BLOOD DONATION CENTRE

Accredited Laboratory
SAC-SINGLAS
LA-2011-0495-H

DEPARTMENT OF LABORATORY SERVICES

Introduction

The main function of the Blood Donation Centre (BDC) is to provide adequate supply of safe and quality blood and blood components by conducting mobile blood donation drives, and by providing walk-in blood donation services, through recruitment and retention of voluntary, non-remunerated blood donors.

BDC also provides plateletpheresis, venesection on polycythaemia rubra vera (PRV) patients and does follow-up and consultation for donors who have been tested positive for certain infectious diseases.

Our Services

Inhouse Blood Donation Unit

The inhouse donation unit operates to cater walk-in donors and platepheresis as well as venesection. It may also operats during outside operating hours which may include public holidays or in the evening depending on pre-determined arrangement.

Mobile Blood Donation Unit

This unit conducts mobile campaigns at various sites, which may include government offices, private companies, shopping complexes and also during invited occasions or public events. The unit welcomes collaborators from both public and private sectors in conducting blood donation drives.

Blood Donor Screening Laboratory (BDSL)

BDSL performs screening of infectious diseases (Human Immunodeficiency Virus – HIV, Hepatitis B, Hepatitis C and Syphilis) and determination of ABO blood group, Rh blood type and red cell antibodies as well as antigen typing on donated blood. It also performs in vitro Nucleic Acid Testing (NAT) for the direct detection of HIV-Type 1 and Type 2 RNA, Hepatitis C RNA, and Hepatitis B Virus DNA in human plasma and serum.

Component Processing Laboratory (CPL)

CPL processes, labels, stores and distributes the donated blood and components including Packed Red Cells (PC), Leucocyte Depleted Packed Cell (LDPC), Fresh Frozen Plasma (FFP), Random Platelet (RDPLT) and Cryoprecipitate (CRYO).

Quality Control Laboratory (QCL)

QCL performs quality tests on donated blood and components to ensure production of high quality products, meeting the minimum standard requirements outlined by American Association of Blood Banking (AABB) and Council of Europe (CE).

National Blood Transfusion Reference Laboratory (NBTRL)

NBTRL operates 24 hrs (24/7) throughout the year. It performs pre-transfusion tests which may include Blood Grouping, Antibody Screening, Antibody Identification, Direct Coombs Test, Red cell Phenotyping, and Compatibility testing or Crossmatching. It also performs Antibody Titre, Cold Agglutinins test, Cryoglobulin test and Transfusion Reaction Investigation. It issues blood and blood components such as RDPLT, FFP and CRYO.

كمنترين كصيحتن
KEMENTERIAN KESIHATAN
MINISTRY OF HEALTH

DEPARTMENT OF LABORATORY SERVICES

Operating Hours

LOCATION	OPERATING HOURS
Blood Donation Centre	Monday to Thursday and Saturday 7.45 am to 12.15 pm and 1.30 pm to 4.30 pm May be open in the evening or during weekends according to pre-determined schedule
Walk-in Donation Registration	Monday to Thursday and Saturday 8.00 am to 11.30 am and 1.30 pm to 4.00 pm May be open in the evening or during weekends according to pre-determined schedule
Blood Donation Drives	Please find our updated schedules on our social media page (IG) and on Bloodkad mobile application

Our Social Media

: Bloodbank_ripas

Bloodkad Mobile Application

Bloodkad Website: www.bloodkad.com

Bloodkad Download link:

For Android users:

For iOS users:

CONTACT US:

Blood Donation Centre, Department of Laboratory Services, Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital, Jalan Putera Al-Muhtadee Billah, Jalan Tutong, Brunei Darussalam, BA1710

+673 2242424 ext 6001/5745/6002

+673 7440267/+673 7440277 (WhatsApp: during operating hours only)

bloodbank@moh.gov.bn

BLOOD DONATION CENTRE

The main function of the Blood Donation Centre (BDC) is to provide adequate supply of safe and quality blood and blood components by conducting mobile blood donation drives, and by providing walk-in blood donation services, through recruitment and retention of voluntary, non-remunerated blood donors.

BDC also provides plateletpheresis, venesection on polycythaemia rubra vera (PRV) patients and do follow-up and consultation for donors who have been tested positive for certain infectious diseases.

Blood Donor Screening Laboratory (BDSL) of BDC performs screening of infectious diseases (Human Immunodeficiency Virus – HIV, Hepatitis B, Hepatitis C and Syphilis) and determination of ABO blood group, Rh blood type and red cell antibodies as well as antigen typing on donated blood with the aim to ensure the safest blood is transfused to the recipients.

In 2023, BDSL of BDC achieved another milestone by embarking on a new infectious screening test; a qualitative in vitro Nucleic Acid Amplification Testing (NAAT) for the direct detection of Human Immunodeficiency Virus (HIV) Type 1 and Type 2 RNA, Hepatitis C RNA, and Hepatitis B Virus DNA in human plasma and serum that substantially close the window period and further enhance and strengthen the patient safety in blood and blood products transfusion in Brunei Darussalam.

