## **TECHNICAL EVALUATION REPORT (SUMMARY)**

1. Name of Procuring Agency:University of Health Sciences Lahore2. Method of Procurement:Single Stage two Envelopes3. Title of Procurement:Procurement of Laboratory Equipment under PHEC Project of IBAHS Department, University of Health Sciences Lahore4. Tender Inquiry No:UHS/Pur/1605/20225. Date & Time of Bid Closing:19-07-2022 at 11:00 AM6. Date & Time of Bid Opening:19-07-2022 at 11:30 AM7. No. of bids received:07

## Research Project PHEC/ARA/PIRCA/20487/19 entitled "Investigating the Genetic Landscape of Acute Lymphoblastic Leukemia"

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Equipment	Quantity • 500ml	WWS	MBP	BRIOGENE	BIOSPHERE	PAK HOSP	RESEARCH TIME	ABO
Ficoll (Histopaque)	<ul> <li>Composition: Polysucrose and sodium diatrizoate</li> <li>Appearance: Clear and colorless</li> <li>pH 8.8-9.0</li> <li>Sterile</li> <li>Endotoxin free (&lt;= 3 EU/ml)</li> <li>Density at 25°C = 1.076 - 1.078 g/cm3</li> <li>Should enable enrichment of at least 90% momonuclear cells/total cell count</li> <li>Should enable cell viability of at least 85%</li> <li>Sigma/Invitrogen or equivalent</li> </ul>	Qualified	Not Quoted	Not Quoted	Qualified	Not Qualified: Solid medium quoted instead of liquid	Qualified	SCIENTIFIC Not Quoted
DNA extraction Kit	<ul> <li>200 samples</li> <li>Should be capable of recovering genomic and mitochondrial DNA sized fragments &gt; 50 kb as well as parasitic, microbial, and viral DNA if present.</li> <li>DNA binding capacity of the column = at least 25 µg.</li> <li>Purified DNA yield of 1-7 µg DNA per mg tissue or 100µl blood sample.</li> <li>Purified DNA should be compatible with sencitive downstream applications such as qPCR, DNA-sequencing, arrays, DNA methylation analysis and NGS.</li> </ul>	Not Qualified: DNA isolation from Virues not covered, isolated Frgment size is >30 kb instead of >50 kb. DNA yield less than required and column binding capacity is not specified	Qualified	Qualified	Not Qualified: DNA isolation from Virues not covered, isolated Frgment size not specified. DNA yield less than required	Not Qualified: DNA isolation from Virues not covered, isolated Frgment size is >30 kb instead of >50 kb. DNA yield less than required and column binding capacity is not specified	Not Qualified: DNA isolation from Blood sample and Viruses not covered, and isolated Frgment size and column binding capacity are not specified.	Not Quoted
rizol reagent	<ul> <li>Molecular biology grade</li> <li>100ml</li> <li>In brown glass bottle</li> <li>Sterile, RNase, DNase free.</li> <li>Invitrogen or equivalent</li> </ul>	Qualified	Not Quoted	Not Quoted	Qualified	Qualified	Qualified	Not Quoted
icrocentrifuge tubes .5ml)	<ul> <li>Pack of 500</li> <li>Polypropylene material</li> <li>Sterile</li> <li>DNase, RNase free</li> </ul>	Not Qualified: Sterility and DNAse, RNAse	Not Qualified: Sterility status is not mentioned.	Not Quoted	Not Qualified: Multiple brands quoted.	Qualified	Qualified	Not Quoted

