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Seema Nanda* (seema.nanda@dartmouth.edu), **Vardayani Ratti** and **Dorothy Wallace**. *On the road to eliminating cART for HIV*. Preliminary report.

We present treatment for HIV using a proposed new CRISPR/CAS gene therapy which could eliminate the need for the current combined anti-retroviral therapy (cART). We use a dynamical system model that takes into account the hard to eliminate latent reservoir of infected HIV cells, which are a barrier to elimination of the disease with current treatments. We show the possibility of replacing cART therapy with gene edited cells which could replace the infected cells over a period of time. (Received September 14, 2016)