



Basic Details

Organisation Chain	Department of Health Research Indian Council of Medical Research		
Tender Reference Number	B/13015/52/25-26/MEC1108		
Tender ID	2025_DoHR_812280_1		
Tender Type	Open Tender	Form of contract	Rate Contract
Tender Category	Services	No. of Covers	2
Payment Mode	Offline	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No		

Payment Instruments

Offline	S.No	Instrument Type
	1	Demand Draft
	2	Bank Guarantee
	3	As Per Tender Document

Cover Details, No. Of Covers - 2

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Technical Bid
2	Finance	.xls	Financial Bid

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	NA	Fee Payable At	NA
Tender Fee Exemption Allowed	NA		

EMD Fee Details

EMD Amount in ₹	36,000	EMD Exemption Allowed	Yes
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	Director, ICMR-NIRRH	EMD Payable At	Mumbai

Work /Item(s)

Title	B/13015/52/25-26/MEC1108				
Work Description	Tender for Cell-free RNA Sequencing including Bioinformatics Analysis				
Pre Qualification Details	Please refer Tender documents.				
Tender Value in ₹	12,00,000	Product Category	Miscellaneous Services	Sub category	Sequencing Services incl. Bioinformatics Analysis
Contract Type	Tender	Bid Validity(Days)	60	Period Of Work(Days)	365
Location	Mumbai	Pincode	400012	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	Mumbai

Critical Dates

Publish Date	12-Sep-2025 03:35 PM	Bid Opening Date	07-Oct-2025 11:00 AM
Document Download / Sale Start Date	12-Sep-2025 04:00 PM	Document Download / Sale End Date	03-Oct-2025 05:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	12-Sep-2025 04:15 PM	Bid Submission End Date	03-Oct-2025 05:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (in KB)
	1	Tendernotice_1.pdf	Tender for Cell-free RNA Sequencing including Bioinformatics Analysis	93.84

Work Item Documents				
	S.No	Document Type	Document Name	Description
				Document Size (in KB)
	1	Tender Documents	Tech-Spec-MEC1108-Sequencing.pdf	Technical Specifications
	2	Tender Documents	Terms-Conditions-Sequencing.pdf	Terms and Conditions

Tender Inviting Authority

Name	Director, ICMR-NIRRH
Address	J M Street, Parel, Mumbai 400012, Maharashtra.

Tender Creator Details

Created By	Geetanjali Sachdeva
Designation	Director
Created Date	12-Sep-2025 03:19 PM



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NATIONAL INSTITUTE FOR RESEARCH
IN REPRODUCTIVE AND CHILD HEALTH



आई सी एम आर – राष्ट्रीय प्रजनन एवं
बाल स्वास्थ्य अनुसंधान संस्थान
स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य और परिवार
कल्याण मंत्रालय, भारत सरकार

ICMR-National Institute for Research in
Reproductive and Child Health

Department of Health Research, Ministry of Health
and Family Welfare, Government of India

File No. B/13015/52/25-26/MEC1108/Dr.PallaviShukla

September 12, 2025

Subject: Tender for Cell-free RNA Sequencing including bioinformatics analysis

DUE DATE: 03rd October, 2025

Sealed tenders are invited, in Two Bid System, from reputed vendors / agencies for Cell-free RNA Sequencing including bioinformatics analysis for our Institute. If you can offer the required services, please send us your quotation in a sealed cover, super-scribed with our File Number, Due Date and Subject, so as to reach this Institute well before the above due date. While submitting your quotation the technical specifications and terms & conditions specified, may please be carefully observed. Tenders / Quotations are liable to be ignored if any of these terms and conditions are not complied with.

**Sd/-
DIRECTOR**

Technical Specifications for Cell-free RNA sequencing including Bioinformatics Analysis

