

# Inflammation and depression in HIV

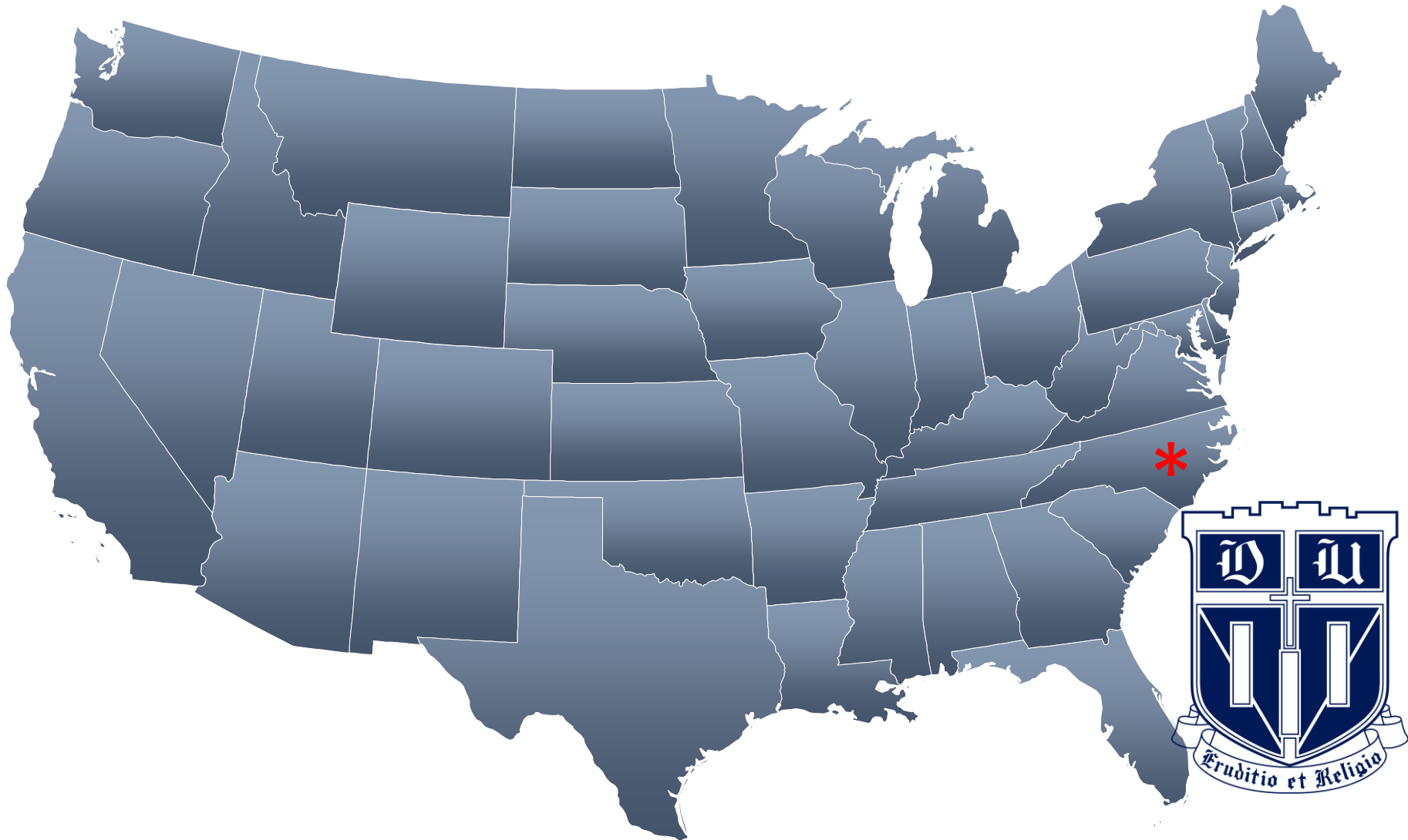
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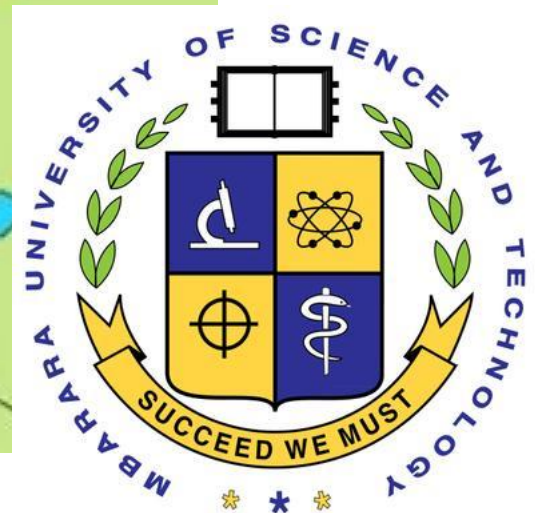
INTEREST 2019, Accra, Ghana



