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Major conceptual change required to improve lung cancer: see a respiratory physician

To the Editor:

We fully agree with the discussion of FIELD and BRAMBILLA [1] regarding effective strategies that could lead to important reductions in lung cancer mortality. We would like to add a fifth strategy, chemoprevention, which can be used in parallel with screening of high risk individuals. Chemoprevention is the medicinal use of natural or synthetic agents to arrest, delay, or reverse early carcinogenesis [2]. The potential of this approach to decrease the incidence of cancer and cancer precursor lesions has been demonstrated recently in breast and colon cancer [3, 4]. While prior phase III chemopreventive studies of the antioxidant, beta-carotene, did not show a reduction in lung cancer incidence [5, 6], several promising new drugs are in the early and middle phases of development and chemoprevention remains a major part of the National Cancer Institute's initiative to eliminate suffering and death from cancer by the year 2015. In contrast to helical computerised tomography screening, which detects peripheral malignancies at earlier and therefore, in theory, curable stages but has no impact on an individual's risk of cancer, chemoprevention, when successful, actually reduces an individual's absolute risk for cancer. This distinction gains added importance given the recent information that smoking cessation may not lead to a reduction in one's risk of lung cancer but rather stabilises one's risk; in contrast, continued smoking leads to increasing risk [7]. Therefore, in the future, we foresee a multimodality strategy of molecular screening of smokers and former smokers to identify individuals at particularly high risk, combined with early detection through computerised tomography screening and perhaps improved sputum cytology techniques, coupled with chemoprevention.

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