

20 YEARS

IN LUNG CANCER DIAGNOSIS AND CARE

Early diagnosis of lung cancer is linked to achieving better outcomes for patients, and improving rate of survival¹. Over the last twenty years significant technological advances, developments in research and evolutions in specialised care have had a significant improvement to both the diagnosis of lung cancer and lung cancer supportive care.

ADVANCEMENT IN DIAGNOSIS

IMPROVEMENT IN CARE

2000 - PET/CT Scanner used for the first time in the USA

for the diagnosis and staging of lung cancer.² Combining the benefits of PET and CT allows for more accurate staging of lung cancer.

2000

2001 - PET/CT scanner used for the first time in Europe

for the diagnosis and staging of lung cancer.²

2001

2005 - New project to map lung cancer genome

The National Cancer Institute's Cancer Genome Atlas Project begins a comprehensive atlas of genetic abnormalities in lung cancer to help understand genetic pathways involved in cancer development and growth.^{4,5}

2005

2007 - Pattern of DNA damage is observed in people with a history of substance abuse who develop lung cancer

These findings indicate that gene expression can serve as a lung cancer biomarker.⁶

2007

2010 - New lung cancer staging system is adopted

The American Joint Committee on Cancer (AJCC) and the Union for International Cancer Control (UICC) issue new guidance on the system used by doctors to assess lung cancer and select the best combination of treatments for each patient.⁷ Greater consensus leads to improvement in uniformity of lung cancer diagnosis and treatment.

2010

2014 - Study identifies novel genomic changes in the most common type of lung cancer

Researchers from The Cancer Genome Atlas (TCGA) Research Network identify novel mutations in the most common subtype of lung cancer.¹¹

2012

2015 - First PD-L1 companion diagnostic assay is approved for use in NSCLC

The US FDA regulatory body approves PD-L1 IHC 22C3 pharmDx assay as the first companion diagnostic for NSCLC (non-small-cell lung cancer).¹³

2015

2016 - Lung cancer signature detected with simple breath test

Study shows that a simple breath test to detect a lung cancer 'signature' may be used in the future for lung cancer diagnosis and recurrence monitoring.¹⁴

2016

2004 - Widespread utilization of multi-disciplinary teams in cancer care

Between 1996 and 2004 there was a marked increase in the utilization of multidisciplinary teams (MDTs) for the management of lung cancer patients within Europe and the USA. In 2004 more than 80% of patients were managed by a MDT, compared to less than 20% in 1996.³

2004

2007 - European Union health services review committee publishes guidelines for multi-disciplinary approach to cancer care

To ensure the best decisions about diagnosis, treatment and support.³

2007

2010 - One year survival rates improve

In the UK, 29% of men and 33% of women are alive a year after lung cancer diagnosis, compared to 17% of all patients in 1990.⁸

2010

2011 - UK National Lung Cancer audit shows impact of specialist nurses on care of lung cancer patients

An UK annual audit shows 64.8% of patients who saw a specialist nurse received treatment compared with 30.4% of patients those who did not.⁹

2011

2012 - Reduction in lung cancer incidence and mortality trends in the USA

Over a ten year period, from 2003 to 2012, incidence of lung cancer decreased by 2.5% per year among men and 0.9% per year among women.¹⁰ Over the same period the rate of death from lung cancer decreased by 2.7% per year among men and 1.4% per year among women.¹⁰

2012

2014 - Insights into models for supportive care

Data from descriptive studies provides insights into supportive care service models in lung cancer, including: establishing a single point of contact for timely advice regarding changes in symptom presentation and service models that offer home-based and remote monitoring.¹²

2016

Over the last two decades, significant advances have been made in the area of lung cancer research. As a result, patients with lung cancer are diagnosed sooner and continue to live longer following treatment, leading to a greater interest in the assessment of their quality of life.¹⁵

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