

**SPESIFIKASI  
[SPECIFICATIONS]**

**SPECIFICATIONS FOR PACKAGING AND TRANSPORTATION OF PLASMA,**

- 1) FROM MALACCA HOSPITAL TO PUSAT DARAH NEGARA
- 2) FROM PENANG HOSPITAL TO PUSAT DARAH NEGARA
- 3) FROM PUSAT DARAH NEGARA TO MELBOURNE TULLAMARINE AIRPORT, AUSTRALIA

**AND DELIVERY OF FRACTIONATED PLASMA PRODUCTS**

- 4) FROM KUALA LUMPUR INTERNATIONAL AIRPORT TO PUSAT DARAH NEGARA

**1. PURPOSE**

- 1.1 To pack plasma at Malacca Hospital and Penang Hospital and deliver the plasma to Pusat Darah Negara (PDN), Kuala Lumpur;
- 1.2 To pack plasma at PDN and deliver the plasma from PDN to Melbourne Tullamarine Airport, Australia for collection by CSL Behring, Australia; and
- 1.3 To deliver fractionated plasma products by CSL Behring, Australia from Kuala Lumpur International Airport (KLIA) to PDN – *Carriage and Insurance Paid to (CIP) KLIA*.

**2. GENERAL REQUIREMENTS FOR THE FORWARDING AGENT**

- 2.1 Shall have good reputation and high standard locally and internationally. Certificate or any supporting document shall be provided;
- 2.2 Shall have extensive experiences and have been operating in the transportation industry for at least **five (5) years** (records of experience is required);
- 2.3 Shall have experience in import, export and regulatory procedures in order to ensure smooth custom clearance;
- 2.4 Shall have at least **three (3) trained and competent staffs** to help the laboratory staff during plasma packing and arranging of the fractionated plasma products into storage compartments;
- 2.5 Shall appoint at least **two (2) staffs** to be responsible for this programme. The candidate must be available and reachable at any time to support any unpredictable conditions. The names and contact numbers (including mobile number) of the person in-charged are required;
- 2.6 Shall provide a '**Standard Operational Procedure**' for maintaining the temperature of the plasma during transportation; and
- 2.7 Shall ensure all packaging, transportation of plasma and delivery of fractionated product are done by the appointed agent as agreed in the contract. The forwarding agent is not allowed to hire a subcontractor to perform the services

agreed in this contract except with prior written consent of the Government. Failure to do so shall result in termination of contract.

### 3. PACKAGING OF PLASMA

3.1 Plasma shall be packed at these sites:

- 3.1.1 Malacca Hospital;
- 3.1.2 Penang Hospital;
- 3.1.3 PDN; and
- 3.1.4 Other blood collection centres which will be informed during the contract period.

3.2 The forwarding agent shall provide the packaging materials as specified below:

#### 3.2.1 Outer carton

- (i) Must be of sturdy construction to resist damage during transport
- (ii) Should be manufactured from corrugated cardboard with a board weight specification of 290gsm Kraft (gsm = grams per square metre)
- (iii) Cardboard thickness: 5mm
- (iv) Dimension: 445mm (length (L)) x 320mm (width (W)) x 335mm x height (H))

#### 3.2.2 White polystyrene box

- (i) Dimension: 420mm x 290mm x 315mm (L x W x H); (Height includes cover)
- (ii) Thickness: 25mm

#### 3.2.3 Polythene bag

- (i) Size: 445mm x 850mm (L x H)

#### 3.2.4 Corrugated cardboard base (to be placed in the polythene bag)

- (i) Size: 355mm x 250mm (L x W)
- (ii) Thickness: 5mm

3.2.5 Dry ice to maintain the temperature in all cartons at temperature below -30 degrees Celsius during transportation in order to ensure the plasma is in frozen state;