	<ul> <li>Chemical resistant</li> <li>Able to withstand 30,000×g centrifugal force</li> <li>With Safe lock lid.</li> <li>Autoclavable</li> <li>Eppendorf /Corning/Axygen equivalent</li> </ul>	free and chemical resistant status is not mentioned.	Cannot withstand 30,000×g centrifugal force					
Microcentrifuge tubes (2ml)	<ul> <li>Pack of 500</li> <li>Polypropylene material</li> <li>Sterile</li> <li>DNase, RNase free</li> <li>Chemical resistant</li> <li>Able to withstand 30,000×g centrifugal force</li> <li>With Safe lock lid.</li> <li>Autoclavable</li> <li>Eppendorf /Corning/Axygen equivalent</li> </ul>	Not Qualified: Sterility and DNAse, RNAse free and chemical resistant status is not mentioned.	Not Qualified: Sterility status is not mentioned. Cannot withstand 30,000×g centrifugal force	Not Quoted	Not Qualified: Multiple brands quoted	Qualified	Qualified	Not Quoted
1000ul Pipette Filter tips	<ul> <li>Packed in boxes</li> <li>Carton of 10 boxes with 96 tips per box</li> <li>Sterilized and nuclease free</li> <li>Compatible with routine micropipettes e.g. Gilson/Eppendorf</li> </ul>	Qualified	Qualified	Not Quoted	Not Qualified: Multiple brands quoted	Qualified	Qualified	Not Quoted
200ul Pipette Filter tips	<ul> <li>Packed in boxes</li> <li>Carton of 10 boxes with 96 tips per box</li> <li>Sterilized and nuclease free</li> <li>Compatible with routine micropipettes e.g. Gilson/Eppendorf</li> </ul>	Qualified	Qualified	Not Quoted	Not Qualified: Multiple brands quoted	Qualified	Qualified	Not Quoted
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Laboratory gloves	<ul> <li>Box of 100 pairs</li> <li>Nitrile material</li> <li>Powdered free</li> <li>Small and Medium cize</li> </ul>	Qualified	Not Quoted	Not Quoted	Qualified	Qualified	Qualified	Not Quoted
Qubit RNA HS kit	<ul> <li>100 reactions</li> <li>Assay: RNA Quantification, high sensitivity</li> <li>Detection Method: Fluorescent</li> <li>Quantitation Range: 4 - 200ng</li> <li>For Use with: Qubit Fluorometer</li> <li>Shipping Condition: Room Temperature</li> <li>Thermoscientific equivalent</li> </ul>	Qualified	Not Quoted	Not Quoted	Not Quoted	Qualified	Not Quoted	Not Quoted
RNA Sequencing	<ul> <li>Library preparation: Kit based mBNA enrichment and rBNA removal</li> <li>NGS format: 150bp paired-end sequencing</li> <li>Choice of sequencing depth: standard (-30x)</li> <li>Sequencing Quality Standard: ≥30 Million reads per sample</li> <li>Bioinformatics analysis: Standard including         <ul> <li>Quantitative expression profiles</li> <li>Alternative splicing analysis</li> <li>Time series analysis</li> <li>Pathway enrichment analysis</li> <li>Hierarchical clustering analysis</li> <li>Protein-Protein Interaction (PPI) analysis</li> <li>Gene ontology analysis</li> </ul> </li> </ul>	Not Qualified: No specifications are given	Not Quoted	Qualified	Qualified	Qualified	Not Quoted	Qualified

Or

	<ul> <li>Output data storage and delivery:         <ul> <li>Cloud-based data storage and delivery system</li> <li>Reports and output data should be delivered in industry standard FASTQ, BAM and Excel formats with publication-ready tables and figures. BGI/Macrogen/Illumina equivalent</li> </ul> </li> <li>Library preparation: PCR or PCR-free library</li> <li>NGS format: 150bp Paired end sequencing</li> <li>Sequencing depth: standard (~30x)</li> <li>Sequencing Quality Standard: Guaranteed ≥80% of bases with quality score of ≥Q30</li> <li>Bioinformatics analysis: Standard including</li> </ul>							
Whole genome sequencing	<ul> <li>Filtering         <ul> <li>Alignment</li> <li>SNP calling and annotation</li> <li>SNP validation and comparison</li> <li>SNP functionality and conservation prediction</li> <li>SNP Statistics per functional element</li> <li>InDel calling and annotation</li> <li>InDel validation and comparison</li> <li>InDel validation and comparison</li> <li>InDel statistics per functional element</li> <li>CNV calling and annotation</li> <li>SV calling and annotation</li> <li>SV calling and annotation</li> <li>SV calling and annotation</li> <li>Mutational Co-Occurrence analysis</li> </ul> </li> <li>Output data storage and delivery:         <ul> <li>Cloud-based data storage and delivery system</li> <li>Reports and output data should be delivered in industry standard FASTQ, BAM and Excel formats with publication-ready tables and figures.</li> </ul> </li> </ul>	Not Qualified: No specifications are given	Not Quoted	Qualified	Qualified	Qualified	Not Quoted	Qualified

All technical bid was evaluated by EndUser against the laid specifications and comparative statement (summary/detail) is being submitted to Technical committee for further necessary action.

FM34,2 Dr. Saqib Mehmood HOD IBAHS

No Complaint Shall be entertained after 07 days of display of Technical Evaluation report.

Dr. Uruj Zehra Convener

Lt.Col. ( R ). Dr. Khalid Rahim Member

Dr. Allah Rakha Member

Psepared by: Dr. Ali Amar. Osheen Safrad

