IH-500 and IH-1000 Experience Report Saint-Denis Delafontaine Hospital, France



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IH-500 and IH-1000 systems, designed to make immunohematology lab life easier

Since April, the hematology-transfusion department of the Saint-Denis Delafontaine hospital has been using **IH**-500 and **IH**-1000 Bio-Rad systems, coupled with one single data management software (**IH**-Com).

According to Doctor Youcef Siad, head of this department, **IH**-Com facilitates extensive and reliable immunohematology expertise.



The team led by Dr Youcef Siad appreciate the Bio-Rad immunohematology sy as they meet their safety, traceability and archiving needs.

What is your activity in immunohematology?

We perform some 24,000 blood groupings each year. We also perform antibody screening tests and identifications, Direct Antiglobulin Tests (DAT), single antigen typing and crossmatch testing. We deliver approximately 3,000 labile blood products per year.

Why did you change supplier?

Previously, only routine operations were performed on an automated system. IAT identification, single antigen typing and crossmatching, along with reagent traceability, were performed manually (using Bio-Rad reagents), taking a lot of time. Now, we perform all of these operations on the IH-500 and IH-1000 systems and, thanks to IH-Com, all data is stored indefinitely (results images, reagent lot information, quality controls).

Why did you choose Bio-Rad systems?

We were already using Bio-Rad reagents for our manual techniques. Their systems have the advantage of performing single antigen typing and crossmatch testing procedures very rapidly, which is highly beneficial for our patients - in particular alloimmune patients and those with sickle cell anemia. Moreover, we can continuously add tubes without interrupting the system's analytical process.



The Bio-Rad IH-500 system performs "specialist" immunohematology tasks (antibody screening, single antigen typing and crossmatch testing) in the hematology-transfusion department of the Saint-Denis Delafontaine hospital.



We selected two systems, one larger, **IH**-1000 for routine analyses (blood grouping, antibody screening and DAT) and a smaller one, **IH**-500, for "specialist" immunohematology (IAT identification, single antigen typing and crossmatch testing). **IH**-500 also serves as a backup in case of **IH**-1000 system malfunction. **IH**-500 is very simple to use, sophisticated and user-friendly. Both systems are fully autonomous. They are connected to **IH**-Com, the software on which all results are assessed, viewed, then validated by the technician. The system meets our requirements in terms of activity and technician time (one technician). The technician simply loads the reagents and samples and the systems take care of the analysis.

Archiving is essential: the **IH**-Com software stores everything. An additional advantage for us biologists is that we can now see the color result images before biological validation; we can even zoom in on individual wells. We also have a very good working relationship with Bio-Rad, which represents genuine added value for us.

How did the installation go?

It was well-prepared. We kept the old system throughout the validation and method comparison period. This was essential for accreditation. Once the results had been validated and the technicians trained, we stopped the old system.

How did your teams adapt to these new systems?

A Bio-Rad technician trained our laboratory technicians in groups. Two advisor technicians will receive more in-depth training at the Bio-Rad site. I was also trained in the use of the systems and IH-Com software. It's new, so we are not yet fully up to speed, but IH-Com has made things easier for us, particularly concerning control and reagent management and electronic data transfers. The only downside is the quality control for single antigen typing, that we need to obtain elsewhere. For the rest, the main benefits are safety, traceability and archiving.

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