

Corrigendum-II

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for Procurement, Rate contract, Supply, Installation of Medical Equipment vide Tender No.-BMSICL/2024-25/ME-368. During Pre-bid meeting various suggestions were received from different prospective bidders regarding amendment in technical specification of equipment which were discussed and deliberated on by the experts. On the basis of their recommendations certain amendments in the technical specification of the equipment have been made which are annexed as **Annexure-I** of this corrigendum. In order to facilitate maximum participation of bidders tender schedule is being revised as following:-

Tender Reference No.	BMSICL/2024-25/ME-368
Last date and time of submission of online bids	15th October 2024 till 17:00 Hrs.
Last date and time of submission of original documents of EMD, Tender Fee and Document.	16th October 2024 till 14:00 Hrs.
Date, Time and Place of opening of Technical Bid	16th October 2024 (at 15:00 Hrs.) on the website of https://eproc2.bihar.gov in the office of BMSICL
Date and time of opening of financial Bids	To be announced later on https://eproc2.bihar.gov

**SD/-
GM (Procurement)
BMSICL**

Annexure-I

Name of Equipment:- Refrigerated Centrifuge		
Sl. No	Technical Specification as per tender	Final Amendment
1	For separation of blood components like cells, platelet rich plasma platelet concentrate plasma.	No Changes
2	Microprocessor controlled system to make operation automatic.	Microprocessor controlled system with LCD/ Touch Screen display of all critical parameters to make operation automatic
3	Programmable memory: memory with tamper proof facility.	Programmable Memory: Memory with tamper proof facility which means the set programs are password protected & the operator is unable to change the program unless allowed by Technical supervisor
4	Stainless steel chamber: Easy to clean, corrosion resistant with provision of both drain and condensed water collection container.	Stainless steel chamber: easy to clean, corrosion resistant
5	CFC free refrigerant.	No Changes
6	Swing bucket blood bank with metal buckets: 6 x 2000ml. wind. Shielded suitable adapters for 12 blood bags of 350ml. & 450ml.	Swing metal buckets - 6 x 2000ml.with/without wind Shield with suitable adapters for 12 blood bags of 350ml /450ml
7	Removable plastic adaptors to hold double /triple/quadruple blood bags with partition in every adaptor and with provision to hold balancing weight at the sides of adaptor so that it may not come in contact with blood bags.	No Changes
8	Insert with hook adapter to spin buffy coat or small volume of blood and with provision to hold balancing weight at the sides of adaptor so that it may not come in contact with blood bags. Balancing weights should be supplied with each plastic insert.	Deleted
9	Equipped with automatic lid lock and lid interlock.	No Changes
10	Centrifuge force 5000-6000 g.	No Changes
11	Speed variation Microprocessor controlled rotor speed to within 10rpm of set value Acceleration and deceleration profiles shall be available.	No Changes
12	Temperature Control range – 20degree C to + 40degree C. Minimum temperature at maximum speed at full load of 12 quadruple blood bags of 450ml, should be $\leq 4^{\circ}\text{C}$.	No Changes

13	Micro Processor controlled rotor temperature within 1degree C of set temperature regardless of the centrifuge speed.	No Changes
14	Programmable time: 0 to 99 hrs with minimum resolution of 1 minute.	No Changes
15	Digital display of temperature speed and time Minimum no of 3 digit resolution.	No Changes
16	Power requirement 220/240 volts, 50 Hz single phase AC supply.	No Changes
17	The equipment shall be suitable for operation from 0 to 40degree C at 90% Relative humidity Electronic circuitry shall be tropicalized for this ambient condition.	No Changes
18	Noise levels within 60 decibels.	No Changes
19	The equipment shall have lockable castors.	No Changes
20	Protection of data in event of power interruption or complete failure data should remain stored.	No Changes
21	Should have a provision for external connectivity.	No Changes
22	It shall have a security lock to prevent unintentional switch off and also unauthorized opening of the equipment.	No Changes
23	Automatic Line voltage corrector/ voltage Stabilizer. A line voltage corrector of appropriate rating should form part of standard configuration. Copper wound single phase automatic line voltage corrector conforming to IS 9815(pt.I)/94 with latest amendments or equivalent international standards fitted with a voltmeter and switch to indicate output/input voltage as under:	No Changes
i	Suitable Capacity UPS, having Backup not less than 30 minutes	Deleted
ii.	Input voltage 140 to 280 volts, 50 cycles.	No Changes
iii.	Output voltage:220 volts +- 10% volts input – output voltmeter and ampere meter protection high-low voltage cut off. Over load and short circuit protection.	No Changes
iv.	The equipment should be supplied with 2 meter cord at input and fitted with plugs of appropriate rating (15Amp)	No Changes
v.	Make of the line voltage corrector shall be indicated.	No Changes
24	Certification	No Changes

