

Hôpital Nord Franche-Comté Speeds Up Laboratory Turnaround with Automated Tempus600® System

Hôpital Nord Franche-Comté (HNFC), located in Trevenans, in France, is a modern healthcare facility that has been operational since 2017. With more than 1,200 beds distributed across its main site and four satellite facilities, the hospital serves approximately 350,000 residents in the region.

Goals for process optimisation

The hospital's central laboratory processes 2,000 samples every day, including around 600 haematology samples. To achieve greater efficiency, the laboratory aimed to implement a more effective system for analysing haematology sample - one that would allow direct sample delivery to the analysis equipment, thereby eliminating the need for manual transport by staff.

Laboratory operations and daily workload

In 2024, the management at HNFC decided to invest in a Tempus600® system directly connected to a new haematology analyser to optimise laboratory processes and reduce turnaround times. The new equipment, combined with workflow improvements, has significantly shortened the total turnaround time (ToTAT) for haematology samples - resulting in faster responses and better treatment for patients.

Sample processing before and after implementation of Tempus600®

Both incoming and internal samples are delivered to the laboratory reception, where staff unpack and sort them.

With the former setup, staff carried all samples approximately 2 metres to a bulk loader connected to the track system, which then transported them to the analytical equipment.

With the new workflow, a Tempus600® sending station is installed right next to the sorting table.



Staff place the sorted haematology samples directly into the system, which automatically sends them 15 metres to a Tempus600® Connection Module connected to the bulk loader of the new haematology analyser.



Results and Measurable Improvements

“The combination of the Tempus600® transport system and the new analysis equipment has optimised the workflow in our laboratory. Samples are now sent immediately after sorting, saving technicians valuable time and allowing them to focus on other skilled tasks,” says Dr. Pascale Dussert, Head of Department, Medical Biology Laboratory, Hôpital Nord Franche-Comté.

- Transport time for samples between the sample reception and the new haematology analyser is reduced by 20 minutes.
- During peak morning hours, the total turnaround time has been reduced from 120 minutes to 75 minutes.
- In the afternoon, when the workload is lighter, results can be available within a few minutes if no microscopic analysis is required.



From right: Dr. Pascale Dussert, Hôpital Nord Franche-Comté and Mr. Matthieu Boyer, SARSTEDT S.A.R.L.

Installation and Implementation

Installation was completed within a few days and on schedule. Collaboration between the hospital and the installation team worked smoothly. The implementation process was straightforward, and laboratory technicians quickly adapted to the new workflow.

Technicians were instructed to sort samples and place haematology samples directly into the Tempus600® sending station, while other samples were placed in the bulk loader. Special training sessions were arranged for the haematology team. The system itself is highly user-friendly, and maintenance is handled by three super users and 17 regular users.

User Experience and Benefits

The system operates reliably and has no negative impact on sample integrity.

Key advantages include:

- Faster turnaround times
- Ease of use
- Improved workflow efficiency
- Better and quicker patient treatment

Looking Ahead

“The main benefit of Tempus600® is the reduced turnaround time, which reflects the efficiency of all our processes. When turnaround times are good, everything runs smoothly,” explains Dr. Pascale Dussert.

“I’d like to see Tempus600® implemented in other departments as well, because automating manual processes is the future.”