



Jiang Yan

National Center for AIDS/STD Control and Prevention, China CDC

Determination of mean duration of recency and false recent rate for estimation of HIV-1 incidence with LAg-Avidity EIA in China

A new avidity assay, limiting-antigen avidity enzyme immunoassay (LAg-Avidity EIA), was developed in these years to enhance the accuracy of HIV-1 incidence estimated by laboratory method. The pilot study showed the new assay was better than BED-CEIA which is most widely used in world now. In May 2012, it was introduced to China, before it was used for the HIV-1 incidence estimation in China, two essential parameters, mean duration of recency and false recent rate (FRR), for incidence estimation should be determined with this assay. 531 longitudinal specimens (151 seroconvert individuals) collected from three different cohort studies were tested and analyzed to obtain the mean duration of recency; total 513 specimens from long-term infection (diagnosis time longer than twice the mean duration of recency of this assay) and antiretroviral therapy naive individuals were tested to analyze the FRR of the LAg-Avidity assay. The repeatability of the LAg-Avidity assay was better; when the cutoff value of this assay was 1.0 as described in the kit instruction, the mean duration of recency was 126 days and the FRR with this assay used in China was 0.39% (2/513, 95%CI 0.00%-0.93%), much lower than BED assay. The LAg-Avidity assay could improve the accuracy of HIV-1 incidence calculated in China.

Biography

Jiang Yan has completed her Ph.D. from Osaka Medical University of Japan and postdoctoral studies from Institute of Virology and Epidemiology of Beijing, China. She is the director of National HIV/HCV Reference Laboratory, China CDC. She has published more than 32 papers in reputed journals and has been serving as an editorial board member of repute.

Jiangyan03@263.net