








Comprehensive Test Menu

-  Cardiology **hs-TnI[#], CK-MB, MYO, NT-proBNP**, H-FABP, ST2, Lp-PLA2, BNP
-  Inflammation **PCT, CRP+hsCRP, IL-6**, HBP, Ferritin, IFN- γ , TNF- α , Calprotectin, SAA, Anti-CCP
-  Coagulation **D-Dimer**, FDP
-  COVID-19 **SARS-CoV-2 IgG, SARS-CoV-2 IgM, SARS-CoV-2 NAb_s**
-  Tumor Markers CA15-3, HER-2, CEA
-  Hormones β -HCG, Progesterone, AMH, INH-B
-  Bone Metabolism 25-OH VD, iPTH, hGH

● On List ● Under Development # cTnI available, hs-TnI coming soon



Comprehensive Test Menu

Immu F6

Automated Chemiluminescence Immunoassay Analyzer



MEDCAPTAIN MEDICAL TECHNOLOGY CO., LTD.



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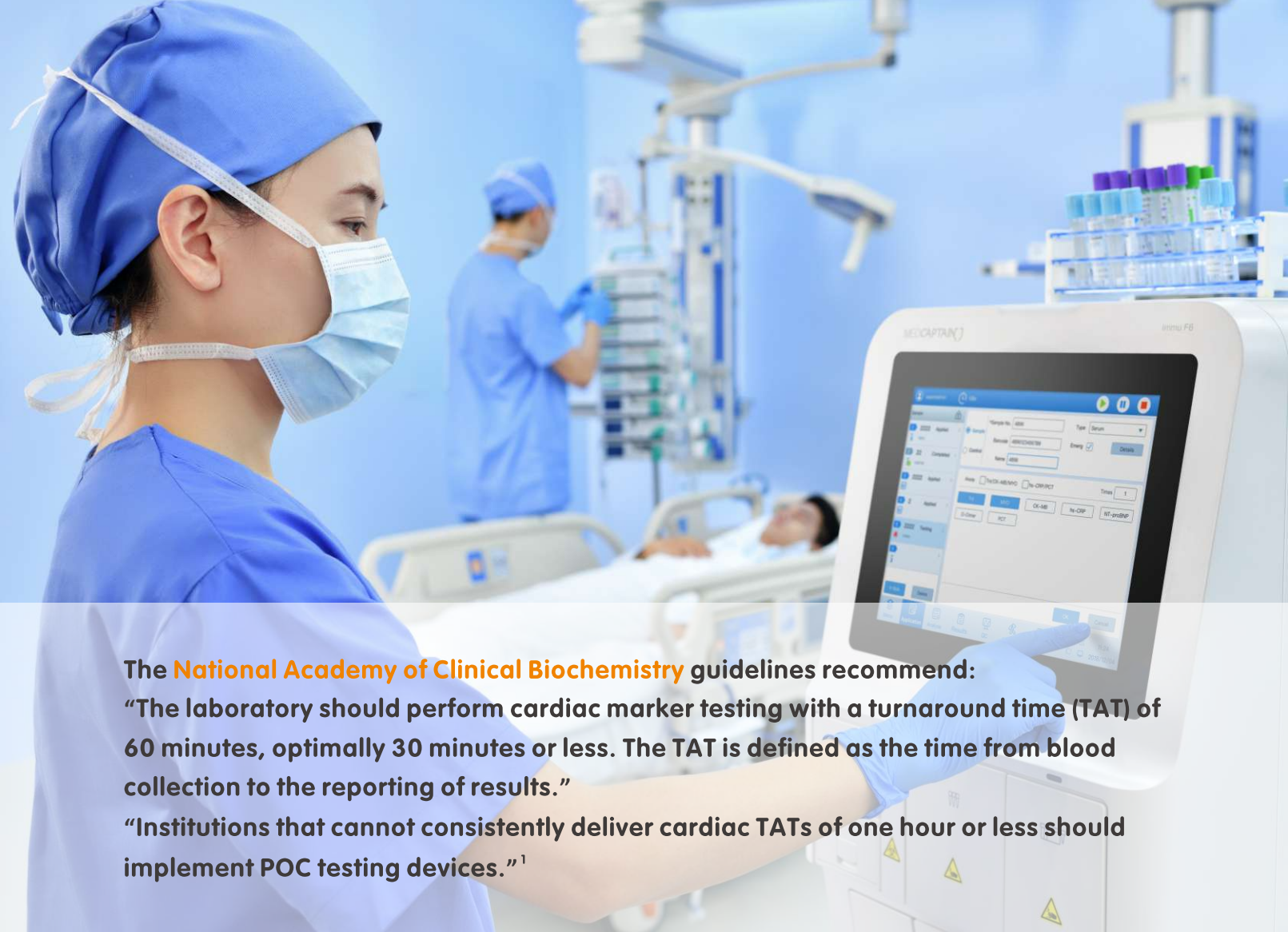
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 ENG-CLIA Solution -12P-Version 1.8