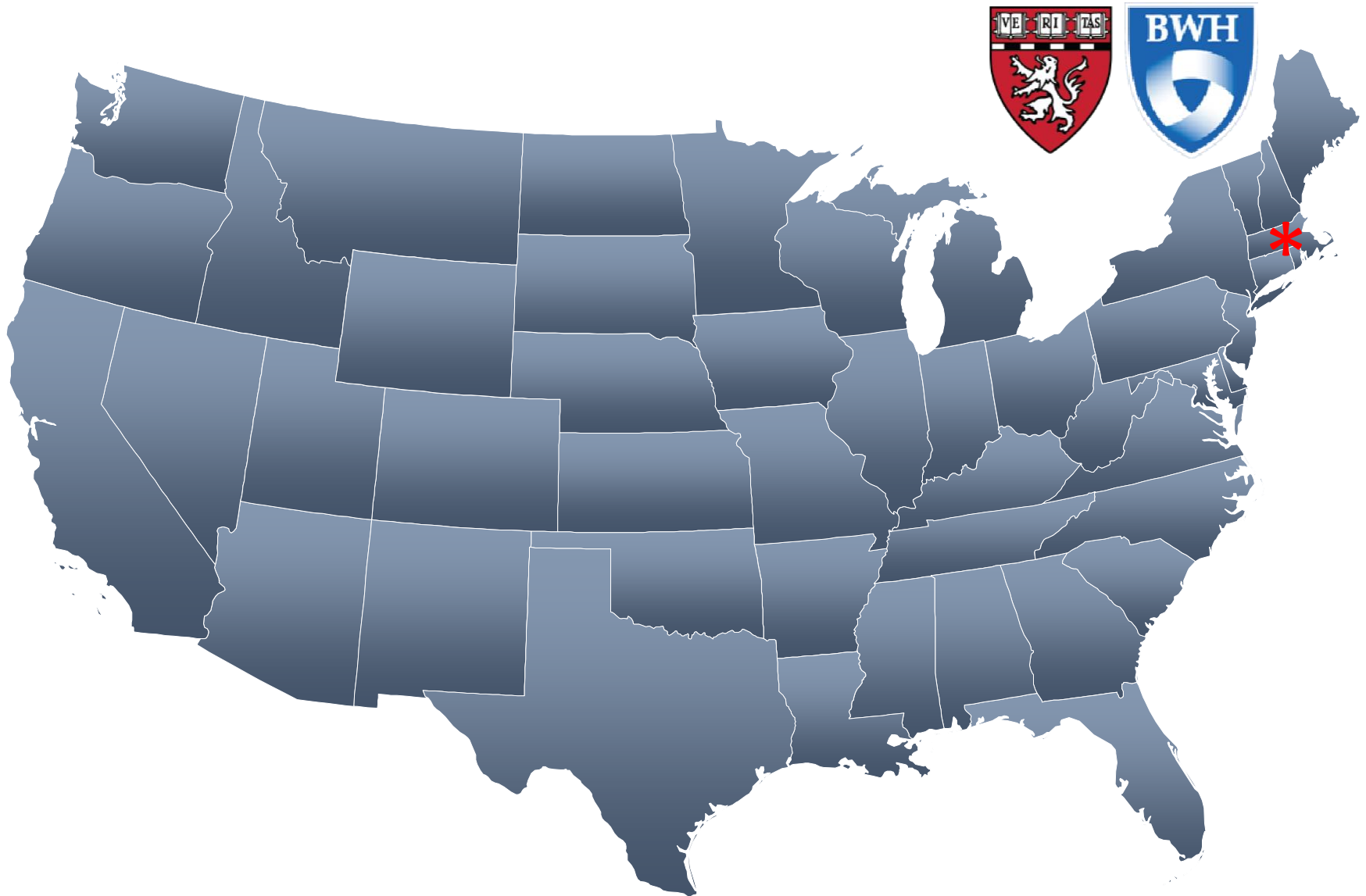
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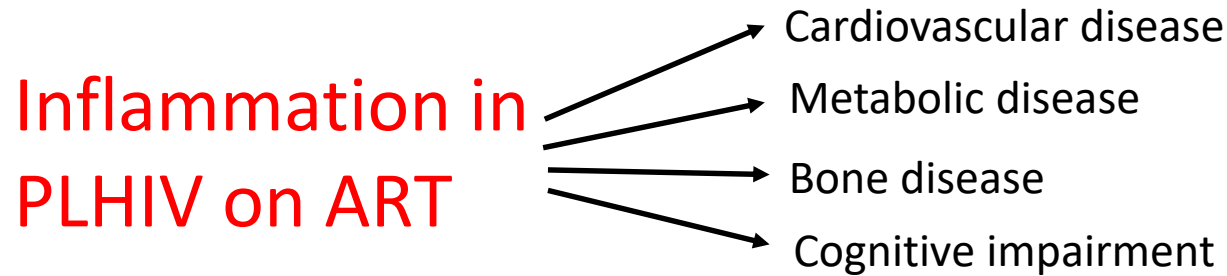
# About me



