

Abstract

This project explains the role of low-dose computed tomography (LDCT) aiding in the diagnosis of lung cancer. General statistics, risks, signs, symptoms of lung cancer, as well as low dose scans are discussed. In addition, the doses of routine chest computed tomography scans (CT) and low-dose are compared. Lung cancer is the second most common form of cancer in the United States, however early detection with the use of LDCT reduces mortality rate. About 80% of lung cancer diagnosis is caused by smoking. The use of LDCT reduces mortality rate in addition to a lower dose to the patient. Risks of preventive screening are overdiagnosis, false positives in addition to radiation induced cancer, etc. Doctors believe that the risks of biannual or annual screenings outweigh the risks of LDCT. Even though lung cancer is one of the most common types of cancer, with preventative treatment, individuals have a lower chance of mortality than previous generations.

Keywords: computed tomography, lung cancer, low-dose