1035-92-1950 Mike Martin* (mmartin@jccc.edu), 15612 Slater Street, Overland Park, KS 66221. Angiogenic Signaling in Tumor Development: Pharmacological Inhibition, Analysis, and Models.

Based on the work of Hahnfeldt, spatially-averaged models for antiangiogenic cancer therapies will be developed and extended to account for vessel maturation, necrosis, and chemotherapies. The effects of the angiogenic inhibitors Endostatin, Angiostatin, and TNP-470 on tumor growth dynamics are analyzed using real data for Lewis lung carcinomas. Combinations of treatments are considered as to their efficacy in reducing tumor volume. (Received September 20, 2007)