

Expression of Interest.

Subject- To invite Expression of Interest from Original Equipment Manufacturer /Vendor / Distributor to supply of Nitric Oxide Delivery System at Department of CVTS KEM Hospital through MPLAD Fund.

King Edward Memorial Hospital is one of the leading tertiary care, public hospitals in the metropolis of Mumbai that provides basic as well as specialized services to needy patients from all over the country. With a glorious legacy of 96 years and currently catering to over 1.8 million out-patients and 85,000 in-patients annually, the institute is among the top ranked medical institutes in India. The CSR Wing of the Social Service Department has been working hard to raise funds to procure advanced medical equipment for various medical and surgical specialty and super specialty departments of KEM, with the objective of providing state of the art facilities to the underprivileged sections of our society.

Through MPLAD funds, we wish to purchase a **Nitric Oxide Delivery System for Dept. of CVTS KEM Hospital.**

For purchase of the above equipment, it is proposed to invite "Expression of Interest" from Original Equipment Manufacturer /vendors / Distributor, to supply the same to KEM Hospital. To supply Nitric Oxide Delivery System, Original Equipment Manufacturer /vendors / Distributor should purchase a form, from Poor Box Charity Fund, KEM Hospital from 10/01/24 to 19/01/24 in working hours and all proposals with the required documents should be submitted on or before 19/01/24 (by 1.00 pm) in the Department of CVTS, CVTC Building, ground floor KEM Hospital, Parel, Mumbai 400012. With Two packet System (i.e. Packet A is a Administrative & Technical Documents & Packet B is a commercial) do not disclosed the price other than commercial packet. The packet will be open in front of Heart transplant committee as per schedule decided by committee.

BRIHANMUMBAI MUNICIPAL CORPORATION OF GREATER MUMBAI

**King Edward VII Memorial Hospital,
CSR Wing, Social Service Department,
Parel, Mumbai 400012**

Specifications For Nitric Oxide Delivery System, Dept. of CVTS Kem Hospital

Name of Equipment	Technical Specifications
Specification of Equipment	<u>Nitric Oxide Delivery System</u>
	Attached to Annexure I

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King Edward VII Memorial Hospital,
CSR Wing, Social Service Department,

Parel, Mumbai 400012

General Conditions :

Warranty period	Comprehensive warranty on equipment and all spares shall be three years. Inclusion and exclusion of Warranty documents should be clearly stipulated.
CMC	<u>Comprehensive Maintenance Contract (CMC)</u> 1) After the warranty period of 3 years is over, five years Comprehensive Maintenance Contract (CMC) will have to be entered into with the terms and conditions mentioned in the documents as per BMC norms. List of spare parts / consumables will be submit by supplier with cost freeze in advance for the warranty and CMC period. 2) The successful supplier must ensure that all the required spares/consumables and services are available during warranty and CMC period and 2 years after that, duly backed by the principal.
<u>Delivery & Installation Period</u>	1) Supplier should give free delivery at user department of KEM Hospital within 30 days or as soon as possible from the date of receipt of purchase order. 2) Installation and commissioning of equipment shall be done within 7 days from the delivery of the equipment.

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**GENERAL
REQUIRE
MENTS:**

- 1) Price should include GST charges & any other charges (Supplier needs to submit basic cost of equipment and GST rate in prescribed format).
- 2) The above equipment shall be new and manufactured from virgin materials.
- 3) It is mandatory to provide free installation & training for use of equipment.
- 4) The equipment should have warranty of three years as described in the terms and condition document. The warranty and CMC shall cover the list of spare parts and the rate of which shall be valid for total 8 years (warranty 3 years and CMC 5 years) irrespective of whether those are treated as consumables or otherwise.
- 5) After the warranty period is over, five years Comprehensive Maintenance contract (CMC) will have to entered into with the terms and conditions mentioned in the documents as per BMC norms. List of spare parts / consumables will be submitted by supplier with cost freeze in advance for the warranty and CMC period
- 6) It should be European CE certified along with declaration of conformity or USFDA approved.
- 7) 3 years comprehensive warranty followed by 5 years comprehensive maintenance contract.
- 8) Demonstration of quoted model is compulsory and to be given at an end user site.
- 9) User list with address and phone number to be provided
- 10) The Successful supplier must ensure that all the required spares/consumables and services are available during warranty and CMC period.
- 11) All the requirements of this supply shall be sourced from the original equipment manufacture of the model quoted
- 12) Power supply: 230 V, 50 Hz. The main supply voltage variation may be maximum 15% and frequency variation maximum 3%.

