

Pre-treatment CD4 Count Predicts CD4 Gains on Treatment

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The higher a person's [CD4](#) count upon starting HIV treatment, the higher their CD4 count will be 60 months later, say British researchers at the 11th European AIDS Conference in Madrid.

Rachael Hughes, MSc, of the department of social medicine at the University of Bristol in England, and her colleagues analyzed data involving 4,559 patients participating in the U.K. collaborative HIV Cohort (UK-CHIC), all of whom had maintained undetectable viral loads for at least six months after starting HIV treatment. Data were available for 631 patients who had been followed for greater than 60 months.

The research team found that CD4 gains were universally good among all of the patients in the study, regardless of their starting CD4 count. Those who started treatment with the lowest CD4 count, between 0 and 100, had the largest gains of up to 379 cells, while those who started with the highest, 500 and above, had the least gains, roughly 100 cells.

However, the average CD4 count 60 months after starting treatment was 100 cells lower among those who started treatment with CD4 counts between 350 and 499, compared with those who started with between 500 and 749 cells.

While these data suggest that people who start HIV treatment earlier will, on average, do better immunologically than those who start later, they also illustrate that almost all patients, regardless of their starting CD4 counts, can expect robust CD4 increases as a result of treatment. This research also concludes that CD4 gains are most noticeable during the first few months of treatment but do continue even after a year of treatment.

Source:

Hughes R, Sabin C, Sterne J. **Long-term Trends in CD4 Count in Patients Starting HAART: UK-CHIC Study** [Abstract P18.4/04] 11th European AIDS Conference, Madrid, 2007.