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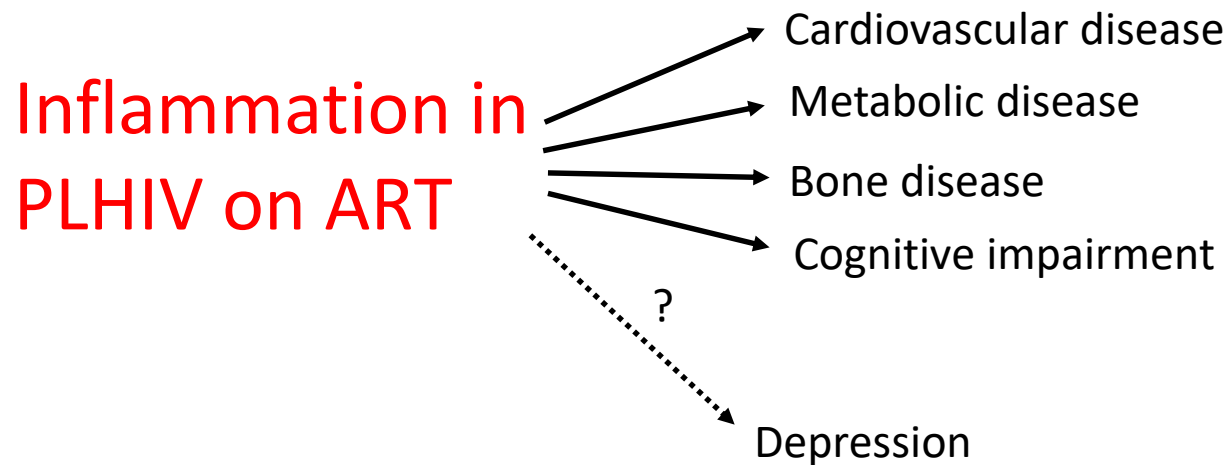


