

**Augumentation of Nuclear Medicine Department with PET-CT unit & Dual Head Gamma Camera at Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry**

III AMENDMENT TO RFP				
AS IN RFP			AS AMENDED	
No	Clause	Description	Clause	Description
1	NIT	Completion period of work -12 months	NIT	Completion period of work is amended as 15 months (wherever mentioned in the tender.)
2	RFP VOL I- 2.1 General, 2.2.1 (iii) Pg No7	Detailed design engineering including architectural design and construction documents, structural engineering, electrical engineering, heating ventilation and air conditioning plans, medical gases and manifold plan, plan for the central sterile services department, communication and networking plan, fire detection and protection plan and waste management etc	RFP VOLUME I- 2.1 General, 2.2.1 (iii)	Detailed design engineering including architectural design and construction documents, structural engineering, electrical engineering, heating ventilation and air conditioning plans, communication and networking plan, fire detection and protection plan and waste management etc
3	RFP VOL I SECTION IV- 3.3.1-Slno 8	Extension of existing gas manifold system to PET – CT & Dual head gamma camera	RFP VOLUME I SECTION IV- 3.3.1-Slno 8	Deleted
4	RFP VOLUME I	250 KVA Diesel Generator	RFP VOLUME I	325 KVA Diesel Generator(wherever mentioned in the tender.)
5	RFP Volume I- 2.2.1--Pg No 8	UPS Room & AHU Room-Epoxy Flooring	RFP Volume I- 2.2.1	UPS Room & AHU Room -Vitrified Tile Flooring
6	RFP Volume I- 2.2.1--Pg No8	Rooms for PET CT & Gama Camera- Vitrified Tile Flooring	RFP Volume I- 2.2.1	Rooms for PET CT & Gama Camera- Vinyl Flooring
7	RFP Volume 1- Pg No3	Last Date & time of Submission of Tender 23/01/2014, up to 15.00 Hrs	RFP Volume 1- Pg No3	Last Date & time of Submission of Tender 10/02/2014, up to 14.00 Hrs
8	RFP Volume 1- Pg No3	Date & time of Opening of Tender 23/01/2014, up to 15.30 Hrs	RFP Volume 1- Pg No3	Date & time of Opening of Tender 10/02/2014, up to 15.30 Hrs

**AMENDMENT IN MEDICAL EQUIPMENT**

SL NO.	Item	Page no. & clause no.	AS PER RFP	Amended Page no. & clause no.	AMENDED AS
1	<b>Dual headed SPECT Gamma Camera Syetem</b>	PG NO. 84 & Clause 6.ii	High performance PC of latest specifications with multi-tasking operating system. It should have a minimum of 4 GB RAM, 2.8 GHz or more processor speed, 1 TB or more SCSI hard drive and high resolution (1024 x 1024 or more) antiglare flat panel square LCD monitor of minimum of 22" size. It should also have CD and DVD combo drive preferably with writer facility.	PG NO. 84 & Clause 6.ii	High performance PC of latest specifications with multi-tasking operating system. It should have a minimum of 4 GB RAM, 2.8 GHz or more processor speed, 1 TB or more SCSI hard drive and high resolution (1024 x 1024 or more) antiglare flat panel diagnostic medical grade LCD monitor of minimum of 19" size. It should also have CD and DVD combo drive preferably with writer facility.
2		PG NO. 86 & Clause 8.ii	Filtered back projection & Iterative reconstruction, PSF based reconstruction algorithm software for SPECT studies (equivalent or better reconstruction, 3D OSEM).	PG NO. 86 & Clause 8.ii	Filtered back projection & Iterative reconstruction for SPECT studies (equivalent or better reconstruction, 3D OSEM).
3		PG NO. 87 & Clause 8.xix	Brain <b>quantification program for rCBF</b> calculation	PG NO. 87 & Clause 8.xix	Regional quantification for Brain program
4		Additional clause		Additional clause	Upgradability of dual head gamma camera to SPECT.CT

