

# Blood Components Reference Manual Table of Contents

## Puget Sound Blood Center Regional Edition

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# Section G

## Other Services

### Part I: Laboratory Services

#### Publications

##### Blood Center Laboratory Services Directory

The Blood Center Laboratory Services Directory contains descriptions of the full spectrum of laboratory tests available to hospitals, clinics and individual physicians to support patient care. The directory details procedures for ordering tests, specimen requirements, test values and CPT codes for each laboratory. Specialized laboratories at the Blood Center include Virology, Immunogenetics, Platelet Immunology, Red Cell Reference and Hemostasis. The Laboratory Services Directory is available on the Blood Center web site:

[www.psbcc.org/lab\\_services/index.htm](http://www.psbcc.org/lab_services/index.htm)

To order forms for lab testing, contact the Blood Center Business Office at (206) 292-6559. For general information about any Blood Center Service or Program, phone (206) 292-6500.

## Part II: Testing Services

### Hemostasis Laboratory

**Phone: (206) 292-6594**

**Specimen Info line: (206) 292-1876**

The Hemostasis Laboratory provides special testing and technical assistance in evaluating bleeding and thrombotic disorders and their relevance to the patient's clinical condition. The laboratory works in conjunction with the Hemophilia Care Program.

The laboratory has over 30 years of experience in providing quality hemostatic evaluation including testing, interpretation of results and patient evaluations.

Hemostasis studies should be ordered on a Hemostasis Laboratory Order Form. For further information call the laboratory at the phone listed above or consult the Blood Center website.

[www.psbcc.org/lab\\_hemostasis/index.htm](http://www.psbcc.org/lab_hemostasis/index.htm)

### Virology (Donor Testing) Laboratory

**Phone: (425) 656-7907**

The Blood Center Virology (Donor Testing) Laboratory performs blood typing as well as virology testing for infectious disease markers for the Puget Sound Blood Program donors. The Laboratory provides some virology testing services for other health care facilities on a limited basis.

Orders for virology testing should be made on a Request for Testing form. Additional information concerning individual virology testing may be obtained by consulting the Blood Center web site or by calling the Laboratory at the phone number listed above.

[www.psbcc.org/lab\\_virology/index.htm](http://www.psbcc.org/lab_virology/index.htm)

## Testing Services — continued

### Immunogenetics (HLA) Laboratory

**Phone: (206) 292-1860**

The Immunogenetics Laboratory provides histocompatibility testing including HLA typing and identification of HLA antibody. The laboratory serves organ transplant programs in Seattle who draw patients from throughout the WAMI region. The laboratory also provides histocompatibility testing for transfusion recipients and HLA typing for a variety of patient needs including vaccine programs in infectious disease and oncology.

Orders for the Immunogenetics Laboratory including HLA typing and TRALI workup (see Section C, Part II) should be made on a Request for Testing Form. To view a copy of this form and for further information please refer to the Blood Center web site or call the Laboratory at the phone number listed above.

[www.psbcc.org/lab\\_immunogenetics/index.htm](http://www.psbcc.org/lab_immunogenetics/index.htm)

### Platelet Immunology Laboratory

**Phone: (206) 292-6543**

The Platelet Immunology Laboratory provides services and research to improve the care of thrombocytopenic (low platelet count) patients. Samples are analyzed for the presence of platelet alloantibodies in patients who become refractory to random donor platelet transfusions to determine if they need platelets from selected donors. Platelet antibody is also evaluated in a variety of other patients who may have immune-mediated thrombocytopenia such as autoimmune thrombocytopenia, neonatal autoimmune thrombocytopenia, post-transfusion purpura and heparin-induced thrombocytopenia. In addition, physician consultation is available to identify the best treatment approaches for thrombocytopenic patients.

Orders for the Platelet Immunology Laboratory, including HLA typing, should be made on a Request for Testing form. To view a copy of this form and for further information, please refer to the Blood Center web site or call the Laboratory at the phone number listed above.

[www.psbcc.org/lab\\_platelet/index.htm](http://www.psbcc.org/lab_platelet/index.htm)

## Testing Services — continued

### Red Cell Reference Laboratory

Phone: (206) 292-6534

The Red Cell Reference Laboratory performs both individual tests and profiles that are involved in:

1. Identification of serum red blood cell alloantibodies in individuals previously sensitized through transfusion or pregnancy, and selection and compatibility testing of blood for transfusion.
2. Prenatal testing, which may include antibody identification and titers.
3. Evaluation of underlying causes for hemolysis in a patient.
4. Diagnosis and transfusion management of patients with autoimmune hemolytic anemia.
5. Compatibility testing and antibody titration studies for potential donor/recipients of bone marrow and solid organ transplants.
6. Follow-up studies on minor ABO incompatible bone marrow transplantation recipients.

