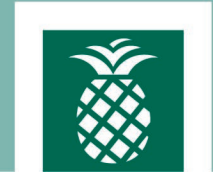


Lung Updates

Research Advances in Lung Cancer

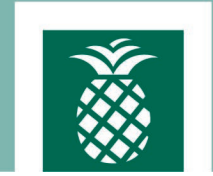
Research Advances in Lung Cancer



Efforts to Prevent Lung Cancer

- Quit smoking
 - Counseling, nicotine replacement and other medicines
 - Brain stimulation therapy
 - Inherited differences
- Environmental causes
 - Radon about 20,000 lung ca deaths per year
- Diet and nutrition
 - 18% of all cancers are related to overweight, physical inactivity, excess alcohol consumption and poor nutrition
- Vaccine & Immunotherapy to high risk current or former smokers
- TTTFields therapy to prevent brain mets in SCLC

Research Advances in Lung Cancer



Can lung cancer be found early?

- CT Scan Low Dose Screening
 - Trial published in NEJM on August 2011
- Markers in Blood and Sputum
 - Spot cell DNA changes to see if they can find lung cancers at an earlier stage
- AI
 - Quick and accurate diagnosis
 - How genetic mutations affect cell structure

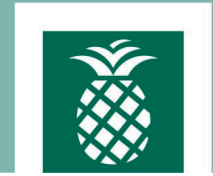
Research Advances in Lung Cancer



Efforts to Advance Treatment in Lung Cancer

- Surgery
 - Expand the use of VATS to larger tumors
 - Robotic assisted therapy
- Genetic or biomarker driven therapy
 - Screening testing to select the best treatment
 - ALCHEMIST Study early stage NSCLC
 - Lung MAP Trial advance NSCLC with no response to prior treatment

Research Advances in Lung Cancer



- Targeted Therapy
 - Drugs that target cancer cell growth and spread
 - New radiation techniques- Stereotactic radiosurgery (SRS)
- Maintenance Therapy
 - Cancers that have not worsened on treatment, continuing treatment with a single drug
- Immune Treatments
 - Checkpoint inhibitors
 - Target PD-L1 or PD-1 protein
 - In combination with radiation therapy in non-surgical candidates

Research Advances in Lung Cancer



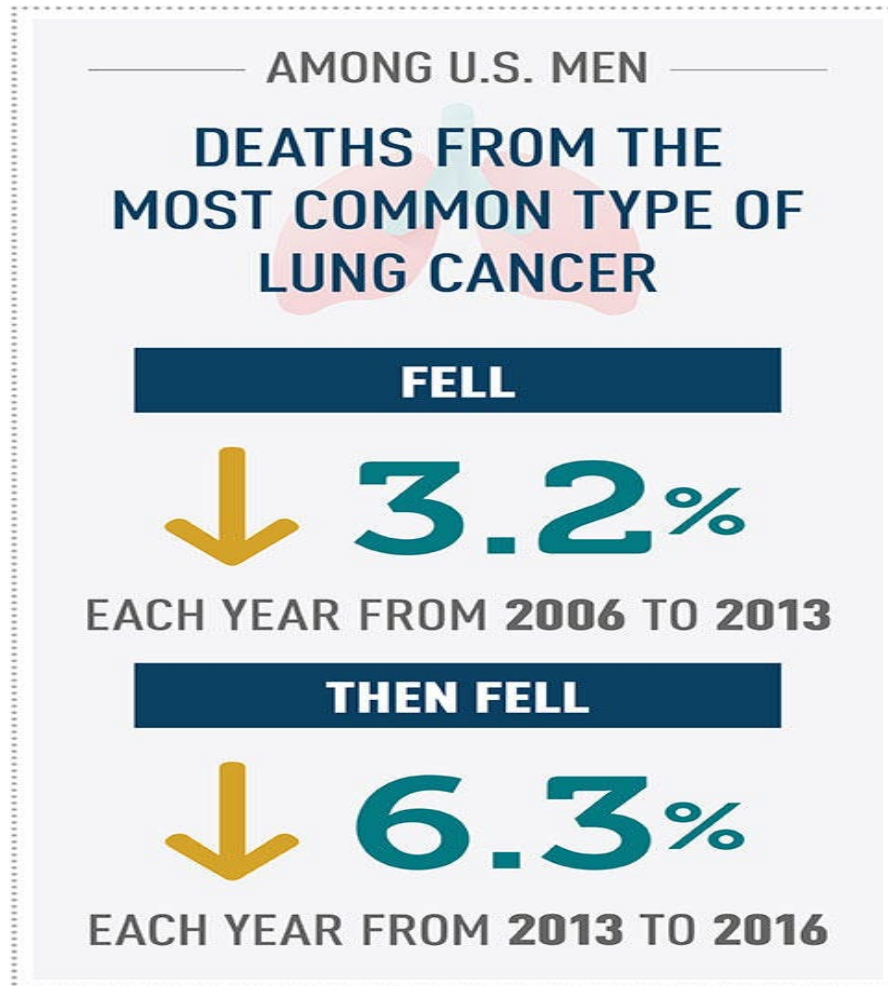
August 12, 2020 NIH Press Release

New treatments spur sharp reduction in lung cancer mortality rate

Decrease in NSCLC mortality is related to:

- 1- Decline in new cases due to reduction in smoking
- 2- Improvement in treatments associated with improvement of survival

Research Advances in Lung Cancer



Source: Howlader N, et al. NEJM. doi: 10.1056/NEJMoa1916623
cancer.gov



Research Advances in Lung Cancer



Thank you for your attention