# AIDS 2018



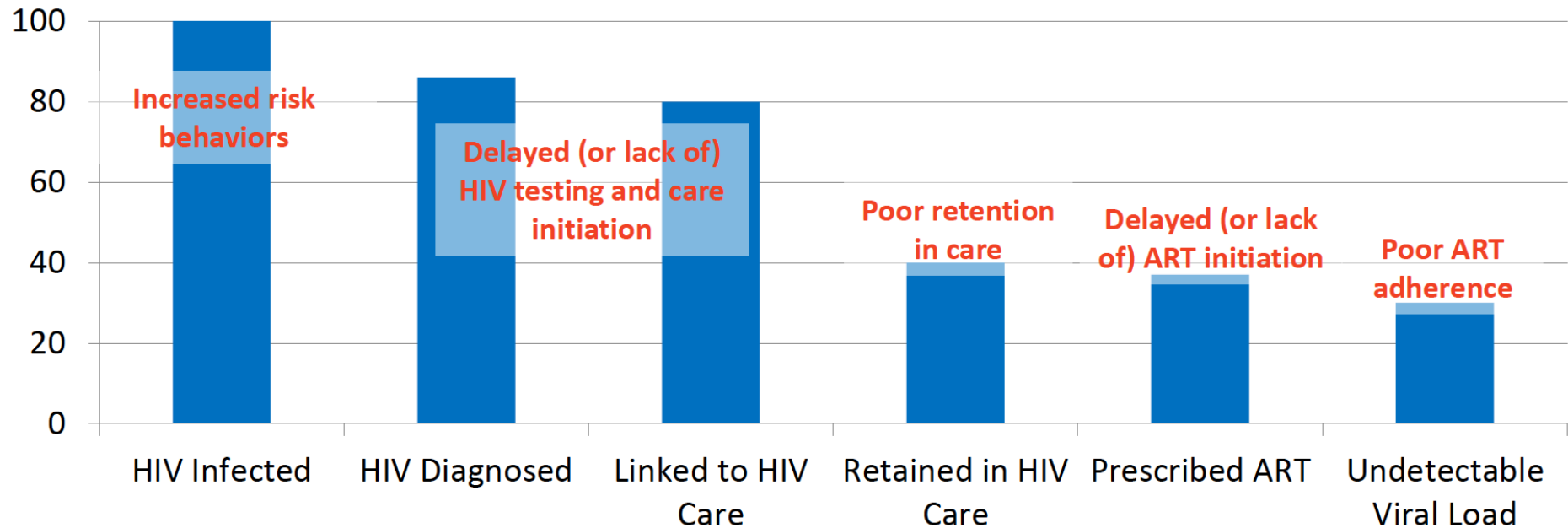
1. Byakwaga H, et. al. J Infect Dis, 2014
2. Lee S, et. al. J Infect Dis, 2017
3. Siedner MJ, et. al. J Infect Dis, 2016
4. Martinez P, et. al. JAIDS, 2014

# AIDS 2018



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# Depression affects every step of the cascade

