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About the Cover

With regard to incidence and mortality, lung cancer is one of the most common and deadliest cancers worldwide. Interestingly, early epidemiologic and clinical studies suggested an association between tobacco and lung cancer. By the 1950s and 1960s, it was evident that smoking, primarily from cigarettes, is a major contributor to lung cancer, thus prompting the first report of the Surgeon General’s Advisory Committee on Smoking and Health on January 11, 1964. Since that time, a multitude of studies have demonstrated that cigarettes produce more than 60 compounds that have carcinogenic potential. To combat these and other environmental carcinogens, normal cells employ the p53 tumor suppressor, which regulates cell growth and death to prevent cancer. Because p53 is considered a guardian against genomic insult, it is not surprising that it is one of the most frequently mutated genes in many cancers and lung cancer is no exception. In this issue, Gibbons and colleagues mark the 50th anniversary of the Surgeon General’s Report on Smoking and Health by reviewing the evidence of smoking, p53 mutations, and lung cancer. The cover shows an artistic representation of the percentage of hotspot p53 mutations in a human population of lung squamous cell carcinoma and adenocarcinoma. For additional insight and details, please see the article by Gibbons and colleagues on page 3.