#### 7.2.2.4 Special situations

**Practice Point 7.2.2.4.1: Rituximab and cyclophosphamide should be avoided in patients with simultaneous HBV infection and anti-PLA2R antibody-mediated MN until a sustained virologic remission has been obtained by nucleos(t)ide analogue therapy.**

The utility of antiviral therapy in patients with simultaneous HBV infection and anti-PLA2R antibody–mediated MN has not been evaluated, but rituximab or cyclophosphamide-based regimens carry a risk of aggravation of HBV replication in such patients and probably should be avoided, at least until a sustained virologic remission has been obtained by nucleos(t)ide analogue therapy (Chapter 3).[443] A CNI regimen might be preferred in such patients, but evidence is lacking to support such use. It is also possible that the association of HBV infection and PLA2R+ MN is coincidental rather than causal, at least in some cases.

**Practice Point 7.2.2.4.2: Plasma exchange may be tried in patients with accompanying cryoglobulinemic vasculitis.**

The role of plasma exchange in treatments of HBV-related cryoglobulinemic vasculitis has been incompletely assessed, but if the plasma level of cryoglobulins is high (CryoCrit >5%, >500 mg/dl) and symptomatic vasculitis is present, it might be tried with 5% albumin or fresh frozen plasma replacement.[417,427]

**Practice Point 7.2.2.4.3: Children with HBV infection and MN should be managed conservatively without immunosuppression due to a high likelihood of spontaneous remission of the kidney disease.**

The presence of occult HBV infection and MN (circulating HBs negative with HBs/HBc antigen in the immune deposits) in children may require antiviral therapy, as immune suppression alone is seemingly ineffective.[444]

#### Research recommendations

- RCTs are needed to establish the most effective antiviral treatment regimen in modifying the progression of HBV-associated GN. Studies will need to account for the extrarenal disease involvement, as well as evaluate varying drug combinations, including timing and duration of therapy
- RCTs in children should be evaluated separately in view of the higher rate of spontaneous remission in HBV-associated GN

### 7.2.3 Human immunodeficiency virus (HIV)–related GN

This section makes management suggestions for adults aged >18 years with HIV-related glomerular disease.

There are no RCTs for HIV-related kidney disease. For a summary of current issues related to this topic, we refer readers to the publication from the KDIGO HIV Controversies Conference.[445]

According to the United Nations AIDS organization, approximately 36.9 million people were living with HIV in 2017. In 2017, 59% (CI: 44%–73%) of all people living with HIV were accessing treatment.[445] A recent review of HIV-related kidney disease defined by different GFR-estimating formulas (MDRD, CKD-EPI, and Cockcroft–Gault) demonstrated that the presence of kidney disease varied by formula and by region in the world, but it is truly a growing issue in the HIV pandemic (Figure 58).[446,447]

**Figure 58 | The global distribution of CKD associated with HIV infection.** Reproduced from Ekrikpo UE, Kengne AP, Bello AK, et al. Chronic kidney disease in the global adult HIV-infected population: a systematic review and meta-analysis. *PLoS One*. 2018;13:e0195443.[447] Copyright © 2018 Ekrikpo *et al*. This is an open access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/). CG, Cockcroft–Gault; CKD-EPI, Chronic Kidney Disease Epidemiology Collaboration; HIV, human immunodeficiency virus; MDRD, Modification of Diet in Renal Disease.