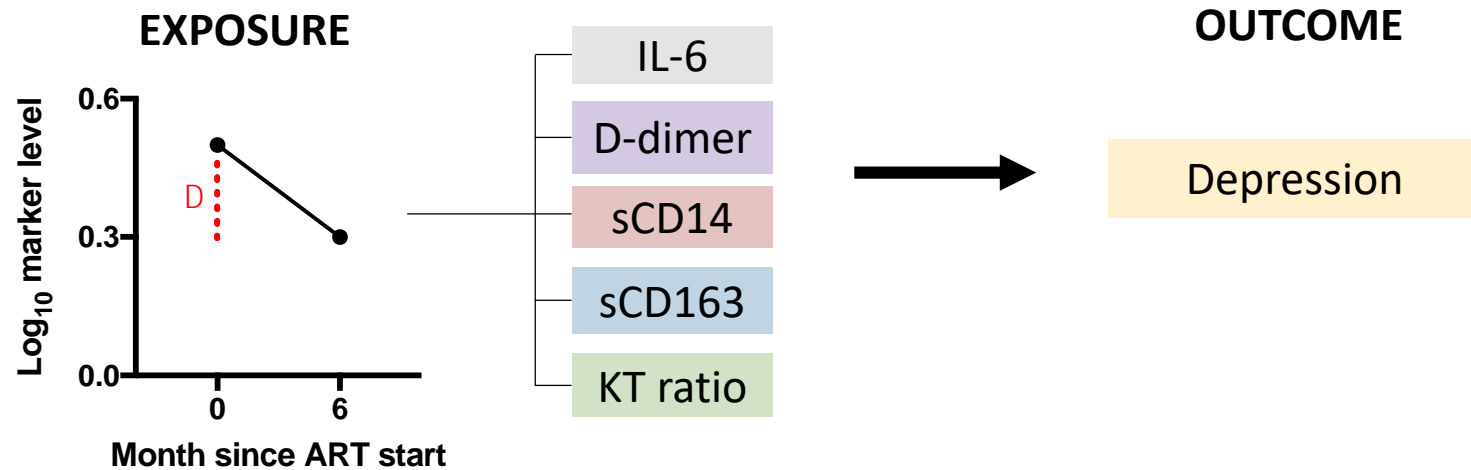


Source: Bemelmans M et al, J Int AIDS Soc, 2016; Gonzalez JS et al, JAIDS 2011; Uthman et al, Curr HIV/AIDS Rep, 2014; Mayston et al, AIDS, 2012; Krumme et al, J Epidemiol Community Health, 2014; Musisi et al, Int J STD AIDS, 2014; Antelman et al, JAIDS, 2007; Remien et al, AIDS and Behavior, 2007

