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In January of 2015, Tomasetti and Vogelstein published in Science Magazine a revolutionary, provocative and rigorous statistical analysis which strongly suggests that the accumulation of random mutations during division in healthy stem cells can explain two-thirds of cancers. Their mathematical analysis is a wonderful subject for exploration by students in an Introductory Statistics Class. Mathematics faculty will be able to directly use the information in our presentation to design a stimulating classroom activity about the risk for cancer. In particular, students will be able to see how linear regression can be used to understand the correlation between cancer risk in an organ and the number of cumulative stem cell divisions within that organ, and students will be able to understand how this correlation can lead to a quantitative understanding of some of the causes of cancer. Furthermore, this classroom activity can open the door to further discussion and debate about the many possible causes of cancer and the role that statistics can play in understanding cancer. (Received September 22, 2015)