In addition to serologic testing, the Red Cell Reference Laboratory staff maintains and coordinates a frozen red blood cell program. The frozen red cell inventory consists of rare antigen-negative units that are a source of compatible units for specific patients who have red cell alloantibodies against high-frequency antigens or multiple antigens.

Orders for any testing performed by the Red Cell Reference Laboratory should be made on a Request For Testing form.

To view a copy of this form and for further information, please refer to the Blood Center web site or call the Laboratory at the phone number listed above.

[www.psb.org/lab\\_redcell/index.htm](http://www.psb.org/lab_redcell/index.htm)

## Part III: Clinical Services and Programs

### Apheresis Program

**Phone: (425) 453-5098**

Approximately 3,500 donors are part of our Community Apheresis Donor Program. Specially trained registered nurses and technicians perform component collections (predominately platelets) to support patients undergoing chemotherapy and/or bone marrow transplantation.

Facilities for Apheresis platelet collection are located at the Central Seattle Blood Center on First Hill in downtown Seattle and at the Bellevue, Lynnwood, Tukwila, Olympia, Silverdale and Everett Blood Center sites. The donation hours for these sites are varied. Granulocyte collections are performed only at the Central Seattle Blood Center in downtown Seattle.

[www.psbcc.org/programs/platelets.htm](http://www.psbcc.org/programs/platelets.htm)

### Autologous Blood Program

**Phone: (206) 292-6588**

The Autologous Blood Program serves the region to coordinate and support patients storing their own blood for upcoming surgeries. A number of patients needing blood support during or following planned surgery are able to provide for their transfusion needs by the use of autologous blood. Although not completely risk free, autologous blood is the safest form of transfusion. Exclusive use of a patient's own blood eliminates reactions due to donor-recipient incompatibility and precludes exposure to transfusion-transmitted infection.

Physicians can order preoperative autologous blood storage for surgical patients by calling (206) 292-6588. Optimally patients start preoperative autologous donations 3-6 weeks before the scheduled surgery. There are multiple sites in the region where patients can donate autologous blood. Further information is available by calling the Autologous Blood Program at the phone number listed above.

[www.psbcc.org/need/store.htm](http://www.psbcc.org/need/store.htm)

## Clinical Services and Programs — continued

### Bone Marrow Donor Program

**Phone: (206) 292-1897**

This program recruits and manages bone marrow and Peripheral Blood Stem Cell donors for the National Marrow Donor Program (NMDP). These donors provide transplants to unrelated patients who do not have a suitable HLA matched donor available within their family. Over 60,000 donors are registered through the Blood Center and are listed on the NMDP Registry. More people of ethnic minorities are needed on the Registry to help patients of ethnic minorities find a donor. Because HLA types are inherited, patients are most likely to find a donor match within their own ethnic or racial group. For this reason, minority donors are especially encouraged to join the Registry.

[www.psbcc.org/programs/marrow.htm](http://www.psbcc.org/programs/marrow.htm)

### Cord Blood Program

**Phone: (206) 292-1896**

The Blood Center has the only public cord blood bank in Washington State. This program enables pregnant women to donate umbilical cord blood, collected from the placenta after the baby is born. Personnel from the Cord Blood Program recruit and screen donors, test, process, and cryopreserve cord blood units when they are received, and maintain an electronic registry of units that are available to patients around the world.

Cord blood is rich in stem cells, the same cells derived from the bone marrow of adults. A cord blood transplant, much like a bone marrow transplant, can restore the body's blood and immune systems after chemotherapy and irradiation. Cord blood is collected from the placenta, through the umbilical cord, directly following the birth of a baby. This blood would otherwise be discarded along with the placenta. During processing, the stem cells are separated from the other cells in the blood and frozen until a patient with a corresponding HLA type requires the unit for transplantation.

[www.psbcc.org/cordblood/what.htm](http://www.psbcc.org/cordblood/what.htm)

## Clinical Services and Programs — continued

### Directed Donation Program

**Phone: (206) 292-6588**

The Blood Center's Directed Donation Program permits patients to select blood donors for planned or potential transfusion needs. The program is provided as a medical service to patients in the community, many of whom feel strongly that their selection of the donors is likely to result in safer blood. The available evidence suggests the contrary, that, if anything, blood from directed donors is less safe than that from volunteer community donors. The safest blood continues to be autologous blood, and patients who are able to store autologous blood for their transfusion needs should do so in preference to requesting directed donations.