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Quality Control Laboratory (QCL) of BDC performs quality tests on donated blood and components to ensure production of high quality products, meeting the minimum standard requirements outlined by Association for the Advancement of Blood and Biotherapies (AABB) and European Directorate for the Quality of Medicine and Healthcare (EDQM), Council of Europe.

National Blood Transfusion Reference Laboratory (NBTRL) of BDC operates 24 hrs (24/7) throughout the year. It performs pre-transfusion tests which may include Blood Grouping, Blood Group Confirmation, Antibody Screening, Antibody Identification, Direct Coombs Test, Red cell Phenotyping, and Compatibility testing or Crossmatching. It also performs Antibody Titre, Cold Agglutinins test, Cryoglobulin test and Transfusion Reaction Investigation. It issues blood and blood components such as platelets, fresh frozen plasma, and cryoprecipitate.

ADDRESS

Blood Donation Centre
Department of Laboratory Services
Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital
Jalan Putera Al-Muhtadee Billah/ Jalan Tutong
Ministry of Health, Brunei Darussalam, BA1710

LABORATORY PERSONNEL

Head of Section:	Chong Kim Moi
Deputy Head of Section:	Ken Teo Shyh Kheng
Staff:	Scientific Officers Medical Laboratory Technologists Laboratory Technicians Nurses Laboratory Assistants

LOCATION	**WORKING HOURS**
Blood Donation Centre	Monday to Thursday and Saturday 7.45 am to 12.15 pm and 1.30 pm to 4.30 pm May be open in the evening or during weekends according to pre- determined schedule
Walk-in Donation Registration	Monday to Thursday and Saturday 8.00 am to 11.30 am and 1.30 pm to 4.00 pm May be open in the evening or during weekends according to pre- determined schedule
Blood Donation Drives	According to pre-determined schedule
Plateletpheresis	Monday to Thursday and Saturday 8.00 am to 11.30 am and 1.30 pm to 3.00 pm (last donor) (Request to be made 1 day in advance for harvesting)
Venesection Services	Monday to Thursday and Saturday 8.00 am to 11.30 am and 1.30 pm to 4.00 pm
National Blood Transfusion Reference Laboratory	24 Hours

CONTACT NUMBERS

RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL LABORATORY TEL NO: 2242424/2232189	
BLOOD DONATION CENTRE	
Head	6001
In-house Donation Section	5745/6002
Blood Donor Screening Laboratory	5762/6604/6605
Component Processing Laboratory	6007
National Blood Transfusion Reference Laboratory	6622
Hotline (operating only during working hours)	7440267/7440277
SOCIAL MEDIA	
Facebook	Bloodbankripas.brunei
IG	Bloodbank_ripas
email	bloodbank@moh.gov.bn
BLOODKAD APPLICATION	
Website	www.bloodkad.com
Bloodkad Download link: For Android users:	For iOS users:

AVAILABLE BLOOD PRODUCTS

The products below are processed and available at the Blood Donation Centre:

- Whole Blood (upon Request)
- Packed Red Blood Cells (or Red Cell Concentrate)
- Leucocyte Depleted Packed Red Blood Cells
- Fresh Frozen Plasma
- Cryoprecipitate
- Random Platelet
- Single Donor Platelet (Upon Request)

BLOOD DONATION CENTRE AND NATIONAL BLOOD TRANSFUSION REFERENCE LABORATORY TEST CATALOGUE

ABO Group and Rh Type	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Daily
TAT	1 hour (STAT), 1 day (Routine, 3 Days (Ante-natal, Medical Records and Haji Screening))
Clinical Usage	Determines ABO and Rh D blood groups

Blood Group Confirmation	
Specimen	Blood (Neonatal EDTA, Purple, Top 2 ml; Adult and Paediatrics, EDTA, Purple Top 4ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS), Specimen more than 3 days old.
Method	Tube-based Haemagglutination or Columnn Agglutination
Performed	Daily
TAT	STAT- 1 hours, Routine-1 day
Clinical Usage	For confirmation and comparison of ABO and Rh D blood groups for patients with no previous blood grouping history. A **MANDATORY** second specimen must be collected at a different time or phlebotomist upon receiving a call or request from the laboratory. The laboratory will make comparison between the two specimen results and confirming the blood group.

Antibody Identification (Red Cells)	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Office hours only
TAT	1 week (1 month for sample sent overseas)
Clinical Usage	Determines the specificity of antibody/antibodies detected during antibody screening

Antibody Screen (Red Cells)	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Daily
TAT	1 day (3 days for antenatal screening)
Clinical Usage	Detects clinically significant alloantibodies
Reference Range	Not detected

Antibody Titre	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Appointment with the lab required, office hours only
TAT	1 day
Clinical Usage	Measures the amount of antibody present in blood or serum based on a dilution method
Reference Range	Titre ≥16 (Clinically Significant)

Cold Agglutinins	
Specimen	Blood (red top – 4 ml), collect in pre-warmed tube at 37°C (available from the laboratory)
Transport	Send to the laboratory immediately
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Appointment with the lab required, office hours only
TAT	1 day
Clinical Usage	To determine presence of cold agglutinins in conditions such as autoimmune haemolytic anaemia, mycoplasma infection and infectious mononucleosis
Reference Range	Titre < 64 (Negative: Clinically insignificant)

