

Schedule No. 03 - Cyclotron

Sl. No	Tender Page & Para	TENDER SPECIFICATION	NAME OF THE FIRM	REPRESENTATION RECEIVED FROM THE FIRMS	COMMITTEE RECOMMENDATIONS
1	Page 61	The cyclotron energy must be at least 18 MeV	GE HEALTHCARE	The cyclotron energy must be \geq 15 MeV Specs favouring one vendor / model. Hence neutralization requested.	The cyclotron energy must be at least 18 MeV or Higher.
			Consolidated products corporation	Our suggestion is that vendor should describe a possibility of operating cyclotron at different energies (Variable energy cyclotron) or other means of lowering proton beam energy to enable system to produce some of the required isotopes with adequate radio nuclic purity. To describe possibilities and limitations.	No change
2	Page 61, A. (ii)	It must be an auto-ejectable cassette system that will be installed in one hot cell with four mini- hotcells for synthesis of radiopharmaceuticals.	GE HEALTHCARE	It must be an automated cassette based synthesis module installed in one hot cell with capability of consecutive FDG synthesis without the need to open the hotcell door. Specs favouring one vendor / model. Hence neutralization requested.	It must be an manual or auto-ejectable cassette system that will be installed in one hot cell with four mini- hotcells for synthesis of radiopharmaceuticals.
			Consolidated products corporation	We request to keep the specification more generic as this type of module is available only with IBA. No other manufacturer produce ejectable cassette based module.	
3	Page 62, B.	IODINE-124 & IODINE -123 PRODUCTION: All the equipment necessary for Iodine-124 & Iodine -123 production must be detailed.	GE HEALTHCARE	Request Deletion. Technically I-123 is a SPECT isotope with very limited use. Besides, the difficulty of regular production as well as low yield of I-123/I-124 isotopes in a medium energy cyclotron hardly justifies the cost to benefit ratio.	No change
4	Page 62.	MARKETING AUTHORIZATION FOR FDG: The tenderers will give support to build the files for FDG Marketing Authorization submission to local authorities.	GE HEALTHCARE	LICENSE FOR CYCLOTRON OPERATION: The tenderers will provide necessary technical support for obtaining license of cyclotron operation from the regulatory body of India (AERB). Market authorization for FDG is an activity owned by the licensee/end-user.	No change
5	Page 62. MAINTENANCE/ SERVICING (iv.)	Trained Service Engineer should be stationed on-site on 24 hrs x7 days basis.	GE HEALTHCARE	Trained Service engineer should be available on call basis.	No change
6	Page 64. A1. 1(iv.)	Minimum Two number control station to be connected.	GE HEALTHCARE	Minimum One control station to be connected. Specs favouring one vendor / model. No functional requirement/importance. Hence neutralization requested.	No change
7	Page 64. A1. 1(vi.)	The cyclotron should be equipped with minimum two proton sources	GE HEALTHCARE	The cyclotron should be equipped with at least one ION SOURCE. Specs favouring one vendor / model. Hence neutralization requested.	The cyclotron should be equipped with minimum one number proton sources .
			Consolidated products corporation	Two ions source configuration only available from IBA. Mostly due to limited longevity of the ions source at full current.	
8	Under appendix 1A 1.4 point i	Target port General Requirements "Each target must be fixed at best position"	Consolidated products corporation	We request target must be aligned with the beam and equipped with collimator system that provides continuous feed back on the target position with respect to the beam.	No change

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Response To Pre-Bid Queries (Pre-Bid date: 05.10.2017)

NIB Ref: HITES/PCD/NCI-AIIMS/03/17-18 Dated: 22.09.2017

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Sl. No	Tender Page & Para	TENDER SPECIFICATION	NAME OF THE FIRM	RESPRESENTATION RECEIVED FROM THE FIRMS	COMMITTEE RECOMMENDATIONS
9	Page 64. Power Consumption (iii.)	Total for 365 days (considering 6 hours/operation and 18 hours stand-by per day Power consumption: kW	GE HEALTHCARE	Total for 250 days Considering holidays and scheduled/planned preventive maintenance shutdown.	No change
10	Page 66. Cyclotron Control Computer (iii.)	It should be possible to fully control the cyclotron operation from multiple computer work stations, installed at different locations	GE HEALTHCARE	It should be possible to fully control the cyclotron operation from computer work station. Specs favouring one vendor. No functional requirement/importance. Hence neutralization requested.	No change
11	Page 66. A1. 4 (iv.)	Each beam exit port must be equipped with one extraction system.	GE HEALTHCARE	All beam exit ports must be equipped with extraction systems. Specs favouring one vendor. Hence neutralization requested.	No change
12	Page 70. (G)	Cyclotron Solid Targetry System	GE HEALTHCARE	Request Deletion or make it Optional. Limited Use considering high cost to benefit ratio.	No change
13	Page 71. B. vi.	Each FDG Synthesis Unit shall be capable of ≥ 4 runs in one day.	GE HEALTHCARE	Each FDG Synthesis Unit shall be capable of at least two runs Specs favouring one vendor / model. Hence neutralization requested.	No change
14	Page 71. B. ix.	Are the modules able to automatically eject the cassette at the end of synthesis?	GE HEALTHCARE	It must be an automated cassette based synthesis module installed in one hot cell with capability of consecutive FDG synthesis without the need to open the hotcell door. Specs favouring one vendor / model. Hence neutralization requested.	No change
15	Page 76. G.	[F2-18] SYNTHESIS UNIT . [F2-18]-FLUORODOPA Module	GE HEALTHCARE	Request Deletion FDOPA synthesis through nucleophilic module gives much better yield and specific activity of the final product.	No change
16	Page 76. H.	[124-IODINE] – RECOVERY UNIT & [123-IODINE] - RECOVERY UNIT	GE HEALTHCARE	Request Deletion Technically I-123 is a SPECT isotope with very limited use. Besides, the difficulty of regular production as well as low yield of I-123/I-124 isotopes in a medium energy cyclotron hardly justifies the cost to benefit ratio.	No change
17	Page 77. D. (b). i.	One HPGe detector coaxial 50 keV to 2 MeV, 10% efficiency, FWHM resolution 2 keV, lead shielding 5cm w/th Cu lining, digital spectrum analyser and related software.	GE HEALTHCARE	One Multi Channel Analyzer with detector and necessary shielding for radionuclidic assay with related software	No change
18	Page 77. D. (b). ii.	One High Pressure Liquid Chromatography (HPLC)	GE HEALTHCARE	Request deletion TLC is already included in the tender for radiochemical purity.	No change
19	Page 78. E. c. vii.	Neutron monitor : 4 no.	GE HEALTHCARE	Neutron Monitor: 1 No.	No change
20	Page 78. F. c.	Other equipment (for example, fridge for reagent storage) shall be offered and technically described.	GE HEALTHCARE	Request full list and technical details of other equipment	No change
21			IBA	Is it possible to have more explanations about the "Turnkey works" ? Can we have some drawings , some indicative scope , some information about the gurantees, the respective responsibilities etc.	Prospective bidders may contact NCI Office , Room No 160 DBRAIRCH, AIIMS New Delhi for drawings.

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Dr. N. A. B. Sample

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~~Pharmaceuticals~~

Dr. Sanoj Kumar

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