1146-34-502 Zachariah Sinkala and Sujani Ambahera* (sa6h@mtmail.mtsu.edu), TN. Sensitivity Analysis of Ordinary Differential Equation in Angiogenic Model using Sobol Method.

Mathematical models are increasingly used in angiogenic process to predict and investigate the tumor growth, invasion, metastasis and to determine optimal anti-angiogenic drug treatments and combinations. Models involve in angiogenic processes are complex and associate with large number of parameters. We use Sobol analysis methods to find the most sensitive parameters in the models. (Received January 29, 2019)