ALL INDIA INSTITUTE OF MEDICAL SCIENCES,

STORE SECTION (DO), 1ST FLOOR, ANIMAL HOUSE,

ANSARI NAGAR, NEW DELHI-110 029, INDIA

TENDERENQUIRY DOCUMENT

(Two Bid System for Machinery & Equipments)

Advertised Tender Enquiry No.: XX-159/SO(DO)/Gastro/24-25/M&E

Brief Description of Goods : Purchase of Advanced USG Machine with Shear Wave Elastography and Contrast Enhancement – 01 No.

SECTION-I

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR, NEW DELHI-110 029

TENDERS ENQUIRY DOCUMENTS (TED)

Advertised Tender Enquiry No : XX-159/SO(DO)/Gastro/24-25/M&E

On behalf of Director, AIIMS, Ansari Nagar, New Delhi-110 029, online bids are invited in two bid system (Techno-Commercial Bid and Financial Bid) from reputed, eligible and qualified firms/manufacturer for supply of following Goods:

S. No.	Brief Description of Goods	Quantity	Amount of Bid Security/EMD
1.	Purchase of Advanced USG Machine with Shear Wave Elastography and Contrast Enhancement	01 No.	INR Rs. 1,60,000/-

CRITICAL DATE SHEET

Published Date & Time	03-12-2024 at 04.00 pm
Bid Document Download/Sale Start Date	03-12-2024 at 04.00 pm
Seek Clarification Start Date	03-12-2024 at 04.00 pm
Seek Clarification End Date	09-12-2024 at 04.00 pm
Pre Bid Meeting	*NA*
Pre Bid Meeting Place & Address	*NA*
Bid Submission Start Date & Time	16-12-2024 at 04.00 pm
Bid Submission End Date & Time	02-01-2025 (Thursday) at 03.00 pm
Bid Opening Date & Time	03-01-2025 (Friday) at 03.00 pm

Exemption under list of 354 medical devices, Global Tender Enquiry (GTE) OM No.F.4/1/2023-PPD Dated 28/06/2024 @ S.No.# 345 "Advanced USG Machine with Shear Wave Elastography and Contrast Enhancement"

Technical Specifications: for Advanced USG Machine with Shear Wave Elastography and Contrast Enhancement–01 No.

The system should be state of the art with full digital technology and should be for Abdominal, Renal, Pelvic, Genitourinary and MSK Imaging Applications. The specific minimum requirements for this equipment are as follows.

1. The system should be capable of high-resolution 2D, 3D, M, PW, Color flow, Power & Directional Power Doppler, Pulse Wave Doppler, Panoramic imaging and CEUS modes.

2. It should have Contrast imaging and Real-time Shear wave Elastography modes.

3. The system should have 60000 or more digital processing channels.

4. Transducers should be of broadband technology.

5. The system should have a dynamic range of 180 dB or more.

6. The system should offer an Imaging depth of 30 cm or more.

7. The system should have a frame rate on receive of over 5000 frames per second or more.

8. System should have microvascular imaging or perfusion imaging to obtain microvascular details in the region of interest.

09. System should have Panoramic Imaging with at least 60cm of scanning length. It should have skin line scaling markers, curved distance measurement tool and Zoom, Pan, Rotate & Trim facility to trim panoramic images from start or end of the panoramic capture.

10. Machine should be capable of real time Compound imaging technology on linear, curved and mechanical volume probes for improved visualization. The compound imaging should have at least 9 beam steered lines of sight.

11. The system should have Basic Imaging Optimization controls like Tissue Harmonic Imaging, High Definition / General / Frame Rate optimization Control, Penetration / General / Resolution optimization control, Trapezoidal Imaging and Sector Size Control.

12. System should have both manual and Auto Doppler Trace facility on live and frozen images

to improve the vascular workflow quantification of Doppler parameters.

13. System must be offered with High Definition Speckle Reduction Imaging

14. The system should have the 'Speed of Sound Correction' feature. Specify number of such sound correction speeds to adapt to tissue type. This feature should be available both in linear and convex transducers.

15. The machine should support intima media thickness (IMT) quantification with automatic or user assisted tracing of intima-media complex.

16. System should have High definition and PAN /Zoom facility.

17. System should be able to support at least four electronic transducers with universal ports with simple electronic selection method for interchanging transducers. Additional parking ports would be preferable.