- 3.2.6 Polyvinyl chloride (PVC) tape to secure the cartons; and
- 3.2.7 Any other accessories deemed necessary for the packaging of plasma.
- 3.3 The label on the individual carton shall have these following information:
  - 3.3.1 Consignment Number;
  - 3.3.2 Carton Number;
  - 3.3.3 Name of the products e.g. Fresh Frozen Plasma (FFP) / Plasmapheresis / Recovered Plasma;
  - 3.3.4 Name, address and contact number of sender;
  - 3.3.5 Name, address and contact number of receiver; and
  - 3.3.6 Date of despatch.
- 3.4 Each consignment is accompanied with **temperature monitoring device** to monitor the plasma temperature;
- 3.5 FFP, plasmapheresis or recovered plasma shall be packed into **separate cartons**;
- 3.6 Forwarding agent shall provide **one (1) industrial vacuum** as part of plasma packing material;
- 3.7 Forwarding agent shall provide **one (1) poly bag neck sealer with sufficient tapes**;
- 3.8 Forwarding agent shall provide **one (1) computer** for the purpose of managing plasma inventory and preparation of import and export documents. Please refer Appendix 2;
- 3.9 Forwarding agent shall provide **one (1) dot matrix printer with sufficient ribbons and consumables** for printing of import and export documents. Please refer Appendix 2; and
- 3.10 Forwarding agent shall provide maintenance and repair to items mentioned above.

#### 4. TRANSPORTATION OF PLASMA FROM MALACCA HOSPITAL AND PENANG HOSPITAL TO PUSAT DARAH NEGARA

- 4.1 Plasma shall be transported as below:
  - 4.1.1 From Malacca Hospital to PDN;
  - 4.1.2 From Penang Hospital to PDN; and

- 4.1.3 From other collection centres which will be informed by PDN throughout the contract duration.
- 4.2 Plasma shall be delivered to PDN as in paragraph 14.1;
- 4.3 Plasma shall be maintained at temperature **-30 degrees Celsius** during transportation until it reaches PDN. The plasma shall not be accepted by PDN if the cold chain is not maintained and the forwarding agent shall reimburse the difference in cost in which PDN needs to buy commercial products within **seven (7) working days** after being notified;
- 4.4 Maximum weight of each carton with contents is **15kg**;
- 4.5 Temperature monitoring device shall be placed randomly inside the transport to record the temperature performance. Record of the temperature performance shall be submitted to respective hospitals and with a copy to PDN;
- 4.6 Plasma consignments shall be transported immediately from sites to PDN. The consignment shall arrive in PDN during working hours as stated in paragraph 14.4;
- 4.7 Forwarding agent shall not break bulk and stopover or transit during transportation unless written approval from PDN is obtained;
- 4.8 Forwarding agent shall be held responsible if the plasma is lost, damaged or deteriorated during transportation and delivery. Reimbursement is required according to the value of the commercial products in replacement of the fractionated plasma product involved within **two (2) months** of notice of reimbursement; and
- 4.9 Forwarding agent shall inform PDN within **24 hours** via telephone or email and write formally to PDN in the event of plasma is lost, damaged or deteriorated within **two (2) weeks** of date of implicated transportation.

**5. TRANSPORTATION OF PLASMA FROM PUSAT DARAH NEGARA TO MELBOURNE TULLAMARINE AIRPORT, AUSTRALIA FOR COLLECTION BY CSL BEHRING, AUSTRALIA**

- 5.1 Types of plasma to be transported:
  - 5.1.1 Fresh Frozen Plasma (FFP);
  - 5.1.2 Plasmapheresis; and
  - 5.1.3 Recovered plasma.
- 5.2 Plasma shall be maintained at temperature **below -30 degrees Celsius** at all times during transportation until it reaches Melbourne Tullamarine Airport, Australia;
- 5.3 Maximum weight of each carton with contents is **15kg**;
- 5.4 **One (1) unit of temperature monitoring device** provided by forwarding agent shall be placed randomly inside the transport to record the temperature

performance. Record of the temperature performance shall be forwarded to PDN within **three (3) days** upon arrival at Melbourne Tullamarine Airport, Australia;

