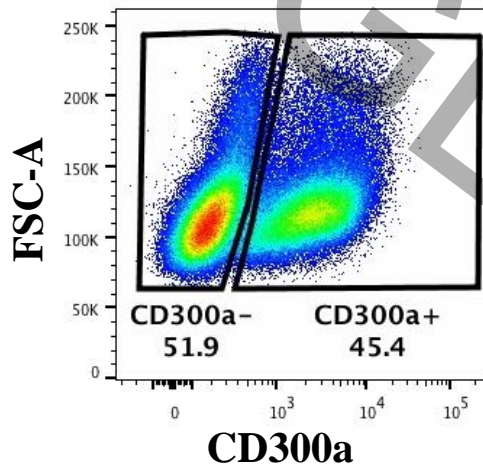


# Higher susceptibility of CD4+RA- T lymphocytes expressing CD300a to HIV-1 infection

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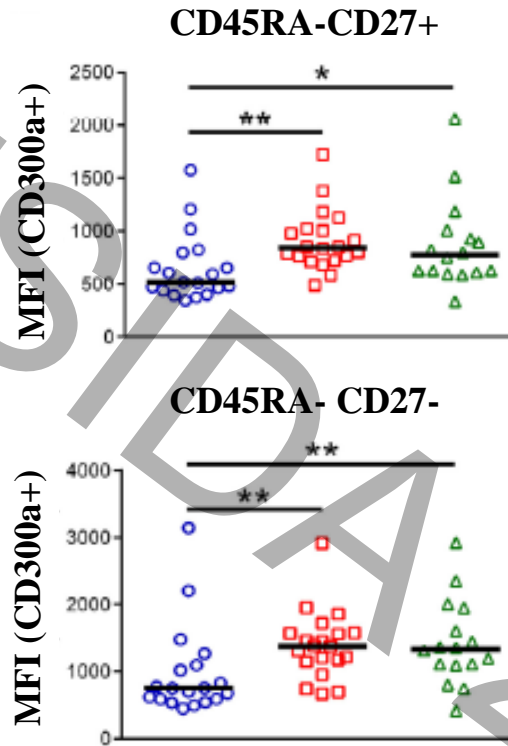
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# INTRODUCTION

