**Supplementary Material**

*Clinical Protocols:*

Antiretroviral therapy (ART) recommendations for HIV-monoinfected patients if:

a) CD4+ T-cell count ≤ 350 cells/mm3, irrespective of clinical symptoms or WHO stage *or*

b) all patients with WHO clinical stage 3 or 4 irrespective of CD4 count *or*

c) all patients with active tuberculosis irrespective of CD4+ T-cell count or WHO stage.

ART recommendations for HIV/HBV co-infected patients if:

1. CD4+ T-cell count ≤ 350 cells/mm3 *or*
2. if evidence of chronic active hepatitis (ALT > 41 IU/ml in men and > 31 IU/ml in women) regardless of CD4 count.

Patient demographic, clinical, laboratory and therapeutic data were collected by physicians and nurses on standard case report forms and National Care and Treatment Center forms (CTC 2) then entered into a secure computerized database using Filemaker Pro software. Data collected in the parent study included gender, marital status, age, weight, height, body mass index (BMI), WHO stage, alcohol use, dates of all clinic visits, history of or current tuberculosis infection, co-trimoxazole use, ART regimen at initiation and follow up, ART duration, and date of loss to follow up and/or death. Laboratory data collected at baseline and follow up included hemoglobin g/dl (Hgb), CD4+ T cell count/mm3 (CD4), alanine aminotransferase IU/L (ALT), HIV RNA copies/ml (Roche Cobas AmpliPrep TaqMan), HBV DNA IU/ml (Roche Cobas AmpliPrep TaqMan), HBeAg and anti-HBe.

*PCR Primers and Reaction Conditions:*

1. **BCP/PC**: (1742 – 1900)
   1. First round:
      1. 1606+ (1606-1625): 5’ - GCATGGAGACCACCGTGAAC – 3’
      2. 1974- (1974-1955): 5’ - GGAAAGAAGTCCGAGGGCAA - 3’
         1. Hot-start
         2. Denaturation 94°C for 1 min
         3. Annealing 55°C for 1 min
         4. Extension 72°C for 2 min
         5. 40 Cycles
   2. Second round:
      1. 1653+ (1653-1672): 5’ - CATAAGAGGACTCTTGGACT – 3’
      2. 1959- (1959-1940): 5’ - GGCAAAAAACAGAGTAACTC – 3’
         1. Identical reaction conditions as above
2. **Complete S** (2848 – 835) & **partial P** (2624 – 1240)
   1. First round:
      1. 2410+ (2410-2439): 5’ – TCAATCGCCGCGTCGCAGAAGATCTCAATC – 3’
      2. 1314- (1314-1291): 5’ - TCCAGACC**X**GCTGCGAGCAAAACA – 3’
         1. Hot-start
         2. Denaturation 94°C for 1 min
         3. Annealing 66°C for 1 min
         4. Extension 72°C for 3 min, 40 cycles
         5. 40 cycles
   2. Second round:
      1. 2451+ (2451-2482): 5’ - AATGTTAGTATTCCTTGGACTCATAAGGTGGG – 3’
      2. 1280- (1280-1254): 5’ - AGTTCCGCAGTATGGATCGGCAGAGGA – 3’
         1. Hot-start
         2. Denaturation 94°C for 1 min
         3. Annealing 65°C for 1 min
         4. Extension 72°C for 3 min
         5. 40 cycles
3. **Short S (for genotyping – if unable to amplify/sequence complete S)**
   1. First round:
      1. 253+:CTC GTG GTG GAC TTC TCT CAA TT
      2. 759-:CCC CAA TAC CAC ATC ATC CAT
         1. Hot-start
         2. Denaturation 94°C for 30 sec
         3. Annealing 56°C for 40 sec
         4. Extension 72°C for 1 min
         5. 40 cycles
   2. Second round:
      1. 460+:TAT GTT GCC CGT TTG TCC TCT
      2. 711-: AGC CCT ACG AAC CAC TGA ACA
         1. Hot-start
         2. Denaturation 94°C for 30 sec
         3. Annealing 56°C for 40 sec
         4. Extension 72°C for 50 sec
         5. 40 cycles

*Sequencing Primers:*

**BCP/PC** and **short S** sequencing performed with second round PCR primers.

**S/P** sequencing primers:

* + - 1. 2454F (2454-2471): 5′-GTTAGTATTCCTTGGACT-3′
      2. 185R (185-168): 5′-GTCCTAGGAATCCTGATG-3′
      3. 60F (60-75): 5′-CTGGTGGCTCCAGTTC-3′
      4. 711-: AGC CCT ACG AAC CAC TGA ACA
      5. 595F (595-610):  5′-CACCTGTATTCCCATC-3′
      6. 1280- (1280-1254): 5’ - AGTTCCGCAGTATGGATCGGCAGAGGA – 3’