AAV-expressed eCD4-Ig provides durable protection from multiple SHIV-AD8 challenges

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Community Summary: So what have we really got here?

- eCD4-Ig is a very good entry inhibitor, on average more potent and certainly broader than any antibody.
- It is more difficult to escape eCD4-Ig than antibodies *in vitro*. We hypothesize that escaped virus will be less fit and less transmissible.
- It is also much less immunogenic in macaques than antibodies.
- If we combine it with AAV, *and it continues to live under the immune radar*, it could protect humans from most potential transmission events.
- However its safety of this approach not yet been established, and an off-switch would be important for its broad use.
- Its use as a therapeutic, replacing some components of HAART, is an exciting but unproven possibility.
- Nonetheless, this general approach is closer to realization than any conventional vaccine effort.