Monitoring and Managing Chronic Active Antibody-Mediated Rejection (CABMR) in Kidney Transplant Recipients

A spotlight on European practices

A lack of consensus on CABMR monitoring and management may be harming renal transplant recipients

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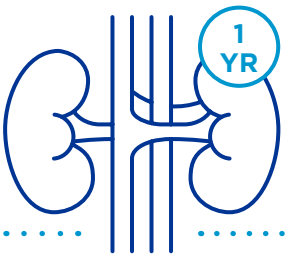
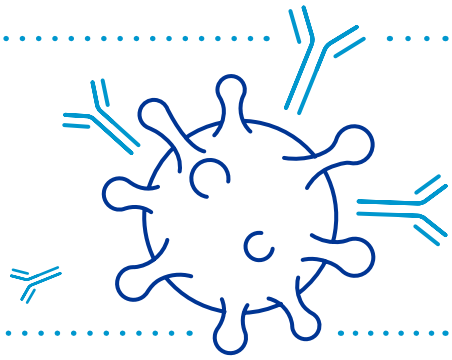
The burden of CABMR:



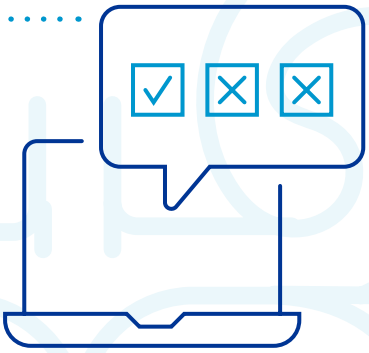
CABMR develops about **1 year** following a kidney transplant, increasing the risk of negative outcomes such as graft loss and death.

Host donor-specific antibodies (DSAs) bind to human leukocyte antigens (HLAs) on the surface of the transplant kidney, activating a complement cascade that **mediates tissue damage**.



Currently, there is **no expert consensus in Europe** on the monitoring and management of CABMR post-transplant.

An **online survey** of 52 European nephrologists, transplant nephrologists and transplant surgeons reveals that **lack of clarity** regarding the risk-benefits of CABMR diagnostic and management procedures may be **preventing the routine clinical use of valuable diagnostic tools and treatments**.



Post-transplant surveillance:

The majority of surveyed European physicians assess creatinine and proteinuria for the first year post-transplant

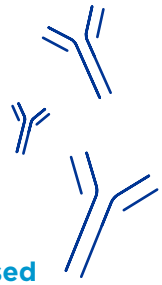
Every 1–3 months
88% and **79%** of physicians assess creatinine and proteinuria, respectively

Every 1–6 months
100% of physicians assess creatinine and proteinuria

There is confusion regarding the utility of DSA assays

of physicians assess de novo DSA in **pre-sensitised patients**

of physicians assess de novo DSA in **patients who are not pre-sensitised**



Despite unmatched diagnostic value, protocol biopsies are not routinely used

of physicians perform **surveillance biopsies** routinely 6–12 months post-transplant

Cell-free DNA assays are potentially effective CABMR biomarkers, but are not widely used

of physicians use **cell-free DNA assays** in a small portion of their patients

CABMR management:

Optimisation of immunosuppression is the primary mode of CABMR management

100%
of physicians use **mycophenolate mofetil** and **tacrolimus**

94%
of physicians use **glucocorticoids**

Only 57% of patients with CABMR achieve disease control with immunosuppression

Yet, **52%** of patients with CABMR do not receive any treatments beyond their maintenance immunosuppression

Severity of disease during diagnosis (**67%**), lack of evidence regarding other treatments (**61%**) and the belief that immunosuppression is sufficient (**33%**) are some of the key reasons physicians do not prescribe other treatments

Beyond maintenance immunosuppressants, intravenous immunoglobulin (IVIG), steroid pulse and apheresis are the most common treatments for CABMR

71% of physicians use **IVIG**

71% of physicians use **Steroid pulse**

62% of physicians use **apheresis**

Hesitancy surrounds the use of biologics for the treatment of CABMR

50% of physicians prescribe **rituximab**

30% of physicians prescribe **tocilizumab**

4% of physicians prescribe **eculizumab**

Safety and efficacy concerns are the key drivers of hesitancy to prescribe biologics

Rostaing LPE, *et al.* Post-transplant surveillance and management of chronic active antibody-mediated rejection in renal transplant patients in Europe. *Transpl Int.* 2023;17(36):11381.