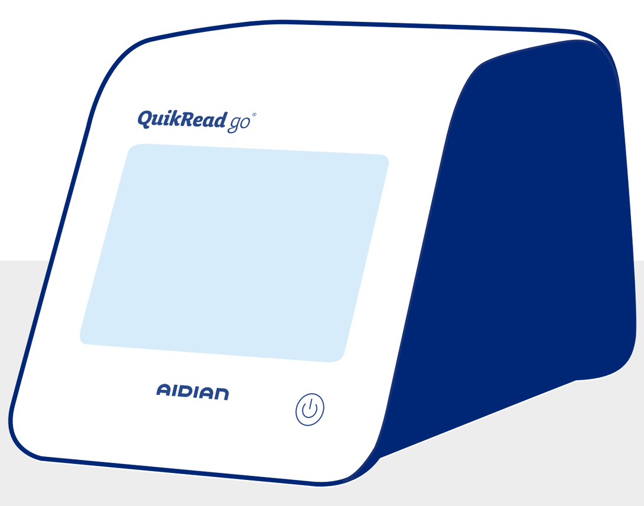
CRP tells about the severity of acute respiratory infection, also in COVID-19

C-reactive protein (CRP) increases during COVID-19 infection, and higher concentrations are often related to the severity of the disease. The result combined with clinical findings helps to assess the severity of the patient's condition and decide on further steps. CRP is measured fast and easily with the portable QuikRead go CRP system.

CRP in COVID-19 infection

A significant increase of CRP has been reported in COVID-19 patients with concentrations on average 30–50 mg/L[1-3]. Patients with severe symptoms seem to have significantly higher CRP levels, and several studies have reported that higher concentrations are linked to lung damage or worse prognosis of COVID-19 patients. Procalcitonin has not significantly reflected the overall disease severity in COVID-19.[3-5]



QuikRead go CRP tests give quick support

- Fast – 2 minutes test time, thus supporting fast patient flow at the point of care.
- Flexible – 2 hours sample stability, minimum hands-on time and portable instrument support flexible testing in various healthcare settings.
- Reliable – Comparability to clinical chemistry analyzers and enhanced bi-directional connectivity features ensure reliable results at the point of care.
- Easy to use – Only a fingerprick blood sample is needed. Maintenance-free instrument with intuitive user interface.

Practical experiences from the COVID-19 pandemic

Efficient patient flow is important when the healthcare system faces exceptionally high numbers of patients with symptoms of any seasonal respiratory pathogen. CRP doesn't specify the pathogen, but it has been used and recommended as one of the key markers to evaluate the severity of infection, prognostics, and monitoring the course of COVID-19 disease[6-8]. Measured easily at the forefront, point of care CRP is helping to direct patients to the appropriate treatment path e.g., home care or specific testing[7-8].

How CRP works

C-reactive protein (CRP) is a well-known and used biomarker for evaluation of inflammation, infection and tissue injury[9]. CRP becomes detectable within four to six hours after the initial stimulus, and the level peaks at 48 hours, and the concentration reflects the severity of the disease[10-11]. It has a half-life of 19 hours, and after the disappearance or removal of the stimulus, the levels decrease rapidly back to normal[11-12]. As a non-specific marker, CRP is always used together with the clinical assessment when making diagnostic or treatment decisions.

For community acquired pneumonia, levels below 20 mg/l tell that the infection is mild, whereas 100 mg/l usually is related to significant bacterial infection indicating the need of antibiotics. The concentrations in between indicate viral infection or self-limiting disease.[13-14]

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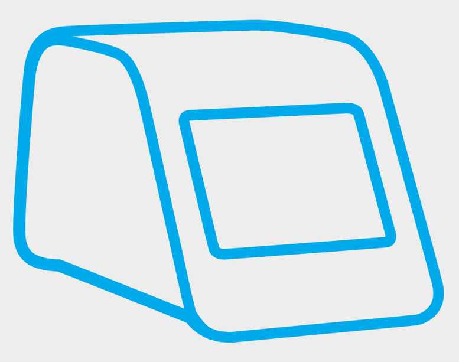

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