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The **National Academy of Clinical Biochemistry** guidelines recommend:
 “The laboratory should perform cardiac marker testing with a turnaround time (TAT) of 60 minutes, optimally 30 minutes or less. The TAT is defined as the time from blood collection to the reporting of results.”
 “Institutions that cannot consistently deliver cardiac TATs of one hour or less should implement POC testing devices.”¹

Medcaptain’s Immu F6 provides fast turnaround time with POC technologies & reliable results based on chemiluminescence method to help speed up the diagnostic process and accelerate patient workflow, thereby saving valuable time of the patients and medical staffs.

POC Benefits

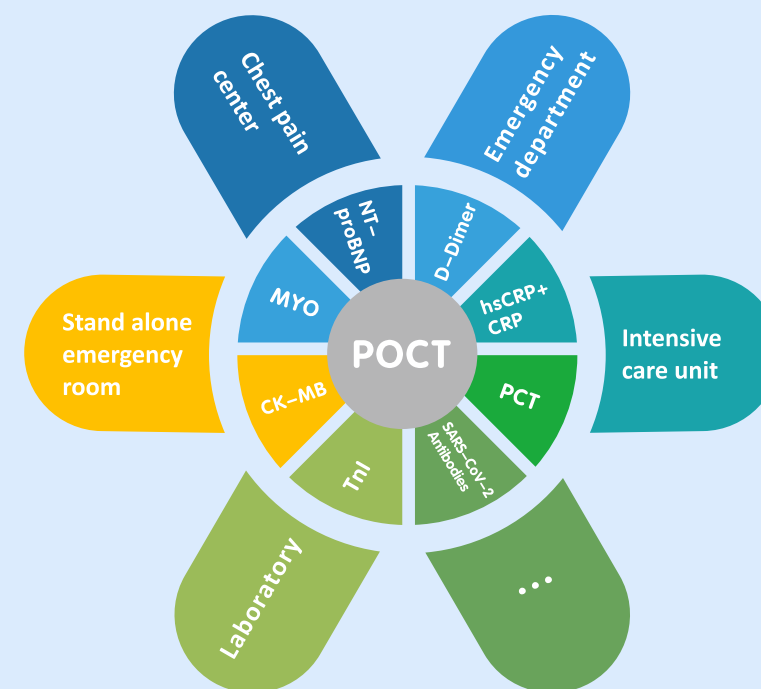
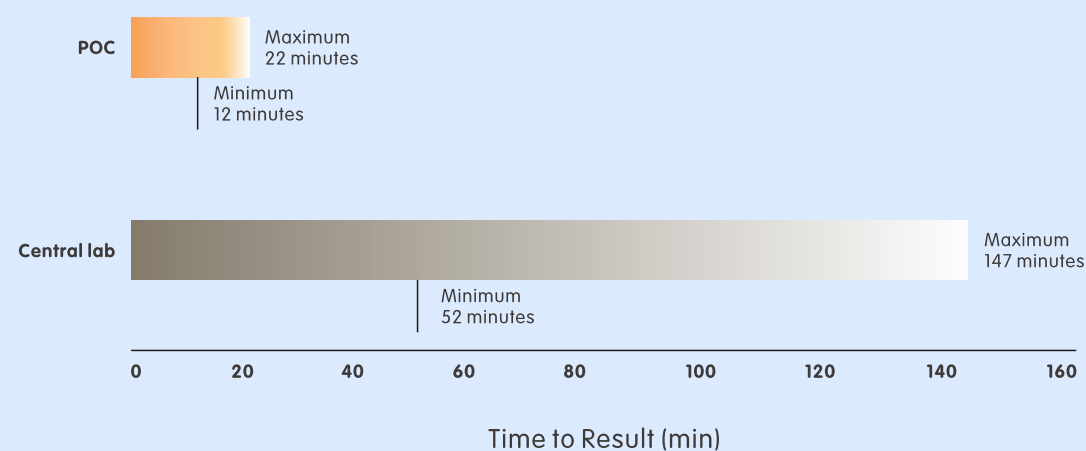
- ◆ POC and Fully-automated, easy to use
- ◆ First result in 13.5 minutes, accelerated patient workflow
- ◆ Whole blood, Plasma or Serum sampling; no preparation needed
- ◆ Random access and STAT mode enable fast patient stratification
- ◆ Power-on self-test, maintenance free

