



## Overview

Autofusion's state-of-the-art technology and high performance functionality provide a comprehensive, cost-effective and accurate centralized solution. Autofusion's highly secure environment encompasses all aspects of risk management and process controls to ensure optimal blood safety.

Autofusion™ is a Windows® based system with a user-friendly graphical interface. The system's modular structure and standards based architecture reduces hardware costs and its unique relational database structure provides consistent and secure data access. Autofusion provides extreme flexibility in every aspect - enabling clients of varying sizes and needs to utilize the same application while tailoring it for their specific environment.

Autofusion™ supports regulatory guidelines such as AABB, FDA and HIPAA and fully complies with standards such as HL7 and international ISBT128, including data-entry validation and errors detection. The software received the FDA 510K clearance and is approved for marketing in the US.

Autofusion™ enables clients to define the systems decision algorithms, and determine for example which actions are allowed, which are blocked and which need a specific signature. Management defined testing panels as well as dynamic worklist design definitions allow complete flexibility, while maintaining process controls required for cGMP requirements. The system provides multisite capabilities offering multi-facility and centralized transfusion service support.

## Features/Benefits

The software combines two modules within one fully integrated package - Transfusion Services Management and a Donation Management System.

### **Transfusion Services Management, providing:**

Integrated clinical, managerial and administrative processes associated with inventory management, patient testing, units crossmatching and issue, data integrity validation and risk management, reporting and information documentation. Full support for label generation and barcode reader based work throughout the system, including labeling verification and code typing check algorithms.

#### **Inventory Management**

- Stock management and utilization, providing a centralized inventory that is current and highly responsive to specialized daily needs as well as emergencies.
- Full documentation of blood components processing, including automatic re-calculation of expiry limit allowing maximized product usage and minimized product waste.
- Tracking incoming and outgoing product shipments.
- Creating order for products to match stock requirements.

State - of - the - art Laboratory Information System from NetLIMS



## Patient Testing

- Summarized interactive view of patient complete information – such as special requirements, patient blood types, previous and external results, transfusion reactions and issued blood units.
- Direct link between records and processes, increasing security and integrity levels to optimum patient safety standards.
- Patient testing procedures including sophisticated user defined algorithms, data integrity validation, and complete documentation.
- General Lab Capabilities, supporting the unique laboratory aspect of blood bank's operations.
- Antigen and antibody history for donors, patients and units for both red cell antigen groups and HLA antigen groups, including calculation of cell panels results and antibody identification.
- Neonate Dedicated Procedures, ensuring maximum level of safety while performing tests and transfusion services for neonate patients.
- Allogeneic Bone Marrow Transplanted Patients Procedures, providing a unique dedicated logic involving every aspect of handling transplanted patients, including: test results algorithms, product ordering methods, product compatibility logic, integrated donor – patient link, valuable data documentation and display, related permissions, system configurations and dedicated reporting tools.
- Patient Hematological Test Results Display, providing the user complete details of the patient current clinical condition in respect of the products ordered for him/her.
- Unique Rules Engine, providing user-defined sophisticated formulas for enhanced flexibility in system's logic and automatically initiated functions.

## Transfusion Services

- Transfusion management and products distribution, with embedded critical safety features conforming to the FDA and AABB requirements.  
Unit issue and recall management and documentation.
- Comprehensive support for biologic products acquisition, processing and issue.
- Automatic application of patient special processing requirements on products ordering.
- Emergency and MCI procedures supported.
- Improved turnaround time with Electronic Crossmatch and Blood Bank Instrument Interfaces.
- Extensive risk management and safety checks throughout the system, preventing user errors and offering corrective ability.
- Retroactive Results Entry after issuing under emergency or MCI procedures, allowing complete and accurate data documentation.
- Centralized worklist displaying current workload status and pending assignments, cutting performance time short and providing managers a clear overview of blood bank's tasks.

## Information Services and Quality Assurance

- Detailed daily trace and audit trail for every action and process.
- Interfaces to automated testing equipment.
- Label, barcode and form creation for inventory items, patient samples and completed tasks.
- Labeling verification supported throughout the system.
- Powerful reporting tools for inventory management, clinical records, statistics, accounting, staff management and much more.
- Integration with AutoClip™ allows using automated attachment capabilities and storing images as part of the system records.
- Multi-tiered permission levels, allowing highly flexible user definitions.

State - of - the - art Laboratory Information System from NeTLIMS



## **Donation Management system, providing:**

Full support for the donation, processing, testing, and distribution of blood and blood products:

### **Donor information services**

- Eligible donors registration and posting of donor demographic and eligibility updates.
- Documentation and review of donor medical and phenotype history, post donor testing results and donor deferrals.
- Instantly sort and filter donors information to recognize specific donor eligibility, manage individual donations, view donor history and identify donation opportunities.
- Interface with instruments or reference laboratories to retrieve test results and interpretations.

### **Donor Testing**

- Document donor visit history review, questionnaire, physical tests and phlebotomy data including the performer and date/time of each action.
- Comprehensive control over donor records so that duplicates, entry mistakes, inconsistencies and other potential problems are quickly identified and corrected.
- User-defined sophisticated test algorithms, that can be defined to calculate donor's tests results, defer donors, automatically discard associated units, format notification letters and validate donor's data entry.

### **Donated products management**

- Optional procedures and verification methods upon inventory insertion of donated units, for increased safety.
- Products automatic recall based on donor testing results or any case of donor deferral.
- Support for aphaeresis donation processes and their required testing

### **Documentation and Reporting Services**

- Detailed documentation throughout the donation process.
- Documented communication performed with the donor by letter or telephone.
- Extensive inquiry and reporting functionality, of all aspects of donation processing, donors database's information and donor deferral episodes.

State - of - the - art Laboratory Information System from NetLIMS