आईसीएमआर- प्राकृतिकअनुसंधानकेलिएराष्ट्रीयसंस्थान/
ICMR-National Institute for Pre- Clinical Research,
जीनोमघाटी, तुरकापल्ली/ GENOME VALLEY, TURKAPALLY- 500101

No. ST/NIPCR/Outsourcing of Transcriptomic analysis/NHP/P115/2026-27

Date: -06.10.2026

Limited Tender Enquiry forOutsourcing of transcriptomic analysis of purified liver biopsy RNA samples from rhesus macaques

Name of the Procuring Entity_____

Firm's Reference		Date	
Firm Registration No. (if any)		PAN (Attach Photocopy)	
TIN/GST No.		Address	
Phone		Enquiry No. and Date	ST/NIPCR/Outsourcing of Transcriptomic analysis/ NHP/P115/2026-27,Dated 06.10.2026
Fax		End date for submission of Tender	27.10.2026, 5:00 PM
Email			
M/s			

All prospective bidders are requested to submit their tenders (on their company letter head only) on or before 5:00 PM in a sealed cover clearly marked title at the top as **No. ST/NIPCR/Outsourcing of Transcriptomic analysis/ NHP/P115/2026-27, Dated 06.10.2026** with end date as **27.10.2026**, and the complete address of the bidder including email Id and contact number. The sealed tender may be submitted by post, courier. Tenders received without mentioning the Enquiry/Tender Number or with incomplete tender details shall be rejected. No tenders shall be accepted after the due date and time specified in the tender notice. Further, no intimation will be issued to the rejected, disqualified, or unsuccessful bidders. Only the successful bidder (L1) will be informed through a Purchase Order after evaluation.

As per the **ICMR–NIPCR procedure** for resolving cases where multiple bidders quote the same L1 rate, the following **tie-breaking criteria** have been applied:

1. **Past Performance / Experience:**

   Preference is given to the bidder who has previously supplied similar items to ICMR or other Government institutions, supported by a copy of the recent Purchase Order (PO).

2. **Annual Turnover:**

   If the performance records are comparable, preference is accorded to the bidder having a higher average annual turnover during the last three financial years, as per documentary proof (audited balance sheet or CA certificate).

Documents Required

1. **Price tender:**
    - The price tender must include **all the items** listed in the schedule.
    - **Partial tenders** will be **rejected at the initial stage**.
2. **Past Performance / Experience Certificate:**
    - Bidders shall submit copies of **previous Purchase Orders (POs)** or **Performance Certificates** for the **same or similar items** supplied to ICMR or other Government institutions.
3. **Annual Turnover Certificate:**
    - Bidders shall provide an **Annual Turnover Certificate** for the **last three financial years**, duly certified by a Chartered Accountant, along with the **relevant financial documents** (audited balance sheet or profit & loss statement).

Yours Sincerely,

Senior Administrative Officer

Tender Schedule: All Rates in Figures and Words in Rupees

Sl. No	Description and Specification	Qty	Unit	Delivery Terms	Rate per Unit	Taxes & Duties	Packing/ forwarding	Total Rate per Unit	Total Value
1.	Outsourcing of transcriptomic analysis of purified liver biopsy RNA samples from rhesus macaques	30	Samples	45 days for each batch					

1. Any addendum/Corrigendum date extension in respect of above Tender shall be issued on our official website https://nipcr.icmr.gov.inonly. The bidders are therefore requested to regularly visit above websites to keep themselves updated.
2. The address and contact details for sending tender documents / tender's areas under:

   The Director,

   ICMR-National Institute for Pre- Clinical Research,

   Genome Valley, Kolthur P.O, Shamirpet,

   Hyderabad – 500101,

   Ph.: 040 -23480808/ 23480800.

   Mail Id's- **sostores-narfbr@icmr.gov.in**, **pramod.mini@icmr.gov.in**

*** Important Notes:**

Scope of work: Transcriptomic Analysis of Macaque Liver Biopsy Tissue

1. Scope of work

The bidder shall provide end-to-end bulk RNA sequencing (RNA-seq) and transcriptomic analysis of macaque liver biopsy tissue, including: Tissue processing, RNA extraction, RNA QC, library preparation, sequencing, bioinformatics, differential expression, and pathway analysis.