Reliable Results

- ◆ Acridinium ester CLIA technology provides highly accurate results
- ◆ Single-use cartridge and tip help avoid cross-contamination
- ◆ Powerful cleaning technology with two needles ensures high sensitivity

Point-of-care (POC) improves turnaround time

The overall gain in time from point-of-care testing compared with central laboratory measurements was 65 minutes (range, 34–135 minutes).²





Cardiac Markers

• hs-TnI[#]

• CK-MB

• MYO

hs-TnI[#], MYO, CK-MB

Severe Situation

Chest pain is one of the top 10 reasons for visits to emergency departments (ED), accounting for about 5% of all ED visits.³ Expected prevalence of acute myocardial infarction (MI) in chest pain patients in the ED is between 20% and 30%.⁴

However, inappropriate discharge of ED patients who have AMI has been estimated to occur in 2%–5% of patients and is the single most common cause of malpractice lawsuits against ED physicians.¹

Therefore, measuring biomarkers, preferably high-sensitivity cardiac troponin, is recommended, especially in patients with suspected NSTEMI.⁶

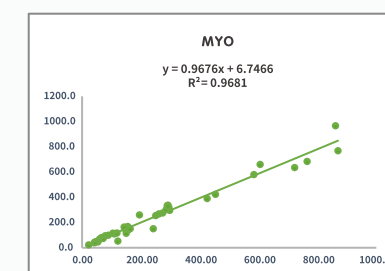
Medcaptain's powerful markers for the diagnosis of MI

---Troponin I (TnI) is an appreciated biomarker of cardiac necrosis due to its high specificity for myocardial tissue damage.⁵ Moreover, Medcaptain's new generation **high sensitive troponin I (hs-TnI[#])** allows earlier detection of acute MI and a more rapid "rule-in" and "rule-out" of MI.⁶

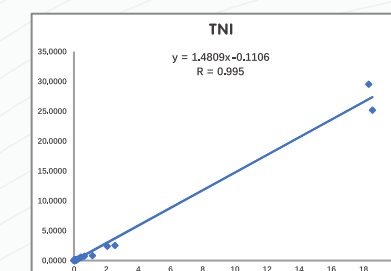
---**CK-MB** increases rapidly after infarction and it can also be indicating for re-infarction.

---**Myoglobin (MYO)** is one of the first markers of myocardial damage to be measured after the onset of myocardial infarction.

