

In (NA) Accord

April 30, 2009 By [Paul Dalton](#)

While the swine flu is the story of the moment- maybe for good reason, maybe not- HIV was in the news today as well. [The New York Times reports](#) more data supporting earlier treatment for HIV.

This is an interesting study. It looked at a large number of people- over 17,000- living in the US or Canada, between the late 1990s and 2005. Two questions were asked. 1) is there a difference when people start taking HIV drugs with CD4 counts between 350 and 500 compared to below 350? and 2) is there a difference when people start with CD4 counts over 500 compared to under 500.

The answer to both questions was yes. In the first analysis, people who started treatment with CD4s less than 350 had an almost 70% increased risk of death compared to those who started with CD4 counts over 350. The difference was even larger in the second analysis, where people who started treatment with CD4 counts below 500 had virtually double the risk of death compared to those who started with CD4s above 500.

There are some important limitations to this study. Most importantly it is a retrospective cohort study- which is much more prone to bias and confounding factors than a prospective randomized trial. In each analysis, many more people delayed treatment than started it- at a ration of around 3:1. This can skew the data- although in what direction is unclear.

What does this study mean for people with HIV? Alone, not too much. Simply put, it is a good study, which adds evidence to the idea that earlier treatment leads to better outcomes.

Along side other similar studies- it might mean much more. Treatment activist, doctors, researchers and guideline writers struggle with questions of evidence all the time. Rarely does the evidence line up in clear, unambiguous ways. In the case of the 'when to start' question, the major hang up is the lack of prospective randomized controlled clinical trial data. Such a trial would go a long way to answering the question- but such trials are difficult and take a long time- and for many the answers just can't wait.

So, we look at lesser data types- things like cohort studies. While they are more prone to biases, they can be very useful. This is especially true when multiple studies point in generally the same direction. This study suggest earlier treatment is better. Other recent studies have said pretty much the same- including a subgroup analysis from the SMART study.

It is tempting to see this as the latest incarnation of the swinging pendulum. A cursory view of treatment recommendations does appear to support the notion that they swing from one extreme- hit hard, hit early- to the other- delay as long as possible- and back.

The pendulum view is overly simplistic, and fundamentally incorrect. The guidelines for treating HIV evolve as the evidence evolves. When the studies of protease inhibitors showed a major jump in life expectancy the thought was go on as soon as you can. When the limitations of the available drugs became clear, the equation changed, arguing for a more conservative approach. As the drugs have improved and our understanding of the myriad ways HIV harms our bodies, the calculus has changed once again.

When asked 'when should I start treatment', I usually answer 'when you are ready.' It is important to be ready, as HIV treatment is a major commitment. Left unsaid most of the time is, 'get yourself ready.' I don't say it because it isn't my place to tell people what they should or shouldn't do. I just give out information along with some opinion- but no advise.

But in my head, I am thinking that what ever problems there are with taking HIV drugs, the consequences of not taking them are worse. The data are piling up in support of earlier treatment. I don't know if these studies are enough to change the guidelines or doctors' prescribing practices. I do know they have convinced me- at least for now.

Quick note: Just to be clear- in my swine flu post, I was not saying that people with HIV are going to be less affected by this flu bug- or even that they were by SARS. The pathophysiology of this strain is not well enough understood to have any such opinions- I was just thinking outloud.