

IS STARTING ART IN ACUTE HIV INFECTION BENEFICIAL?

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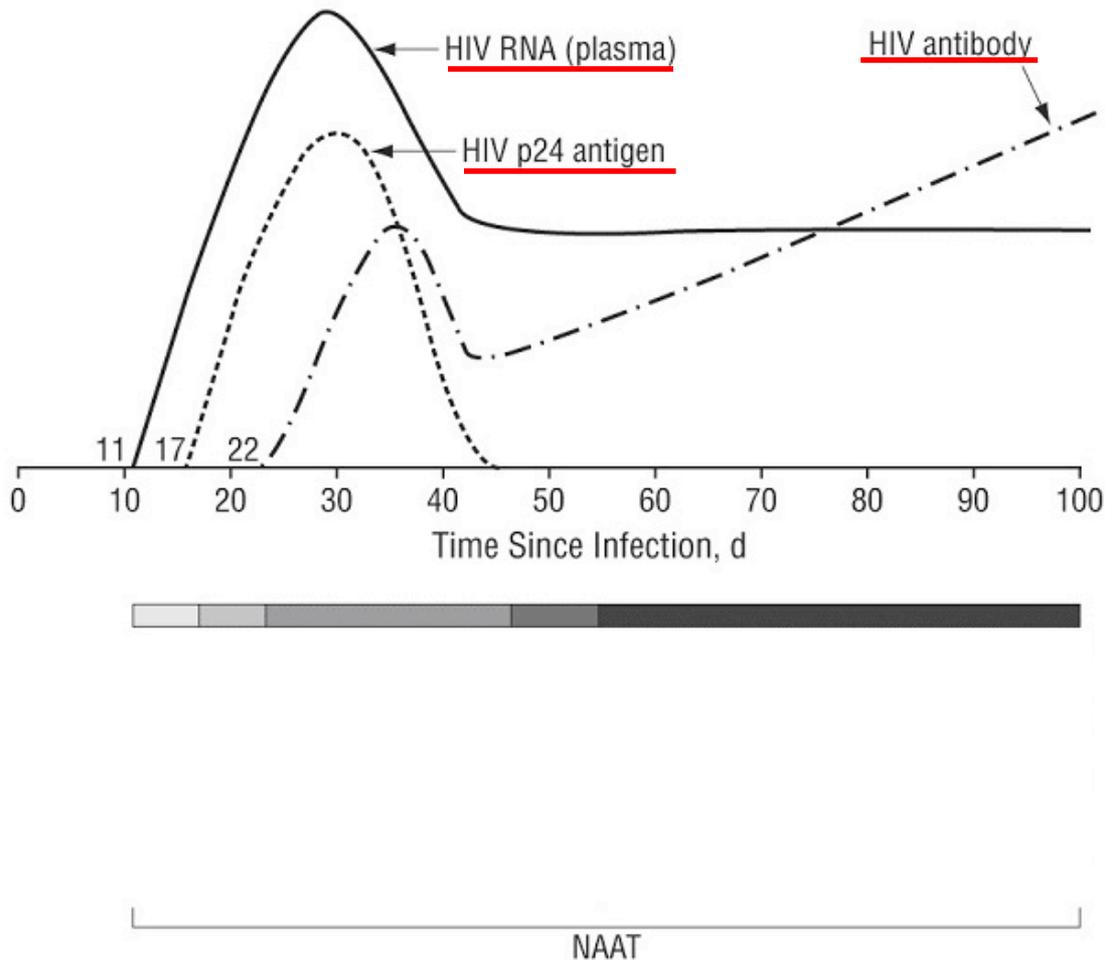
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Why We Did this Study

- HIV doubles the risk of heart attacks
- HIV also increases the risk of liver disease, kidney disease, and cancer, even in people with undetectable viral loads on antiretroviral therapy (ART)
- These diseases are associated with the immune system being over-activated
 - HIV, other infections, gut damage and bacterial products
- **If we can treat people in acute HIV infection, we might decrease the total amount of virus in the body and decrease gut damage and immune system activation**

