# Article information:

Development and Validation of a Multivariable Lung Cancer Risk Prediction Model That Includes Low-Dose Computed Tomography Screening Results - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6484623/>

# Article summary:

1. A risk prediction model was developed and validated using data from the National Lung Screening Trial (NLST) that incorporates low-dose computed tomography (LDCT) screening results.

2. The model demonstrated significantly greater discrimination than a model excluding screening results, with good calibration in validation data.

3. The model may help guide decision making regarding screening interval and identify high-risk individuals for continued screening and enrollment into clinical trials.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally trustworthy and reliable, as it is based on a secondary analysis of data from the NLST, which was a randomized clinical trial that recruited participants between August 2002 and April 2004, with follow-up to December 31, 2009. The authors also followed the Transparent Reporting of a Multivariable Prediction Model for Individual Prognosis or Diagnosis (TRIPOD) reporting guidelines, which adds to the trustworthiness of the article.

The article does not appear to be biased or one-sided in its reporting, as it presents both sides of the argument fairly and objectively. It also provides evidence for its claims by citing relevant studies such as those conducted by the Dutch-Belgian Lung Cancer Screening (NELSON) trial and Continuous Observation of Smoking Subject (COSMOS) trial.

The article does not appear to have any missing points of consideration or missing evidence for its claims made. All relevant information is provided in detail, including epidemiological data collected at study entry by structured questionnaires, cumulative incidences of lung cancer from T3 to T6 estimated taking competing risks into account, selected PLCOm2012 predictor variable data updated from baseline to T3, etc.

The article does not appear to have any unexplored counterarguments or promotional content either; instead it provides an objective overview of the development and validation of a multivariable lung cancer risk prediction model that includes LDCT screening results. Furthermore, possible risks are noted throughout the article; for example, major concerns regarding lung cancer screening are mentioned such as harms associated with false-positive screens and excess radiation exposure.

In conclusion, this article appears to be trustworthy and reliable overall; however further research should be conducted in order to confirm these findings before they can be applied in practice.

# Topics for further research:

* Lung cancer screening guidelines
* Lung cancer risk prediction models
* False-positive screening results
* Excess radiation exposure from screening
* NELSON trial results
* COSMOS trial results

# Report location:

<https://www.fullpicture.app/item/959d4e82409f49fdd4e019eb8d0a18ae>