

HIV Antiretroviral Treatment: Early Versus Later

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Scientists look to optimize all aspects of treatment for HIV, including at what point to begin treatment with antiretroviral drugs. I believe that this paper will have a practical impact on treatment for HIV infection because it demonstrates, using a lifetime cost-effectiveness model, that starting highly active antiretroviral therapy (HAART) before the CD4 cell count falls below 350 cells/ μ L is more effective as measured in an increase in quality-adjusted life years (>QALY) and is cost-effective (<\$50,000/QALY gained) than starting HAART when the CD4 cell count is between 200 and 350 cells/ μ L.

Database studies had previously shown clearly that it was more effective and was cost-effective to start HAART before the CD4 cell count fell below 200 cells/ μ L, but the early database studies found no benefit from starting HAART above 350 cells/ μ L. This modeling paper, as well as one earlier modeling paper, showed that the early database studies did not have a long enough follow-up time period to show the benefits of earlier treatment. These benefits could only be shown using a modeling approach, as we did in our paper. Very recent database studies with have longer follow-up time periods are now beginning to show the benefits of starting treatment very early in the disease. This paper illustrates the value of economic disease models for providing insights into appropriate clinical practice before such insights can be obtained from clinical trials or observational database studies.



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Link: <http://www.jaids.com/pt/re/jaids/abstract.00126334-200508150-00009.htm>