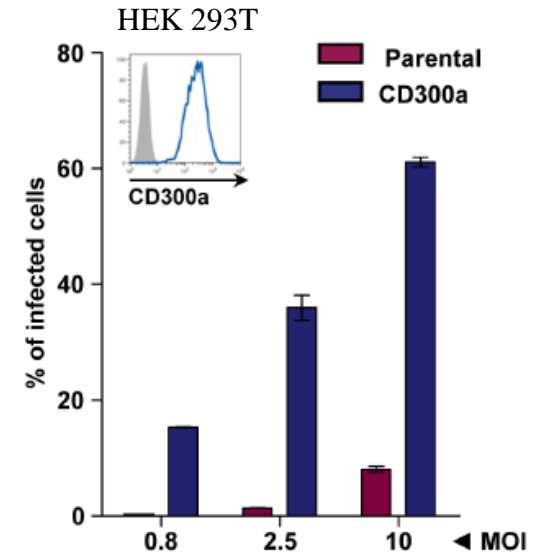


Vitallé J *et al.* 2018

- Healthy donors
- HIV
- △ HIV ART



## DENGUE

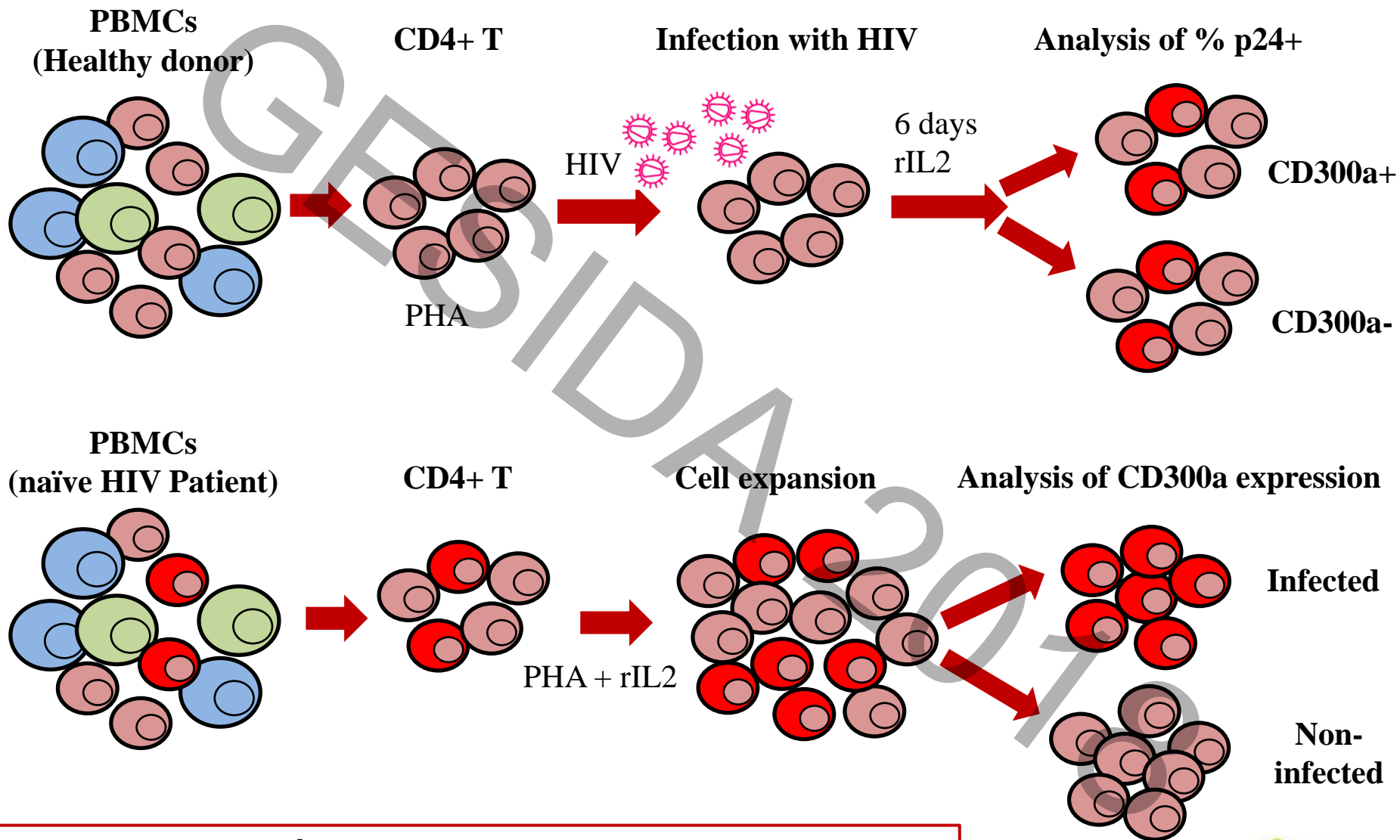


Carnec X *et al.* 2015

## OBJECTIVES:

1. To analyze the expression of CCR5 and activation markers on CD300a expressing CD4+CD45RA- T cells
2. To study the susceptibility to *in vitro* HIV-1 infection of CD300a expressing CD4+CD45RA- T cells from healthy donors
3. To determine CD300a expression on *in vivo* HIV-1 infected CD45RA-CD4+ T lymphocytes from cART naïve HIV-1 infected patients