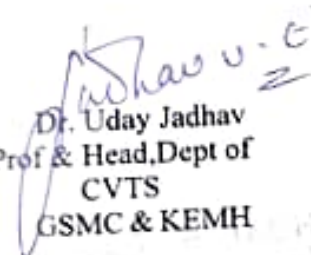
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**King Edward VII Memorial Hospital,
CSR Wing, Social Service Department,
Parel, Mumbai 400012**

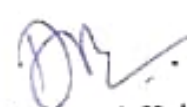
- 13) The equipment shall have valid CE mark / US FDA approved and documentary evidence to that effect needs to be submitted.
- 14) Training to Medical Electronics Cell Engineers from servicing point of view and to user department from operating point of view is compulsory.
- 15) Supplier should submit all technical details in the form of technical brochures / leaflets for all the equipment proposed for supply and mentioned in the technical offer.

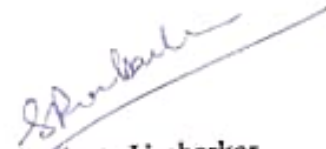
The supplier should be submit documents mention in chek list attached herewith.

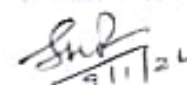
If any doubts or any query about above mentioned work, you can contact Heart Transplant Committee / Dept of CVTS, KEM Hospital, Parel, Mumbai - 400012.

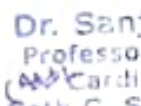

Dr. Uday Jadhav
Prof & Head, Dept of
CVTS
GSMC & KEMH


Dr. Ajay Mahajan
Prof & Head, Dept of Cardiology
GSMC & KEMH
Professor & Head
Department of Cardiology
SETH, GSMC & KEMH,
Parel, Mumbai - 400 012.


Dr. Dwarkanath Kulkarni
Prof & Head of unit,
Dept of CVTS
GSMC & KEMH


Dr. Sanjeeta Umbarkar
Prof & head, Dept of Cardiac Anaesthesia
(Add) GSMC & KEMH


Dean,
GSMC & KEMH


Dr. Sanjeeta Umbarkar
Professor & Head Of Dept.
Cardiac Anaesthesia
Seth G. S. Medical College &
KEM Hospital Mumbai.

Dean, K.E.M.H & Seth G.S.M.C.,
Parel, Mumbai - 400 012.

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**King Edward VII Memorial Hospital,
Department of cardiovascular and Thoracic
surgery, Parel, Mumbai 400012**

Check list of Documents to be submitted as per the order given below.

Sr No	Administrative Documents	Sr. No.	Technical Documents
1	Authorization Certificate	1	Technical Offer
2	Undertaking about CMC for 5 year after 3 year warranty period is over will be follows as per BMC norms	2	List of Consumables (Applicable in Warranty & CMC Period)
3	Signed copy of Terms & Condition of EOI Document	3	Comparison of EOI specification v/s Quoted equipment specification
4	Firm/Company/ Sanstha Registration Certificates	4	Experience Certificate
5	Partnership deed (If applicable)	5	Past Performance Certificate of Quoted Equipment.
6	Pan Card with Photograph.(Only for Indian Bidder)	6	Copy of valid CE certificate OR copy of valid USFDA approval as mentioned in General Conditions (Technical specifications).
7	GST Registration Certificate as applicable	7	Technical brochure of quoted model
8	Import / Export license issued by competent authority(if applicable)	8	List of Spare Parts (Applicable in Warranty & CMC Period)
9	Power of Attorney to sign the tender		
10	Special Annexure for GST		
11			
12			
13			
14			

**Authorized Signature of the Bidder
with Official Seal & Address**

(15)