- 5.5 The temperature monitoring device shall be programmed by the forwarding agent to record the temperature at **every one (1) minute** interval;
- 5.6 Plasma transport shall comply with the British Pharmacopoeia or relevant Food and Drug Administration Cost and Freight (FDA CFR) and International Air Transport Association (IATA) guidelines and regulations;
- 5.7 Plasma consignments shall be transported **immediately** from PDN to Melbourne Tullamarine Airport, Australia in order to maintain the quality of plasma;
- 5.8 Forwarding agent shall not break bulk the consignment and stopover or transit during transportation unless written approval from PDN is obtained;
- 5.9 Forwarding agent shall be held responsible if the plasma is lost, damaged or deteriorated during transportation and delivery. Reimbursement is required according to the value of the commercial product in replacement of the fractionated plasma product involved within **two (2) months** of notice of reimbursement; and
- 5.10 Forwarding agent shall inform PDN within **24 hours** via telephone or email and write formally to PDN in the event of plasma is lost damaged or deteriorated within **two (2) weeks** of date of implicated transportation.

## **6. TRANSPORTATION OF PLASMA FROM CSL BEHRING, AUSTRALIA PREMISE TO PUSAT DARAH NEGARA**

- 6.1 Forwarding agent shall also transport back PDN's plasma as instructed from CSL Behring, Australia premise to PDN if required, at an additional cost to be mutually agreed by PDN and the forwarding agent later.

## **7. TRANSPORTATION OF FRACTIONATED PLASMA PRODUCTS BY CSL BEHRING, AUSTRALIA FROM KUALA LUMPUR INTERNATIONAL AIRPORT (KLIA) TO PUSAT DARAH NEGARA**

- 7.1 The fractionated plasma products to be transported:
  - 7.1.1 Factor VIII concentrate (Anti Haemophilic Factor concentrate);
  - 7.1.2 Factor IX concentrate (Purified);
  - 7.1.3 Prothrombinex complex concentrate;
  - 7.1.4 Intravenous Immunoglobulin (IVIG); and
  - 7.1.5 Human Albumin.
- 7.2 The transportation conditions for all the fractionated plasma products shall be at **2 degrees Celsius to 8 degrees Celsius**. The fractionated plasma products

**shall not be frozen** at any time. The products shall not be accepted by PDN if the cold chain is not maintained and the forwarding agent, if found to be at fault, shall replace with commercial products which are agreed by PDN within **seven (7) working days** after being notified;

7.3 The fractionated plasma products shall be shipped by the manufacturer from CSL Behring, Australia via **Incoterms 2010 – Carriage and Insurance Paid to (CIP) KLIA**. The forwarding agent shall transport the products from KLIA to PDN. All necessary documentations shall be arranged by the forwarding agent according to the said Incoterm. The products shall be delivered to PDN as stated in paragraph 14.3;

7.4 The fractionated plasma products consignments released from CSL Behring, Australia shall be transported to PDN **as soon as possible** in order to maintain the quality of the fractionated plasma products. The consignment shall arrive in PDN on **working days only, between 8 am to 3 pm** not inclusive of lunch break;

7.5 Forwarding agent shall not break bulk the consignment and stopover or transit during transportation unless written approval from PDN is obtained;

7.6 Forwarding agent shall be held responsible if any of the fractionated plasma products is lost, damaged or deteriorate during transportation and delivery. Reimbursement required is according to the value of the commercial products in replacement of the fractionated plasma products involved within **two (2) months** of notice of reimbursement;

7.7 Forwarding agent shall inform PDN within **24 hours** via telephone or email and write formally to PDN in the event of fractionated plasma product is lost, damaged or deteriorated within **two (2) weeks** of date of implicated transportation; and

7.8 Forwarding agent shall also transport the replacement of fractionated plasma products by CSL Behring, Australia as instructed from KLIA to PDN if required.

