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Naveen Vaidya and **Libin Rong*** (libinrong@ufl.edu), Department of Mathematics, University of Florida, Gainesville, FL 32611. *Modeling pharmacodynamics on HIV latent infection*. Preliminary report.

Highly active antiretroviral therapy has successfully controlled HIV replication in many patients. The treatment effectiveness may depend on the pharmacodynamics of antiretroviral drugs. We integrate several drug-related parameters into an HIV infection model to investigate the effects of drug pharmacodynamics on the HIV latent reservoir and viral load dynamics. We show that pharmacodynamic characteristics of drugs and the dosing schedule can significantly affect the outcome of either early or late treatment. This is a joint work with Naveen Vaidya. (Received September 25, 2017)