Hepatitis B testing

This pathway MUST be followed for patients starting rituximab, obinutuzumab, TKIs for CML, ibrutinib, or lenalidomide
(Hep B testing is also recommended before starting other immunosuppressive treatments)

Hepatitis B reactivation is well known to occur following treatment with rituximab, and can also occur following treatment for CML, with obinutuzumab or ibrutinib, and following treatments for acute leukaemia and myeloma.

Hep B reactivation is most likely to occur in patients with chronic active infection, associated with Hep B surface antigen (HBsAg) positivity. But it can also occur in patients who are negative for HBsAg, but who have detectable anti Hep B core antibody (HBcAb), indicating a past "resolved" infection.

Patients who are positive for Hep B core antibody, with negative surface antigen, carry a risk of Hepatitis B reactivation following exposure to drugs such as rituximab. In a meta-analysis[1], patients who were positive for core antibody, with negative surface antigen, had a risk of Hep B reactivation following rituximab exposure of 6.3% (but up to 41.5% in one series). Fatalities were also reported.
These patients can often still be treated for their haematological malignancy, but require antiviral prophylaxis and close monitoring of viral PCR.

[1]Law, MF et al; *World Journal of Gastroenterology* 2016; 22 (28): 6484 - 6500

Pre-treatment screening

All patients with a haematology malignancy and starting rituximab, obinutuzumab, TKIs for CML, ibrutinib or lenalidomide should be screened for Hep B surface antigen (HBsAg) **and** anti Hep B core antibody (HBcAb).

Hep B testing is also recommended before starting other immunosuppressive treatments, although not currently MHRA advice.

Patients negative for both HBsAg and HBcAb

All patients who are negative for both HBsAg and HBcAb may proceed with their treatment for malignancy, as standard practice.

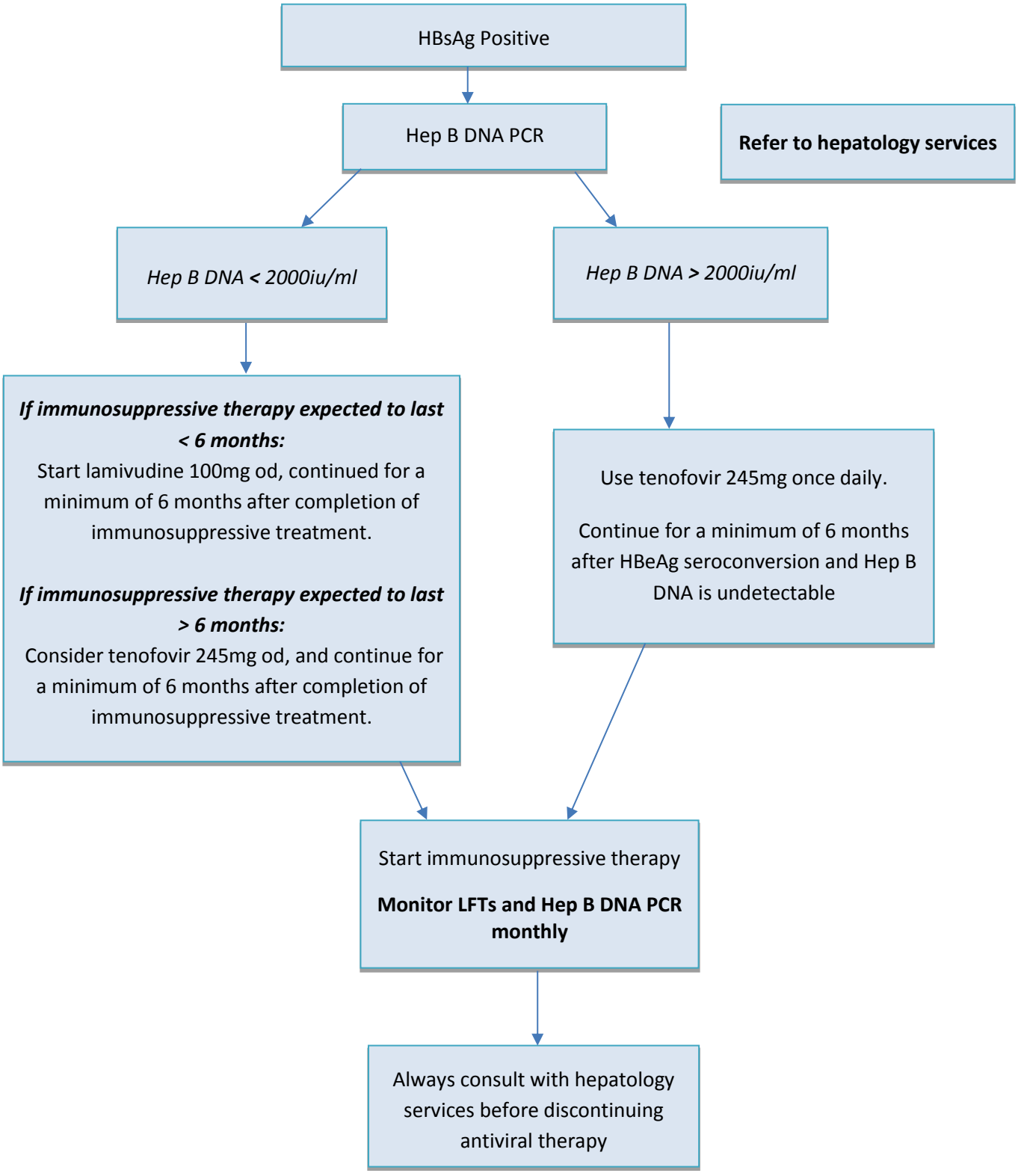
HBsAg +ve patients *or* HBsAg –ve / HBcAb +ve patients

For patients who are either HBsAg +ve ***or*** HBsAg –ve / HBcAb +ve, please follow the flowcharts below.

Antiviral therapy should start, preferably 2-3 weeks prior to starting chemotherapy, but at the latest on the same day. Do not delay management of the malignant condition.

Flowcharts for patients at risk of Hepatitis B reactivation

a) Hepatitis B Surface antigen Positive Patients



b) Hepatitis B surface antigen –ve / Hep B core antibody +ve patients