

Corrigendum-IV

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 Re-Tender No.-BMSICL/2024-25/ME-390. 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.

Note:-

- 1. Bidders are advised to refer to the Annexure-I of this corrigendum before submission of bid.**
- 2. Those who have submitted their bids are requested to re-submit their bids in accordance with this corrigendum.**

Annexed:- as above

Sd/-

GM (Procurement)

Annexure-I			
Name of Equipment :- Heamatology Analyzer(3 Part)			
SI. No	Technical Specification as per tender	Previous amendment as per corrigendum-II Dated-14.01.2025	Final Amendment
18.1	Pursuant to ITB Clause 12, the bidder shall furnish, as part of his bid, an Earnest Money Deposit (EMD) for an amount of mentioned in Section IV – Schedule of Requirements in the form of Bank Guarantee (Only Offline mode).No other mode of payment is acceptable.	No Change	No Change
1	Should be fully automated three part haematology Analyzer providing 20 parameters WBC,Lymph#,Mid#,Gran#,Lymph%,Mid%,Gran%,RBC,HGB,MCV,MCH,MCHC,RDW-CV/RDW-SD,HCT,PLT,MPV,PDW,PCT,P-LCR,P-LCC including 3 color histograms for WBC,RBC,PLT	No Change	Should be fully automated three part haematology Analyzer providing 20 parameters WBC,Lymph#,Mid#,Gran#,Lymph%,Mid%,Gran%,RBC,HGB,MCV,MCH,MCHC,RDW-CV/RDW-SD,HCT,PLT,MPV,PDW,PCT,P-LCR/P-LCC including 3 color histograms for WBC,RBC,PLT
2	The system should give a differential count as Lymphocytes, mid population and Granulocytes.	The system should give a differential count as Lymphocytes, Mxd population and Granulocytes / Neutrophils	The system should give a differential count as Lymphocytes, Mxd population and Granulocytes /Neutrophils
3	System should be capable of processing samples at 60 -70 samples/hour & storage memory result capacity 10000.	No Change	No Change

4	The system should be based on “closed, maintenance free Sample Rotary Valve (SRV) / Needle for precise sample all quoting for dilution.	No Change	No Change
5	System should have auto Probe wiper to clean the sample probe automatically after sample aspiration and with pre dilution mode.	No Change	No Change
6	The system should use non cyanide based reagents for Hb estimation.	No Change	No Change
7	System for the reliability of the results should have "electrical Impedance" method. Cell counting withan integrated temperature sensor for monitoring and compensating for shift in room temperature is optional. an integrated temperature sensor for monitoring and compensating for shift in room temperature is optional.	No Change	No Change
8	The system should use to proven and approved "Volumetric & time Metering" of cell counting, for WBC RBC and PLT for high precision of the results and stability of the calibration with close measuring chamber.	The system should use proven and approved volumetric / time metering of cell counting, for WBC, RBC and PLT for high precision of the results and stability of calibration with close measuring chamber	The system should use proven and approved volumetric / time metering of cell counting, for WBC, RBC and PLT for high precision of the results and stability of calibration with close measuring chamber
9	The system should have automatic floating discriminator of RBC /PLT.	No Change	No Change
10	The system should have Open mode as well as pre diluted mode of sample aspiration.	No Change	No Change
11	The system should use high Intensity LED for HB estimation.	No Change	No Change
12	All reagents required should be available locally from the company or its authorized distributor	No Change	No Change
13	System should be user friendly with color touch screen and should option for external printer as well as data inter facing	No Change	No Change
14	System should be US FDA approved/ European CE certified (issued by notified body)/CE-IVD(Notified body)/BIS.	No Change	System should be US FDA approved/ European CE certified (issued by notified body)/CE-IVD (Notified body)/BIS/ISO13485 Certification.
15	Price Evaluation will be done as per annexure-II	No Change	No Change

