Comments": "Application of low-dose CT screening can reduce cancer mortality"

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We read the study by Xue Tang[1] and colleagues with great interest, in which they identified that low-dose CT (LDCT) screening for lung cancer is effective in reducing the mortality rate of lung cancer in high-risk smokers. This information is of great significance in the prevention and early diagnosis of lung cancer, providing strong evidence for formulating health policies. However, we believe there are still some deficits, and that stronger evidence should be included for drawing the cause and effect conclusion between LDCT screening and decrease of lung cancer mortality.

To begin with, the authors should take into consideration many other protective effects following LDCT screening. For example, smoking cessation is a well-known protective factor for reducing lung cancer mortality[2]. Changes in lifestyle after the lung cancer diagnosis, such as smoking cessation, can also result in the decrease of lung cancer mortality. Furthermore, early treatment and intervention following early diagnosis by LDCT screening can also be a strong protective factor[3]. Therefore, more factors should be considered when exploring the cause and effect relationship between LDCT screening and low-dose cancer mortality.

Furthermore, population bias should be appropriately excluded. Candidates included in LDCT screening tend to receive more emphasis on their health condition. Therefore, other measures such as regular serological examination might be performed, which can also elevate the possibility of lung cancer diagnosis and decrease the mortality rate of lung cancer[4]. Therefore, population-based studies should be included in future meta-analyses.

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