



**PHILIPS**

IntelliSpace Portal 7.0

Pulmonary Solutions

# Lung cancer is the most common cause of cancer death worldwide

Lung cancer accounts for nearly 160,000 deaths per year in the U.S., and there are more than 224,000 new lung cancer cases every year in the U.S.<sup>(1)</sup> That's almost 440 deaths per day, which is equivalent to the number of passengers it takes to fill a jumbo jet daily.

In males, lung cancer accounts for more deaths than prostate cancer. In females, lung cancer accounts for more deaths than breast cancer. Globally, lung cancer is responsible for 1.59 million deaths each year, which makes it the most common cause of cancer death worldwide.<sup>(2)</sup>

Do you have the right tools to manage pulmonary patients?

## A comprehensive lung management solution on a single advanced platform

From nodule discovery to diagnosis to therapy monitoring and follow up, the IntelliSpace Portal offers a full suite of tools to help you track Pulmonary disease. The IntelliSpace Portal is an advanced visualization solution that allows you the flexibility to view, analyze, collaborate, and report seamlessly using consistent workflow tools.

Integrated with your hospital, the IntelliSpace Portal utilizes images from multiple vendors<sup>(5)</sup>. It can be launched directly from your PACS<sup>(6)</sup> giving you advanced segmentation, 3D analysis, longitudinal lesion tracking, and a host of time-saving tools designed to boost your diagnostic confidence and report findings quickly and efficiently.

Aids in:

### Problem detection

- CT Lung Nodule Assessment
- CT PAA<sup>(4)</sup>
- CT COPD

### Diagnosis

- CT Lung Nodule Assessment
- CT Calcium Scoring
- CT Lung Nodule CAD<sup>(4)</sup>
- CT PAA<sup>(4)</sup>
- CT COPD

### Therapy management

- Multi Modality Tumor Tracking
- CT Lung Nodule Assessment

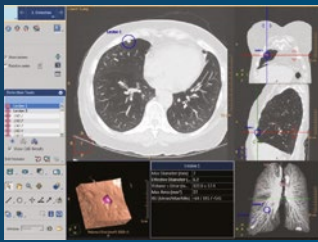
<sup>(1)</sup> American Cancer Society. Cancer Facts & Figures 2014. Atlanta: American Cancer Society; 2014.

<sup>(2)</sup> World Health Organization. Cancer. Fact sheet No. 297. Updated February, 2014.

<sup>(4)</sup> Not for sale in the USA.

<sup>(5)</sup> Please contact your local Philips representative for details on multi-vendor coverage.

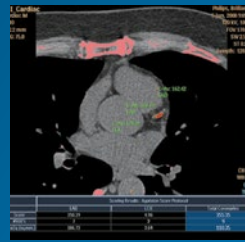
<sup>(6)</sup> Requires integration work with your PACS vendor.



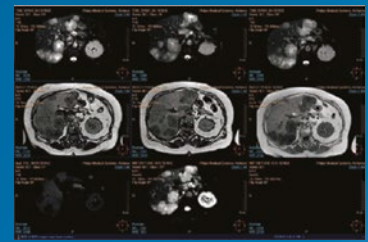
CT Lung Nodule Assessment (LNA)



CT COPD



CT Calcium Scoring

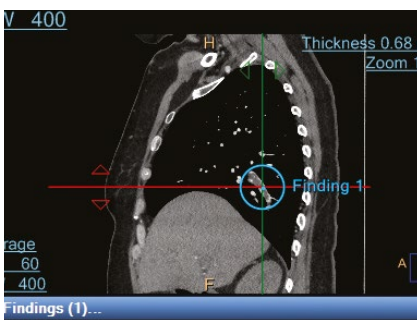
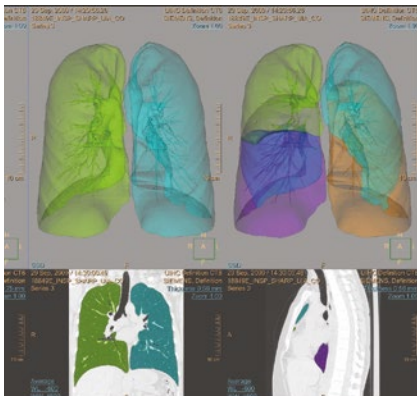


Multi Modality Tumor Tracking

In addition to advanced viewing capabilities such as a CT Viewer to review Low Dose CT (LDCT) and PET/CT exams, the Philips IntelliSpace Portal offers an award-winning platform including robust clinical tools for advanced visualization, segmentation, and accurate quantification of lung nodules and irregularities.