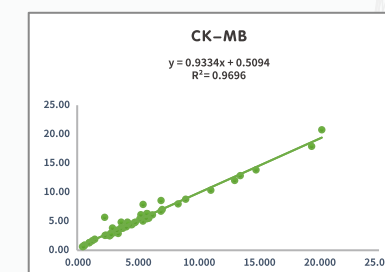
High coincidence rate



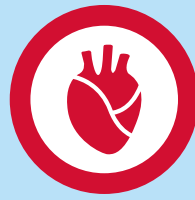
vs. Roche
Cobas e411
R=0.9681



vs. Abbott
i2000
R=0.995



vs. Roche
Cobas e411
R=0.9696



Heart Failure Marker

NT-proBNP

NT-proBNP

Current situation

Affecting about 26 million people worldwide, heart failure (HF) is an acute life-threatening disorder and a major global health problem.⁷ Common symptoms include shortness of breath and fatigue.

However, shortness of breath and fatigue are very common symptoms, especially among patients presenting to the emergency department and underlying causes of these symptoms could be many.

NT-proBNP, is a proven biomarker to rule-out HF since patients with normal plasma NT-proBNP concentrations are unlikely to have HF.⁸ It is particularly useful for triaging of patients with acute dyspnea and suspected acute HF in ED.

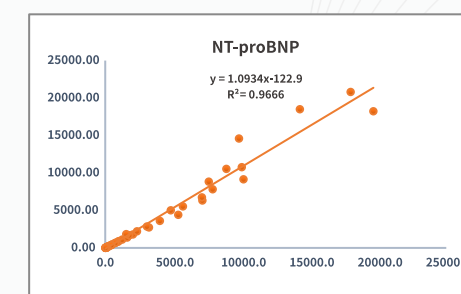
Moreover, NT-proBNP assists in risk stratification in patients with acute coronary syndromes (ACS), as several studies have shown that elevated concentrations of NT-proBNP in people with ACS indicate an increased risk of recurrent events.⁹⁻¹¹

Medcaptain's essential marker for the diagnosis of HF

---Early diagnosis is crucial for the prognosis of HF. Medcaptain's point of care NT-proBNP test aids in improving clinical decision-making.

---When used together with Medcaptain's hs-TnI[®], NT-proBNP is also useful for risk stratification of ACS.

High coincidence rate



vs. Roche
Cobas e411
R=0.9666



Inflammation Markers

PCT
IL-6
CRP+hsCRP



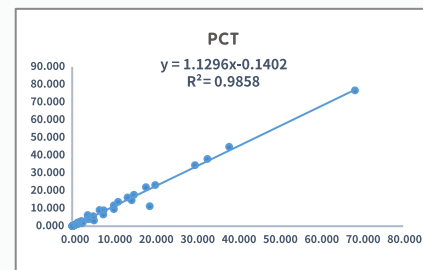
Coagulation Marker D-dimer

Procalcitonin (PCT) levels change with the severity of infection and thereby act as an indicator for differentiating between bacterial and viral infection & guides antibiotic treatment.

With a negative predictive value above 95%, PCT is acknowledged as the most sensitive biomarker to aid in the diagnosis of bacterial sepsis, which accounts 20% of all deaths.¹²

Medcaptain's specific marker for severe bacterial infection and sepsis

---Medcaptain's **PCT** helps early diagnosis of severe bacterial infection and sepsis and enables clinicians to swiftly optimize the patient's antibiotic treatment.



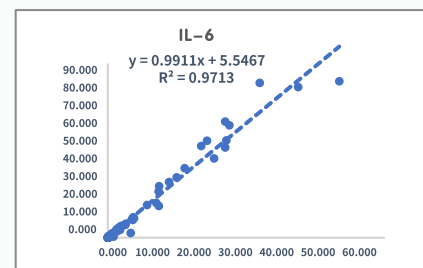
vs. Roche
Cobas e411
R=0.9858

Interleukin-6 (IL-6), a key mediator for inflammation and an early alarm signal of infection that becomes elevated as part of the inflammatory response, has emerged as a valuable early marker for inflammation in sepsis¹³.

