



Completely Enclosed Cartridge System
No Blood Manipulation After Sample Collection



Safe, Rapid, Reliable Coagulation Testing near the Patient

Recent clinical reports have shown that patients with severe COVID-19 infection can develop a coagulopathy that is likely triggered by the acute inflammatory response.¹⁻⁵ How do you ensure safe and efficient coagulation monitoring at the point of care and minimize staff exposure?

The **Quantra® Hemostasis Analyzer**, with its QPlus® and QStat® cartridges, represents the only VET (viscoelastic testing) system specifically designed and optimized for point of care use, with a completely enclosed system and no open-tube blood manipulation required after sample collection.

Recently, the Quantra has been specifically approached by several hospitals in Europe as uniquely suited for point-of-care coagulation testing in COVID-19 isolation units:



*Here in Milan we are facing a true medical emergency due to COVID-19 disease. San Donato Hospital has been transformed into a hospital for COVID-19 positive patients, both very severe needing intubation and less severe cases isolated in the two different wards. We are not operating cardiac surgery right now. Dr. Ranucci is responsible for the COVID+ ICU and has noticed a certain prothrombotic profile of these patients. **The Quantra is the only device on which we can operate safely without needing specialized rooms and a biohazard cabinet, so we would like to use it to test these patients.***

- Ekaterina Baryshnikova PhD, IRCCS Policlinico San Donato, Milan, Italy



*Our intensive care unit at Frankfurt has been instructed to create space for COVID-19 patients. In the meantime, the first patients have arrived - but the real "wave" is still ahead of us. During a discussion about patient care we noticed a detail we had never thought about before... In some cases, POCT diagnostics requires the pipetting of potentially contaminated/infectious patient samples. **This is not necessary for devices with cassette structure like the Quantra. Furthermore, the advantage of the Quantra is that no moving parts come into contact with blood. This is a unique benefit that reduces the risk of infections among our medical staff.***

- Dr. Florian Raimann, Anesthesiologist, University Hospital Frankfurt, Germany



Why the Quantra System?

- **Ease of use:** Simple, intuitive, and safe POC workflow from sample collection to cartridge disposal.
- **Ease of interpretation:** Innovative “dials” display option for expedited interpretation training.
- **Rapid, actionable results:** Whole blood coagulation information within 15 minutes or less.
- **No-fuss** maintenance and infrequent external QC recommendations.

Additional considerations for hospitals facing an influx of severely ill COVID-19 patients in their intensive care units (ICU):

- Creating isolation areas for COVID-19 patients means that blood samples for hemostasis testing ought not travel outside the isolation unit. An obvious solution would be a **dedicated point-of-care instrument** in the sick ward allowing clinicians to test patients quickly, without having to take samples to the laboratory (and change hands in the process).
- Cancellations of elective surgeries create a backlog which may result in a significant surge post-epidemic; while blood products may take considerable time to replenish. More **targeted blood product usage** and goal-directed therapy using the Quantra system may be beneficial for conserving blood products and ensuring positive outcomes. Historically, Point-of-care VET has been shown to help with both.^{6, 7}



Request Information about the Quantra System:

✉ info@au.stago.com

☎ +61 3 9840 5555

🌐 www.stago.com.au

Diagnostica Stago Pty Ltd
351 Burwood Highway
Forest Hill, Victoria 3131
Australia

References

1. Han H, et al. Prominent changes in blood coagulation of patients with SARS-CoV-2 infection. *Clin Chem Lab Med.* 2020 Mar 16 [Epub ahead of print].
2. Tang N, et al. Abnormal coagulation parameters are associated with poor prognosis in patients with novel coronavirus pneumonia. *J Thromb Haemost.* 2020;18:844-47.
3. Darzi AJ, et al. Prognostic factors for VTE and bleeding in hospitalized medical patients: a systematic review and meta-analysis. *Blood.* 2020 Feb 24 [Epub ahead of print].
4. Hunt B, et al. Practical guidance for the prevention of thrombosis and management of coagulopathy and disseminated intravascular coagulation of patients infected with COVID-19. <https://thrombosisuk.org/covid-19-thrombosis.php>
5. Ranucci M, et al. The procoagulant pattern of patients with COVID-19 acute respiratory distress syndrome. *J Thromb Haemost.* 2020 Apr 17. doi: 10.1111/jth.14854. [Epub ahead of print]
6. Pearse BL, et al. Protocol guided bleeding management improves cardiac surgery patient outcomes. *Vox Sang.* 2015;109:267-79.
7. Redfern RE, et al. Thrombelastography-directed transfusion in cardiac surgery: impact on postoperative outcomes. *Ann Thorac Surg.* 2019;107:1313-1318.

*Disclaimer: The Quantra Hemostasis Analyzer, QPlus and QStat® Cartridges, and their respective Quality Controls Level 1 and 2) are CE Marked for use with patients 18 years of age or older where an evaluation of their blood coagulation properties is desired. Coagulation evaluations are commonly used to assess clinical conditions in surgery (e.g. cardiovascular and orthopedic surgeries) to assess risk of hemorrhage and thrombosis before, during, and following the procedure. Product availability is subject to fulfillment of regulatory requirements in each market.