अखिल भारतीय आयुर्विज्ञान संस्थान ,रायपुर (छत्तीसगढ़)
All India Institute of Medical Sciences, Raipur (Chhattisgarh)
Tatibandh, GE Road,
Raipur-492 099 (CG)
www.aiimsraipur.edu.in

No. AIIMS/R/CS/Micro/18/55/OT

Raipur, Dtd:-29.11.2018

Corrigendum

Tender ID.No.2018_IMSRP_394316_1, Dated:11.10.2018.

With reference to above Tender ID.No., the following amendment is issued:

1.Next Generation Seguencer (NGS)

S.No.	Page no in the NIT	Existing Tender Specification	To be read as
1.	Page.No.18	Intended applications for the instrument. The system should be a single, integrated benchtop instrument capable of performing real time sequencing of DNA, PCR amplicon, cDNA, targerted RNA, micro RNA, de novo and re-sequencing of whole genome of virus, bacteria, fungi and yeast. System must also be able to perform target exome sequencing, detection of low frequency variants, full length transcript sequencing and micro RNA sequencing etc. Prepared libraries should be loaded directly onto the sequencer, and there should be no need of an ancillary system for template amplification.	Intended applications for the instrument. The system should be a single, integrated bench top instrument capable of performing real time sequencing of DNA, PCR amplicon, cDNA, targeted RNA, micro RNA, de novo and re-sequencing of whole genome of virus, bacteria, fungi and yeast. System must also be able to perform target exome or whole exome and transcriptome sequencing, detection of low frequency variants, full length transcript sequencing and micro RNA sequencing etc.
2.	Page no 18.	Clonal amplification of DNA template should be fully automated on the sequencer, without the involvement of emulsion PCR. It must provide sequence both sense and antisense strand.	Clonal amplification of DNA template should be fully automated on the sequencer or using ancillary equipment. It must provide sequence both sense and antisense strand.
3.	Page.No.18.	The chemistry should allow for highly accurate sequencing through minimum 8 homopolymeric regions.	No Change
4.	Page no 18.	The sequencing workflow should allow fully automated, walk-away operation, without user intervention, from template amplification to analyzed data on a single machine and support unattended operation for at least 300 sequencing cycles	The sequencing workflow should allow fully automated, walk-away operation, without user intervention, from template amplification to analyzed data on a single machine or by attaching ancillary systems.
5.	Page no 18.	System should generate data of around 7.5 Gb of 25 million paired end reads of high quality data passing filter.	No change
6.	Page.No.18.	NGS should generate accurate base calls and data should be error free with greater than 80% bases with high quality Q30 score at minimum 2 x 150bp read length, derived directly from intensity data and from a reference sequence.	No change
7.	Page no 18.	The system should be offered with integrated paired-end fluidics on the instrument, supported with fully automated paired-end chemistry,without user intervention.	Deleted
8.	Page.No.18.	System should be offer barcode for multiplexing.	No change.

