

Amendment No. 03

Date: 11/06/2018

Sub: Amendment No.03 to the Tender Enquiry Document**Ref: (i) Tender No: HITES/PCD/04AIIMS-PETCT/18-19 dated: 20.04.2018 and subsequent amendments published for the referred tender.**

The pre bid meeting of the above referred tender enquiry was held on 27.04.2018. Based on pre-bid discussions following amendments are being incorporated in the tender enquiry document.

Section VII
Technical Specifications

Schedule No. 01 128-SLICE PET - CT SCANNER

Tender Page & Para	TENDER SPECIFICATION	READ AS
	A. Site Preparation: Design, planning, interiors and furnishing "on site modification basis", adhering to all the AERB prescribed safety guidelines and regulations. Vendor has to coordinate with NCI for avoiding duplicity of work. If any modification required in the AERB approved structure as per current / new AERB guidelines shall be undertaken by the vendor.	It should be as per normas of AERB/RSD Mumbai India. It will include complete development of the department including PET-CT machine room (excellent interiors ceiling and walls), console, pet radiopharmacy, UPS room, patient waiting areas, with reclining chairs.
1 (a)	A latest technology whole body Positron Emission Tomography system with 128 slices acquisition per rotation, DICOM ready and isotropic volume generation/production spiral CT scanner designed for providing volume measurements of metabolic and physiological processes using positron emitters, as well as for producing accurate structural and anatomical fusion images and making attenuation maps for CT based attenuation correction.	A latest technology whole body Positron Emission Tomography system with 128 slices acquisition per rotation, DICOM ready and isotropic volume generation/production spiral CT scanner designed for providing volume measurements of metabolic and physiological processes using positron emitters, as well as for producing accurate structural and anatomical fusion images and making attenuation maps for CT based attenuation correction. Kindly quote all options (latest models with latest technology/hardware/software) not included in the standard configuration with prices. Kindly quote for continuous motion technique also if possible.

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1.f	All the Application, Operating and Service manual sets in English language in duplicates should be provided by the vendor at the time of handing over the machine. At least one of these manual sets to be provided in computer readable format, preferably as Word for Windows format document.	Deleted
1.g	Kindly separately quote all options not included in the standard configuration with prices. The vendor will have to deliver the latest state of the art model of the machine at the time of installation with all hardware and software available at that time at no extra cost.	The vendor will have to deliver the latest state of the art model of the machine in the same segment at the time of installation with all hardware and software asked in the tender specifications at no extra cost (as mentioned response assessment, neuroimaging, cardiology, and SUV quantification software for SPECT-CT)
2.k	Integrated CT simulation software for conformal radiotherapy planning with laser system (one moving & 2 fixed lasers of green colour) to be provided. It is to be connected with main TPS in the radiotherapy department through Ethernet wiring. A separate workstation is to be provided in TPS room.	Integrated CT simulation software for conformal radiotherapy planning with laser system (one moving & 2 fixed lasers of green color) to be provided. It is to be connected with main TPS in the radiotherapy department through Ethernet wiring. One out of 5 workstations to be installed in TPS room
3.a	Multi detector CT having minimum 64 rows of detectors acquiring 128 slices per rotation.	Equipment should be capable of acquiring 128 slices with 128 channels to transmit data or make it
3.e	Detector coverage should be at least 38 mm or higher.	Detector coverage should be at least 38 mm or higher. : optional
3(h)	High frequency X-Ray generator tube with output of 70 kW or more, Anode heat storage capacity of 6.0 MHU or more, Tube Voltage between 80-140 kV, Tube Current of 20-400mA, Automatic self-testing system.	High frequency X-Ray generator tube with output of 70 kW or more, Anode heat storage capacity of 6.0 MHU or more, Tube Voltage between 80-140 kV, Tube Current of 20-600mA , Automatic self-testing system.
4.b	Axial & Transverse spatial resolution at 1cm & 10 cm from the central axis of the gantry should be : ≤ 5.1 mm FWHM.	NEMA Axial and Transverse Sp. Resolution at 256x256 matrix should be ≤ 6 mm at 1 cm and ≤ 7 mm at 10 cm distance
6	Workstation (Data Acquisition, Processing & Management).	Workstation (Data Acquisition, Processing & Management). - 5 clients as client server architecture with acquisition console are required
6.h	The workstation should be accessible remotely by at-least 5 concurrent workstations for PET and CT each.	Five workstations with concurrent users for all applications in PET and CT.

