KERALA MEDICAL SERVICES CORPORATION LTD
(A Government of Kerala Undertaking)
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CIN: U24233KL200TSGC021616, PAN : AADCK4029M, GSTIN : 32AADCK4029M1ZK

Running Contract Details	
Equipment Name	Haemoglobin HPLC Variant System
Running Contract Valid Till	26-01-2028
Tender Ref No	KMSCL/EP/T577/1795/2025
Tendered Quantity	5
Supplier Name	M/s R.K.Agency
GST No	32AKWPJ3317R1ZJ
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	**Contact Details**	
43/713 Cemetery Junction Pothady House Power House Extension Road Ernakulam - 18	Contact Person	Mr. Jitendra Bhandari
	Phone	
	Mobile No	9746015353
	Email	rkagencykerala@rkagency.in

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	**Haemoglobin HPLC Variant System** *Model & Make : Variant II System / Biorad Laboratories*	3990000 Incl.GST :5%	313880	4303880
		3990000	**313880**	**4303880**

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	**4th Year**	**5th Year**	**6th Year**	**7th Year**	**8th Year**	**9th Year**	**10th Year**
Haemoglobin HPLC Variant System							
Labour	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00
Comprehensive	1,57,143.00	1,57,143.00	1,57,143.00	1,57,143.00	1,57,143.00	1,57,143.00	1,57,143.00

Other terms & conditions

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).

2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.

3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.

4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).

5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

Technical Specification

Equipment :Haemoglobin HPLC Variant System

The required automated HPLC system must be dedicated to thalassemia and hemoglobinopathy testing and screening, offering precise quantitation of hemoglobins such as Hb A2, Hb A, and Hb F, and detecting abnormal hemoglobins in various genetic conditions, including rare variants. With features like continuous buffer gradient, dual piston pumps, random access sample analysis, barcode automation, and real-time software functionalities, the system should ensure efficient operation, reliability, and high throughput with screening times under 8 minutes or better. It must meet stringent certifications like US FDA/ EU CE and ISO 13485, and demonstrate proven efficacy through publications, installations in accredited labs, and government screening programs.

1. Should be an automated HPLC system, (with continues buffer gradient) must be dedicated to Thalassemia and Haemoglobinopathy testing and screening.
2. The system should be able to screen and quantitate hemoglobins Hb A2, Hb A and Hb F and detect the most commonly occurring abnormal hemoglobins like Hb S, Hb D, Hb E, Hb C, Hb Q- India, Hb D-Iran, Hb Lepore, Hb Saurashtra and other rare abnormal hemoglobins in both homozygous and in single and double heterozygous conditions.
3. There should be publications (in reputed journals) to show the system can detect rare hemoglobin variants.
4. The system should have the provision of presumptive identification of Hb Barts and Hb H and various alpha chain variants like Hb J Meerut, Constant Spring etc.
5. The system must have installation in other diagnostic labs in India (expected at least more than 50) doing Thalassaemia and Haemoglobinopathy of which there should be at least 20 installations in NABL or CAP accredited Laboratories for thalassemia and hemoglobinopathies screening and should be able to provide the relevant product and service support.
6. The company must have at least 10 years of presence in India with availability of system & reagents for thalassemia and haemoglobinopathies testing. And must have users for Haemoglobinopathies for a minimum of the last 7 years.
7. A minimum of 15 customer satisfaction certificates from Government as well as private lab should be provided.
8. The HPLC system should have a dual piston pump or similar system so that each elution buffer has a different pump and the buffers work efficiently to give a continuous and a precise buffer gradient.
9. The system should take not more than 8 mins for the screening of thalassemia and hemoglobinopathies.
10. The kit size should be a minimum of 400 tests or better so that it can be consumed well within the expiry date.
11. The system should have spinning of vacutainer or similar technology before aspiration to avoid improper sampling.
12. The system should have automatic barcode positioning and reading facility. The barcode should be able to auto align to the barcode reader. No manual intervention should be needed.
13. The system should have continuous or batch wise sample analysis with random access and sample bar code sensor or better management of samples.
14. The system should have the facility of primary tube sampling and direct dilution of the samples or better management of samples without manual intervention.
15. The system should have Tube Venting Capabilities or better management of samples so that there is no resistance caused while pulling blood from the tube which can impact the repeatability of results.
16. The system should have an automated sampler module which can accommodate a minimum of 10 sample racks together or better management. Each sample rack is barcoded and has 10 sample positions or better. The system should have a continuous loading facility during the run.
17. The system should have easy maintenance which should not incur additional cost of purchasing cleaning material or solutions.
18. The system should not require adjustment of flow rates for maintaining Retention time by the user.
19. The system should have a dedicated computer and software, which enables the system for bidirectional interfacing. Moreover, the software should have a customized reporting format, giving info on the subtype and quantity of hemoglobin detected.
20. It should have a sufficient data hard disk approx. 80GB or better, a remote data access feature when connected to LAN or Intranet.

