

1116-VP-1027 **Mehdi Razzaghi*** (mrazzagh@bloomu.edu), Department of Mathematics, Bloomsburg University, Bloomsburg, PA 17815. *Rosner's Mathematical Model of Ovarian Cancer and its Generalization*. Preliminary report.

The incidence of ovarian cancer in women has for a long time been the most common and one of the most problematic forms of cancer. Recently, Rosner et al (2005) made an attempt to develop a mathematical model that describes the incidence rate of ovarian cancer as a function of risk factors that are relevant at a given age. The model is based on the assumption that log cell proliferation depends on risk factors linearly. Based on a data set, several interesting conclusions are drawn. Although the model has several interesting properties, it has not been further explored or generalized. Here, we discuss the properties of this model and describe its components. We further consider the model assumptions and explore the possibilities of extending the model to more general situations. (Received September 16, 2015)