1. **Technology to be used:** PacBio ONSO sequencer (PacBio ONSO sequencing by binding chemistry)
2. **Application:** Cell-free RNA sequencing
3. **Sample Type:** Human plasma sample in Trizol, ~1mL
4. **No. of samples:** 40
5. Extraction of cell free RNA from plasma samples should be done by vendor. Quality check of samples should be done in house by bidder using i) Absorbance at 260 and 280 nm for purity, ii) fluorimetric method such as Qubit to quantitate sample and iii) Evaluation of RNA integrity on Tapestation/ Bioanalyzer. An RNA QC report to be shared and discussed before library preparation. Bidder must provide information on make model and serial number of instruments used to prepare the report.
6. **Library preparation** should be done using a Smarter pico mammalian input kit with ribodepletion or any other compatible low-input library preparation method.
7. Sequencing should be done on PacBio ONSO platform using 150x2 chemistry to generate 40 million paired end reads per sample reads corresponding to 12 GB data per Sample. PCR duplicates in the cleaned data should be <2% with no barcode hopping, no optical duplicates. >96% of total data should be Q40+ Phred score.
8. The data alignment metrics should be consistent with best practices for RNA-seq data analysis. Details of parameters used for alignment and software details, statistics report detailing coverage, orientation of mapped reads and number of unmapped reads should be provided. Vendor must provide workflow of RNA-seq sample processing and data analysis for technical evaluation.
9. Leftover RNA samples should be returned to ICMR-NIRRH, Mumbai free of cost
10. **Duration of samples to be sent for sequencing:** As per sample availability
11. **Bioinformatics analysis should include entire analysis as below:**
 1. Primary Statistics report – detailed QC results
 2. Read statistics reports, total reads, total bases, Q40>90%
 3. Average base content per read
 4. GC content distribution of reads
 5. Read length distribution
 6. Insert size distribution
 7. Adapter content
 8. PCR duplication rate
 9. Sequence quality score distribution, base quality score distribution
 10. Alignment statistics report
 11. Kmer counts
 12. Gene/Transcript wise expression matrix across all samples
 13. Gene/Transcript annotation results (Gene Ontology - GO level distributions of genes covering biological processes, cellular components and molecular analysis & Pathway analysis)
 14. DGE reports should be provided (Log2FC +/- 1 provided as standard threshold)
 15. Heatmap of up and down-regulated transcripts, Bubble plot-enrichment analysis, correlation plot, GEO pathway-specific map, Network analysis and also for target genes.

16. RAW data, BAM, SAM and count files should be provided
17. Analysis of differential expression of mRNA and lncRNA
18. Groupwise comparison to understand differential gene expression between cases and controls.
19. Alternative splicing events and fusion of transcripts needs to be shared
12. Report with methodology, results and references should be provided.
13. The company should have good experience/ record in conducting such experiments should have good experience/record in conducting such experiments before with proof of publications, purchase order and satisfaction certificate given in writing.
- 14. Vendor should have in-house sequencing facility of PacBio ONSO in the company and certification from PacBio Onso installation must be provided by the vendor in bidder's company name and certification will be considered more competent than others without certification.**
15. Proof of lab facility: PacBio ONSO installation certificate in company should be provided. Partner/collaborator company installation certificate located in India or abroad will not be considered.
16. **Samples should not be sent out of India.** All sample processing and analysis must be done in India.
17. Bidder should transport plasma sample with appropriate freezing temperature and must commit to use declared shipping/ logistical partner. The Bidder must disclose make, model and serial number of freezer with temperature capacity to be used for the same.
18. NGS work orders from any institute for human RNA sequencing should be attached along with quotation. MSMEs does not require to attach the same.
19. Quotation should be on firm's letter head with GST Number, PAN Number and CST Number mentioned clearly and should include sample transport charges. No sample transport charges will be paid separately. Any Repeat sample has to be taken without transport charges.
20. Establishment of firm: Firm should be established in India a minimum 5-6 years before with NGS lab and experience in handling NGS projects and successful completion (Testimonial should be provided). Please provide establishment of firm certificate along with tender docs.
21. Data (raw and analysed including all graphs) should be delivered through a secured server & HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs. All cost of data delivery including hard disc should be included in the financial quote.
22. Data confidentiality disclosure statement must be signed with the client specifying no data generated would be used for training, commercial purposes including foreign/domestic partners. To maintain data confidentiality, firm should not write data in CDs/DVDs
23. The vendor should be available for in-person/online meetings when required by the client within 24 hours of request, especially during all discussion of reports. Also, vendor site should be available for end user visit (if deemed necessary by end user) within 24 hours of request following any issue related to sample storage, QC or sequencing. Bidder must provide details including names, designation and qualification of technical team that will be available and committed to discussing each issue.
24. The vendor should be prepared to and disclose strategy to improve quality of samples that fail QC with mutually agreed (with client) additional cost
25. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 6 weeks.
26. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.
- 27. MSME certificate should be attached along with quotation.**
28. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration.
29. Director NIRRH reserves the right to accept/ reject any or all bids without assigning any reason

Data delivery deadline: Sample cell free RNA QC report should be submitted within 15 days after receiving the samples. If not, it will be considered as QC passed and liability for quality and timely delivery of data will lie with the vendor. Raw FastQ file, Clean FastQ file and other quality and parameter files mentioned above (at 1) should be delivered within 30 days after sample QC completed. All data analysis with above mentioned tools should be delivered within maximum 45 days after sample qc check is completed.

Mandatory Conditions

PacBio ONSO installation certification should be attached with the quotation.

Penalty clause: If data does not fulfil the above-detailed criteria, the data will not be accepted and payment will not be made and order will be cancelled. If timely delivery of data is not done, penalty will be applied both in the case of raw data and analyzed data. in case of late delivery of raw and/analyzed data 0.01% of total cost will be deducted for delay of every day and delay of more than 30 days will lead to the cancellation of the order. Vendor does not follow the above mentioned detailed criteria, the institute/Lab has the full right to cancel the order at any time. In that case no payment would be made.