16	Reagent Consumption chart for 10 test per day (including two times ON/OFF) should be provided.	No Change	No Change
17	Should be provided with UPS for at least 60 min.	No Change	No Change
18	Should be provided with control	No Change	No Change
19	Blood mixer should be provided separately	No Change	No Change
20	Bar code for sample should be provided	No Change	No Change
21	Proper demonstration of machine should be provided before installations	No Change	No Change
22	Proper training of machine should be provided to lab technician & Doctors	No Change	No Change
23	Complementary Supply of reagents for first 5000 (Five Thousand) test free of cost	No Change	No Change
24	Should be provided with permanent printing facility (Not on thermo graph Paper) Printing facility should be covered in warranty.	No Change	No Change
Name of Equipment :-Biochemistry analyser (Semi automated Bio-Chemistry Analyser)			
1	Should be microprocessor controlled general purpose bi-chromatic photometer system with at least 6 filters/grating system ranging from 340 to 630nm.	No Change	No Change
2	Temperature 37 self-monitoring built-in incubation systems for temperature controlled absorbance reading.	No Change	No Change
3	Light source: Tungsten/ halogen or higher grade with 2 (two) additional bulb.	No Change	No Change
4	Should have end point, kinetic and two point kinetic measurement modes.	No Change	No Change
5	Should have flow cell measuring device having capability of measuring with 500 µl or less volume of reaction mixture.	No Change	No Change
6	Should have inbuilt printer.	No Change	No Change
7	Should have a measurement range from 0.001 to 2.500Abs or more	No Change	No Change
8	Should have facility for reading results on LCD display.	No Change	No Change
9	The system should have good repeatability and precision	No Change	No Change
10	Should have quality control – two control/test QC survey of at least 30 points, Levy Jenny plot.	No Change	No Change
11	Should have a filter half bandwidth of 10nm or lesser.	No Change	No Change
12	Should have a test programme memory of 50 or more.	No Change	No Change
13	Should be provided with sample carry over prevention facility.	Delete	Delete
14	Should be supplied with 1 variable (10-100µl) and one fixed volume 500µl pipettes.	No Change	No Change
15	Aspiration should be based on Bellow/Peristaltic Pump/ Vacuum pump.	No Change	No Change

16	Should provide 500 ml of reagents with calibrators for urea, Serum creatinine, Serum bilirubin, Plasma Glucose, Cholesterol separately and Quality control 5ml one each for normal and abnormal for installation and demonstration.	No Change	No Change
17	Should submit cost per ml of all reagents and consumables	No Change	No Change
18	Should be supplied with online pure sine wave UPS of sufficient capacity for a minimum back of 30 minutes.	No Change	No Change
19	Should be provided with calibration certificate issued by the manufacturer at the time of installation and calibration certificate should be issued for the machine by the supplier during preventive maintenance visit in the warranty/AMC period if demanded by the end user.	No Change	No Change
20	US FDA (510K) / European CE (Issued from notified Body)Approved model should be offered	No Change	No Change
Name of Equipment :-Electrolyte Analyser			
1	Should be able to measure sodium, potassium & chloride, it should be upgradable to measure ionized calcium	No Change	No Change
2	Should have a measuring method of Ion Selective Electrode (ISE).	No Change	No Change
3	Should be able to measure sodium and potassium in whole blood and serum.	No Change	No Change
4	Should have ability to analyze 30 or above samples per hour.	No Change	No Change
5	Should have electrode for sodium, potassium, ionized calcium and chloride in case of electrode based technology	No Change	No Change
6	Resolution should be at least 0.1mmol/litre for each parameter	No Change	No Change
7	Should have automatic calibration, 1 and 2 point calibration, 2 point time bound (4th hour) calibration	No Change	No Change
8	Should have QC memory storage of at least 2	No Change	No Change
9	Stand-by mode user controlled and automatic	No Change	No Change
10	Should have a measuring range for sodium 40 to 200 mmol/l, potassium 1.5 to 10 mmol/l	No Change	No Change
11	It should require 120 micro liter or lesser for whole blood serum	No Change	No Change
12	Should have printing facility	No Change	No Change
13	Should supply reagent pack for 1000 tests, one internal filing solution of 15 ml, two cleaning solution of 125 ml, 100mldeprotenizer and one quality control of 10 ml (5ml each)	No Change	Should supply reagent pack for 1000 tests, with one internal filing solution, two cleaning solution,

