# Diagnostic Imaging in COVID-19 Chest X-ray and CT

How to use chest CT for early COVID-19 diagnosis and prediction of disease progression

## Chest CT is more sensitive for early COVID-19 diagnosis than chest X-ray

### Why?

- > Chest X-ray may remain normal for 4-5 days after start of symptoms
- > CT scan shows typical pattern of ground glass opacity and consolidation

#### Therefore:

- > CT scan should be performed unless patient cannot be moved
- > Patient in ICU: chest X-ray is preferred unless complications are suspected

### Chest CT may show abnormalities typical for COVID-19, even if PCR is still negative

### So:

- > Trust the CT scan and assume patient is COVID-19 positive
- > Repeat PCR

### Extent of lesions on CT predicts progression towards mechanical ventilation and resuscitation

#### So

- > Repeat CT at day 7-8 and day 14-15
- > Consider additional CT depending on clinical evolution or to exclude potential complications

