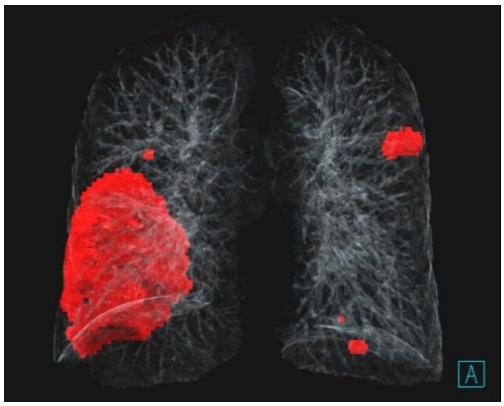
Pulmonary Density Plug-In

For *syngo*.via, *syngo*.via View&GO, and the AI-Rad Companion Chest CT

Our answer to COVID-19 and other pulmonary infections providing users with automated lung segmentation and opacity quantification.

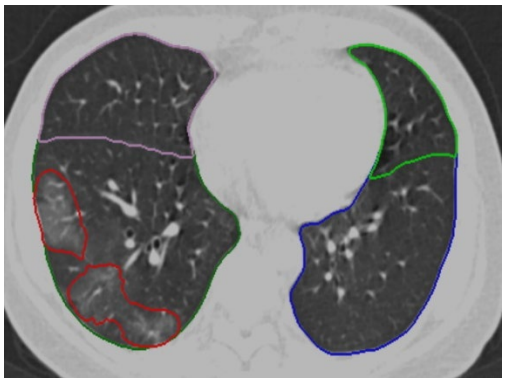
This document is intended to provide you with all relevant information regarding the CE-labled Pulmonary Density Plug-In*, that has also been approved under the FDA enforcement policy during the 2020 COVID-19 pandemic and is based on the CT Pneumonia Analysis prototype published in March 2020.



A 360° VRT overview visualizes the affected areas

Which features are provided?

- Fully automatic segmentation and quantification of ground-glass opacities and high densities in the lung
- Quick & Easy overview of the lung with a complementary color-coded pictogram and key
- VRT (Volume Rendering) for additional overview of opacity spatial distribution
- 2D axial views - overlaid with delineations of the opacities and the lungs



Depiction of segmented lung lobes (green, blue, pink) and high density areas (red)

*Plug-In is provided through syngo.CT Extended Functionality (medical device).

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All quantifications listed in one report and the color-coded pictogram offers a quick overview of affected lung lobes.

Measuring GGOs and Densities

The plug-in provides users with various tabulated measurements, i.e. relative ("percentage of opacities") and absolute volume of opacities, mean and standard deviation of HU values between lung parenchyma and the detected opacities which are exportable.

Certain parts of this plug-in were used in the "CT Pneumonia Analysis" prototype Siemens Healthineers offered to fight COVID-19, to analyze ground-glass opacities and consolidations. High opacity abnormalities were shown to correlate with lungs of COVID-19 patients.

For which deployments is the Plug-In available?

- *syngo*.via VB50B and higher and
  syngo.via VB30B (available soon)
- *syngo*.via View&GO VA26 and higher)
- AI-Rad Companion Chest CT (current version)

Acessing the Pulmo Density Plug-In

For *syngo*.via the Plug-In is now available in MM Reading where it can be found in the "Favorites Toolbar" the same counts for *syngo*.via View&GO. A download from the Digital Marketplace is no longer necessary. For the AIRC Chest CT, the new software version is rolled out to all AI-Rad Companion Chest CT users and is part of all new orders automatically.

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