SL NO.	Item	Page no. & clause no.	AS PER RFP	Amended Page no. & clause no.	AMENDED AS
5	<b>PET CT</b>	PG NO.81 & Clause 2.2.A	<b>Upgradeability:</b> The quoted price should include software (including licenses) and hardware upgrades to be provided free of cost for eight years (during warranty period and CAMC period).Any options or added facilities not indicated in the specifications may also be given. Any improved modifications or updated versions of the system can be included in the quotations	PG NO.81 & Clause 2.2.A	Upgradeability: The quoted price should include software (including licenses) upgrades to be provided free of cost for eight years (during warranty period and CAMC period).Any options or added facilities not indicated in the specifications which is mandatory for mentioned applications to run normally may also be given. Any improved modifications or updated versions of the system from this tender specification may be considered.
6		PG NO.90 & Clause 2.xiii	Axial Field of view should be 16 cm or more	PG NO.90 & Clause 2.xiii	Axial Field of view should be 15 cm or more
7		PG NO.90 & Clause 2.xv	The scanner must have low power laser lines orthogonally mounted on the gantry for patient alignment and auto-contouring.	PG NO.90 & Clause 2.xv	The scanner must have low power laser lines orthogonally mounted on the gantry for patient alignment .
8		PG NO.90 & Clause 2.xvi	Efficient Gantry cooling system for continuous running of the machine with tilt angle + 30 degree desired.	PG NO.90 & Clause 2.xvi	Efficient Gantry cooling system for continuous running of the machine
9		PG NO.90 & Clause 3.d	System Energy Resolution should be $\leq$ 12.0 %	PG NO.90 & Clause 3.d	System Energy Resolution should be $\leq$ 13.0 %

10	<b>PET CT</b>	PG NO.90 & Clause 3.f	Uniformity should be $\leq 2\%$ variation. The coefficients of variations of Volume should be $\leq 5\%$ and System should be $\leq 1\%$ .	PG NO.90 & Clause 3.f	Uniformity should be $\leq 5\%$ variation. The coefficients of variations of Volume should be $\leq 5\%$ and System should be $\leq 1\%$ .
11		PG NO.90 & Clause 3.e	3-D scatter Fraction should be $\leq 36\%$	PG NO.90 & Clause 3.e	3-D scatter Fraction should be $\leq 37\%$
12		PG NO.91 & Clause 4.vi	Low contrast spatial resolution 3 mm at 0.3% at 2 rads. Noise 0.3% at 2.5 rads. (Specify actual resolution).	PG NO.91 & Clause 4.vi	The low contrast resolution should be at least 5 mm at 3.0 HU/3 % contrast. Dose to be less than 8 mGy on Standard Algorithm at 10 mm slice thickness. Measurement to be based on 20 cm CATPHAN. (Specify scan time, mA, filter for image reconstruction, scan field, slice).
13		PG NO.91 & Clause 4.vi	Pitch factor (volume pitch) should be variable between 0.4 to 1.75 and should be freely selectable. Give details of all pitch selections	PG NO.91 & Clause 4.vi	Pitch factor (volume pitch) should be variable between 0.5 to 1.5 and should be freely selectable. Give details of all pitch selections
14		PG NO.91 & Clause 4.xii	Facility for reconstruction of PET and CT images and immediate display of images in <b>1024 x 1024</b> matrix parallel to acquisition in spiral mode in 512 x 512 or higher matrix.	PG NO.91 & Clause 4.xii	Facility for reconstruction of PET and CT images, and immediate display of reconstructed images in 1024 x 1024 matrix parallel to acquisition in spiral mode in 512 x 512 or higher matrix. If immediate display monitor is provided by vendor apart from acquisition station then 124x124 matrix display is also accepted.
15		PG NO.92 & Clause 4.xiv.c	It should be able to bear <b>200 kg</b> or more patient weight.	PG NO.92 & Clause 4.xiv.c	It should be able to bear 180 kg or more patient weight.