2. Sample details

Parameter	Specification
Sample type	Liver biopsy tissue
Species	*Macaca mulatta* (Rhesus macaque)
Number of samples	Up to 30 biological samples, submitted in staggered batches (every 3 months, upto 7 batches).
Biological replicate	Each individual macaque shall be treated as one biological replicate.
Sample processing	RNA extraction, RNA QC, library preparation, sequencing and bioinformatics shall be performed by the service provider.
Sample preservation	Samples shall be submitted in an appropriate frozen/preserved condition suitable for RNA extraction.

Biological replicates should be maintained as independent samples throughout the workflow; technical replication should not substitute for biological replication.

3. RNA extraction and quality assessment

- Total RNA shall be extracted by the service provider from the submitted liver biopsy tissue using a validated RNA extraction method.
- DNase treatment shall be performed where required to minimize genomic DNA contamination.
- RNA concentration shall be determined using Qubit or an equivalent fluorometric method.
- RNA purity shall be assessed using appropriate spectrophotometric measurements.
- RNA integrity shall be assessed using Agilent Bio analyzer, Tape Station, Fragment Analyzer, or equivalent.
- RNA QC results shall be provided for each sample before library preparation.
- Samples failing the agreed QC criteria shall be reported to the PI/project representative before further processing.

Acceptance criteria

Parameter	Requirement
RNA integrity	RIN/RINe $\geq$7.0
RNA input	As required by the selected validated library kit
RNA concentration	Qubit or equivalent
RNA purity	Suitable for RNA-seq library preparation
Genomic DNA contamination	Within acceptable limits for the selected library protocol

4. Library preparation

- Stranded mRNA-seq library preparation with poly(A) enrichment shall be preferred for high-quality liver RNA when the primary objective is protein-coding transcriptome profiling.
- Stranded total RNA-seq with rRNA depletion may be used when RNA quality is reduced or when broader transcriptome/non-coding RNA profiling is required.
- Library preparation shall use a validated commercial protocol.

- Library size distribution and quality shall be assessed using Bioanalyzer, TapeStation, Fragment Analyzer, or equivalent.
- Libraries shall be appropriately quantified prior to sequencing.

5. Sequencing platform

Parameter	Requirement
Platform	Illumina NovaSeq 6000 or NovaSeq X Seriesor equivalent high-throughput platform
Platform experience	The service provider shall have demonstrated experience of at least one year in operating/handling Illumina NovaSeq 6000/NovaSeq X Series instruments and shall provide documentary evidence of such experience.
Read configuration	Paired-end, 2 × 150 bp (PE150)
Target output	≥45 million read pairs/sample
Minimum acceptable output	≥40 million usable/aligned read pairs/sample, unless otherwise justified
Base quality	≥85% bases at Q30 or higher
Sequencing details	The bidder shall specify the sequencing platform, chemistry and sequencing output in the technical quotation.

6. Primary bioinformatics analysis

The service provider shall perform:

- FASTQ generation and demultiplexing.
- Adapter and quality trimming, where required.
- FastQC and MultiQC or equivalent QC.
- Alignment to the current validated Macaca mulatta reference genome and annotation.
- Reporting of total, mapped and uniquely mapped reads.
- Gene-level expression quantification.
- Raw gene-count matrix generation.
- Normalized expression matrix generation.
- Sample-level QC, correlation and clustering.

The reference genome assembly and annotation version must be explicitly reported.

7. Differential gene-expression analysis

The service provider shall perform:

- Gene annotation and expression quantification.
- Appropriate count normalization.
- Sample-level QC and correlation analysis.
- Differential gene-expression analysis using DESeq2, edgeR, limma-voom, or an equivalent validated method.
- Appropriate statistical modelling of experimental groups.
- Assessment and correction/accounting for batch effects and relevant biological covariates, where applicable.
- Multiple-testing correction.

DEG reporting criteria

- FDR-adjusted P value <0.05
- $|\log_2$ fold change$| \geq 1$, unless otherwise specified by the PI based on the study design.

The final report shall provide effect size, statistical significance and adjusted P values, rather than

relying on fold-change alone. Biological replicates and relevant sources of technical/biological variation must be incorporated into the analysis.

