Screening and Management of Patients Undergoing Cancer Chemotherapy or Immunosuppressive Therapy

Test for anti-HBc (total or IgG), HBsAg and anti-Hbs

- HbsAg-neg/ Anti-HBc negative
  - No Follow-up Necessary

- HBsAg-negative/ anti-HBc positive
  - Obtain HBV DNA
    - HBV DNA negative. On med targeting B Cells
      - HBV DNA, LFT and HBsAg every 1-3 months while on therapy. Consider referral to Liver Clinic
        - If HBV DNA remains negative throughout therapy and at least one year thereafter-
          - No further follow-up needed.
    - HBV DNA positive
      - HBV DNA > 2000 IU/ml
        - Tenofovir (TDF) or Entecavir (ETV) or Tenofovir alafenamide (TAF)
          - Start before initiation of chemo/ immune therapy
            - Continue antiviral therapy indefinitely
      - HBV DNA <2000 IU/ml
        - Refer to Liver Clinic, obtain HBV DNA, if not already done

- HBsAg positive
  - Refer to Liver Clinic, obtain HBV DNA, if not already done
    - HBV DNA > 2000 IU/ml
      - TDF, ETV or TAF
        - Start before initiation of chemo/ immune therapy
          - Continue anti-viral drug for at least 1-year after chemo/ immune therapy is completed
    - HBV DNA <2000 IU/ml
      - No further HBV follow-up needed after chemo/immune therapy completed

See Lab Terminology Key on pg. 2
Footnotes:

1 Patients receiving immunosuppressive therapy post bone marrow or solid organ transplants who are HBsAg-negative/anti-HBc-positive should receive HBV antiviral therapy for life.

2 Patients receiving Rituximab or similar class anti-CD20 therapy should take HBV antiviral therapy. Clinicians may choose to follow persons with anti-HBc who are receiving less intensive chemotherapy or TNF inhibitors and are HBsAg and HBV DNA-negative. Check for HBV DNA periodically during therapy as uncommon reports of reappearance of HBV DNA have occurred, but more data is needed to guide any specific recommendation.

3 Tenofovir should be used instead of Entecavir in patients exposed previously to lamivudine, telbivudine, adefovir or emtricitabine. Entecavir or Tenofovir alafenamide would be preferred in patients with renal disease or receiving potentially renal toxic Tenofovir alafenamide.

4 Patients receiving potent immunotherapy with anti-CD20 agents or other intensive therapy should consider continuing HBV antiviral prophylaxis indefinitely.

5 Patients receiving potent immunotherapy with agents that target B cells or other intensive therapy should continue to have HBV DNA tested for a longer period.

Cerner & Other Names for Hepatitis B Labs/ Definitions

HBsAg = Hepatitis B Surface Antigen = Hep B Surface Ag: If Positive/Reactive = Infection

Anti-HBs = Hepatitis B Surface Antibody = Hep B Surface Ab: If Positive/Reactive = Immunity

Anti-HBc Total or Anti-HBc IgG = Hepatitis B Core Antibody = Hep B Core Ab: If Positive/Reactive = Immune due to previous exposure. Persists through life

IgM anti-HBc = Hepatitis B Core Antibody IgM = HBC – IgM: If Positive/Reactive = Acute hepatitis B infection

*If Hep B Surface Ab result is Non-reactive in previously immunized person, booster dose is not needed.*