9.	Page no.18.	The vendor must provide the basic ancillaries required to perform QC check i.e. an instrument that can perform fdregment analysis and QC check in terms of nucleic acid quality and quantity along with NGS platform.	No change
10.	Page no.18.	The system should have an option of integrating with a cloud-based computing environment, for data storage, sharing and secondary /tertiary level data analysis.	No change
11.	Page.No.18.	The sequencing chemistry should be robust and globally proven, demonstrated with at least 100 peer reviewed publications.	No change
12.	Page.No.18.	System should be accompanied by **a** work station having minimum CPU-2.6GHz or above 2 with octa core processor, RAM-32 Gb, **Storage- 2-3 Tb.** Data sharing and storage should be enabled with ease with a secure and safe environment.	System should be accompanied by either on board or additional **good reputed quality** work station having minimum CPU-2.6GHz or above 2 with octa core processor, RAM-32 Gb, Storage- 2-3 Tb. Data sharing and storage should be enabled with ease with a secure and safe environment.
13.	Page.No.18.	Should be provided with 2 KVA UPS for 1 hour backup.	No change
14.	Page.No.18.	Should have warranty of three years and CMC of five years after expiry of the warranty period.	No change
15	Page.No.19	Instrument should be supplied with initial complete set of reagents for start-up of the system for at least 100 sequencing reactions, comprising of 20 samples for viral genome, 40 samples for targeted PCR amplicons, 20 for micro RNA and 20 for 16s rRNA.	No change
16	Page.No.19	All reagents for calibration and quality control and also for initial installation and training should be supplied with the equipment.	No change
17	Page.No.19	User friendly software to analyze the sequences in the standard format of FASTA and FASTQ. All future software upgradation should be supplied free of cost within warranty period.	No change
18	Page.No.19	On-site trainings should be provided for wet lab and bioinformatics for easy understanding of function of the equipment of the equipment till the user gets confidence to run the applications on his own and later on remote support basis as and when required.	No change
19	Page.No.19	A user list to be enclosed of installations in India.	No change

2.Real Time PCR Machine

S.No.	Page no in the NIT	Existing Tender Specification	To be read as
1.	Page.No.19	Open system capable of performing both real time PCR and end point analysis.	No change
2.	Page no 19.	Peltier-based system.	No change
3.	Page.No.19.	96-well block (both for fast and standard Emulation Mode)	96 well block (Compatible to both fast and standard mode with multiplexing capability).
4.	Page no 19.	Supported volume range:10µl to 50µl.	No change
5.	Page no 19.	Filters (wide band) – Five-excitation filters,five-emission filters.	No change
6.	Page.No.19.	Excitation source- LED/ Xenone.	No change
7.	Page.No 19.	Detection: CCD/PMT.	CCD/PMT/CMOS
8.	Page.No.19.	Any periodic calibration pertaining to the optics should be taken care by the vendor at least for next 5 years.	No change.
9.	Page no.19.	Block ramp rate (at peak):≥ 5˚C	No change.
10.	Page no.19.	Temperature Range: 4˚C- 99˚C	No change.
11.	Page.No.19.	Should be factory calibrated for handling various commonly used fluorescent dyes such as SYBR Green, FAM, VIC, JOE, HEX, TET, NED, TAMRA, ROX, Texas Red,Cy3,Cy5,Quasar 670,705 and calibration for any other dye in the wavelength of 300-700nm should be possible without any addtional filter sets.	Should be factory calibrated for handling all commonly used fluorescent dyes such as SYBR Green, FAM, VIC, JOE, HEX, TET, NED, TAMRA, ROX, Texas Red,Cy3,Cy5,Quasar 670,705 etc for Real Time PCR applications for diagnosis of human infectious diseases and calibration for any other dye in the wavelength of 450-730nm should be possible without any additional filter sets.
12.	Page.No.19.	Reaction should be run in the form of plate, individual tube and tube strips with optical flat caps.	No change.
13.	Page.No.19.	Should have feature of performing relative and absolute quantitation, Melting curve analysis (at high resolution), gradient/primer optimization and multiplex-PCR,SNP analysis, dissociation curve analysis, pathogen detection and plus/minus assays etc.	Should have feature of performing relative and absolute quantitation, Melting curve analysis (at high resolution),gradient/primer optimization and multiplex-PCR up to 6 target/channels, SNP analysis, dissociation curve analysis, pathogen detection and plus/minus assays etc.
14.	Page.No.19.	Data Collection: **Standard:** Collect data for all 5 filters for all wells regardless of plate setup. Plate setup may be altered after run completes. **Expert:** Collect data for selected individual filter or group of filters for all wells regardless of plate. Plate setup may be altered after run completes.	No change
15	Page.No.19	Details of data acquisition during run for all dyes should be provided and ensured Temperature accuracy: Maximum (+/- 0.25˚ C of set point/display temperature, measured at 3 minutes after clock start).	No change
16	Page.No.19	Run Time: ~40 min (fast mode-expert), <2 hrs (Standard & emulation mode) for 40 cycles.	Run Time: ~40 min (fast mode-expert), <2 hrs (Standard) for 40 cycles.
17	Page.No.19	The software should be inclusive of Multi-componenting Algorithm designed to provide precise deconvolution of multiple dye signals in each well to ensure minimal crosstalk when using multiple fluorophores for multiplex assays.	Software should ensure minimal crosstalk when using multiple fluorophores for multiplex assays.
18	Page.No.20.	Dedicated licensed full version software for primer and probe design with	No change