18. System should have one touch optimization for 2D & Doppler Modes.

19. System should have Cine loop facility, both frame by frame and in cine mode, with a memory for at least 3 minutes in 2D, color and Elastography modes. The system should also be able to review and at least 20 seconds of Doppler and M mode data.

20. The system should have facility of direct storage and retrieval of B/W and color images in both frozen and cine loops in the inbuilt hard disk drive of storage capacity of 1TB or more.

21. System should have state of the art technology to enhance the needle shaft and tip for biopsy procedures. It should also predict the needle path on B Mode without attaching any needle brackets for more precise free hand biopsies.

22. The Real time shear wave elastography mode should be capable of performing:

i) Real time Shear Wave tissue elastography imaging with Convex, Linear.

ii) The Shear wave elastography should be Real-time, Fully automatic; requiring no manual / automatic compression with reproducible results in KPa or m/s for Liver, Renal and MSK applications, without any cool down time in between consecutive acquisitions.

iii) System should be able to generate a color coded Shear wave elastogram with a reference Adjustable Numerical elasticity scale for all the applications.

iv) System should be able to display simultaneously both color coded Shear wave

elastogram and corresponding B-Mode image in real time for performing elastography guided biopsies/FNAC.

v) There should be User adjustable elasticity-box size with a Display Depth of 0 - 12cm.

vi) Shear wave Elastography Quantification tool (Ellipse and trace) should be able to provide Mean, Max & Min elasticity values of the tissues in both m/s and kPA (Kilopascal) on all transducers.

vii) System should have integrated report worksheet for Liver elasticity assessment with inbuilt reference cut off values according to different etiologies.

23. Fully optimized Contrast Imaging mode should be available on Convex, Linear and transducers with simultaneous acquisition of B-mode and Contrast images in real-time in full screen or Side-by-side display.

i) On-screen Contrast timer should be available allowing up 5minutes of streamed prospective cine capture

ii) Independent control of contrast color maps, TGC curves, and Dynamic Range

iii) Flash micro bubble destruction mode should be available

iv) User adjustable number of frames, Micro-vascular Imaging, and persistence imaging should be available to assess slow micro-vessel perfusion.

24. A high resolution, fully articulation non-interlaced flicker free antiglare, flat panel display of 21 inches or more. System should have facility to transfer data from the hard disk on to a removable media (CD /DVD/USB).

25. The system should be DICOM 3.0 (or higher version) ready (like send, receive, print, record on CD/DVD, acknowledge etc.) for connectivity to any network, PC/computer etc. in DICOM format. Vendor will connect the machine to existing PACS and to local other laser cameras without additional cost.

26. The system should have advanced Query Retrieve capabilities to Query full native data from the PACS, and display Retrieved images side- by-side with real-time ultrasound on system's monitor.

27. System should be upgradable to FUSION Imaging, Needle guidance and Volume Navigation with ability to fuse Shear wave Elastography and color imaging data with the dataset of second modality during FUSION Imaging.

28. The system should have CD-DVD and USB archival (DICOM and PC format) and WIFI capability.

29. Both the machine and the Real time shear wave elastography should be USA FDA certified.

30. Transducers: Following transducers should be offered with the system (All transducers must have Shear wave Elastography imaging mode available):

1. Curved array 1 - 6 MHz.
2. Linear array 4 - 15 MHz.
3. Microconvex Probe 3-12 MHz.
4. Linear array transducer 5-12 or wider.

<u>Accessories</u>

1. Online UPS OF 2KVa for at least 30mins backup
2. Color laser jet printer (wi-fi enabled)
3. Offline solution for Contrast Wash-in/wash out quantification.

<u>Terms and conditions:</u>

- The system must have a standard comprehensive warranty of 5 years with spares and should quote CMC for next 5 years.
- A certificate should be given by the supplier that the instrument has not been supplied at a rate lower than the rate quoted in the tender of AIIMS. If it is found to be so then the difference will be recovered from the supplier along with penal interest.
- System should be European CE with 04 digit notified number/FDA Approved or BIS compliant.
- It should be certified that if the instrument becomes non functional, it will be repaired within the shortest possible time period otherwise a penal charge will be levied on the company.
- All System should be of latest version and of high end.

This is to certify that the specifications of the said equipment are broad-based and do not match or suit any particular firm.

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