Physicians may order collections of red blood cells, divided red blood cell (pediatric use) and assigned pediatric aliquot directed donations by faxing a Directed Donation Physician's Order Form to (206) 292-4177. The patient must also sign a Directed Donation Patient Consent Form. Due to the processing time required, directed donations are not available for emergency transfusion. Because of the additional administrative and clerical tasks involved with directed donations, a processing fee will be collected for each directed donation unit at the time of donation. A shipping charge will also be added to each unit shipped outside of the Blood Center's usual distribution region.

[www.psbcc.org/need/family.htm](http://www.psbcc.org/need/family.htm)

### Hemophilia Care Program

**Phone: (206) 292-6507**

The Hemophilia Care Program serves Washington State and northern Idaho as a resource for hemophilia patients and their physicians. The program provides medical consultation services and nursing support as well as patient education and counseling services to facilitate care for persons with hemophilia and other congenital bleeding tendencies and help them and their families lead more normal lives.

If an urgent medical consultation with the Hemophilia Care Program staff is required in the evening or on weekends or holidays, phone the Blood Center Laboratory at (206) 292-6525 and have them page the Hemophilia Care Program person on-call.

[www.psbcc.org/patient/hemophilia.htm](http://www.psbcc.org/patient/hemophilia.htm)

## Clinical Services and Programs — continued

### Northwest Tissue Center

**Phone: (206) 292-1879**

The Northwest Tissue Center was established in 1988 by the Blood Center, the Northwest Kidney Center and the University of Washington Department of Orthopedics. The Northwest Tissue Center is a nonprofit, community-sponsored, AATB-accredited tissue bank that recovers, processes, and distributes musculoskeletal and cardiovascular tissue for transplant. The Tissue Center provides donation services to all of the more than 180 hospitals in Washington, Montana, and northern Idaho and distributes over 6,000 allografts annually for transplant. The Center has made the opportunity of donation available to more than 3,000 generous families and has provided pain relieving, limb-sparing, mobility restoring, sometimes life saving transplants to more than 45,000 patients. Tissue Center expertise in cryopreservation has led to the development of programs to process and preserve peripheral blood stem cells, umbilical cord blood, and islet cells. The Tissue Center also conducts studies to evaluate the clinical effectiveness of tissue transplantation and related research.

[www.nwtc.org](http://www.nwtc.org)

### Patient Services Department

**Phone: (206) 292-4174**

The Patient Services Department provides both inpatient and outpatient treatment. The department utilizes specially trained Registered Nurses to perform stem cell collection, therapeutic cellular depletion, and therapeutic apheresis. Prior to the patient being scheduled, all therapeutic procedures must be coordinated by the Blood Center's physician covering the department and the ordering physician. In addition, the department provides outpatient transfusion of red blood cells and other blood components to ambulatory patients as an inexpensive and pleasant alternative to inpatient or emergency room transfusion. In order for a patient to participate, the patient's medical condition must be stable. The transfusion must be scheduled in advance and Blood Center guidelines for sample identification must be followed.

The Patient Services Department, located at the Central Blood Center on First Hill in Seattle, is staffed 7 days a week and a nurse is on-call for emergencies after regular business hours.

[www.psbcc.org/patient/services.htm](http://www.psbcc.org/patient/services.htm)

## Clinical Services and Programs — continued

### Peripheral Blood Stem Cell Program

**Phone: (206) 292-1267**

The Peripheral Blood Stem Cell Program became operational in May 1993 in response to the increasing use of peripheral blood stem cells (PBSC) as a means of speeding the reconstitution of hematopoiesis following marrow-ablative or non marrow-ablative high dose chemotherapy. The program includes PBSC collection, cryopreservation, storage and reinfusion support. In order to facilitate the most efficient mobilization and collection of PBSC, the ordering physician or facility must coordinate the details of the treatment plan with the Blood Center prior to participation in the program.

[www.psb.org/stemcell/index.htm](http://www.psb.org/stemcell/index.htm)

### Transfusion Information Service

**Phone: (206) 292-1840**

The Transfusion Information Service provides phone consultation for the public and for health care professionals about transfusion related issues. The Transfusion Information Coordinator is also available for presentations to health professionals regarding issues related to transfusion safety and administration. For urgent patient issues and questions, the Blood Center Physician on Call should be contacted by calling (206) 292-6525.

### Communications / Public Relations

**Publications: (206) 292-4661**

**Media Inquiries: (206) 292-6511**

The Blood Center's Communications Department publishes a variety of educational materials for physicians, healthcare specialists, patients and the general public. This department develops public service advertising and educational campaigns and is the primary contact for the news media. For more information about the Blood Center's programs and services, visit [www.psb.org](http://www.psb.org). For information about publications available for distribution to patients in your hospital, please call (206) 292-6533.