## 8. VARIATIONS

8.1 Variations to the packaging and delivery methodology and procedures shall be mutually agreed between PDN and the forwarding agent; and

8.2 Any changes, alterations or variations in the specification shall not be made without the prior consent of both parties.

## 9. QUANTITY

9.1 Estimated number of plasma for packaging and transporting is mentioned in Appendix 1:

9.1.1 Table A – Plasma Consignment from Malacca Hospital to PDN

9.1.2 Table B – Plasma Consignment from Penang Hospital to PDN

9.1.3 Table C – Plasma Consignment from PDN to Melbourne Tullamarine Airport, Australia

9.2 Estimated number of fractionated plasma products to be delivered from KLIA to PDN is mentioned in Table D in Appendix 1.

## 10. COST

- 10.1 The forwarding agent shall estimate the cost of transporting the plasma consignments from Malacca Hospital and Penang Hospital to PDN and Melbourne Tullamarine Airport, Australia as well as fractionated plasma products from KLIA to PDN based on the estimated amount of plasma and fractionated plasma products from **August 2016 to August 2019**, subject to completion of the last consignment; and
- 10.2 Other scope of work not mentioned in the specification, inclusive of the following shall be carried out by the forwarding agent as instructed by PDN at an additional cost to be mutually agreed by PDN and the forwarding agent later:
  - 10.2.1 Transporting back PDN's plasma as instructed from CSL Behring, Australia premise to PDN if required as stated in paragraph 6.1; and
  - 10.2.2 Packaging of plasma and transportation of plasma at/from other blood collection centres which will be informed during the contract period as stated in paragraph 3.1.4 and 4.1.3.

## 11. TRAINING AND TECHNICAL ASSISTANCE

- 11.1 Forwarding agent shall conduct and/or provide training, seminars or workshops for the Ministry of Health's personnel from time to time as determined by the Ministry of Health;
- 11.2 Forwarding agent shall provide technical assistance if required by the Ministry of Health or PDN on matters relating to the service rendered; and
- 11.3 Forwarding agent should also keep the Ministry of Health and PDN informed of any up-to-date development in the industry of service rendered.

## 12. DURATION OF CONTRACT

The duration of the contract between the Malaysian Ministry of Health and the forwarding agent shall be for a period of **three (3) years** from the date of the agreement.

## 13. ADDITIONAL INFORMATION

- 13.1 Experience in performing such task is an advantage;

- 13.2 Forwarding agent that can provide **Envirotainer** for the shipping of frozen plasma consignment to Australia is an advantage;
- 13.3 Forwarding agent who provides **refrigerated truck with temperature controlled at 2 degrees Celsius to 8 degrees Celsius** has an advantage;
- 13.4 Audits and/or inspections and/or visits on the executed processes and practice may be carried out by PDN, National Pharmaceutical Control Bureau and/or CSL Behring, Australia; and
- 13.5 Forwarding agent with special status e.g. obtaining Halal certification is an advantage.

#### **14. PLACE AND TIME OF PACKAGING, COLLECTION AND DELIVERY**

- 14.1 Plasma consignments from Malacca Hospital and Penang Hospital shall be delivered to:

**Pengarah  
Pusat Darah Negara  
Jalan Tun Razak  
50400 Kuala Lumpur  
(u.p.: Bahagian Produksi)**

- 14.2 Plasma consignments from PDN to be collected by CSL Behring, Australia shall be delivered to:

**Melbourne Tullamarine Airport, Australia**

- 14.3 Fractionated plasma products consignments by CSL Behring, Australia shall be delivered from KLIA to:

**Pengarah  
Pusat Darah Negara  
Jalan Tun Razak  
50400 Kuala Lumpur  
(u.p.: Bahagian Farmasi dan Stor)**

- 14.4 The packaging, collection and delivery of plasma shall be performed during working hours (excluding public holidays) as below:

<b>Mondays to Thursdays</b>	<b>8.00 am to 1.00 pm</b>	<b>and</b>	<b>2.00 pm to 4.00 pm</b>
<b>Fridays</b>	<b>8.00 am to 12.00 pm</b>	<b>and</b>	<b>3.00 pm to 4.00 pm</b>

- 14.5 The packaging and collection of plasma from PDN to KLIA shall be performed the morning of scheduled consignment to Melbourne Tullamarine Airport, Australia.