			one deprotenizer pack and one quality control each (Normal & High)
14	Should have an alpha numeric display/ LCD display.	No Change	No Change
15	Should have a minimum memory capacity of at least 100 samples.	No Change	No Change
16	Should work on 200-240Vac 50Hz power supply.	No Change	No Change
17	Should be supplied with online pure sine wave UPS of sufficient capacity for a minimum back up of 30 minutes	No Change	No Change
18	Should be provided with calibration certificate issued by the manufacturer at the time of installation and calibration certificate should be issued for the machine by the supplier during preventive maintenance visit in the warranty/AMC period /CMC period.	No Change	No Change
19	US FDA (510 K) /European CE (Issued by Notified body) Approved model should be offered.	US FDA (510 K) /European CE/IVD (Issued by Notified body) Approved model should be offered.	No Change
20	The amount and rate of various reagents required to perform 100 test/month shall be quoted separately and this rate will be taken for evaluation (L1 Calculation)	The amount and rate of various reagents required to perform 1000 test/month shall be quoted separately and this rate will be taken for evaluation (L1 Calculation)	The amount and rate of various reagents required to perform 1000 test/month shall be quoted separately and this rate will be taken for evaluation (L1 Calculation)
21	The available pack size and amount/pack (in ml) of these reagents available for each bidder shall be quoted. Quoted. This rate shall be fixed for 5+2 years (extendable for further 2 years with mutual consent of BMSICL and firm depending upon the performance of the supplied machine) from the date of Agreement.	No Change	No Change
22	All electrodes, tubing set and membrane assembly will be covered in warranty and CAMC. The rate of each type of electrode shall be quoted separately and this rate will be fixed for 5+2 years (extendable for further 2 years with mutual consent of BMSICL and firm depending upon the performance of the supplied machine) in	No Change	No Change

	required to be procured in case of idling machines.		
23	L1 Will be calculated Cost of 1000 Test/Month for 3 Years + Each type of electrode (Sodium, Potassium, Reference Electrode Etc.) + Machine Cost.	No Change	No Change
Name of Equipment :-Semiautomatic Coagulation Analyzer			
1	The equipment should be capable of analyzing PT and aPTT.	No Change	No Change
2	Should be an open system with provision to use 3rd party reagents.	No Change	Should be an open system /close system.
3	The cost/ test for PT&APTT should be quoted by the bidder. For the L1 calculation, the total cost of 1000 tests (Each) will also be taken and the calculation will automatically be done by the BOQ.	No Change	No Change
4	Should use optical/mechanical detection principle and there should not be any interference from lipemic /icteric /hemolytic samples.	No Change	No Change
5	The system should be complete with all incubation steps inbuilt.	No Change	No Change
6	Should have automatic INR calculation.	No Change	No Change
7	Should quote available reagent pack sizes and rates for each parameter separately.	No Change	No Change
8	The bidder shall provide the quantity of reagents required to perform one test and also the reagent requirement as per the format in the offer form. The standard pack should also mention in the offer form. The price bid will not be considered for evaluation if any discrepancy in the quantity mentioned in the offer form and price bid. One standard pack of reagents shall be provided along with equipment by the L1 bidder. (part of financial bid)	No Change	No Change
9	US FDA (510 K) /European CE (Issued by Notified body)/BIS Approved model should be offered.	No Change	No Change
10	Should be semi-automated 4 channel	No Change	No Change
11	Should be supplied with inbuilt/external printer with necessary accessories	No Change	No Change
12	Should have result storing facility	No Change	No Change
13	Manufacturer prescribed calibrator matching with international standards shall be provided along with reagent.	No Change	No Change
14	Should quote available consumable pack sizes and rates for consumables (Cuvette, Ball vials, and CaCl2) separately	No Change	No Change

