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MoVIE-immune study group.

MoVIE has disproportionally affected people with HIV (PWH) during the 2022 outbreak, with re-infections being reported. Although PWH have shown a prolonged MoVIE illness and higher severity when compared to people without HIV (PWoH), magnitude and durability of responses are still poorly understood. Here, we aimed to characterize and compare the magnitude and durability of both T- and B-cell MoVIE-specific immunity between PWoH and PWH with good immune reconstitution, determining their impact in disease severity and viral clearance dynamics.

RESULTS 1

Although PWH had a smaller increase and a faster wane of MoVIE-specific antibodies, both groups had a sustained T-cell response up to 6 months post-MoVIE.

RESULTS 2

Both PWoH and PWH had comparable neutralization capacity, which was fully reached 3 months post-diagnosis.

RESULTS 3

MoVIE showed a delay to reach similar polyfunctionality profile than PWoH, with higher prevalence of cytotoxic CD4+ T cells at diagnosis. Monofunctional GmB+ CD8+ T cells were the most prevalent across all time points in both groups.