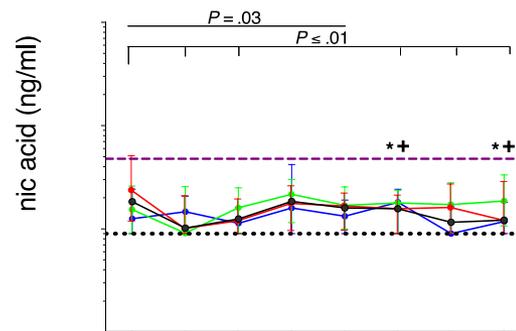
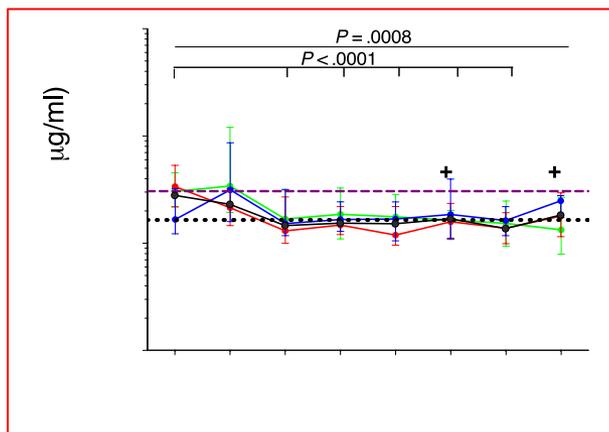
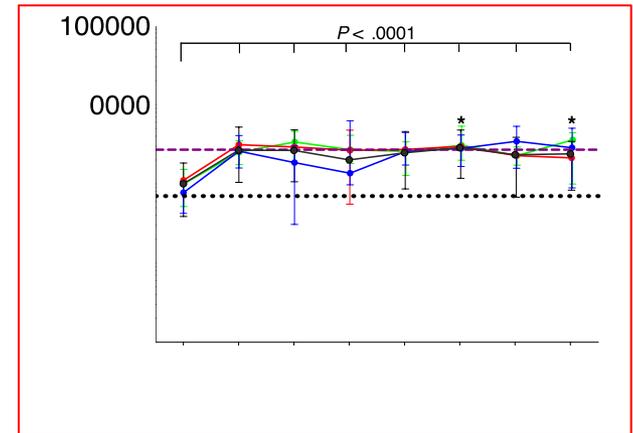
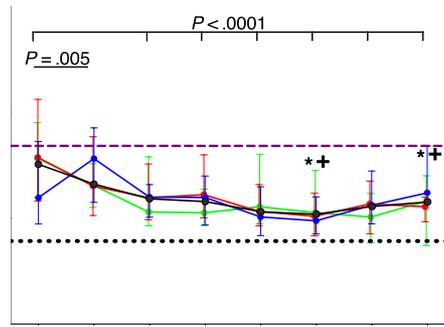
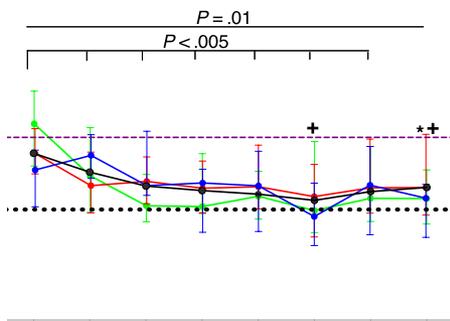
What We Did



- We diagnosed 78 people with acute HIV infection in Bangkok
 - 14 4thG stage 1 (12 days)
 - 22 4thG stage 2 (17 days)
 - 42 4thG stage 3 (18 days)
- Mostly men, median age of 28
- We started them on ART
- We measured proteins in the blood that reflect immune system activation over 96 weeks

What We Found

- Most proteins decreased to less than seen in chronic infection but higher than in HIV-uninfected controls



Chronic HIV+ on ART
HIV-uninfected

What Our Results Mean and Why this Matters

- Starting ART in acute HIV infection may prevent some immune system activation and damage
- Why some proteins improve and not others is unclear but may reflect what makes those proteins go up, such as gut damage versus the virus
- Whether decreasing the inflammation will decrease heart attacks, cancer, other diseases will take years to find out

Acknowledgments

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Opportunities to Volunteer

- Starting ART in acute HIV infection
- Fighting inflammation in chronic HIV infection
- Decreasing the amount of total amount of virus in the body, i.e. the reservoir
- Hepatitis C treatment
- HIV in transgender women
- Fatty liver disease
- Neurocognitive disorder



Houston AIDS Research Team

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