Urine Diagnostics



Recommended Urinalysis on Hospital Admission provides a strategic advantage to Triage and Surveillance of COVID-19 Patients

Hospitals are currently burdened with high numbers of COVID-19 patients. Urinalysis on hospital admission of COVID-19 patients can help to rapidly identify patients with high risk for severe course of disease. [1, 4] The algorithm has been validated in a multicenter study in Germany. [2] An abnormal urine status defined by anuria or at least two of the following criteria:

- urine osmolarity/specific gravity below normal values;
- leukocyturia;
- hematuria;
- albuminuria/proteinuria

A further testing for serum albumin and AT-III activity serves to stratify the risk group.

Patients with an abnormal urinalysis at hospitalization had a higher risk for ICU transfer or death (N=65/102, 63,7 %) as compared to those without urinary abnormalities (N=12/43, 27,9 %).



The algorithm indicates that those with normal urine have a substantially lower risk progressing to ICU or death. The algorithm is recommended for better allocation of patients at risk or with the strongest need for specific therapies. [2, 3, 4]

Use the kidney as a seismograph for severe courses of COVID-19!



The Urinalysis is an essential diagnostic tool for the detection and the monitoring of COVID-19 related AKI. It is also useful for nephrological follow-up of patients with impaired kidney function by "Long COVID". Thus, CombiScreen[®] 11SYS PLUS & CombiScreen[®] mALB / CREA urine test strips in

combination with Urilyzer[®] instruments support the detection and monitoring of urinary abnormalities such as Proteinuria, Hematuria, Leukocyturia and Albuminuria in urine samples. Contact Sales.Team@Analyticon-Diagnostics.com to receive more information.

References:

- 1. Gross, O et al., COVID-19-associated nephritis: Early warning for disease severity and complications? Lancet 2020, 395, e87-e88
- 2. Gross, O et al., Validation of a prospective Urinalysis-Based Prediction Model for ICU Resources and Outcome of COVID-19 Disease: A Multicenter Cohort Study. J. Clin. Med. 2021, 10, 3049
- 3. Böckhaus J et al. Update on: COVID-19 and the kidney clinic. Nephrologe. 2021 Aug 10:1-3
- 4. Kluge S et al., Clinical practice guideline: Recommendations on in-hospital treatment of patients with COVID-19. Dtsch Arztebl Int 2021; 118: 1–7

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