A. ESTIMATED NUMBER OF PLASMA CONSIGNMENTS FROM MALACCA HOSPITAL TO PDN

Year	Estimated No. of Consignments	Estimated Weight per Consignment (kg)	Estimated Total Weight per Year (kg)
1 <sup>st</sup> year	20	500	10,000
2 <sup>nd</sup> year	22	500	11,000
3 <sup>rd</sup> year	25	500	12,500
TOTAL	67	1,500	33,500

B. ESTIMATED NUMBER OF PLASMA CONSIGNMENTS FROM PENANG HOSPITAL TO PDN

Year	Estimated No. of Consignments	Estimated Weight per Consignment (kg)	Estimated Total Weight per Year (kg)
1 <sup>st</sup> year	1	500	500
2 <sup>nd</sup> year	3	500	1,500
3 <sup>rd</sup> year	3	500	1,500
TOTAL	7	1,500	3,500

C. ESTIMATED NUMBER OF PLASMA CONSIGNMENTS FROM PDN TO MELBOURNE TULLAMARINE AIRPORT, AUSTRALIA

Year	Estimated No. of Consignments	Estimated Weight per Consignment (kg)	Estimated Total Weight per Year (kg)
1 <sup>st</sup> year	60	1,200	72,000
2 <sup>nd</sup> year	80	1,200	96,000
3 <sup>rd</sup> year	80	1,200	96,000
TOTAL	220	3,600	264,000

D. ESTIMATED NUMBER OF FRACTIONATED PLASMA PRODUCTS CONSIGNMENTS FROM KLIA TO PDN

Year	Estimated No. of Consignments	Estimated Weight per Consignment (kg)	Estimated Total Weight per Year (kg)
1 <sup>st</sup> year	6	4,000	24,000
2 <sup>nd</sup> year	8	4,000	32,000
3 <sup>rd</sup> year	8	4,000	32,000
TOTAL	22	12,000	88,000

## SPECIFICATIONS FOR COMPUTER AND PRINTER

**Computer:** All-In-One Computer  
 Preferred model – **Lenovo Thinkcenter Edge 93z**

Cassis	Semua dalam satu ( <i>All-in-one</i> ) NONE TOUCH SCREEN
Processor	Minimum <i>Intel Core i5</i>
Memory	Minimum 4 GB
Monitor	Minimum 21.5 inci LED Display
Storage	Minimum 500 GB
Local Area Network (LAN) Card	Built In / Ready
Speaker	Built in
Video Card	<i>Integrated</i>
Optical Drive	DVD RW
USB Port	Minimum 4 slot
Operating System	Windows 8
PC should come with ( <i>Cord-Storing Optical Mouse</i> ) and not wireless	

**Printer:** Multifunction Printer (Print, scan and copy)  
 Preferred model – **HP Color LASERJET Pro MFP M177fw**

Type	Multifunction Printer
Function	Print, Scan, Copy
Print Speed (Black, Normal Quality, A4)	Up to 17 ppm
Print Speed (Colour, Normal Quality, A4)	Up to 4 ppm
First page out colour (A4, ready)	As fast as 27.5 sec
First page out black (A4, ready)	As fast as 16 sec
Print Quality (Black, Best Quality)	Up to 600 x 600 dpi
Print Quality (Colour, Best Quality)	Up to 600 x 600 dpi
Duty Cycle (monthly, A4)	Up to 20,000 pages
Print technology	Laser