**Bihar Medical Services & Infrastructure Corporation Limited 2nd & 3rd Floor, Swasthya Bhawan, Behind IGIMS, Sheikhpura, Adjacent to State Health Society, Patna-800014, Bihar, Phone/Fax: +91612 2283287, 91612 2283288**

## 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/2023-24/ME-314. 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. Rest of the terms and conditions of the NIT shall remain unchanged. In order to facilitate maximum participation of bidders tender schedule is being revised as following:-

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| Tender Reference No. | **BMSICL/2023-24/ME-314** |
| Last date and time of submission of online bids | **20th July 2023 till 17:00 Hrs.** |
| Last date and time of submission of original documents of EMD, Tender Fee and Document. | **21th July 2023 till 14:00 Hrs.** |
| Date, Time and Place of opening of Technical Bid | **21thJuly2023 (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 | | |
|---|---|---|
| **SI. No** | **Technical Specification as per tender** | **Amendment** |
| 1 | For separation of blood components like cells, platelet rich plasma platelet concentrate plasma. | No Change |
| 2 | Microprocessor controlled system to make operation automatic. | No Change |
| 3 | Programmable memory: memory with tamper proof facility. | No Change |
| 4 | Stainless steel chamber: Easy to clean, corrosion resistant with provision of both drain and condensed water collection container. | No Change |
| 5 | CFC free refrigerant. | No Change |
| 6 | Swing bucket blood bank with metal buckets: 6 x 2000ml. wind. Shielded suitable adapters for 12 blood bags of 350ml. & 450ml. | No Change |
| 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 Change |
| 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. | No Change |
| 9 | Equipped with automatic lid lock and lid interlock. | No Change |
| 10 | Centrifuge force 5000-6000 g. | No Change |
| 11 | Speed variation Microprocessor controlled rotor speed to within 10rpm of set value Acceleration and deceleration profiles shall be available. | No Change |
| 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 ≤ 4ºC. | No Change |
| 13 | Micro Processor controlled rotor temperature within 1degree C of set temperature regardless of the centrifuge speed. | No Change |
| 14 | Programmable time: 0 to 99 hrs with minimum resolution of 1 minute. | No Change |
| 15 | Digital display of temperature speed and time Minimum no of 3 digit resolution. | No Change |
| 16 | Power requirement 220/240 volts, 50 Hz single phase AC supply. | No Change |
| 17 | The equipment shall be suitable for operation from 0 to 40degree C at 90% Relative humidity Electronic circuity shall be tropicalized for this ambient condition. | No Change |
| 18 | Noise levels within 60 decibels. | No Change |

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| 19 | The equipment shall have lockable castors. | No Change |
| 20 | Protection of data in event of power interruption or complete failure data should remain stored. | No Change |
| 21 | Should have a provision for external connectivity. | No Change |
| 22 | It shall have a security lock to prevent unintentional switch off and also unauthorized opening of the equipment. | No Change |
| 23 | Automatic Line voltage corrector/ voltage Stabilizer. A line voltage corrector of appropriate rating should from 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 Change |
| i | Suitable Capacity UPS, having Backup not less than 30 minutes | No Change |
| ii. | Input voltage 140 to 280 volts, 50 cycles. | No Change |
| 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 Change |
| iv. | The equipment should be supplied with 2 meter cord at input and fitted with plugs of appropriate rating (15Amp) | No Change |
| v. | Make of the line voltage corrector shall be indicated. | No Change |
| 24 | Certification | No Change |
| i. | US FDA / European CE (Issued by notified body) Approved model should be offered. | No Change |
| 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 the IEC certificates to be issued by European third party. | 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. |

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| 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 shouldhave traceability of NABL standards with valid certificates. | No Change |

| **Name of Equipment :- Dielectric Tube Sealer (Portable Battery operated sealer)** | | |
|---|---|---|
| **SI. No** | **Technical Specification as per tender** | **Amendment** |
| 1 | Dielectric Tube Sealer, Handheld | No Change |
| 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 Change |
| 3 | Should gently seal tubing with no haemolysis, using radiofrequency heating. | No Change |
| 4 | Should be capable of making wide seal of at least 6 mm width. | Should be capable of making wide seal of at least 5 mm width. |
| 5 | Should have a carrying case (Optional) | No Change |
| 6 | Electrodes should be well protected by a cover to prevent blood splutter. | No Change |
| 7 | Sealing trigger is not automatic. Lever to press manually and then only seal. | No Change |
| 8 | Should have indicator lamp for sealing process. | No Change |
| 9 | No warm up time should be required. | No Change |
| 10 | Should have tear-seal feature to make segment that can be easily separated by hand. | No Change |
| 11 | No. of seals per charge should be more than 200 continuous seals from a fully charged battery. | No Change |
| 12 | Charger should be compatible with input voltage: 240V 50Hz Single phase Ac. | No Change |
| 13 | US FDA/European CE (Issued by Notified Body) Approved model should be offered. | US FDA/European CE (Issued by Notified Body)/ ISO13485 Approved model should be offered. |