i.	US FDA / European CE (Issued by notified body) Approved model should be offered.	US FDA / European CE (Issued by notified body) Approved model should be offered. The product should have an import/manufacturing license for the quoted model with a valid number from the Central Licensing Authority or State Licensing Authority of CDSCO for Medical Devices.
ii.	Electrical safety: Equipment meets electrical safety specification such as that of IEC 61010. Safety requirements for electrical equipment for measurement, control and laboratory use IEC 61326-Electromagnetic Compatibility and IEC 60529 Degrees of protection provided by enclosure with protection level of IP 20 or battery level. All IEC certificate to be issued by a NABL Certified Lab.	No Changes
25	The date of opening of price bid will be decided after live demonstration. For technical evaluation live demonstration (at full load of 12 bags) of Refrigerated Centrifuge will be taken in a government blood bank to demonstrate technical specification with all accessories as per tender specification and actually showing component separation with required quality as per NACO/AABB guide lines. The parameter like speed, timer and temperature to be verified with calibration tools like tachometer, Timer and temperature probe respectively. The tools should have traceability of NABL standards with valid certificates.	No Changes

Name of Equipment:- Dielectric Tube Sealer (Portable Battery operated sealer)		
Sl. No	Technical Specification as per tender	Final Amendment
1	Dielectric Tube Sealer, Handheld	No Changes
2	Purpose of Equipment: handheld Blood Bag Tube Sealer is a compact handheld equipment to seal the Blood Bag pilot PVC tubing by transient radio frequency heating and sealing, with no haemolysis.	No Changes
3	Should gently seal tubing with no haemolysis, using radiofrequency heating.	No Changes
4	Should be capable of making wide seal of at least 5 mm width.	No Changes
5	Should have a carrying case (Optional)	No Changes
6	Electrodes should be well protected by a cover to prevent blood splutter.	No Changes

7	Sealing trigger is not automatic. Lever to press manually and then only seal.	No Changes
8	Should have indicator lamp for sealing process.	No Changes
9	No warm up time should be required.	No Changes
10	Should have tear-seal feature to make segment that can be easily separated by hand.	No Changes
11	No. of seals per charge should be more than 200 continuous seals from a fully charged battery.	No Changes
12	Charger should be compatible with input voltage: 240V 50Hz Single phase Ac.	No Changes
13	US FDA/European CE (Issued by Notified Body)/ ISO13485 Approved model should be offered.	No Changes

Name of Equipment:-Dielectric Tube Sealer (Table Top)		
Sl. No	Technical Specification as per tender	Final Amendment
1	Blood bag tube sealer is a compact equipment to seal the Blood Bag pilot tubing.	No Changes
2	The system should be heavy duty and be able to seal the blood bag etc. quickly and effectively.	No Changes
3	Should be simple to handle.	No Changes
4	System should gently seal the tubing with no hemolysis using radio frequency.	No Changes
5	Should be capable of making wide seal of 6mm thickness.	No Changes
6	Should be for bench top use.	No Changes
7	The sealing time should not be more than 2 seconds.	No Changes
8	Should have indication lamps for sealing process on main unit.	No Changes
9	No warm-up time should be required.	No Changes
10	Should ensure easy separation of tube segments after the sealing.	No Changes
11	The unit shall be capable of operating continuously in ambient temperature of 10-40 degree C and relative humidity of 15-90%.	No Changes
12	Power input 220V -240V/50Hz AC single phase with appropriate Indian plugs and sockets.	No Changes
13	Suitable Auto voltage corrector with spike protector should be Provided.	No Changes
14	US FDA/ European CE (Issued by a notified body)/ ISO 13485 approved Model should be offered.	No Changes