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6.i	List mode PET data reconstruction should not take more than 90 sec/bed.	Time of flight PET with latest technology is required
7.b	4D CT Scan software with 4D phantom for QA shall be provided and separately there shall be 4D CT Respiratory Gating hardware to be provided. 4D CT Respiratory Gating hardware to be quoted as option. Price for 4D gating to be quoted separately.	4D PET-CT Scanning facility: 4D PET-CT Scan software shall be provided and separately there shall be 4D PET-CT Respiratory Gating hardware to be provided. 4D phantom for QA should be quoted as optional.
7.2.b	Neuro quantification software including assessment of dementia using SUV values. Provide detailed specification of s/w quoted.	Neuro quantification software including assessment of dementia using SUV values. Provide detailed specification of s/w quoted. Atleast 03 licenses required for three workstations
7.2.c	Quote complete cardiac package both for PET and CT with ECG gating as optional item.	Quote complete package for pet and ct with ecg gating as standard item at least 03 licenses for three workstations .
7.2.g	Should be possible to evaluate different scans of same patients done over a time to give overall assessment of malignancies progression in oncology.	Should be possible to evaluate different scans of same patients done over a time to give overall assessment of malignancies progression in oncology. Atleast 03 licenses required for three workstations
8.b	High Resolution dry chemistry type DICOM laser film printer with online capability of 3 film sizes for x-ray films with minimum 500 packets of films of 14x17 inch size.	High Resolution dry chemistry type DICOM laser film printer with online capability of 3 film sizes for x-ray films with minimum 5 packets (500 films) of films of 14x17 inch size
8 (ç)	Supply of Germanium-68 pin source for a period of 5 years. - Specification of Ge-68 Pin source: 55 MBq (1.49mCi) Ge-68 uniformly dispersed in a ceramic medium with an outer stainless tube and permanently sealed end caps.	Supply of sealed calibration source for QA of PET scanner for a period of 10 years
8.e	Required Phantoms for CT & PET Quality Assurance and calibration sources.	Standard NEMA Phantoms (Scatter/NECR, Sensitivity, Image quality and resolution, Fillable Uniform Flood phantoms) for PET QA, CT image quality phantom to be provided
8.h	One decay drum for PET radionuclides.	Decay drum for PET radionuclides as per standard
8.f	Four dose calibrators (Capintec- CRC 25 PET or equivalent).	Three dose calibrators (Capintec- CRC 25 PET or equivalent).
8.k	One Dose drawing module for F-18 FDG.	One Dose drawing module for F-18 FDG. Fully automatic injector set or semiautomatic whichever is better

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8 ('r)	Tungsten lined Carriers (160 mm) for carrying the radiopharmaceuticals from Cyclotron to PET CT to be provided – 20 nos. (unit price to be quoted separately)	4 numbers of "Type A" Package for transport of radioactive material (FDG bulk dose, upto max 2000 mCi) consisting of following containers: 1. External polyethylene case 2. Internal Tungsten shield container for vial housing
9.c	Fume hood for PET Radio pharmacy.	Standard Fumehood with charcoal filter and lead lining
9.p	After sale service to be available onsite through a service centre of the company located in Jhajjar.	After sale service to be available onsite through a service centre of the company located in raipur
9.o	Qualified Engineer with Minimum 3 years' experience be deputed by the OEM to perform weekly onsite maintenance check-up.	Qualified Engineer with Minimum 3 years' experience be deputed by the OEM to perform monthly onsite maintenance check-up.
17.b	Necessary furniture and fixtures for comfortable working conditions, storage of system components and consumable stand for protective aprons and gonad shields. etc. should be provided.	The vendor should provide the following furnitures and accessories of standard make as described 1. Consultant table-4 2. Consultant chair - 6 3. Customize table for workstations -2 4. Wooden Cupboards - 6 5. Patient sofa for resting in post injection room - 4 6. 5 seaters visitor sofa for consultant room -1 7. CCTV facility for patient viewing in waiting area 8. Apron Stand -1 9. protective aprons -3 10. Gonad shield -3. etc. 11. One executive table and chair for HOD 12. Three seater chrome plated patient waiting chair -8 Preferred FURNITURE make - Hermen Miller / Godrej / Featherlite/Geeken
	SITE MODIFICATION - 128 Slice PET CT Scanner	
	The SCOPE OF WORK for SITE MODIFICATION OF PET CT SYSTEM shall consist of the following rooms:	

