



KP-1461 Redux

July 28, 2008 By [Paul Dalton](#)

Several people have written wondering what is going on with the KP-1461 story. As far I know, not much. Here is what I know:

The company, Koronis hasn't made a formal announcement about either the discordant lab tests or the future of the compound. I spoke with two folks from the company and they assured me that they do plan on going forward with it- and I don't have much reason to doubt that they will. They also said that all signs were pointing toward a problem with the second set of experiments, rather than the compound itself.

If everything is on the up-and-up this would be the best-case scenario. If this represents a simple "pause" in development, the company might be in a better place to study the drug a second time around.

The study that was stopped was done somewhat prematurely, in my opinion. Where a traditional anti-retroviral will show measurable activity pretty much right away, KP-1461 needs time to really work. Other anti-virals work by disrupting some step in the virus' replication process. KP-1461 works by encouraging the virus to accumulate mutations, to the point that it becomes non-viable. These mutations will likely accumulate for a while with no real effect on HIV levels. Theoretically when enough mutations accumulate, HIV levels will fall precipitously.

The study of KP-1461 that was recently stopped dosed volunteers for 180 days. I felt, along with others, that this was likely too short of a time period to see results. The company was only allowed to dose for this long because of the amount of safety data they had from animal studies- they simply didn't have enough data for dosing of longer than 180 days.

When the company analyzed the data from the trial, most people had not experienced significant changes in viral load, but a few had. This could mean two things. Either the drug works somewhat idiosyncratically in some people and not others- possible, but not highly likely. More likely it could be due to differences in people's HIV- in terms of how replicant competent it is, and how many mutations each virus needs to accumulate before its ability to replicate is sufficiently hampered.

By sometime this fall, Koronis will have all the data needed for chronic dosing. Then we should have a better chance at seeing whether or not this mechanism holds promise or not. I certainly hope it does, but we have to wait and see. The HIV drug pipeline is really thin and unimpressive right now, and with companies like Roche abandoning new drug development, we need all the promise we can get.
