DYNAMICS OF AN IN-HOST HCV INFECTION MODEL WITH PERIODIC ANTIVIRAL THERAPY

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Abstract

An in-host HCV infection model with periodic antiviral therapy is investigated in this paper. By employing the persistence theory, a threshold between the extinction and the uniform persistence of the disease is defined. It is shown that the disease-free equilibrium is globally asymptotically stable and the disease eventually disappears if the threshold is less than unity.

Keywords and phrases: mathematical model, HCV, threshold, periodic antiviral therapy. Received December 16, 2021

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