16	<b>PET CT</b>	PG NO.92 & Clause XV.g	CT Fluoroscopy with monitor near gantry. Stereotactic software for localizing lesions in x, y, z planes compatible with third party Stereotactic frame.	PG NO.92 & Clause XV.g	CT Fluoroscopy with monitor near gantry. Stereotactic software for localizing lesions in x, y, z planes compatible with third party Stereotactic frame.(Optional)
17		PG NO.95 & Clause 4.xx.1	4D compliant for Respiratory gating device for RT planning: The department of radiotherapy has Varian Clinac iX linear accelerator system in the same wing.Hence, the supplied system must be ready for non-invasive video based system.	PG NO.95 & Clause 4.xx.1	4D compliant for Respiratory gating device for RT planning: The department of radiotherapy has Varian Clinac iX linear accelerator system in the same wing.Hence, the supplied system must be ready for non-invasive video based system. (To be quoted as optional)
18		PG NO.95 & Clause 4.xx.0	It is the responsibility of the PET/CT vendor to give all the necessary hardware and softwares including required licenses for smooth integration of 4D gating of the PET/CT with RTP system and this should include license for PET/ SUV based <b>contouring software in eclipse RTP.</b>	PG NO.95 & Clause 4.xx.0	It is the responsibility of the PET/CT vendor to give all the necessary hardware and softwares including required licenses for smooth integration of 4D gating of the PET/CT with RTP system.(Integration with existing varian medical system server for export of PET CT images for radiotherapy planning.)
19		PG NO.97 & Clause 5	Robotic arm for CT guided interventions with facility to fuse CT and PET images and planning software for trajectory planning”.	PG NO.97 & Clause 5	Needle navigation system or needle positioning system for CT guided interventions with facility to fuse CT and PET images and planning software for trajectory planning”.
20	<b>Accessory equipment</b>	PG NO.107	Approved make of Accessory equipment	PG NO.107	Kindly refer the attached Annexure 1

## Annexure 1

### Accessory Equipment approved make: -

SL NO.	Item Description	Make 1	Make 2	Make 3
1	Vital Sign monitor	Nihon koden	Schillers AG	Spacelab
2	Laryngoscope	Penlon	KLS Martin	Aesculap
3	Needle destroyer	Colepalmer	Nulife	Amkay
4	Ambu bag	Ambu	Smith medical	Laerdal
5	Stethoscope	3M Littmann	Welch Allyn	Riester
6	Spygmomanometer - digital	Welch allyn	Omron	Beurer
7	X ray veiwing box	Standard Make		
8	ECG machine 12 channel	Schillers AG	Welch allyn	Nihon koden
9	Syringe pump	B Braun	Fresenius	Carefusion
10	Defibrillator monitor	Schillers AG	Nihon koden	Zoll
11	Anesthesia machine	Drager	Maquet	Spacelab
12	Stress test system with TMT	Schillers AG	Motara	Quinton
13	Portable suction apparatus	Penlon	Laerdal	Medela
14	Dose calibrator	Biodex	capintec	PTW
15	Vortex mixer	Remi	Thermofisher	Eppendorf
16	Radio isotope fume hood	BIODEX	COMECER	CAPINTECH
17	CT pressure injector	MEDTRON	MEDRAD	NEMAOTO
18	Table top centrifuge	Remi	Thermofisher	Eppendorf
19	Micropipette	Remi	Thermofisher	Eppendorf

20	Emergency crash cart	Herloff	Metro Lifeline	Herman Miller
21	32 Inch LED TV	Sony	Samsung	LG
22	Water purifier	Aquagaurd	Kent	Eureka forbes
23	Refrigerator	Sanyo	Hitachi	LG
24	Computer and printer	HP	Lenovo	ACER
25	60 Inch LED monitor	Sony	Samsung	LG
26	52 Inch LED TV	Sony	Samsung	LG
27	General Furniture	Godrej	AFC	Ergo
28	Medical Furniture	Janak	Meditech	Godrej

NOTE : For the above listed items if the vendor have their own make that can also be supplied if it satisfies the tender specifications.