# METHODS



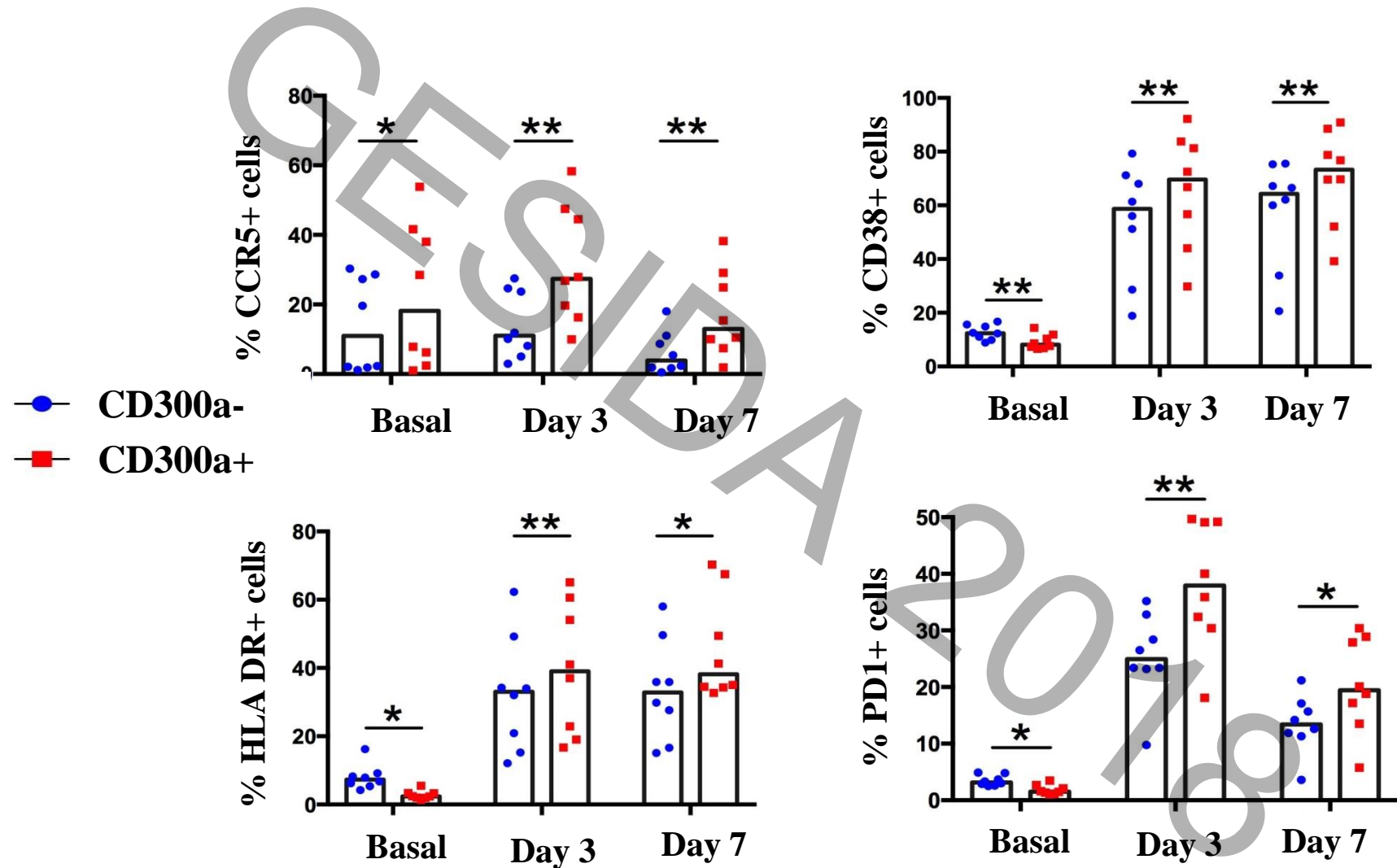
**FLOW CYTOMETRY** → Expression of CCR5, CD38, HLA-DR and PD-1