#### CT Pulmonary Artery Assessment<sup>(4)</sup>

- Manual and automatic tools to aid in the detection of Pulmonary Embolism (PE) in adults
- RV/LV ventricular ratio (using axial or 4-chambers views) and chamber volumes
- Visualize the pulmonary arteries automatically in cross-sectional and longitudinal views to evaluate the presence or absence of pulmonary emboli
- Easy-to-use findings manager for the collection of all the relevant findings
- Color mapping provides an optimized view



#### CT Lung Nodule Assessment (LNA)

- Single-click lung nodule segmentation for quick assessment
- Automatic quantification of solid and semi-solid parameters
- 3D or MIP visualization of segmented nodules
- Real-time display of slab-MIP or MPR data provides for volume visualization
- Automatic registration and matching of identified nodules in previous and follow-up data sets
- Automatic calculation of growth rate and doubling days for lung nodules

In a study, the accuracy of LNA remained consistent in nodule detection with less than 1% error.<sup>(3)</sup> Quantitative volume results provide detailed study information, including doubling days, percentage growth (volume), effective diameter, minimum, mean, and maximum HU.

#### CT COPD

Provides semi-automatic and manual tools to measure and visualize COPD disease in adults:

- Total lung volumes and density
- Right and left lung volumes
- Lung lobe volumes
- Total emphysema measurements
- Emphysema measurements of each lung
- Emphysema measurements of each lung lobe
- Measurements of airway parameters such as lumen diameter and wall thickness
- Segment and quantify lung volumes, emphysema, and other airway parameters
- Load up to 4 studies simultaneously for comparison

#### CT Calcium Scoring

- One-click 3D segmentation and quantification of pulmonary artery calcification for enhanced risk assessment
- Customized reporting of measurements and calcium scores

#### Lung nodule CAD software<sup>(4)</sup>

Philips lung nodule CAD software<sup>(4)</sup> can automatically identify nodules 4mm to 30mm. A multi-center trial<sup>(3)</sup> using Lung CAD as a second reader demonstrated Lung CAD to be effective in improving radiologist sensitivity in detecting pulmonary nodules.<sup>(3)</sup> Lung CAD helped improve the sensitivity of radiology residents in the detection of pulmonary nodules, with results comparable to board-certified radiologists.<sup>(3)</sup>

#### Multi Modality Tumor Tracking

This single, comprehensive platform provides not only robust detection, risk assessment, and quantification tools, but therapy follow-up tools as well. Should lung nodules be determined cancerous, the Multi Modality Tumor Tracking application provides efficient tools to assist clinicians in monitoring change in disease status, including disease progression or assessment of therapy response.

- Monitor disease state to assess treatment response using sequential CT, MR, PET/CT, and SPECT/CT data
- Segment lesions and quantify anatomic and metabolic state over time; enhanced semi-automatic volumetric segmentation optimized per modality
- Automatic calculation of WHO, RECIST 1.0, RECIST 1.1, CHOI, PERCIST, and mRECIST criteria presented in easily exported tabular and graphical layouts
- Advanced treatment response criteria support is part of the preset and reflected in the workflow

<sup>(1)</sup> American Cancer Society. Cancer Facts & Figures 2014. Atlanta: American Cancer Society; 2014.  
<sup>(2)</sup> World Health Organization. Cancer. Fact sheet No. 297. Updated February, 2014.  
<sup>(3)</sup> White CS, Pugatch R, Koonce T, Rust SW, Dharaiya E. Lung nodule CAS software as a second reader: a multicenter study. *Academic Radiology*. March 2008. 15(3).  
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