15	Should also supply pipettes-50/100microlitre along with the machine	No Change	No Change
Name of Equipment :-High Performance Liquid Chromatography (HPLC) Machine			
1	Automated, Integrated system, dedicated to HbA1c. Thalassemia and hemoglobinopathy testing and screening based on HPLC technology.	No Change	No Change
2	The system should be able to screen and quantitate hemoglobin's Hb A2, Hb A, Hb F and Hb A 1c and detect the most commonly occurring abnormal hemoglobin's like Hb s, Hb D, HbE,	No Change	No Change
3	Complete ready to use reagent format should be provided with buffers in plastic tanks/aluminum tank/ pouches with a facility to view and show the number of different reagents	No Change	No Change
4	It should have a faster throughput of 7 or higher operating system	It should have a faster throughput of 7 or higher operating system. Software for automatic interpatation of hemoglobinopaties should be provided	It should have a faster throughput of 7 or higher operating system. Software for automatic interpatation of hemoglobinopaties should be provided
5	It should have facility for data feeding, The system should be a fully automated system.	The system should be a fully automated system.	The system should be a fully automated system.
6	It should have chromatogram library with fully classified abnormal hemoglobin and thalassemia majorly prevailing in India and across the world.	It should have chromatogram library with fully classified abnormal hemoglobin and thalassemia majorly prevailing in India and across the world. The System shoul come be wtih software that asist in interperiting the hemoglobinopathies	It should have chromatogram library with fully classified abnormal hemoglobin and thalassemia majorly prevailing in India and across the world. The System should come be wtih software that asist in interperiting the hemoglbinopathies. (Optional)
7	The system should have in-kit external standards for instrument calibration ensuring accurate quantitation of results.	No Change	No Change
8	The HPLC System should have an automated buffer delivery system that ensures a continuous and precise buffer gradient at High Pressure.	No Change	No Change
9	The system should have a Uni/bi-directional LIS	No Change	No Change

10	The system should have a feature of rack & sample position identification to avoid error in case of bad/fault barcode reading.	No Change	No Change
11	The system should have a visible alarm system for low buffer in the mobile phase reservoirs, low level value for cartridge injections and overflow for the waste tank, as well as built in alarms for calibration failure.	No Change	No Change
12	The system should be capable of positive sample identification using a Barcode reader.	The system should be capable of sample identification using a Barcode reader.	The system should be capable of sample identification using a Barcode reader.
13	The system should have the facility of primary tube sampling and direct dilution of the samples without manual intervention.	No Change	No Change
14	It should have an inbuilt system check facility which checks that all the system parameters (etc., cartridge, Buffer, reagent, waste etc.) are ready before the sample analysis.	No Change	No Change
15	The system should have mode to perform HbA1c or HbA2/HbF without changing any reagents or columns	The system should have mode to perform HbA1c or HbA2/HbF	No Change
16	The system should not require changing of reagents while switching from HbA1c to HbA2/Hb F/Hba1c testing mode.	The system should have modes to perform HbA2/HbF or HbA1c.	No Change
17	The system should be able to detect correct A1c values in presence of abnormal hemoglobin variants like HbD, HbE, HbS & HbC.	The system should be able to detect correct A1c values in presence of abnormal hemoglobin variants like HbD, HbE HbC & HBS	The system should be able to detect correct A1c values in presence of abnormal hemoglobin variants like HbD, HbE HbC & HBS
18	Assay time should not be more than 4 minutes for HbA1c testing and 8 minutes for A2/F testing	Assay time should not be more than 2 minutes for HbA1c testing and 6 minutes for A2/F testing	Assay time should not be more than 4 minutes for HbA1c testing and 8 minutes for A2/F testing
19	The system should be NGSP (National Glycohemoglobin Standardization program) Certified and traceable to IFCC reference method.	No Change	No Change
20	The system should offer both NGSP & IFCC value reporting on the same patient report, control & calibrator report.	No Change	No Change
21	It should be able to print a hard copy report giving identification and information on the	No Change	No Change