| Name of Equipment: -Dielectric Tube Sealer (Table Top) | | |
|---|---|---|
| **SI. No** | **Technical Specification as per tender** | **Amendment** |
| 1 | Blood bag tube sealer is a compact equipment to seal the Blood Bag pilot tubing. | No Change |
| 2 | The system should be heavy duty and be able to seal the blood bag etc. quickly and effectively. | No Change |
| 3 | Should be simple to handle. | No Change |
| 4 | System should gently seal the tubing with no hemolysis using radio frequency. | No Change |
| 5 | Should be capable of making wide seal of 6mm thickness. | No Change |
| 6 | Should be for bench top use. | No Change |
| 7 | The sealing time should not be more than 2 seconds. | No Change |
| 8 | Lever to press manually for sealing trigger. | Deleted |
| 9 | Should have indication lamps for sealing process on main unit. | No Change |
| 10 | No warm-up time should be required. | No Change |
| 11 | Should ensure easy separation of tube segments after the sealing. | No Change |
| 12 | Back up battery should seal more than 200 seals on PVC Tubes in continuous mode. | Deleted |
| 13 | The unit shall be capable of operating continuously in ambient temperature of 10-40 degree C and relative humidity of 15-90%. | No Change |
| 14 | Power input 220V -240V/50Hz AC single phase with appropriate Indian plugs and sockets. | No Change |
| 15 | Suitable Auto voltage corrector with spike protector should be Provided. | No Change |
| 16 | US FDA/ European CE (Issued by a notified body) approved Model should be offered. | US FDA/ European CE (Issued by a notified body)/ ISO 13485 approved Model should be offered. |

| Name of Equipment: - Platelet Incubator with Agitator | | |
|---|---|---|
| **SI. No** | **Technical Specification as per tender** | **Amendment** |
| i | Purpose of Equipment: To continuously agitate platelet concentrates in an incubator in an even suspension in a plasma bag. | No Change |
| ii | Type of Equipment: Flatbed agitator fitted inside a temperature-**controlled** incubator operating with CFC-free refrigerant gas and insulation material. | Type of Equipment: Flatbed agitator fitted inside a temperature-controlled incubator operating with CFC-free refrigerant gas/ Thermolled Incubator and insulation material. |

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| iii | Certifications | No Change |
| iv | US FDA / European CE (Issued by notified body) Approved model should be offered. | No Change |
| v | Electrical Safety: Equipment meets electrical safety specifications such as that of IEC (Class I) | No Change |
| (A) | **Platelet Incubator** | No Change |
| 1 | Should have a provision to store the agitator. | No Change |
| 2 | Should have a single transparent outer door for clear visibility. | No Change |
| 3 | Should be able to maintain a temperature of 22+2oC, Set temperature of 22oC. | No Change |
| 4 | Should have a digital temperature indicator. | No Change |
| 5 | Seven day inkless chart recorder with battery back-up for minimum of 2 hours for continuous operation during power failure failure, agitator off, power failure, compressor and system | No Change |
| 6 | Single digital temperature sensor for both recording and controlling | No Change |
| 7 | Should have audible visual high/low alarm for temperature control, battery on/low, sensor | No Change |
| 8 | Should have forced air circulation method for the uniformity of the temperature at all sides of the incubator. | No Change |
| 9 | Chamber mounted electrical outlet for agitator should be available | No Change |
| 10 | Power supply: 220-240 volts at 50 Hz. | No Change |
| 11 | Facility to connect with central (temperature) monitoring system | Provided with data logger, data can be retrieved & downloaded in system. |
| 12 | Facility of Graph display. | No Change |
| 13 | Should be provided with Separate Servo Voltage Stabilizer. | Should be provided with Separate Voltag Stabilizer. |
| (B) | **Platelet Agitator:** | No Change |
| i | Construction: | No Change |
| ii | Internal : Stainless steel (min 304 grade) | No Change |
| iii | External : Corrosion Resistant, at least 1mm thickness | No Change |
| 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 Change |
| 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 Change |
| vi | Gentle side to side agitation at 3.6-4 cm side to side, 60-70 strokes/ minute | No Change |
| vii | Heavy duty ball bearing gear motor for noise less and continuous operation for 24 hours a day throughout the year | No Change |

