

Perioperative Autologous Transfusion (PAT)



Perioperative Autologous Transfusion (PAT) is a technique used to collect autologous blood shed during surgery for reinfusion into the patient, with the goal of minimizing the need for allogeneic blood transfusion and its associated complications. Autotransfusionists collect blood from the surgical field, washes and centrifuges the blood to remove debris and concentrate the blood (to a Hct of 50-60%), then the red blood cells are infused to the patient. In general, the blood needs to be transfused within eight hours from the start of collection. PAT collection can continue post-operatively as needed. Each processing procedure requires 200- 300 mL of collected blood, is completed in 5-10 minutes, or can be performed in a continuous manner for Jehovah's Witness patients. The PAT product contains only red cells and saline, without the plasma or additives of allogeneic blood.

Benefits

PAT has the following benefits:

- 1) mitigates the transmissible disease risks of allogeneic transfusion;
- 2) allows rapid replacement of blood loss independent of blood bank support;
- 3) mitigates the risk of serious transfusion reactions such as transfusion-related acute lung injury or life-threatening hemolysis from mismatched blood.

Indications

PAT is recommended in patients when it is difficult to find matched blood (rare blood or multiple alloantibodies) or if they are Jehovah's Witnesses.

PAT is also used in surgeries with high blood loss, including cardiovascular, orthopedic, organ transplantation, trauma, and obstetric/gynecologic.

Benefits

- Outsourcing enables your practice to offer the benefit of NYBCe PAT services without the burden of maintaining equipment, supplies, staffing, and necessary data for regulatory compliance.
- Our PAT service is one of only two AABB-accredited services in the tri-state area and has been accredited for the last 20 consecutive years.
- We perform over 4,000 PAT and PRP procedures annually.
- Leveraging the larger NYBCe infrastructure allows us to offer the latest in technology and innovation.

Ordering

A member of your team initiates the request by calling 800.CELLSAV (800.235.5728) or [visiting Our Clinical Force Online Community](#). At least 24 hour notice is requested for elective procedures and one hour notice for emergencies. The PAT team transports the required equipment and disposables to your facility. Our technician performs the procedure and records all procedural information, a copy of which is provided for the patient's chart. PAT manager/coordinators or physicians are available 24/7 for further consultation. Hospital staff can be trained to begin PAT collection prior to equipment/technician arrival using supplies we stock at your facility. We have the flexibility to supply only the autotransfusionist ± supplies as needed and to operate in "stand-by" mode.