	subtype and quantity of hemoglobin's detected. It should have the facility to view current and stored chromatograms & should enable storage of chromatograms.		
22	It should have sufficient data hard disk of approx. 80 GB hard drive and a remote access feature when connected to LAN or intranet or RS-232	No Change	No Change
23	The company should be able to provide normal and abnormal controls for HbA2 and HbF. Optional controls for HbS should be supplied. The company should facilitate Quality control program to help compare results with similar users worldwide	The company should be able to provide normal and abnormal controls for HbA2 and HbF. Optional controls for HbS can be supplied. The company should facilitate Quality control program to help compare results with similar users worldwide	No Change
24	The company should facilitate External Quality Assurance Service (EQAS/CAP etc.) for haemoglobin variants.	No Change	No Change
25	The system should have software for real time viewing of the analysis of the sample.	The system should have software for real time viewing as well as software that assist in interpreting the hemoglobinopathies	The system should have software for real time viewing. The System should have software that assist in interpreting the hemoglobinopathies (Optional)
26	The system should be USFDA/European CE issued by notified body.	No Change	No Change
27	The company should have offline library of chromatograms for result interpretation.	The System should come with a software that assist in interpretation the haemoglobinopathies.	The System should come with a software that assist in interpreting the hemoglobinopathies. (Optional)
28	The system should have features to Load minimum 10 samples with continuous loading facility	The system should have features to Load minimum 10 samples with dedicated stat position for emergency sample.	No Change
29	The system should have feature to load at least 10 or more samples simultaneously with continuous loading facility	No Change	No Change

30	To be provided as a startup kit/ Reagent free of cost at the time of installation - 400 test for HbA1C, 100 test for Hb F and 200 test for HbA2 /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, to be provided free of cost. Note- Any reagent/calibrator/equipment specific, consumable, not quoted in the BOQ but required for performing any test shall be supplied free of	No Change	No Change
31	Cost of above mentioned test for HbA2/Hb F/Hba1c /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 Financial Bid and the rate will be frozen for 5 years. L-1 will be decided on considering unit price of the equipment and Cost of test in 5 years (8000 test for HbA1C, 2000 test for Hb F and 4000 test forHbA2) along with their all consumables to perform these tests.	No Change	No Change
Name of Equipment :-Fully Automated Chemiluminescence Immunoassay			
	Chemiluminescence Immunoassay System with capability to perform Thyroid Panel, Fertility Panel, Cardiac Markers, Bone-Markers, Tumor Marker with the following technical specifications.	No Change	No Change
1	The analyzer should have a minimum loading capability of 50 samples per load/batch as well as continuous sample and reagent loading & unloading capability	The analyzer should have a minimum loading capability of 30 samples per load/batch as well as continuous sample and reagent loading & unloading capability	The analyzer should have a minimum loading capability of 30 samples per load/batch as well as continuous sample and reagent loading & unloading capability
2	The analyzer should have capability to accommodate tubes of various sizes	No Change	No Change
3	System must be able to process Samples types: Serum, Plasma and Urine	No Change	No Change
4	The analyzer should have automatic sample dilution ranging from 1:2 to 1:40	No Change	No Change

5	The analyzer should have Clot detection capability	No Change	No Change
6	The analyzer should have sample probe with liquid level detection	No Change	No Change
7	The analyzer should have a through-put of minimum 50 tests/hour or more.	No Change	No Change
8	The analyzer should have at least 15 or above reagent positions. EP division Running Contract Notice Page 4/5	The analyzer should have at least 15 or above reagent positions.	The analyzer should have at least 15 or above reagent positions.
9	The analyzer should have onboard refrigeration at 2-8 deg C	No Change	No Change
10	Analysers must have facility of calibration and history of calibration should be available in	No Change	No Change
11	The analyzer should have reagent level detection	No Change	No Change
12	Reagent packs should have bar code identification, automatic tracking and notification of inventory calibration and control validity, on	No Change	No Change
13	The reagent on- board stability of reagent should be a minimum of 28 days for all parameters	No Change	No Change
14	The analyzer should have STAT capability for prioritized sample request	No Change	No Change
15	Analysers should have in built QC programmes - Westgard rules, Twin plot LJ graphs, Auto QC,	No Change	No Change
16	Analysers should be directly connected to the waste container/drainage system for waste disposal.	No Change	No Change
17	The system should have facility for storage and retrieval of 5000 patient samples or above.	The system should have facility for storage and retrieval of 2000 patient samples or above.	The system should have facility for storage and retrieval of 2000 patient samples or above.
18	System should have the capability of bi-directional interfacing with hospital information system. In case of any software or application is required for the same shall be provided free of cost.	No Change	No Change
19	Analysers and reagents should be US FDA or European CE (Issued by Notified body) approved.	No Change	No Change
20	The analyser should be supplied with all necessary hardware including computer system	No Change	No Change