| | | |
|---|---|---|
| viii | Motor with internal fan | No Change |
| 2 | Temperature | No Change |
| i | 7 days chart recorder with free charts /Digital Recorder till warranty period. | No Change |
| ii | Temperature controller with sensor | No Change |
| 3 | Safety feature | No Change |
| i | Audio alarm for temperature fluctuation | No Change |
| ii | Auto stop for agitation when the door is opened | No Change |
| iii | Power failure alarm | No Change |
| 4 | Push buttons switch with pause function for temporary stoppage of the motion. | No Change |
| 5 | Power supply: 220-240 volts at 50 Hz. | No Change |

| **Name of Equipment: - Apheresis Machine** | | |
|---|---|---|
| **SI. No** | **Technical Specification as per tender** | **Amendment** |
| 1 | Continuous Flow Blood Cell Separator. | Continuous/Intermittent flow Blood Cell separator. |
| 2 | Dual/single Needle operation. | No Change |
| 3 | Built in automated protocols for majority (4 of 6) of the below procedures. | No Change |
| a | Leukoreduced Plasma Collection | No Change |
| b | Therapeutic Plasma Exchange. | Deleted |
| c | Single or double RBC collection and/or RBC Exchange | Deleted |
| d | Peripheral Blood Stem Cell Collections | Deleted |
| e | Granulocyte Collection. | Deleted |
| f | Leukoreduced platelet collection or plateleapheresis | No Change |
| 4 | Automatic Pump Loading & Priming of disposables sets. | No Change |
| 5 | Automated Self-test to ensure maximum Donor Safety. | No Change |
| 6 | Automatic Leukoreduction validation of platelets and plasma at the end of procedure. | No Change |
| 7 | Adjustable product concentration | No Change |
| 8 | Separate Anticoagulation pump with custom programming adjustability | No Change |
| 9 | Safety-check to prevent Platelets count dropping below safety level for Donor safety. | No Change |

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|---|---|---|
| 10 | Configurable maximum volume depletion levels either by weight or percentage of Total Blood Volume | No Change |
| 11 | Extracorporeal volume less than 250 ml. | No Change |
| 12 | Built in Access & Return Pressure sensor. | No Change |
| 13 | Built in air detectors to prevent air embolism | No Change |
| 14 | Built in ACD Detector. | No Change |
| 15 | Built in contamination monitor for monitoring & preventing RBC contaminations in platelet collection and plasma exchange. | No Change |
| 16 | Audio visual alarms. | No Change |
| 17 | Periodic Instrument Calibration certificate for the various parameters and QC of the products should be provided/maintained by the vendor. | No Change |
| 18 | USFDA 510(K) / European CE (issued by notified body) certified approved Model should be offered. | No Change |
| 19 | Power Supply 220VAC +/- 10 %, 50Hz. | No Change |
| 20 | Online UPS of suitable rating with voltage regulation, spike protection and maintenance free batteries for 60 minutes back up. | No Change |
| 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 and the rate 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 Change |
| 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 | 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 |

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| 23 | /Calibrator, QCs (Positive control and Negative control required daily) /Tips required | No Change |
| 24 | /Any other accessory | No Change |
| 25 | required for the above parameters must be supplied complementary at the time of installation and commissioning. | No Change |

| **Name of Equipment: - Plasma Separator** | | |
|---|---|---|
| **SI. No** | **Technical Specification as per tender** | **Amendment** |
| 1 | It should be suitable to Express blood components like plasma, Platelets from collection container. | No Change |
| 2 | It should be manual operated & accept all kinds of blood bags. | No Change |
| 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 Change |
| 4 | Compression plate should be made of transparent acrylic material & should be durable | No Change |
| 5 | It should be non-corrosive & can be cleaned easily with antiseptics. | No Change |
| 6 | US FDA/ European CE (Issued by a notified body) approved Model should be offered. | No Change |