## Clinical Services and Programs — continued

### Donor and Volunteer Resources

**Phone: (425) 462-4388  
or (800) 266-4033**

The Donor and Volunteer Resources Department is responsible for ensuring Whole Blood, Apheresis and Bone Marrow donors participate to meet the needs of patients who require transfusions. By scheduling mobile donation campaigns, providing telephone and direct mail reminders to donors, and arranging volunteer support at donation sites, this department helps provide a safe and ample blood supply for patients in the Puget Sound area. Businesses, schools, religious organizations, and other groups that wish to schedule an on-site mobile campaign, volunteer, or participate in the Bone Marrow or Apheresis Program should call this department for more information. Visit [www.psbcc.org/volunteers](http://www.psbcc.org/volunteers) for information about volunteer opportunities.

### Patient Accounts / Billing Office

**Phone: (206) 292-6559**

Patient or hospital inquiries about billing can be referred to our Patient Accounts Office. Patient Accounts representatives manage over 200 hospital and clinic accounts, as well as 1,000 direct bill patient accounts.

## Part IV: Selected References

- AABB. (2004). *Standards for Blood Banks and Transfusion Services* (23rd ed.). Bethesda, Maryland: AABB.
- AABB. (2002). *Guidelines for the Labeling of Specimens for Compatibility Testing*. Bethesda, Maryland: American Association of Blood Banks.
- AABB. (2002). *Guidelines for the Use of Blood Warming Devices*. Bethesda, Maryland: American Association of Blood Banks.
- AABB. (2001). *Guidelines for Blood Utilization Review*. Bethesda, Maryland: American Association of Blood Banks.
- American Association of Blood Banks, America's Blood Centers, American Red Cross. (July 2002). *Circular of Information for the Use of Human Blood and Blood Component*.
- Anderson, K.C., Ness, P.M., et al. (Eds). (2000). *Scientific Basis of Transfusion Medicine, Implications for Clinical Practice* (2nd ed.). Philadelphia: W.B. Saunders Company.
- Brecher, M.E. (Ed). (2002). *Technical Manual* (14th ed.). Bethesda, Maryland: American Association of Blood Banks.
- Busch, M.P., Kleinman, S.H., Nemo, G.J. *Current and Emerging Infectious Risks of Blood Transfusions*. JAMA 2003; 289(8): 959-62.
- Herman, J.H., Manno, C.S. (Eds). (2002). *Pediatric Transfusion Therapy*. Bethesda, Maryland: AABB Press.
- Hillyer, C.D., Silberstein, L.E., Ness, P.M., et al. (Eds). (2003). *Blood Banking and Transfusion Medicine, Basic Principles & Practice*. Philadelphia: Churchill Livingstone.
- Hrovat, T.M., Passwater, M., Palmer, R.N. (Contributors). (2002). *Guidelines for the Use of Blood Warming Devices*. Bethesda, Maryland: American Association of Blood Banks.
- Kleinman, S.H., Strong, D.M., Tegtmeier, G.G.E., et al. *Hepatitis B Virus (HBV) DNA Screening of Blood Donations in Minipools with the COBAS AmpliScreen HBV Test*. Transfusion 2005; 45: 1247-57.
- Mintz, P.D. (Ed). (2005). *Transfusion Therapy: Clinical Principles and Practice* (2nd ed.). Bethesda, Maryland: AABB Press.
- Petz, L.D., Swisher, S.N., Kleinman, S., et al. (Eds). (1996). *Clinical Practice of Transfusion Medicine* (3rd ed). New York: Churchill Livingstone.
- Pisciotta, P. (Ed). (2002). *Pediatric Hemotherapy Data Card*. Bethesda, Maryland: American Association of Blood Banks.

## Selected References - continued

Popovsky, M.A. (Ed). (2001). *Transfusion Reactions* (2nd ed.). Bethesda, Maryland: AABB Press.

Roseff, S.D. (Ed). (2003). *Pediatric Transfusion: A Physician's Handbook* (1st ed.). Bethesda, Maryland: American Association of Blood Banks.

Simon, T.L., Dzik, W.H., Snyder, E.L., et al. (Eds). (2002). *Rossi's Principles of Transfusion Medicine* (3rd ed). Philadelphia: Lippincott Williams & Wilkins.

Triulzi, D.J. (Ed). (2002). *Blood Transfusion Therapy: A Physician's Handbook* (7th ed.). Bethesda, Maryland: American Association of Blood Banks.

Triulzi, D.J. (Ed). (2002). *Blood Transfusion Therapy Data-Card*<sup>®</sup>. Bethesda, Maryland: American Association of Blood Banks.