Crossmatch, Adult	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS), Specimen more than 3 days old
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Daily
TAT	STAT- 1 hours, Routine-1 day, Emergency Blood Release
Clinical Usage	Compatibility for blood transfusion (Blood units kept inside the cool box need to be transfused within 30 minutes after taking from the lab)

Crossmatch, Baby (< 4 months old)	
Specimen	Blood (Neonatal EDTA, Pink, Top 1ml; Mother EDTA, Pink, Top 4ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS), Specimen more than 3 days old
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Daily
TAT	STAT- 1 hours, Routine-1 day, Emergency Blood Release
Clinical Usage	Compatibility for blood transfusion for Neonates (Blood units kept inside the cool box need to be transfused within 30 minutes after taking from the lab)

Cryoglobulin Test	
Specimen	Blood (red top – 6 ml), collect in pre-warmed tube at 37°C (available from the laboratory)
Transport	Send to the laboratory immediately
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Precipitation of cryoglobulin at 4°C
Performed	Appointment with the lab required, office hours only
TAT	5 days
Clinical Usage	Screen for presence of abnormal globulins in conditions such as Systemic Lupus Erythematosus, Myeloma and L ymphoma

Direct Antiglobulim (Coomb's) Test (DCT)	
Specimen	Blood (EDTA, Pink top)
Method	Tube-based haemagglutination or Column Agglutination
Performed	Daily
TAT	1 day
Clinical Usage	To detect the presence of globulins (IgG and C3d) coating red cells

Exchange Transfusion Compatibility Test	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Daily
TAT	STAT- 1 hours, Routine-1 day
Clinical Usage	Compatibility for blood transfusion

Rh Phenotype	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Tube-based Haemagglutination or Column Agglutination
Performed	Daily
TAT	1 day
Clinical Usage	To determine the presence of C, c, E and e antigens of the Rh Blood Group System

Red Cells Phenotype	
Specimen	Blood (EDTA, Pink top – 4 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Haemagglutination
Performed	Daily
TAT	1 day
Clinical Usage	To determine the presence of antigens of Blood Group Systems other than ABO and Rh Group Blood Systems

Red Cells Genotype	
Specimen	Blood (PINK, lavender top – 4 ml), 2 tubes
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Haemagglutination
Performed	Weekdays only (Sample sent overseas)
TAT	1 month (Sample sent overseas)
Clinical Usage	To determine and predict the blood group phenotypes in recently transfused patient or patients with autoimmune conditions where the patient's own immunoglobulins interfere with conventional grouping reagents and for patient who will be treated with monoclonal antibody such as Daratumumab.

Hepatitis B Surface Antigen (HBsAg)	
Specimen	Blood (SSTII gold top – 3.5 – 5 ml)
Unacceptable	Haemolysed, Quantity Insufficient (QNS)
Method	Chemiluminescence immunoassay (CLIA)
Performed	Daily during office hours
TAT	24 hours
Clinical Usage	A positive screen result is indicative of acute or chronic HBV infection or chronic HBV carrier state

Hepatitis C Antibody (Anti-HCV)	
Specimen	Blood (SSTII gold top – 3.5 – 5 ml)
Unacceptable	Haemolysed, Quantity Insufficient (QNS)
Method	Chemiluminescence immunoassay (CLIA)
Performed	Daily during office hours
TAT	24 hours
Clinical Usage	A positive result suggests that the patient has been infected or is currently infected with hepatitis C virus

HIV A/2 Antigen/Antibody Screening	
Specimen	Blood (SSTII gold top – 3.5 – 5 ml)
Unacceptable	Haemolysed, Quantity Insufficient (QNS)
Method	Chemiluminescence immunoassay (CLIA)
Performed	Daily during office hours
TAT	24 hours
Clinical Usage	Detection of antibodies to HIV type 1 and/or type 2 which is associated with AIDS

Syphilis Screening	
Specimen	Blood (SSTII gold top – 3.5 – 5 ml)
Unacceptable	Haemolysed, Quantity Insufficient (QNS)
Method	Chemiluminescence immunoassay (CLIA)
Performed	Daily during office hours
TAT	24 hours
Clinical Usage	Screening test for syphilis infection

Nucleic Acid Amplification Testing For HIVRNA, HCV RNA and HBV DNA	
Specimen	Blood (EDTA, Lavender top with gel separator – 8 ml)
Unacceptable	Haemolysed, Clotted, Quantity Insufficient (QNS)
Method	Real-time Polymerase Chain Reaction
Performed	Daily during office hours
TAT	24 hours
Clinical Usage	Detection of Human Immunodeficiency Virus Type 1 (HIV1) Group M RNA, HIV-1 Group O RNA, Human Immunodeficiency Virus Type 2 (HIV-2) RNA, Hepatitis C Virus (HCV) RNA, and Hepatitis B Virus (HBV) DNA which are indicatives of infection of respective viruses