21. The system must have software for real time viewing of the analysis of the sample.
22. Complete ready to use reagent kit must be provided with buffers in plastic tanks etc for monitoring of all reagents and buffers where all the reagent levels can be viewed onscreen or similar aiding to operator convenience
23. The system should have an inbuilt system check facility which checks that all the system parameters (eg, cartridge, buffer, reagent, waste etc.) are ready before the sample analysis.
24. The buffers must be provided in proper tanks to view the levels of buffers during the run or better management of buffers. Also there should be a system which monitors liquid volume by weight and an alarm is generated by software if the buffer reduces than the set volume.
25. It should have an offline CD-ROM and an online chromatogram library which should be a searchable database with more than 400 chromatograms of fully classified abnormal hemoglobins and thalassemias along with their clinical and molecular classification. Also, a hard copy of most commonly occurring hemoglobin variants and thalassemias seen in India as a quick guide should be provided.
26. The HPLC system must be used by the government. Thalassemia screening programs in India and a minimum of 15 Govt user list of the thalassemia kit should be provided. Minimum 5 publications should be provided to understand that the system has been used in the screening programs in India.
27. The system should have an on board QC Menu capable of storing the quality control data and printing the standard deviation, Coefficient of Variation values and LJ chart.
28. The company should provide normal and abnormal third party controls for Hb A2, Hb F and Hb S and provide External Quality Assurance Scheme (EQAS) to help compare results with similar users worldwide.
29. The system should have a dedicated computer, laser printer and software, which enables the system for bidirectional interfacing. Moreover, the software should give information on the subtype and quantity of hemoglobin detected. Also, the software should enable result storage of minimum 10000 chromatograms (without any additional purchase of software). It should also have a facility to update kit parameters – calibrator values, integration parameter, lot number, expiry details of reagent etc. through a CD/USB drive or similar system.
30. The result from the machine should be presented in a symmetrical order (vertical chromatogram) with proper description of date, time of injection, sample ID, age, sex, total area count, different fractions of hemoglobins along with their quantity with flagging for out of range values and the chromatogram with each peak marked with their respective retention time for easy viewing of the result.
31. It should have a built in vacuum-based degassing system, automatic equilibration and wash procedures and have built in column thermostat for reproducibility.
32. The system should be capable of holding 80 samples or better at a time
33. The system should have in-kit external standards for instrument calibration ensuring accurate quantitation of results. The system should have minimum calibration points.
34. The system should have a polyethylene waste tank or better (preferably which can accommodate larger volume), which has a sensor to detect a 95% full tank and gives an alarm when sensor is tripped, as well as built in alarms for calibration and control failures for equipment.
35. The software should automatically keep a cartridge/column count and no manual monitoring should be required.
36. The system should be US FDA/EU CE and ISO 13485 certified.
37. The reagent containers should have a preferably larger capacity so that the user does not need to change buffers regularly.
38. The company may have optional feature of capillary collection kit for remote sample collection with sample stability at 2-8 C for 14 days
39. The company must provide support of factory trained engineers, application specialists and thalassemia experts for the technical and chromatogram interpretation related issues.
40. The HPLC system should have flexibility to use various sample tube sizes of 13x75mm, 13x100 mm micro capillary tubes, Micro capillary tubes/ sample cups. Reagents sufficient for at least 100 tests should be provided with the system, exclusively for the user's own assays and not for initial demonstration or training purposes. Furthermore, all components necessary to ensure the full functionality of the system should be included with the equipment.
41. The instrument provider should also provide training to the pathologist for working, quality control, testing, evaluation and interpretation.
42. **UPS**: The system should include an Uninterruptible Power Supply (UPS) providing a minimum of 30 minutes backup to safeguard ongoing processes against power interruptions.