



# Lung Screening.

Improve your diagnostic quality and reading workflow

MeVis



The reading software for your lung cancer screening program.

## Lung cancer

Lung cancer is the most common cancer worldwide and causes the most cancer deaths each year. 1.8 million new cases (13% of all cancer cases) occurred in 2012 worldwide with a mortality of 1.6 million (19% of all cancer deaths).<sup>1</sup>

As small lung tumors are typically not causing pain or other discomfort, many patients present only when their condition is symptomatic, which means treatment has become difficult. It is essential to catch the disease at an early stage, when treatment is most effective.

## Screening

The USA have started to implement lung cancer screening programs with low-dose computed tomography (CT) as medical prevention among risk groups. Other countries are likely to follow.

For healthcare organizations, implementation of screening means that large amounts of medical imaging data must be acquired and read – in a standardized and efficient way, ensuring high diagnostic precision.

## Veolity

Veolity combines lung CAD of solid pulmonary nodules, integration and automatic registration of prior studies, and efficiently creates clear reports. It improves workflow and enhances quality in lung diagnostics, especially in high-throughput environments, such as lung cancer screening programs.



Veolity enables efficient, high-throughput workflow for reading chest CT studies in lung cancer screening programs.

### *<sup>1</sup> Incidence/mortality data*

Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, Mathers C, Rebelo M, Parkin DM, Forman D, Bray, F. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013. Available from: <http://globocan.iarc.fr>, accessed on 10/11/2014

### *Prevalence data*

Bray F, Ren JS, Masuyer E, Ferlay J. Estimates of global cancer prevalence for 27 sites in the adult population in 2008. *Int J Cancer*. 2013 Mar 1;132(5):1133-45. doi: 10.1002/ijc.27711. Epub 2012 Jul 26

What Veolity  
can do for you.



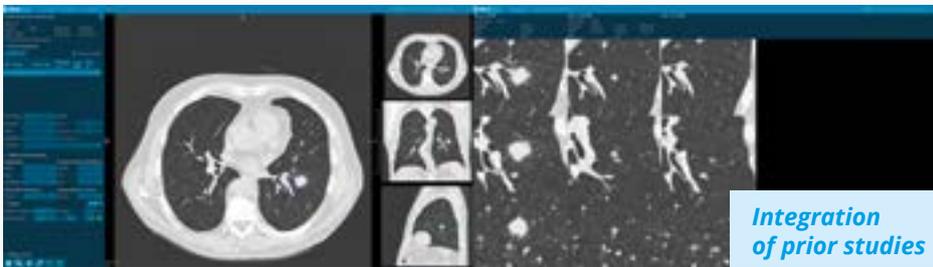
## Veolity highlights

### 1. Automatic follow-up comparison

Veolity provides instant comparison with follow-up cases. Prior findings are automatically mapped to the current exam. Image viewing

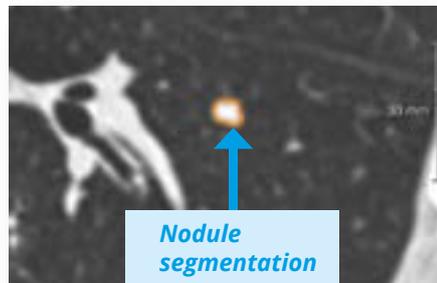
between current and prior studies is always synchronized and changes in nodule size are calculated.

Integrated prior findings, linking prior and current case and objective measuring tools allow to produce precise reports efficiently.

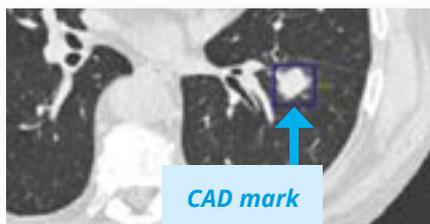


### 2. Automatic nodule segmentation

A simple double-click on a suspicious region automatically segments solid, part-solid, or non-solid nodules in a reproducible way, providing important information such as diameter and volume.



### 3. Fully integrated solid pulmonary nodule computer aided detection (CAD)



Veolity automatically marks regions that are suggestive of solid pulmonary nodules, helping radiologists to quickly identify regions that demand further analysis.

Veolity brings FDA approved CAD of lung nodules, registration of prior studies, and automated measuring of nodules into clinical routine.

MeVis Medical Solutions specializes in developing software applications that combine innovative medical image processing and workflow support, bringing the precision of scientific studies to everyday work environment in hospitals and medical offices.

#### 4. Lung-RADS nodule reporting

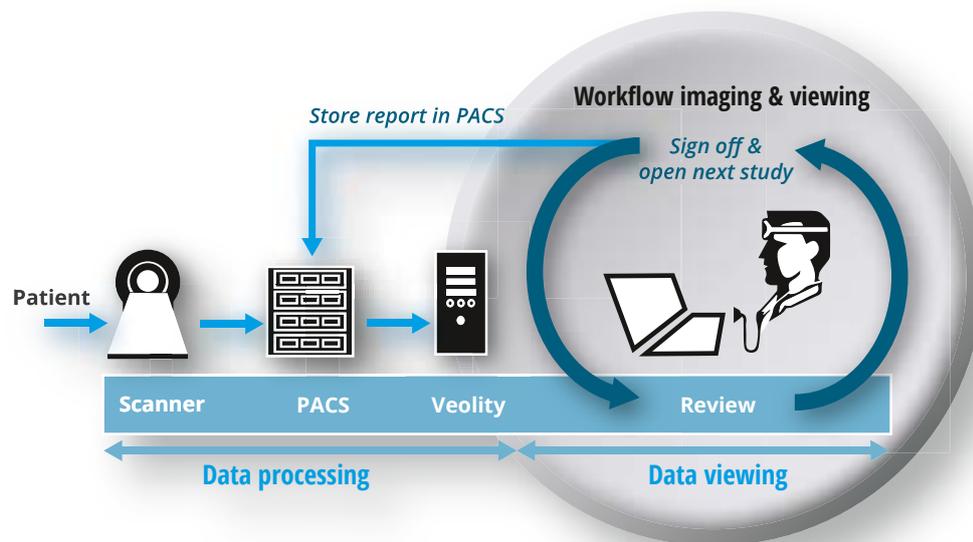
Veolity supports the ACR Lung-RADS™ reporting and management recommendations scheme.

The report automatically summarizes findings of current and prior studies, shows crucial clinical indicators, and is finally sent to PACS or patient management systems.

#### 5. Efficient workflow

Workflow is optimized for fast and efficient reading, streamlined for high-throughput scenarios such as screening.

The physician can concentrate on reading cases as all other data processing steps are automated.



## Contact

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#### 6. Clinical integration

Being vendor-neutral, Veolity is easily integrated into the clinical network infrastructure: The client software runs on existing hardware, all processing (CAD, registrations etc.) is performed on the server, and cases are assigned to clients to spread the workload.