Besides, sequential measurements of IL-6 in serum or plasma of patients admitted to the ICU (intensive care unit) showed to be useful in evaluating the severity of sepsis and to predict the outcome of these patients¹⁴⁻¹⁶.

Medcaptain's valuable marker for sepsis management

---Medcaptain's **IL-6** provides early warning of sepsis and helps assess the severity and prognosis of sepsis.



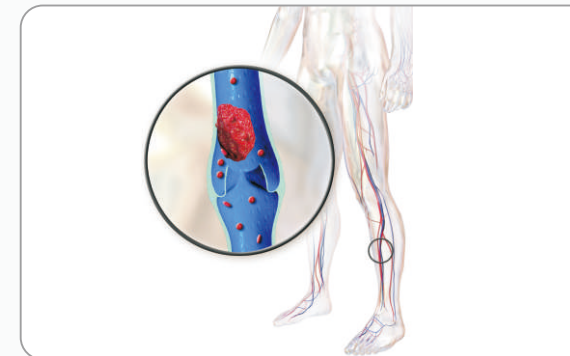
vs. Roche
Cobas e411
R=0.9713

Medcaptain's safe marker for the diagnosis of VTE and PE

---Medcaptain's D-dimer test is used to aid the diagnosis of venous thromboembolism, such as deep vein thrombosis (DVT) and pulmonary embolism (PE).

---When used with NT-proBNP, D-dimer is effective in distinguishing PE from HF, especially in ED patients with dyspnea.

---D-dimer, NT-proBNP and hs-TnI[®] combination test is effective in PE prognosis.

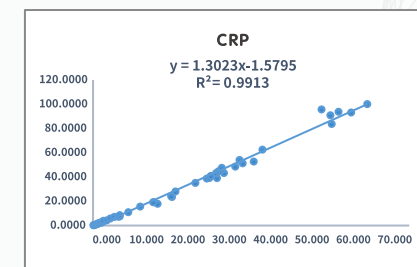


C-reactive protein (CRP) is a protein used to detect inflammation.

In addition, high sensitivity CRP (hs-CRP) can help assess cardiovascular disease risk among individuals.

Medcaptain's complementary marker for the diagnosis of infection

---Medcaptain offers both **CRP and hs-CRP** to provide in inflammation detection and cardiovascular disease risk assessment.