		comprehensive assay design and development guidelines for quantitative and qualitative real-time assays should be provided to enable designing of custom oligo assays.	
19	Page.No.20.	Software for analysis of comparative Ct, Standard curve, relative standard curve, allelic discrimination / SNP genotyping.	No change
20	Page.No.20.	Must be supplied with laptop having features of i3 processor, 1TB hard disk with 4GB RAM, Window 10.	No change
21	Page.No.20.	Must be supplied with UPS (3KVA online UPS with 1 hour back up).	No change
22	Page.No.20.	The IQ, OQ and PQ of the instrument should be performed at the time of installation.	No change
23	Page.No.20.	**BIS/European CE-IVD/FDA certificates may be enclosed.**	**BIS/European CE-IVD/FDA certificates for In-Vitro Diagnostics must be enclosed.**
24	Page.No.20.	There should be 21CFR compliant software to get feature like security access ,auditing and e-signatures.	No change
25	Page.No.20.	Electrical specification: 200 Volts, 50 Hz.Single phase A.C.	No change
26	Page.No.20.	It should be supplied with a warranty of 3 years and CMC of 5 year after expiry of warranty period0	No change
27	Page.No.20.	**Video demonstration/submission of valid document** is required for confirmation of each of the above mentioned specification. A user list to be enclosed.	No change

3. Class II Type A2 Biological Safety Cabinet

.No.	Page no in the NIT	Existing Tender Specification	To be read as
1.	Page.No.20	EN12469/NSF 49 certified.	No change.
2.	Page.No.20	Microprocessor Control_ with temperature compensated airflow sensor for supervising all cabinets functions.	Microprocessor Control_ with temperature compensated airflow sensor for supervising all functions of cabinet.
3.	Page.No.20	Size:102 x 0.6 x 0.6 metres with Recirculation 70% & Exhaust 30%0	Size:1.2 x 0.6 x 0.6 metres with Recirculation 70% & Exhaust 30%.
4.	Page.No.20	The Biological Safety Cabinet should be individually tested, documented by serial number and validated with the Inflow/down flow velocity, PAO Aerosol challenge for filter integrity, light, noise and vibration, Airflow pattern visualization, Electrical safety.	No change.
5.	Page.No.20	Average Air Flow Velocity Inflow:0.45 m/s (90 fpm) at initial set, audible/visual alarm should activate at 0.40 m/s (80 fpm) Downflow: 0.30 m/s (60 fpm) at initial set point with uniformity of > +/- 20%.	No change.
6.	Page.No.20	Noise Level_ < 62 dBA according to EN 12469.	Noise Level_ < 62 dBA according to EN 12469/ NSF49.
7.	Page.No.20	Fluroescent Light_ Intensity At Zero Ambient:1190 Lux (>111 foot candles)	Fluroescent Light_ Intensity At Zero Ambient:1404 Lux (>130 foot candles).
8.	Page.No.20	Cabinet Construction Main Body: 1.2 mm (0.05") 18 gauge electro galvanized steel with white oven-baked epoxy antimicrobial powder coated finish. Antimicrobial coating on all painted surfaces	No change.