8. Functional and pathway analysis

The service provider shall perform, as applicable:

- GO enrichment
- KEGG pathway analysis
- Reactome pathway analysis
- GSEA
- MSigDB Hallmark analysis

Specific interpretation shall include MASLD/MASH-relevant pathways:

- Lipid and fatty-acid metabolism
- Insulin signalling
- Oxidative stress
- Mitochondrial function
- Inflammation/immune response
- Fibrosis and extracellular-matrix remodelling
- Ferroptosis
- Autophagy

9. Data visualization and QC

The final report shall include, as applicable:

- PCA
- Sample correlation matrix
- Hierarchical clustering
- Expression heatmaps
- Volcano plots
- MA plots
- GO/KEGG/Reactome enrichment plots
- GSEA plots
- Sequencing and alignment QC plots

10. Advanced transcriptomic analysis

The following shall be performed where applicable and supported by data quality:

- Transcript/isoform-level quantification
- Alternative splicing analysis
- GSVA/ssGSEA
- WGCNA/co-expression analysis
- Human ortholog-based translational pathway analysis

Immune-cell deconvolution shall be considered exploratory and performed only where a validated macaque-appropriate reference/signature is available.

11. Deliverables

The bidder shall provide:

i. Raw sequencing data (FASTQ).
ii. FastQC/MultiQC reports.
iii. Trimmed FASTQ files, where applicable.
iv. Alignment files (BAM) and alignment statistics.
v. Raw gene-count matrix.

vi. Normalized expression matrix.
vii. Gene annotation table.
viii. Differential-expression results in Excel/CSV format.
ix. GO, KEGG and Reactome analysis reports.
x. GSEA/MSigDB analysis reports.
xi. PCA, clustering, heatmaps, volcano and MA plots.
xii. RNA and library QC reports.
xiii. Complete sequencing summary.
xiv. Comprehensive bioinformatics report.
xv. Complete documentation of reference genome/annotation, software versions, parameters and analysis workflow/scripts.

12. Data Submission and archiving

- All raw and processed data shall be provided through a secure cloud-transfer system or external hard drive.
- The PI/project team shall receive unrestricted access to the complete sequencing and analysis dataset.
- The bidder shall provide technical assistance for NCBI SRA submission, including BioProject, BioSample and SRA metadata preparation.

13. Technical Eligibility

The bidder should:

- Demonstrate experience in bulk RNA-seq and transcriptomic bioinformatics.
- Have access to a suitable high-throughput sequencing platform.
- Demonstrate experience with mammalian/liver transcriptomic datasets; experience with non-human primates/macaques is preferred.
- Follow documented laboratory and bioinformatics QC procedures.
- Provide technical support for interpretation of results.

The bidder shall:

- Repeat sequencing at no additional cost when agreed sequencing QC specifications are not achieved because of a technical failure attributable to the service provider.
- Provide reasonable post-analysis technical support.
- Provide hands-on training in transcriptomic data analysis and interpretation to designated project personnel.
- Maintain confidentiality of biological samples, sequencing data and metadata.
- Document all software, versions, reference databases, parameters and analysis procedures used.

Item/Tender Specific Conditions of this Tender:

I/ we engage to supply the material(s) to your office and comply with the following:

1. Tender schedule and technical specification indicated.
2. Item/tender-specific conditions for this tender.
3. Terms and conditions printed overleaf.
4. General conditions of contract signed by me at the time of supplier registration (for registered suppliers).
5. I/we confirm that set off for the ED, GST, etc. Paid on the inputs have been taken into consideration in the above quoted price and further agree to pass on such additional duties as sets offs as may become available in future underGST, etc.
6. This offer is valid for 90 (ninety) days from the date of opening of the tender.
7. That we have not been debarred by any Government/Undertaking.
8. Thatthe rates quoted are not higher than the rates quoted for the same item to any Government/Undertaking.
9. That the bid submitted by us is properly sealed and prepared to prevent any subsequent alteration and replacement.

