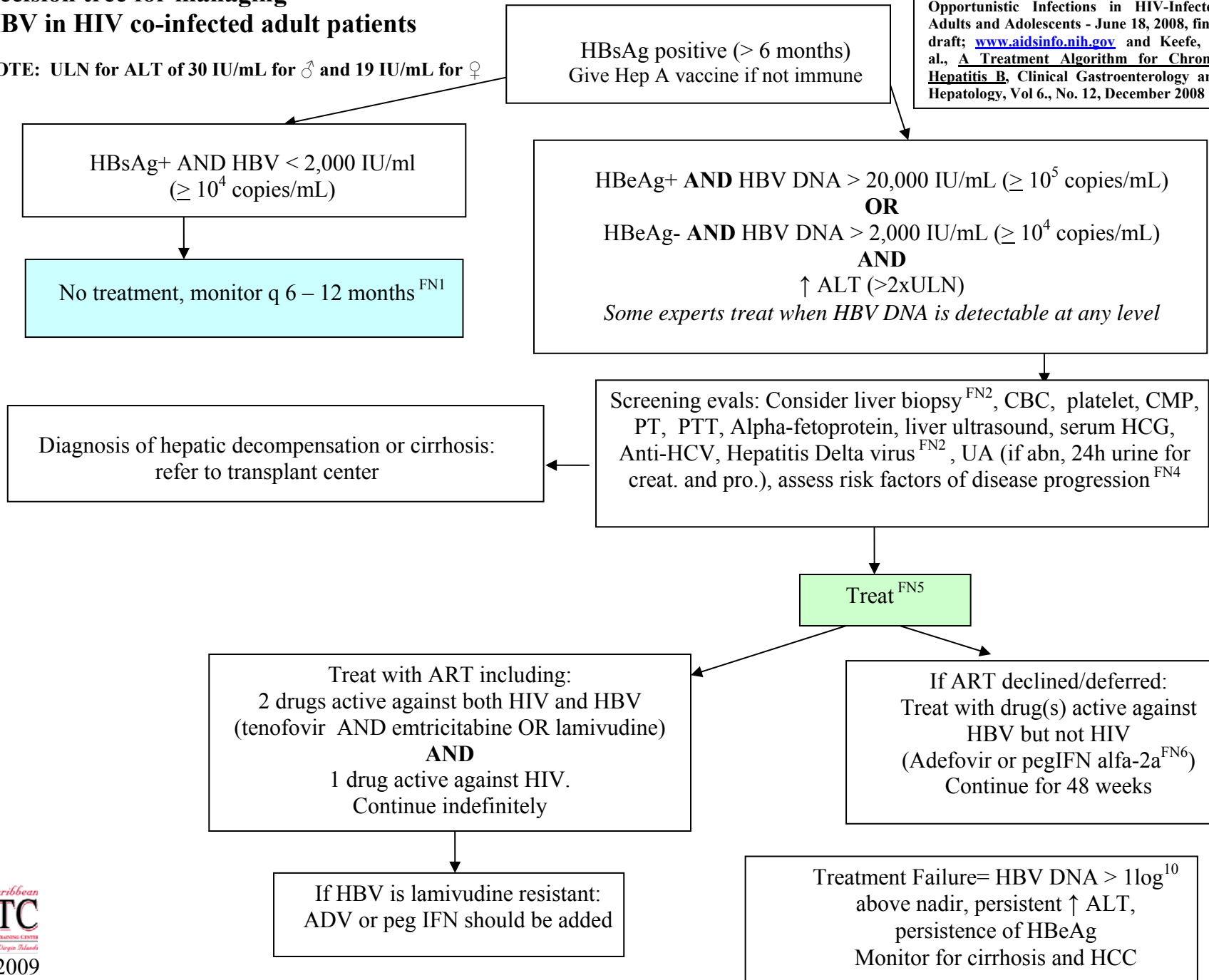


Decision tree for managing HBV in HIV co-infected adult patients

NOTE: ULN for ALT of 30 IU/mL for ♂ and 19 IU/mL for ♀

Adapted from:
Guidelines for Prevention and Treatment of Opportunistic Infections in HIV-Infected Adults and Adolescents - June 18, 2008, final draft; www.aidsinfo.nih.gov and Keefe, et al., A Treatment Algorithm for Chronic Hepatitis B, Clinical Gastroenterology and Hepatology, Vol 6., No. 12, December 2008



MEDICATION	HIV DOSING
INTERFERONS	
IFN-alfa-2a or -2b	5 MU sc qd or 10 MU sc TIW
Peg IFN alfa-2a	180 mg sc q wk
NUCLEOTIDES	
Adefovir	10 mg po qd
Tenofovir ¹	300 mg po qd
NUCLEOSIDES	
Lamivudine ¹	300 mg po qd
Emtricitabine ^{1,2}	200 mg po qd
Entecavir ¹	1 mg po qd
Telbivudine ¹	600 mg po qd

Table Notes

- 1 Not recommended for treatment of patients not on ART therapy.
2 Not FDA approved for treatment of HBV

FN1: Suggested follow-up, if not treated:

HBeAg (+) with HBV DNA \geq 20,000 IU/mL & NL ALT

- ALT every 3-6 months
- Consider liver biopsy and/or treatment when ALT levels become increased

HBeAg (-) with HBV DNA \geq 2,000 IU/mL NL ALT

- ALT every 3-6 months
- Consider liver biopsy and/or treatment when ALT levels become increased

Inactive Carrier State

- ALT every 6-12 months
- \uparrow ALT – Check serum HBV DNA & exclude other causes of disease

FN2: Liver Biopsy might be useful if high HBV DNA but normal ALT and age > 35 or if high risk of disease progression. (See FN4)

FN3: Endemic areas for HDV: Romania, Pacific Republic of Kiribati, Amazon region, Egypt, Senegal, Gabon, Kenya, Tanzania, Bolivia, Columbia, Venezuela, Balkans, Southern Italy, and countries of the near and middle east

FN4: Viral and host factors associated with risk or progression to cirrhosis or HCC:

- HBeAg (+)
- HBV DNA $>10^5$ copies/mL
- Male gender
- Advanced age
- Alcohol consumption
- Cigarette smoking
- Co-infected with HCV or HAV
- HBV Genotype C
- Presence of HBV precore or core promoter of mutations
- Severity and frequency of elevated ALT's

FN5: On TX monitoring:

- HBV DNA at 12 weeks $<1 \log_{10}$ IU/mL decline = failure
- At 24 week HBV DNA response defined as: <60 IU/mL = complete; 60 to <2000 IU/mL = partial; ≥ 2000 IU/mL = inadequate
- For complete response, continue same medication and monitor every 6 months
- For partial or inadequate response, add or change to another drug that is not cross-resistant, monitor every 3 months and continue treatment. Be sure any selected regimen includes at least 3 agents effective against HIV and at least 2 agents effective against HBV.

FN6: Genotypes A & B appear to be associated with higher response to IFN alfa2b therapy than genotypes C & D. Consider genotyping prior to IFN alfa 2b use