## Dear Editor,

Amy Justice says that David Rasnick and Sam Mhlongo "seriously misrepresent [her] research" because we "cite [her] work in support of the argument that HIV does not cause AIDS and that anti-retrovirals cause more harm than good." Let's take a look at her work and see what conclusions can be drawn from it.

This past July, in Barcelona, Amy Justice and her colleagues presented data that confirm the results of previous studies [1-3]. Justice and her colleagues showed that, "Anemia [is a] common complication of HIV and treatment" and "predicts survival" of AIDS patients. In addition, they reported that liver damage, as determined by elevated levels of a liver enzyme called AST, also "predicts poorer survival". What's more, the "Effects of AST elevation and anemia are additive. Even mild AST elevations and anemia deserve attention", the authors conclude. Since Justice et al. did not report anemia and liver damage in HIV positive patients who were not being treated with the antiretroviral drugs, it was wrong to say that these are "common complication[s] of HIV and treatment" because we know of no study that shows HIV causes anemia or liver damage in people who do not use alcohol, recreational drugs or the antiretroviral drugs. If Justice knows of such a study we are eager to examine it. By combining "HIV and treatment" Justice et al. are able to hide the fact that the anemia and liver damage are due overwhelmingly to the treatments, as has been documented in the literature.

Just last year Fellay and colleagues measured the level of antiretroviral drug toxicity in 1160 patients [4]. They looked at the toxic effects of the drug-combinations called HAART as well as individual drugs. They found that "47% of patients presented with clinical and 27% with laboratory adverse events probably or definitely attributed to antiretroviral treatment." They also found that, "Single-PI [protease inhibitor] and PI-sparing-antiretroviral treatment were associated with a comparable prevalence of adverse events. Compared with single-PI treatment, use of dual-PI-antiretroviral treatment and three-class-antiretroviral treatment was associated with higher prevalence of adverse events. [In other words, the more drugs used, the more toxicity produced.] Compound specific associations were identified for zidovudine, lamivudine, stavudine, didanosine, abacavir, ritonavir, saquinavir, indinavir, nelfinavir, efavirenz, and nevirapine".

Therefore, since the antiretroviral drugs are documented to produce Justice's "common complication[s]", and since she and others have shown that these "common complication[s]" predict "poorer survival", it is reasonable to conclude that these antiretroviral drugs are responsible for the "poorer survival" and thus "cause more harm than good".

With regards to the efficacy of the antiretroviral drugs, Justice says "Overwhelming evidence has shown that anti-retroviral treatment...lengthens survival with HIV/AIDS. [Her] own work supports the contention that multidrug, multi-class anti-retroviral therapy for HIV infection is effective." However, Justice does not cite a single example of the "overwhelming evidence", not even

her own work, to back up her assertion. The best she can do is say that the survival rate among her "HIV-positive patients...receiving multi-drug, multi-class therapy is substantially better than survival reported in studies conducted prior to the availability of such treatment". But, in our August 20, 2002, article we showed that AIDS peaked in the USA in 1992, years before the appearance of Justice's "multi-drug, multi-class" therapies. The apparent life-saving benefits of Justice's "multi-drug, multi-class" therapies is a consequence of the simple fact that these drugs have appeared on the scene long after AIDS peaked in the USA, during a period when the mortality due to AIDS was naturally in decline [5].

Justice concludes by saying: "Make no mistake, HIV infection causes Aids, and multi-drug, multi-class anti-retroviral therapy substantially slows this process, leading to prolonged survival in HIV-infected individuals". However, she provides no evidence, offers no citations to the literature. In fact, there is no study in the vast scientific, medical literature that shows that people taking any of the antiretroviral drugs live longer or at least better lives than a similar group of HIV-positive people not taking the drugs. And there is no study that shows HIV-positive people live shorter or poorer lives than a similar group of people who are HIV-negative.

The simplest, most direct, most convincing way for Amy Justice to prove us wrong and herself right is to produce the documented evidence.

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