

1049-15-9

Mostafa Ghandehari* (ghandeha@uta.edu), civil engineering, Univ. of Texas at Arlington, Box 19308, Arlington, TX 76019, and **Shiva Keramati**, San Francisco, CA. *A Discrete Pharmacokinetics Compartmental Model*. Preliminary report.

A system of differential equations for compartmental model of pharmacokinetics is discussed. Discrete approximation of the system will result in a system of difference equations. Eigenvalues and eigenvectors are used to find powers of a matrix which will be used to find an approximate solution of the system. Examples of medications for compartmental models are given. (Received November 30, 2008)