



Running Contract Details	
Equipment Name	High End Ultrasound Shear Wave Elastography with Contrast Imaging (FibroScan)
Running Contract Valid Till	03-09-2020
Tender Ref No	KMSCL/EP/T271/654/2018(R)
Tendered Quantity	3
Supplier Name	M/s Nehra Brothers
GST No	07ARLPS5238E1ZJ
Installation & Delivery Period	6 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
21 New Market Ramesh Nagar New Delhi - 110015	Contact Person	MA Nizar
	Phone	01145142975
	Mobile No	9893028490
	Email	nizar@assizsarah.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>High End Ultrasound Shear Wave Elastography with Contrast Imaging (FibroScan)</b> <i>Model &amp; Make : Aixplorer / Supersonic Image</i>	9990400 <small>Incl.GST :12%</small>	736792	10727192
		<b>9990400</b>	<b>736792</b>	<b>10727192</b>

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>High End Ultrasound Shear Wave Elastography with Contrast Imaging (FibroScan)</b>							
Labour	1,18,000.00	1,18,000.00	1,18,000.00	1,18,000.00	1,18,000.00	1,18,000.00	1,18,000.00
Comprehensive	8,85,000.00	9,44,000.00	10,03,000.00	10,62,000.00	11,21,000.00	11,80,000.00	12,39,000.00

**Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

### **Technical Specification**

#### **Equipment :High End Ultrasound Shear Wave Elastography with Contrast Imaging (FibroScan)**

Equipment Name: High End Ultrasound Shear Wave Elastography with Contrast Imaging (FibroScan)

The system should be state of the art with full digital technology and should be a medical diagnosis instrument to make non-invasive painless and immediate measurement of stiffness and elasticity of hepatic parenchyma to assess fibrosis in the liver.

I. The specific minimum requirements for this equipment are as follows.

- a. The system should be capable of high-resolution 2 D, 3D, M,PW, Colour flow, Power& Directional power Doppler, pulse Wave Doppler and Panoramic imaging mode.
- b. It should have contrast imaging capability along with shear wave elastography modes.
- c. The system should have 60,000 or more digital processing channels.
- d. Transducers should be of broadband technology.
- e. The system should have a dynamic range of 180 dB or more.
- f. System should offer imaging depth of 20 cms or more.
- g. The system should have a frame rate on receive of over 5000 frames per second or more.
- h. The system should have advanced colour Doppler facility to position at least three spectrograms (online or offline) on a single image within the same cardiac cycle to simplify the workflow and reduce the examination time for Vascular application.
- i. The system should have Panoramic Imaging with at least 60 cm 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.
- j. 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.
- k. The system should have Basic Imaging Optimization control like Tissue Harmonic Imaging, High Definition/General/ Frame Rate Optimization Control, Penetration/ General/ Resolution Optimization Control, Trapezoidal Imaging and Sector Size Control.
- l. System should have both auto and manual Doppler Trace facility on live and frozen images to improve the vascular workflow quantification of Doppler Parameters.

- m. System must be offered with High Definition Speckle Reduction Imaging or equivalent technology.
- n. The system should have the 'Speed of Sound Correction' technology. This feature should be available both in linear and convex transducers.
- o. System should have High Definition and Pan/Zoom facility.
- p. System should be able to support at least four electronic transducers with universal ports with simple electronic selection method for interchanging transducers.
- q. System should have one touch optimization for 2 D & Doppler Modes.
- r. System should have Cine Loop facility, both frame by frame and in cine modes, with a memory for at least 3 minutes in 2D, Colour and Elastography modes. The system should also be able to review and at least 20 seconds of Doppler and M mode data.
- s. The system should have facility of direct storage and retrieval of B/W and colour images in both frozen and cine loops in the inbuilt hard disk drive. In- built hard disk storage for images should be for more than 10,000 images.
- t. The real time shear wave elastography mode should be capable of performing:
  - u. Real time Shear Wave tissue 'elastography' imaging with convex, linear and 3D transducers. Automatic compression with reproducible results for Liver application, without any cool down time in between consecutive acquisitions.
  - v. System should be able to generate a colour coded 'elastogram' with a reference Adjustable Numerical elasticity scale for each application.
  - w. System should be able to display simultaneously both colour coded 'elastogram' and corresponding B- Mode image in real time for performing 'elastography' guided biopsies/FNAC.
- x. There should be User adjustable elasticity- box size witha Display Depth: 0-12 cm.
- y. Elastography quantification should be available with pixel accurate absolute or discreet Elasticity values on all transducers.
- z. 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 (Kilo Pascal) on all transducers.
- aa. System should have integrated report work sheet for Liver elasticity assessment.
- bb. User adjustable number of frames, Micro- Vascular Imaging, and persistence imaging should be available to assess slow micro-vessel perfusion.
- cc. A high resolution, fully articulation non-interlaced flicker free, anti-glare, flat panel display of 21 inches or more.
- dd. System should have facility to transfer data from the hard disk on to a removable media (DC/DVD/USB/Wi-Fi).
- ee. 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.
- ff. 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.
- gg. The systems should have CD-DVD and USB archival (DICOM and PC format)

II. Transducers:The following Transducers should be offered with the system

A. Curved Array

Effective brand width: 1 MHz to 6 MHZ (Tolerance: +/- 1MHZ)

Light weight

Cable length 2.1 meter or more

#### B. Linear Array Probe

Effective brand width: 2 MHz to 10MHZ (Tolerance: +/- 1MHZ)

Light weight

Cable length 2.1 meter or more

#### III. Accessories:

- a) On- line UPS with capacity for at least one hour backup to support all functions of the equipment i.e. Performing Ultrasound procedure, exposure on to films or copy on a CD.
- b) High chair – 1 no, Patient Couch – 1 no with mattress, foot step – 1 no.
- c) Biopsy attachment for available probes 2 nos

#### IV. Upgrading Requirements

A free, comprehensive software upgrade (Compatible with the existing platform) guarantee for 10 years (after installation) of the Ultrasound unit must be provided