vs. Roche
Cobas e702
R=0.9913



SARS-CoV-2

SARS-CoV-2 NAbS
SARS-CoV-2 IgG
SARS-CoV-2 IgM

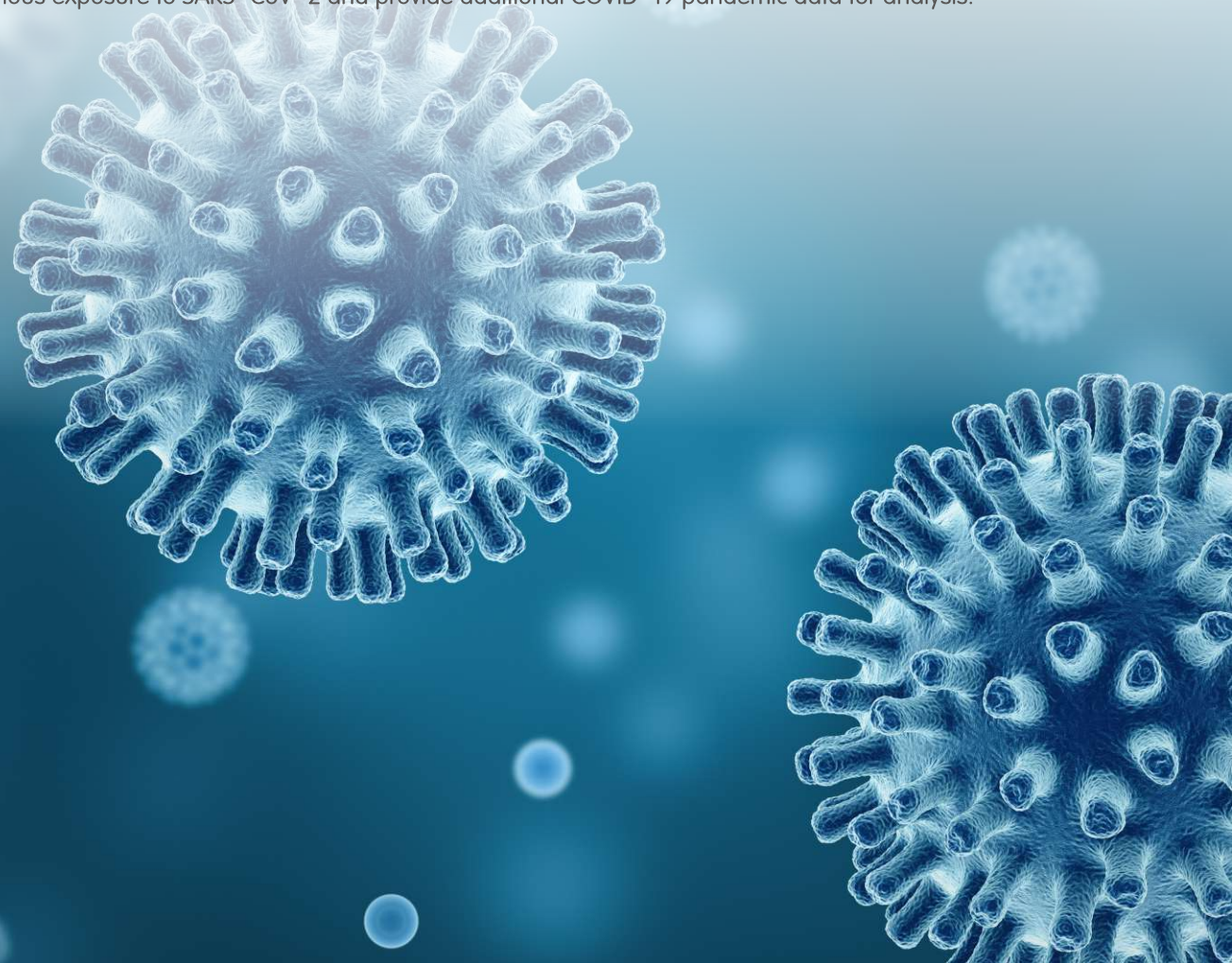
There is a general agreement that neutralizing antibody can block the interaction between the receptor binding domain (RBD) of the SARS-CoV-2 Spike protein and ACE2 receptor of human cells and stop the virus invading the cell, thereby preventing virus from replicating.

Medcaptain's essential marker for immune response towards vaccination

---Medcaptain's **SARS-CoV-2 NAbS** assay provides information to whether people acquire immunity against SARS-CoV-2 after vaccination.

Medcaptain's specific marker for the diagnosis of COVID-19

---Medcaptain's **SARS-CoV-2 IgG and IgM** assays rapidly detect antibodies to help identify individuals with previous exposure to SARS-CoV-2 and provide additional COVID-19 pandemic data for analysis.



---As increased inflammatory and thrombotic responses following SARS-CoV-2 infection, Medcaptain's emergency solution help fight the pandemic.

Items	Clinical Utility
IL-6	Assist in identifying severe inflammatory response to aid in determining the risk of intubation with mechanical ventilation ²¹
D-dimer	Associated with poor prognosis of COVID-19 ¹⁹
PCT	Early identify patients at low risk for bacterial coinfection and adverse outcome ¹⁷
CRP	Reflect the severity of COVID-19 ¹⁸
hs-Tnl ^h	Associated with COVID-19 induced cardiac disease and poor clinical outcomes ²⁰
MYO	
CK-MB	
NT-proBNP	

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