Frequently Asked Questions (FAQ) about TB and HIV*

What are the links between HIV and TB?

HIV affects the immune system and promotes both the progression of latent TB infection to active disease and relapse of the disease in previously treated patients. Worldwide, TB is one of the leading causes of death in HIV-infected people.

What is the impact of co-infection with TB and HIV?

A HIV infected individual who also has untreated TB infection is much more likely to develop active TB disease during his or her lifetime than someone without HIV infection. Among people with latent TB infection, HIV infection is the stronger known risk factor for progressing to active TB disease.

Infection with TB enhances replication of HIV and may accelerate the progression of HIV infection to AIDS. Without treatment, HIV and TB can work together to shorten the life of the person infected.

Can rapid HIV tests be used to screen TB patients and their contacts?

Yes. Rapid HIV tests, using finger prick or oral specimens, can be used. Results are available in about 20 minutes.

Who should be tested for HIV in TB clinics?

All patients in TB clinics should be tested for HIV. This includes TB suspects, patients, and contacts regardless of their age and risk factors. All HIV-infected people should get a TB test to find out if they have TB infection.

What is the TB regimen for individuals with HIV?

Recommendations for treating tuberculosis in adults with HIV infection are, with a few exceptions, the same as those for adult TB patients who are not HIV-infected. Consult the 2013 CDC MMWR guidelines: Managing Drug Interactions in the Treatment of HIV-Related Tuberculosis (http://www.cdc.gov/tb, see link to Guidelines).

When should I start HAART treatment?

Highly active antiretroviral therapy (HAART) is recommended regardless of CD4 cell count when tuberculosis disease is identified in HIV-infected patients. Mortality during TB treatment is also reduced in these patients. The findings of multiple studies provide compelling evidence that HAART should be started early during TB treatment of HIV-TB co-infected individuals.

- CAMELIA trial: Among patients with a CD4 count less than 200, those who started HIV treatment with 2 weeks of TB treatment, compared to 8 weeks, reduced mortality but increased rate of immune reconstitution syndrome (IRIS).
- SAPIT study: Among patients with a CD4 count less than 500, there was no difference in incidence rate of AIDS or death if HIV treatment was started within 4 weeks of TB treatment or within 4 weeks after the completion of the intensive phase. There was a higher incidence of IRIS among patients with a CD4 count less than 50 and earlier treatment initiation.

AIDS Clinical Trial Groups Study A5221: Overall, no difference in mortality if HIV treatment was started 2 weeks or 8-12 weeks after TB treatment initiation.
Among patients with CD4 count less than 50, there was a significant decrease in new AIDS-defining illness, and mortality and higher incidence of IRIS.

WHO guidelines recommend the initiation of HAART between 2 and 8 weeks after the initiation of TB therapy.

*Content Adapted from:

- 1. CDC Grand Rounds: the TB-HIV Syndemic. MMWR, July 6, 2012. 61(26);484–489.
- 2. Thomson MA, Aberg JA, Cahn P, *et al.* Antiretroviral Treatment of Adult HIV Infection: 2010 Recommendations of the International AIDS Society–USA Panel. *JAMA*. 2010; 304 (3):321–333.
- 3. Abdool Karim SS, Naidoo K, Grobler A, *et al.* Timing of Initiation of Antiretroviral Drugs during Tuberculosis Therapy. *The New England Journal of Medicine*. 2010: 362 (8) 697–706.
- Piggott DA, Karakousis PC. Timing of Antiretroviral Therapy for HIV in the Setting of TB Treatment.
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- 5. Blanc FX, Sok T, Laureillard D, *et al.* Earlier versus later start of antiretroviral therapy in HIV-infected adults with tuberculosis. *N Engl J Med.* 2011 Oct 20; 365(16):1471–81.
- 6. Havlir DV, Kendall MA, Ive P, *et al.*; AIDS Clinical Trials Group Study A5221. Timing of antiretroviral therapy for HIV-1 infection and tuberculosis. *N Engl J Med.* 2011 Oct 20; 365(16):1482–91.
- 7. Abdool Karim SS, Naidoo K, Grobler A, *et al.* Integration of antiretroviral therapy with tuberculosis treatment. *N Engl J Med.* 2011 Oct 20; 365(16):1492–501.
- 8. Health Protection Agency. *Universal HIV testing for TB patients: Guidance for healthcare professionals working with TB.* London: 2009.
- Centers for Disease Control and Prevention. HIV and TB Fact Sheet. Available at: http://www.cdc.gov/hiv/resources/factsheets/hivtb.htm. Downloaded December 20, 2011.