



## Appendix 8 – List of Immune Compromising Treatments CASL (2018) – Management of HBV Infection<sup>1</sup>

Risk of HBV reactivation with immunosuppression and chemotherapy in HBsAg-Positive, and HBsAg-Negative, anti-HBc Total positive patients.<sup>11</sup> TNF = tumour necrosis factor

Risk Level	HBV serology	Immunosuppressive or chemotherapy
<b>High-risk</b> (> 10% chance of reactivation)	HBsAg positive OR HBsAg negative and anti-HBc Total positive (high risk regardless of anti-HBs titre levels)	<ul style="list-style-type: none"> <li>B-cell-depleting agents such as rituximab and ofatumumab.</li> </ul>
	HBsAg positive	<ul style="list-style-type: none"> <li>Anthracycline derivatives such as doxorubicin and epirubicin. Corticosteroid therapy for ≥ 4 weeks (prednisone equivalent &gt; 10–20 mg/day).</li> </ul>
<b>Moderate-risk</b> (1-10% chance of reactivation)	HBsAg positive OR HBsAg negative and anti-HBc Total positive (may be lower risk and monitoring may be sufficient if high anti-HBs titres > 100 IU/L)	<ul style="list-style-type: none"> <li>TNF-α inhibitors: etanercept, adalimumab, certolizumab, infliximab.</li> <li>Other cytokine inhibitors and integrin inhibitors: abatacept, ustekinumab, natalizumab, vedolizumab.</li> <li>Tyrosine kinase inhibitors: imatinib, nilotinib, ibrutinib.</li> </ul>
	HBsAg positive	<ul style="list-style-type: none"> <li>Corticosteroid therapy for ≥ 4 weeks (prednisone equivalent &lt; 10 mg/day).</li> </ul>
	HBsAg negative and anti-HBc Total positive (may be lower risk and monitoring may be sufficient if high anti-HBs titres > 100 IU/L)	<ul style="list-style-type: none"> <li>Corticosteroid therapy for ≥ 4 weeks (prednisone equivalent &gt; 10–20 mg/day).</li> <li>Anthracycline derivatives: doxorubicin and epirubicin.</li> </ul>
<b>Low-risk</b> (< 1% chance of reactivation)	HBsAg positive OR HBsAg negative and anti-HBc Total positive (low risk especially if high anti-HBs titres > 100 IU/L)	<ul style="list-style-type: none"> <li>Traditional immunosuppressive agents: azathioprine, 6-mercaptopurine, methotrexate Intra-articular corticosteroids.</li> <li>Corticosteroid therapy for ≤ 1 week.</li> </ul>
	HBsAg negative/anti-HBc Total positive (low risk especially if high anti-HBs titres > 100 IU/L)	<ul style="list-style-type: none"> <li>Corticosteroid therapy for ≥ 4 weeks (prednisone equivalent &lt; 10 mg/day).</li> </ul>

<sup>1</sup> Coffin CS, Fung SK, Alvarez F, Cooper CL, Doucette KE, Fournier C, et al. Management of Hepatitis B Virus Infection: 2018 Guidelines from the Canadian Association for the Study of Liver Disease and Association of Medical Microbiology and Infectious Disease Canada. Can Liver J [Internet]. 2018 Dec 1 [cited 2019 Apr 18]; Available from: <https://canlivj.utpjournals.press/doi/abs/10.3138/canlivj.2018-0008>