Graphic courtesy of Dr. Michael Remien via Dr. Tobias Rinke de Wit

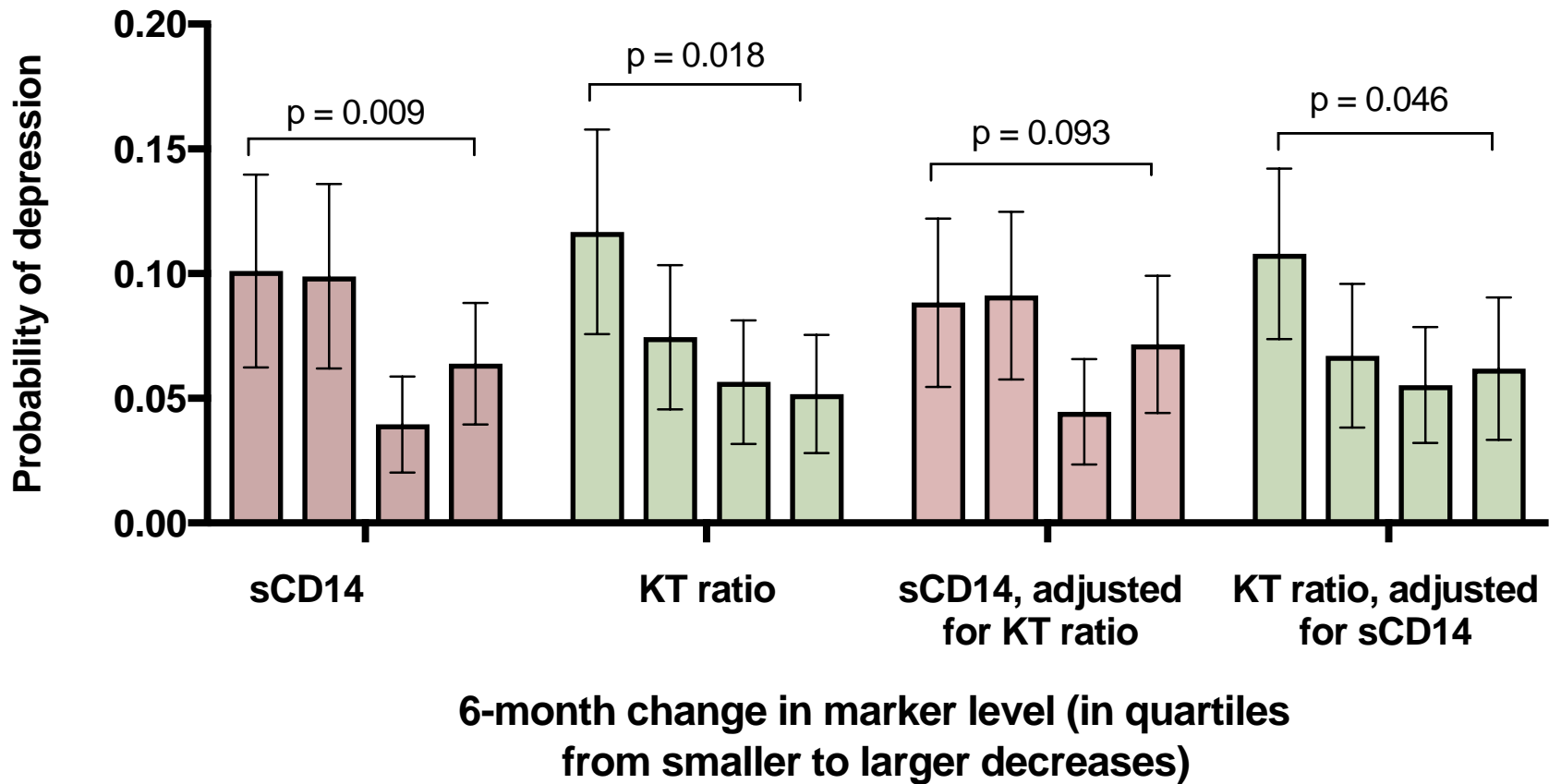
# AIDS 2018

453 Ugandan adults initiating ART from 2005-2013





# AIDS 2018



- Models adjusted for age, sex, BMI, marital status, education, asset index, baseline depressive symptom score, CD4+ count, viral load suppression, tuberculosis co-infection, time on ART, year of enrollment, heavy drinking, and smoking.

## Take-away points

- Additional measures, beyond suppressive ART, may be necessary to reduce mental health disturbances in persons living with HIV
- Interventions targeting KT ratio and sCD14-mediated pathways may decrease risk of depression in PLHIV

# References

1. Byakwaga H, Boum Y, Huang Y, et al. The kynurenine pathway of tryptophan catabolism, CD4+ T-cell recovery, and mortality among HIV-infected Ugandans initiating antiretroviral therapy. *J Infect Dis.* 2014;210(3):383-391.
2. Lee S, Byakwaga H, Boum Y, et al. Immunologic pathways that predict mortality in HIV-infected Ugandans initiating antiretroviral therapy. *J Infect Dis.* 2017;215(8):1270-1274.
3. Siedner MJ, Kim JH, Nakku RS, et al. Persistent immune activation and carotid atherosclerosis in HIV-infected Ugandans receiving antiretroviral therapy. *J Infect Dis.* 2016;213(3):370-378.
4. Martinez P, Tsai AC, Muzoora C, et al. Reversal of the Kynurenine pathway of tryptophan catabolism may improve depression in ART-treated HIV-infected Ugandans. *J Acquir Immune Defic Syndr.* 2014;65(4):456-462.