Signature & Seal
Place & Date:

Name of Authorized
Signatory:

Address:

Tel. No./ Fax. No./
Mobile No. Email Id:

TERMS AND CONDITIONS OF LIMITED TENDER

1. The quotation must be in the form furnished by procuring entity and should be free from corrections/erasures. In case there is any unavoidable correction it should be properly attested. If not, the quotation will not be considered. In case there is any unavoidable correction it should be properly attested. If not, the tender will not be considered. Tender written in pencil will not be considered.
2. The samples shall be collected in staggered manner and the invoice shall be submitted periodically alongwith satisfactory report by the User-Scientist. The payment shall be settledaccordingly.
3. Quotation will be opened on due date at 5.00 pm at the indicated venue in presence of the bidders or their representatives who wish may to be present.
4. Any clarifications regarding the tender may be sought through the email IDs provided above, mentioning the tender number in the subject line.
5. The Director ICMR-NIPCR reserves the right to accept the offer by individual items and reject any or all tenders without assigning any reason thereof and does not bind itself to accept lowest tenders.
6. Participation in this tender is by invitation only and is limited to the selected procuring entity's registered suppliers. Unsolicited offers are liable to be ignored. However, suppliers who desire to participate in such tenders in future may bring it to the notice of procuring entity and apply for registration as per procedure.
7. Manufacturer's name and country of origin of materials offered must be clearly specified. Please quote whether your organization is large scale industry or small-scale industry. If you have UAM Certificate, please attach it to the tender. Mention your registration details.
8. Shelf life of the product should be minimum 12 months (where applicable).
9. The prices quoted should be firm till the supplies are completed. Please quote the rates in words and figures. Rates quoted should be free delivery at destination including all charges otherwise the tender is likely to be rejected. Prices quoted for free delivery at destination will be given preference. If there is no indication regarding the FOR, in the tender, then it will be considered as FOR destinations. Price quoted should be net and valid for a minimum period of one year from the date of opening of the tender.
10. Payment of GST is primarily the responsibility of the seller and will not be paid unless the percentage value is clearly mentioned in the tenders. If no indication regarding GST is recorded in the tender, the GST will be considered as included.
11. If the deliveries are not maintained and due to that account Procuring Entity is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained thereby will be recovered from the defaulting supplier.
12. Dispute clause: Any dispute relating to the enquiry shall be subject to the jurisdiction of the court at Hyderabad only.
13. Payment shall be made only after supply of the items in good condition along with satisfactory report received by concerned Division Head.
14. The Bill should be submitted inclusive of applicable GST as per the latest GoI notification.
15. This payment is subject to recoveries, if any, either on account of statutory deduction/ taxes/ Liquidated Damages, if any and non-rectification of defects/ deficiencies not attended by the Supplier or otherwise. The firm is required to submit the following documents to Stores, ICMR NIPCR for payment:
    a. Invoice in original showing contract number, goods description, quantity, unit price and total amount.
    b. Acknowledgement of Receipt of Goods issued by the consignee.
    c. Satisfactory report received by concerned Division Head.
16. **No advance payment will be made for the supplies**.
17. Institute reserves the right to ask the bidders to submit any other supportive documents / clarifications if any require and right to reject/cancel any or all the bid at any time without assigning any reason, thereof. Any inquiry after submission of the bid will not be entertained.
18. The firm should be legally eligible for submitting tender.
19. If any participant withdraws from the tender after submission of their bid, the firm will be blacklisted from participating in future tenders of ICMR-NIPCR.

Appendix -1

Certificate for Tender
(To be given on Company Letter Head)

Bid Number :_____

Dated :_____

To,
The Director,
ICMR-National Institute for Pre- Clinical Research,
Genome Valley, Kolthur P.O, Shamirpet,
Hyderabad- 500 101.

Sub: Certificate of compliance as per Rule 144 (xi) GFR's 2017

Name of Tender / Work: _____

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares land border with India; I certify that this bidder is not from such a country or, if from such a country has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Appendix -2

Pledge to abide by all the terms and conditions mentioned in the Bid Document

Bid Number : _____

Dated : _____

To,
The Director,
ICMR-National Institute for Pre- Clinical Research,
Genome Valley, Kolthur P.O, Shamirpet,
Hyderabad- 500 101.

Sub.: Pledge to abide by all the terms and conditions mentioned in the Bid Document

Dear Sir,

We / I, _____ (Name of bidder / bidding agency / Firm) _____ (bidding agency / Firm type) located at _____.

I pledge that I have read all the conditions/rules/terms and conditions mentioned in the above referred bid document and I agree to abide by them. I approve and agree that the decision of The Director, ICMR-National Institute for Pre-Clinical Research is final and I will not complain or dispute with their decisions.

The rates filled by me are filled after complete understanding and consideration and shall be bound to it. I approve and abide with all the above stated conditions.

For, _____
(Name of the bidder / bidding agency)

_____

(Authorized signatory)

_____

(Stamp of the bidder / bidding agency)