		to protect against surface contamination. Work Zone: 1.5 mm (0.06") 16 gauge stainless steel , type 304,with 4B finish. Interior work area formed from a single piece of stainless steel with large radius corners to simplify cleaning.	
9.	Page.No.20	ULPA filters_ with efficiency greater than 99.999% for 0.1 – 0.3 micron particulates, superior operator and product protection. The down flow & exhaust, both should be ULPA filters.	No change.
10.	Page.No.20	Advanced separators less mini-pleated ULPA filters tested to> 99.999% efficiency. It should offer ISO Class 3 air cleaning in work zone.	No change.
11.	Page.No.20	Digital read-out with alpha-numeric display should indicate all input, status and alarm functions. An administrator controlled PIN (Personal identification Number) which can be set to restrict access to main menu.	No change.
12.	Page.No.20	Blower_should be Electrically Commutated Motor (ECM).	Blower should have DC motor.
13.	Page.No.20	Night Setback mode to further reduce power consumption by 60%.	No change.
14.	Page.No.21	Ergonomics : Angled viewing window and narrow profile front grille to improve reach into the work area.Front armrest raised above the work zone to improve comfort and to ensure no airflow blockage. Negative pressure plenum should surround contaminatyed positive pressure plenum for quiet uniform airflow.	No change.
15	Page.No.21	Sash: Framless, shatterproof sash for easier cleaning and for larger, unobstructed viewing area.	No change.
16	Page.No.21	The cabinet work zone should not have welded joints to collect contaminants or rust.	No change.
17	Page.No.21	A recessed central area and stainless steel drain pan channels for preventing liquids from.	No change.
18	Page.No.21	Electrical 220-240V, AC,50Hz,1ø.	No change.
19	Page.No.21	Should be supplied with warranty of 3 years and CMC of 5 year after the expiry of warranty period.	No change.
20	Page.No.21	Video demonstration/ submission of valid documents are required for confirmation of each of the above mentioned specification.	No change.
21	Page.No.21	A user list to be provided.	No change.
Annual Turnover & Experience			
22	Page.No.4	Point.No.11. Tenderer must provide evidence of having supplied government hospital / reputed private hospital organizations in India similar nature of items of at least **₹ 67,40,500.00** of Supply of Next Generation Sequencer (with accessary equipments-fragment analyser & Quit fluorometer),Real Time PCR Machine & Bio Safety Cabinet Type II A2 of Tender value in the last three years and the copy of the same should be uploaded.	Point.No.11. Tenderer must provide evidence of having supplied government hospital / reputed private hospital organizations in India similar nature of items of at least **₹ 50,00,000.00** for Next Generation Sequencer (with accessary equipments-fragment analyser &Quit fluorometer), **₹ 13,57,000.00** for Real Time PCR Machine & **₹ 3,83,500.00**Bio Safety Cabinet Type II A2 of Tender value in the last three years and the copy of the same should be uploaded.

23	Page.No.4	Point.No.12.The firm should be registered and should have the average annual turnover at least **₹ 1,34,81,000.00** of the bidder in the last three financial years. Copies of authenticated balance sheet for the past three financial years should be uploaded.	Point.No.12.The firm should be registered and should have the average annual turnover at least **₹ 1,00,00,000.00** Next Generation Sequencer (with accessary equipments-fragment analyser &Quit fluorometer), **₹ 27,14,000.00** for Real Time PCR Machine & **₹ 7,67,000.00**Bio Safety Cabinet Type II A2 of the bidder in the last three financial years. Copies of authenticated balance sheet for the past three financial years should be uploaded.

All other terms and condition will remain unchanged.

Dr.Anudita Bhargava
Additional Professor,
AIIMS,Raipur (C.G.)

Dr.Sanjay Singh Negi
Associate Professor
AIIMS,Raipur (C.G.)

(सुशील सोनबेर)
भंडार अधिकारी
अखिल भारतीय आयुर्विज्ञान संस्थान,
रायपुर (छ.ग.)