Name of Equipment:- Platelet Incubator with Agitator		
SI. No	Technical Specification as per tender	Final Amendment
i	Purpose of Equipment: To continuously agitate platelet concentrates in an incubator in an even suspension in a plasma bag.	No Changes
ii	Type of Equipment: Flatbed agitator fitted inside a temperature-controlled incubator operating with CFC-free refrigerant gas/ Thermolled Incubator and insulation material.	No Changes
iii	Certifications	No Changes
iv	US FDA / European CE (Issued by notified body) Approved model should be offered.	US FDA / European CE (Issued by notified body) Approved model should be offered. The product should have an import/manufacturing license for the quoted model with a valid number from the Central Licensing Authority or State Licensing Authority of CDSCO for Medical Devices.
v	Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (Class I)	No Changes
(A)	Platelet Incubator	
1	Should have a provision to store the agitator.	No Changes
2	Should have a single transparent outer door for clear visibility.	No Changes
3	Should be able to maintain a temperature of 22±2°C, Set temperature of 22°C.	No Changes
4	Should have a digital temperature indicator.	No Changes
5	Seven day inkless chart recorder with battery back-up for minimum of 2 hours for continuous operation during power failure, agitator off, power failure, compressor and system	Seven day chart/Digital recorder with battery back-up for minimum of 2 hours for continuous operation during power failure, agitator off, power failure, compressor and system/
6	Single digital temperature sensor for both recording and controlling	No Changes
7	Should have audible visual high/low alarm for temperature control, battery on/low, sensor	No Changes

8	Should have forced air circulation method for the uniformity of the temperature at all sides of the incubator.	No Changes
9	Chamber mounted electrical outlet for agitator should be available	No Changes
10	Power supply: 220-240 volts at 50 Hz.	No Changes
11	Provided with data logger, data can be retrieved & downloaded in system.	No Changes
12	Facility of Graph display.	No Changes
13	Should be provided with Separate Voltage Stabilizer.	No Changes
(B)	Platelet Agitator:	No Changes
i	Construction:	No Changes
ii	Internal : Stainless steel (min 304 grade)	No Changes
iii	External : Corrosion Resistant, at least 1mm thickness	No Changes
iv	Capacity: Designed to hold random platelet packs or aphaeresis platelet packs or a mixture of both types (minimum 48 random platelet concentrate packs).	No Changes
v	Design of Shelves: Shelves are made of non-slip, corrosion resistant material, Coated with bacteria resistant material, perforated to ensure air circulation and with sufficient clearance to minimize noise.	No Changes
vi	Gentle side to side agitation at 3.6-4 cm side to side, 60-70 strokes/ minute	No Changes
vii	Heavy duty ball bearing gear motor for noise less and continuous operation for 24 hours a day throughout the year	No Changes
viii	Motor with internal fan	No Changes
2	Temperature	No Changes
i	7 days chart recorder with free charts /Digital Recorder till warranty period.	No Changes
ii	Temperature controller with sensor	No Changes
3	Safety feature	No Changes
i	Audio alarm for temperature fluctuation	No Changes
ii	Auto stop for agitation when the door is opened	No Changes
iii	Power failure alarm	No Changes
4	Push buttons switch with pause function for temporary stoppage of the motion.	Auto stop of Agitation once the door is opened/ Manual stoppage of Agitation through a push button switch for temporary stopping the agitation
5	Power supply: 220-240 volts at 50 Hz.	No Changes