	and printer, and software for performance of all available test parameters.		
21	All Consumables required for installation and standardization to be given free of cost	No Change	No Change
22	All available tests in the system should be quoted in the price bid should be given for all available pack sizes.	No Change	No Change
23	List of all reagents, cleaning solutions, buffers, calibrators, consumables and any other item required for the routine maintenance and running of the machine should be provided along with available pack sizes. Frequency of usage of each component to be provided.	No Change	No Change
24	Order will be placed only for the required test kits. All accessory reagents, consumables and calibrators required for running the ordered parameters should be given free of cost. The cost of the same should be included in the reagent cost.	No Change	No Change
25	Calibration and validation of the equipment will be done by the bidder free of cost during warranty and CMC period.	No Change	No Change
26	L1 shall be calculated based on the total ownership cost for 5 years calculated including the, unit cost of the machine + reagent cost of test parameters (T3, T4, TSH, vitamin D, vitamin B12) at 1000 tests (each) per month for 5 years + all types of consumables (cleaning solution, buffers, calibrators, cups tips, controls, etc.) for 1000 tests (each) per month for 5 years	No Change	No Change
27	Parameters to be offered :-	No Change	No Change
1	Thyroid: FT3, FT4, T3, T4, TSH, Anti-TG, Anti-TPO, TG	No Change	No Change
2	Bone Metabolism: Intact PTH, Calcitonin, Vitamin D Total	No Change	No Change
3	Adrenal Function: DHEA-S, Cortisol, ACTH	No Change	No Change
4	Cardia Panel: CK-MB, Myoglobin, Troponin-I, BNP	No Change	No Change
5	Fertility Panel: Total beta HCG, FSH, LH, Prolactin, E2, E3, Testosterone, Progesterone, AMH	No Change	E3 deleted.
6	Diabetes: Insulin, C-Peptide	No Change	No Change
7	Tumor Markers: CEA, AFP, CA-125, CA-15.3, CA-19.9, Free PSA, NSE, CYFRA 21.1, CA72.4	No Change	No Change
8	Anaemia: Ferritin, Vitamin B12, Folate, RBC-	No Change	No Change
9	Inflammation: PCT	No Change	No Change
10	The analyser should be random access	No Change	No Change
11	All consumables required for installation and commissioning to be given free of cost	No Change	No Change

12	All available test in the system should be quoted in the price bid and price should be given for all available pack size.	All available test (Parameter mentioned in Si. No. 1-9) in the system should be quoted in the price bid and price should be given for all available pack size.	All available test (Parameter mentioned in Si. No. 1-9) in the system should be quoted in the price bid and price should be given for all available pack size.
13	List of all reagent, cleaning solution, buffers, calibrators, consumables and any other item required for the routine maintenance and running of the machine should be provide along with available pack sizes	No Change	No Change
14	The Company must also supply reagents, consumables and calibrators required for conducting following numbers of test along with the equipment as startup kits:- T3-500,T4-500,TSH-600,Vitamin D-250,Vitamin B12-250, Anti-tpo- 200.	No Change	No Change
15	All price should be freezed for 05 years.	No Change	No Change
16	Flexibility to use direct primary tube sampling /different sizes of tubes/samples Cups, Microcups and Cups on tube	No Change	No Change
17	There Should be lot to lot and reagent pack calibration and no requirement of daily calibration stability for not less than 02 weeks.	There Should be lot to lot and reagent pack calibration and no requirement of daily calibration stability for not less than 01 week.	There Should be lot to lot and reagent pack calibration and no requirement of daily calibration stability for not less than 01 week.
18	To be supplied with other accessories viz vortex mixer, de- ionized/Ro water Plant (6Lt per Hr) etc. if required for performing test as per the menu	No Change	No Change
19	To be supplied with an online UPS having battery Backup at Least One hour	No Change	No Change