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File No. B/13015/52/25-26/MEC1108/Dr.PallaviShukla

September 12, 2025

Subject: Tender for Cell-free RNA Sequencing including bioinformatics analysis

DUE DATE: 03rd October, 2025

TERMS & CONDITIONS:

1. Sealed Tenders / Quotations are to be submitted in Two Bid System; One Cover with Technical Bid and another with Financial Bid. Both these envelopes should be submitted in one big envelope. The envelope should be super-scribed with File Number, Subject and Due Date. The said sealed tender should reach Director, ICMR-National Institute for Research in Reproductive and Child Health, Jehangir Merwanji Street, Parel, Mumbai 400012, Maharashtra, **latest by 05.00 PM on 03.10.2025. The tenders will be opened on 07th October, 2025 at 11.00 AM.**
2. The successful tenderers will have to submit **Earnest Money Deposit (EMD)** in the form of Demand Draft / Bank Guarantee in favour of Director, ICMR-NIRRCH, for **&36,000.00 (Rupees Thirty Six thousand only)**. The said EMD will be refunded / returned to unsuccessful bidders within 30 days from award of contract. The vendors eligible for exemption from payment of EMD may please submit documents supporting their eligibility for exemption from payment of EMD. Tender without EMD / Exemption eligibility document, will be summarily rejected.
3. The successful bidder will have to submit Security Deposit of **&60,000.00 (Rupees Sixty thousand only)** which will be retained for 60 days beyond the date of completion of services.
4. Security Deposit is subjected to be forfeited, if the successful bidder fails to deliver services as per the requirement of the contract order.
5. The Director, ICMR - NIRRCH, reserves the right to call for break-up of the quotation if it is found necessary. Incomplete specifications offered by the tenderer(s) will not be considered and are liable to be rejected.
6. The offers should be kept valid for acceptance for a period up to 30th November, 2025.
7. The payment will be arranged as per existing Government of India Rules and Regulations.
8. The prices quoted shall be firm for the duration of contract period. The tendered price should be quoted as the basic cost, without taxes and duties which may be indicated separately.
9. Conditional offers will not be accepted and liable to be rejected without any further reference.

10. The Director, ICMR-National Institute for Research in Reproductive and Child Health (NIRRCH), Mumbai reserves the rights to accept or reject any lowest tender in full or in part of any tender or all tenders without assigning any reasons and cancel the tender at any stage of the tender process.
11. No infrastructure, machineries, vehicles, will be provided by the ICMR-NIRRCH. The interested agencies should have the requisite infrastructures machineries, vehicles, and qualified personnel.
12. ICMR-NIRRCH reserves the right to cancel the contract agreement or to withhold the payment (which may be deemed fit according to situation) in the event of non-commencement or unsatisfactory performance of the work contract. In such eventuality the institute further reserves the right to get the work done from open market or through other agencies. In such cases, vendor/agency will be blacklisted for a period of 2 years from participating in such type of tender floated by the institute and their earnest money/security deposit will be forfeited.
13. The bidder/agency selected through this tender shall indemnify the institute against all other damages/charges and expenses for which the institute may be held liable to pay on account of the negligence of the bidder or his employees or any person under his control whether in respect of accident, injury to the person or damages to the property of any member of the public or any person or in executing the work or otherwise and against all claims and demands thereof.
14. If any information furnished by the bidder is found to be incorrect at any time, the contract is liable to be terminated without any notice and the security deposit is liable to be forfeited by the institute.
15. The bidder shall comply with the labor laws applicable and this Institute shall not be responsible for any litigation/default from agency side.
16. No escalation of rates quoted will be allowed during the period of contract. The agency will honor the Fall Clause in case it provides services at a reduced rate in any other establishment.
17. The agency/bidder shall not engage any sub-contractor or sublet/transfer the contract to any other agency/person in any manner.
18. Terms of Payment: As per Government of India extant rules. No Advance Payment will be made.
19. After due evaluation of the bid, Institute will award the contract to the responsive Bidder who has quoted the lowest average price for the services to be rendered.
20. The Bidder should not have been banned / de-listed / black listed / debarred from business by Government of India or any State Governments of India.
21. The Bidder shall bear all costs associated with the preparation and submission of his bid, and the Purchaser will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.
22. The successful bidder should undertake to extend the validity of the Bank Guarantee, if offered as security deposit and performance guarantee, in case, the tendered work is delayed beyond the validity period of the Bank Guarantee.

23. Any of the disputes if arise between the Supplier/Tenderer and the NIRRH/ICMR shall be resolved by the sole arbitrator which will be appointed by mutual consent of both the parties thereof failing which one of the Director of other Institute of ICMR in Mumbai (NIIH or NIV) shall be appointed within 30 days from the date of cause of action of dispute and the award as may be given by the sole arbitrator shall be binding on both the parties within the Civil Jurisdiction of Hon'ble High Court of Bombay.