Name of Equipment:-Apheresis Machine		
SI. No	Technical Specification as per tender	Final Amendment
1	Continuous/Intermittent flow Blood Cell separator.	No Changes
2	Dual/single Needle operation.	No Changes
3	Built in automated protocols for majority (4 of 6) of the below procedures.	No Changes
a	Leukoreduced Plasma Collection	No Changes
b	Therapeutic Plasma Exchange.	No Changes
c	Single or double RBC collection and/or RBC Exchange	No Changes
d	Peripheral Blood Stem Cell Collections	No Changes
e	Granulocyte Collection.	No Changes
f	Leukoreduced platelet collection or plateleapheresis	No Changes
4	Automatic Pump Loading & Priming of disposables sets.	No Changes
5	Automated Self-test to ensure maximum Donor Safety.	No Changes
6	Automatic Leukoreduction validation of platelets and plasma at the end of procedure.	No Changes
7	Adjustable product concentration	No Changes
8	Separate Anticoagulation pump with custom programming adjustability	No Changes
9	Safety-check to prevent Platelets count dropping below safety level for Donor safety.	No Changes
10	Configurable maximum volume depletion levels either by weight or percentage of Total Blood Volume	No Changes
11	Extracorporeal volume less than 250 ml.	No Changes
12	Built in Access & Return Pressure sensor.	No Changes
13	Built in air detectors to prevent air embolism	No Changes
14	Built in ACD Detector.	No Changes
15	Built in contamination monitor for monitoring & preventing RBC contaminations in platelet collection and plasma exchange.	No Changes
16	Audio visual alarms.	No Changes
17	Periodic Instrument Calibration certificate for the various parameters and QC of the products should be provided/maintained by the vendor.	No Changes
18	USFDA 510(K) / European CE (issued by notified body) certified approved Model should be offered.	No Changes
19	Power Supply 220VAC +/- 10 %, 50Hz.	No Changes
20	Online UPS of suitable rating with voltage regulation, spike protection and maintenance free batteries for 60 minutes back up.	No Changes

21	Cost of 500 (Five hundred) EACH test of Platelet kit & Plasma Exchange kit along with the price of startup and shut down consumption of reagents and other Reagents (Cleaner/Washer/Diluent /Kits /Calibrator, QCs (Positive control and Negative control required daily) /Tips required /Any other accessory required for the above parameters according to the mentioned number of tests must be quoted in BOQ / Financial Bid .The rate of kits will be frozen for next 5 years from the rate contract done. L-1 will be decided on considering unit price of the equipment and Cost of 500 (Five hundred) for each test as listed above along with their all consumables to perform those tests.	No Changes
22	As a startup kit, 50 no's (fifty) test of Platelet kit & 10 no's (Ten) of Plasma Exchange kit along with all consumables of reagents and other Reagents (Cleaner/Washer/Diluent /Kits/ ACD Solution	No Changes
23	/Calibrator, QCs (Positive control and Negative control required daily) /Tips required/Any other accessory required for the above parameters must be supplied complementary at the time of installation and commissioning.	No Changes

Name of Equipment :- Name of Equipment:- Plasma Expressor		
Sl. No	Technical Specification as per tender	Final Amendment
1	It should be suitable to Express blood components like plasma, Platelets from collection container.	No Changes
2	It should be manual operated & accept all kinds of blood bags.	No Changes
3	Front panel should be spring loaded to exert uniform pressure on container i.c. blood bag so that fluid can be Expressed out.	No Changes
4	Compression plate should be made of transparent acrylic material & should be durable	No Changes
5	It should be non-corrosive & can be cleaned easily with antiseptics.	No Changes
6	US FDA/ European CE (Issued by a notified body) approved Model should be offered.	No Changes

Name of Equipment:- Blood Bank Refrigerator		
Sl. No	Technical Specification as per tender	Final Amendment
1	Purpose of Equipment: A refrigerator for storing whole Blood or red cell packs in a blood bank.	No Changes
2	Type of equipment: compression type refrigerator that uses CFC –free refrigerant gas/ green gas	No Changes