- **HEALTHY DONORS:** Basal, Day 3 and Day 7

- **HIV PATIENTS:** Basal, Day 7 and Day 13

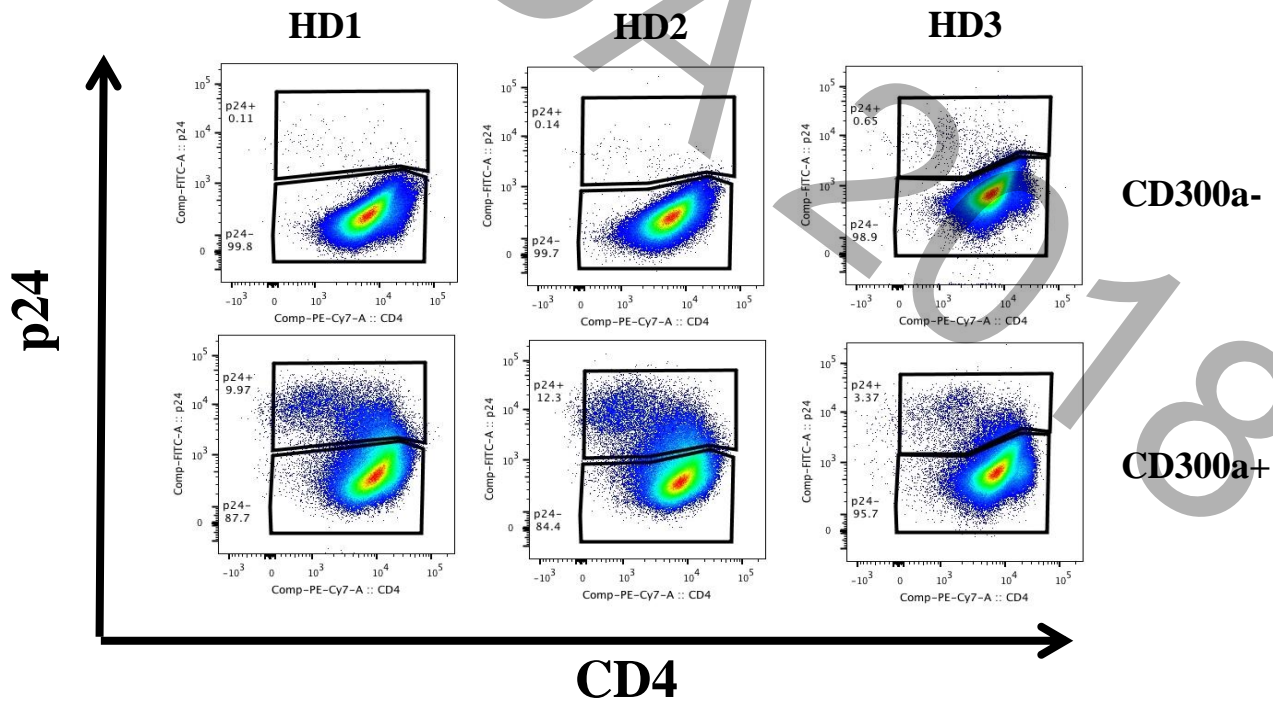
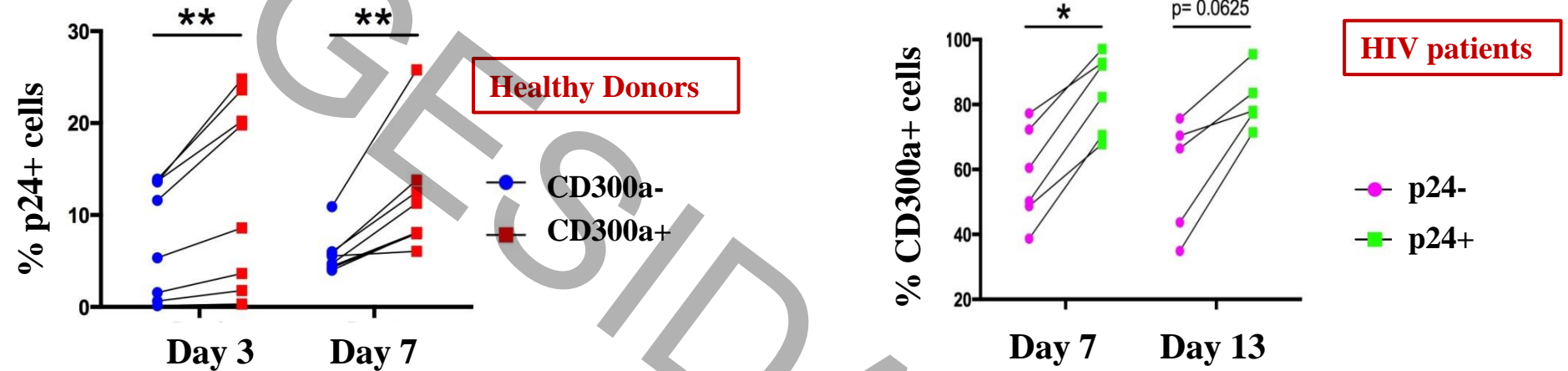
# RESULTS

Cell surface markers expression levels are different between CD300a+RA- and CD300a-RA- cells



# RESULTS

## CD300a+RA- CD4+T lymphocytes are more susceptible to HIV-1 infection



# { CONCLUSIONS }

1. CD300a+RA- CD4+ T lymphocytes exhibit higher CCR5 expression levels than CD300a-RA- cells.
2. Non-activated CD300a+RA- CD4+ T lymphocytes display a lower expression of activation markers, while after stimulation and infection they exhibit higher expression of activation markers than CD300a- cells.
3. CD300a expressing CD4+RA- T lymphocytes are more susceptible to *in vitro* HIV-1 infection.
4. *In vivo* HIV-1 infected CD4+RA- T lymphocytes are predominantly CD300a+.



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