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	a. PET CT Examination Room b. Console room c. PET CT equipment / UPS room.	The SCOPE OF WORK for SITE MODIFICATION OF PET CT SYSTEM shall consist of the following rooms: a. PET CT Examination Room b. Console room c. PET CT Equipment/Cabinet Room. d. Dose Admin Room e. Post Admin Waiting Area/Room f. Hot Lab cum radio Pharmacy Room g. Radioactive Source Storage Room h. Radioactive waste Storage i. Active Toilet j. Technologist Room k. UPS/Battery Room l. General Toilet Male/Female m. General Waiting n. changing rooms
1.e	1. Civil works All the construction work to be done as per the final plan approved by NCI Jhajjar	All the construction work to be done as per the final plan approved by end consignee in line with AERB guidelines.
1.f	Ceiling-to-wall ceramic tiling in PET CT examination room.	600x600 mm Vitrified wall tiles in PET CT examination room up to false ceiling level.
1.a	a) Flooring i) 600 x 600 mm glazed vitrified (GVT) tiles with 100mm tile skirting in PET CT Examination room. ii) 5mm-Vinyl flooring in PET CT equipment / UPS room.	i) 600 x 600 mm glazed vitrified (GVT) tiles in PET CT Examination room and 600 x 600 mm glazed vitrified (GVT) tiles with 100 mm tile skirting all other rooms of Pet CT complex. ii) 5mm-Vinyl flooring in PET CT equipment / UPS room.
1.b.i	b) Painting i) Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, PET CT equipment / UPS room.	i) Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, PET CT equipment / UPS room. As per requirement all area to be developed based on AERB/RSD guidelines
3.a	3 AIR CONDITIONING: 15 TR capacity. Unit rate to be quoted. a) Duct-able package air conditioners and split air conditioners may be used according to room as well as equipment requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface.	a) Duct-able package air conditioners and split air conditioners may be used according to room as well as equipment requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface. Air conditioning capacity may be increased as per requirement with explanation however it may not be decreased

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9. n	Four physicians to be trained onsite for 4 weeks and two technologist to be trained onsite for 4 weeks	Two physicians to be trained outside country in an international reputed center 04 weeks and two technologist to be trained onsite for 04 weeks
8.d	high resolution color laser printer for color hardcopy on paper with 5 sets of cartridges	High resolution colour laser printer for colour hardcopy on paper with 10 sets of all cartridges (A3 and A4 sizes).
8 h	lead glass window	lead glass window:size 110 x 180 cm sufficient to shield CT radiation and 511 kev of PET
8 j	40 lead bricks and 8 corners for F-18 handling	40 lead bricks and 8 corners for F-18 handling , additional set of 104 lead bricks
8 g	one shielded L bench for F 18 handling	02 shielded L bench -one for F18 handling other for I-131 handling
		Added para:
		Intercom facility from PET post injection waiting areas to console. Atleast 05 mike and speaker systems
		site modification, supply, installation and commisioning of PET-CT may be done in a period of 60 days after obtaining LC
		Possible arrangement of Demo of the machine to be quoted by vendor if in any centre installed in India
		quote for continuous flow motion if present with the vendors
		Please quote SUV max quantification software for SPECT-CT as optional item

All other terms and conditions of the tender enquiry remain unaltered