



CMV Treatment May Improve Immune Function

Letermovir was associated with improved immune function, better physical function and more in people with HIV on antiretroviral treatment

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Letermovir (Prevymis), an antiviral drug used to treat cytomegalovirus (CMV), was associated with reduced inflammation, improved immune function and better physical function in people with HIV on antiretroviral treatment, according to research presented at the Conference on Retroviruses and Opportunistic Infections.

CMV infection is usually asymptomatic in people with a healthy immune system. The virus goes dormant after acute infection, but it remains in the body and can reactivate if immunity wanes, potentially leading to severe illness. The new research suggests that even latent virus can have more subtle detrimental effects.

In the ACTG A5383 trial, people with HIV on suppressive antiretroviral therapy who tested positive for CMV were randomly assigned to add letermovir or continue their antiretrovirals alone for 48 weeks. CMV treatment led to declines in various biomarkers of inflammation and pro-inflammatory cytokines linked to comorbidities such as cardiovascular disease and cancer.

People in the letermovir group also experienced a greater increase in their CD4 T-cell count, which was especially pronounced among those who started with a count below 350 at baseline. Letermovir recipients also saw a significantly larger increase in their CD4/CD8 ratio (an indicator of better immune function), particularly among women. What's more, those who took letermovir scored better on tests of physical function, including leg strength.

Letermovir "is probably the most exciting intervention that has been done in people with HIV for inflammation and aging over the last 20 years," says lead investigator Sara Gianelle Weibel, MD, of the University of California San Diego.