3	Capacity: minimum 130-150 blood bags of 450ml or 170-200 blood bags of 350ml	No Changes
4	Construction:	No Changes
i	External corrosion resistant (CR at least 1mm thickness)	No Changes
ii	CFC- free insulation	No Changes
iii	Drawers Roll out type. Stainless steel scratch resistant material perforated on the bottom for perfect an homogeneous distribution of cold air. The separators, if provided in the drawers, should	No Changes
	be such that blood bags are held in a vertical position with the label side visible	No Changes
iv	Glass door, automatic closing of the front door below opening angle of 90 degree and opening angle limit to 110degree. Glass door should be vapour free.	No Changes
v	Insulation and gasket should be Silicone/Rubber	No Changes
vi	Polyurethane insulation should be minimum 50-80mm	No Changes
vii	Door opening audio and visual display alarm.	No Changes
5	Temperature range	No Changes
i	2 degree C to 6degree C and adjustable with setting accuracy of ± 0.5 degree C with set temperature of 4degreeC	No Changes
ii	User parameter settings set point high alarm point low alarm point buzzer off time. C/F Temperature choice.	No Changes
6	Electrical characteristics Input voltage 220/240V 50Hz	No Changes
	. Equipment meet electrical safety specification such as that if IEC (class I)	No Changes
	. A line voltage corrector of appropriate rating will form part of standard configuration	No Changes
7	Minimum compressor starting voltage 22% below nominal voltage.	No Changes
8	Internal Temperature control	No Changes
i	Electronic temperature control range +2 degree C to 6 degree C with setting accuracy of ± 1 degree C whatever the load.	No Changes
ii	Fan air cooling.	No Changes
9	External Ambient Temperature: performs in an ambient temperature of + 10 to +40 degree C	No Changes
10	Hold –Over Time A full load of blood packs at +4 degree C (± 1 degree C) takes at least 30 minutes to rise to above +6 degree C.	No Changes

11	Internal temperature hold over time in case of power failure should be at least 1.5 hours if door is closed.	No Changes
12	Cooling Down Time. A full load of blood packs at +25 degree C takes a maximum of 4 hrs for all the packs to reach below +6degree C	No Changes
13	Temperature Monitoring	No Changes
i	Digital temperature (LED) display with 0.1 degree C graduation	No Changes
ii	Microprocessor based temperature controller with integrated audio visual temperature and power alarm function with digital monitoring display	No Changes
iii	Independent safety thermostat to avoid negative temperature.	No Changes
iv	At least 2 temperature Sensor for temperature monitoring shown on front display. Sensor for managing use of compressor.	No Changes
14	Temperature recording devices.	No Changes
i	Visual and audible alarm system indicating unsafe temperature	No Changes
ii	Battery backup for alarm and temperature recording device	No Changes
iii	Facility for remote alarm contact.	No Changes
iv	Seven days graphic temperature recorder/digital thermograph with range of -10degree C to +20 degree C with data logger with supply of free charts for a period of warranty for Analog System.	No Changes
v	Ideal compressor running time upto 27% at room temperature	No Changes
vi	Door locks should be available.	No Changes
vii	Audio and visual alarm for variation in temperature.	No Changes
viii	Auto defrosting	No Changes
ix	Cooling time – Maximum 4 hours for all the packs	No Changes
x	US FDA / European CE (Issued by notified body) Approved model should be offered.	US FDA / European CE (Issued by notified body) Approved model should be offered. The product should have an import/manufacturing license for the quoted model with a valid number from the Central Licensing Authority or State Licensing Authority of CDSCO for Medical Devices.

xi	Suitable Capacity Automatic Voltage regulator/stabilizer meeting ISI specifications should be supplied. Broad specifications are Automatic Type input 170-280V. Output 220V+/-10V.	No Changes
xii	Equipment Electrical Safety Declaration Should be submitted by the Bidder	No Changes