ANNEXURE I

SPECIFICATION OF INHALED NITRIC OXIDE SYSTEM

Sl. No.	Specification
1.	Should be compact system which is able to deliver 0 to 80 ppm in increment of 0.1 ppm.
2.	Should be portable & light weight
3.	Should be compatible with all the major neonatal, pediatric and adult ventilator systems (including high frequency ventilator)
4.	The equipment should include all components necessary for delivery of NO using different ventilator and with manual bag resuscitator
5.	Should have bright continuous and simultaneous LCD touch screen 10.1 inch monitor display of NO concentration (0-100 ppm) and NO ₂ concentration (0-50 ppm) in the inspired gases.
6.	Should have compact mobile stand and trolley to accommodate all components of the system with mounting of at least two nitric oxide cylinders & A type oxygen cylinder simultaneously.
7.	The castors should be lockable
8.	Flowmeters - Adjustable Flow meters of 0-800ml/min should be integrated in main system console.
9.	The unit should run on 220/240V power supply and should have internal rechargeable long-life battery with a running time of at least 90 Hours.
10.	Should have computerized dosing and monitoring device coupled in a single system
11.	Should have safety measure to check high and low dose supply of NO
12.	Should have both the cylinders real time pressure monitoring on the same screen
13.	Should have indicate cylinder status with different colors.
14.	Should be able to supply constant NO concentration
15.	Should be capable of both continuous and synchronous NO delivery modes for use with patient
16.	Should have facility to measure of NO & NO ₂ high concentration in the in the ambient air for safety
17.	When one cylinder is getting emptied, it should automatically shift to the other cylinder without cessation of the therapy
18.	Dosing unit
	a) Should be microprocessor based
	b) Should have NO Delivery Range: 0 to 80 ppm
	c) Should be constant and independent of ventilator modes

	d) Should use electrochemical sensing technology
	e) Should be able to deliver NO dosage proportional to respiratory flow and automatic synchronize with ventilator flow rate
	f) Should have measuring Range NO: 0 to 100 ppm NO2: 0 to 50 ppm O2: 0 to 100%
	g) Should be compatible with ventilator flow range: 0.5 to 100 LPM
	h) Should have accuracy: ± 0.2 ppm for NO and ± 0.2 ppm for NO2
	i) Should have sample Line Flow Rate: 130 – 180 ml/min approx.
	j) Should have back up: at least 4 hours
	k) Warm Up Time: less than 1 minute.
	l) Response time: ≤ 10 seconds
19.	The company should ensure turn key installation
20.	Should be having USB port
21.	Should be provided with calibration kit including gas cylinder, all connectors and tubing.
22.	There should be information area of the display shows the trend over time (the last 60 minutes) of the 3 monitored parameters with separate graphic coloring. The blue line represents the O2 trend expressed in %. The green line represents the NO expressed in ppm. The red line represents the NO2 trend expressed in ppm.
23.	Software should be upgradable with any new technology available during the life of the equipment
24.	Should have built in safety features such as pressure relief and safety valves fitted to both regulators
25.	The equipment should work with standard and portable NO cylinders
26.	Standard 1000 ppm of nitric oxide (NO) and balance nitrogen gas cylinders should be provided
27.	Accessories
	a) System must be supplied with all the essential accessories including the following:
	b) Nitric Oxide delivery circuit (neonatal) with flow sensor: 03 Nos
	c) Calibration Cylinder 25ppm NO in N2 : 01 Nos
	d) Calibration Cylinder 10ppm NO2 in Air: 01 Nos
	e) 10 litre aluminum cylinders duly filled with 1000 ppm NO and 10 balance N2 which should be refillable in India
	f) Connectors to connect NO circuit with circuits of various ventilators. 3 sets of Each

1.	Alarm: audio-visual alarm should include high NO ₂ ; high NO, low NO, low gas supply; tubing obstruction .It should have warning messages for calibration
2.	Standards, safety and training
	a) Should be European CE certified product
	b) Manufacturer should be ISO 9001 and ISO 13485 certified for quality standards (certificate should be provided)
	c) Electrical safety conforms to standards for electrical safety IEC 60601-1 (OR EQUIVALENT international/national standard) General requirement for Electrical safety of Medical Equipment
	d) Should have local service facility. The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual. List with name and address of technical service providers in local.
	e) Onsite physical demonstration and training of the equipment to all the end users with all the requested facilities will be mandatory
3.	Warranty
	a) As per Institute norms
4.	Items covered under warranty/CMC
	a) Warranty and CMC must include (but not limited to) the following: all electrical and electronic parts, weighing, heating parts and casings thereof.
	b) Consumable accessories, if any, not covered in warranty/CMC should be clearly specified.
	c) Prices of consumables and accessories should be quoted separately and frozen for the period of warranty and CMC.
5.	Operational Environment: The unit should be capable of operating continuously in ambient temperature of 20- 30 deg C and relative humidity of 20-80%
6.	Manual
	a) The manual of the equipment (in English language) should be supplied along with the equipment
7.	Service
	a) Should have onsite service facility.
	b) The service provider should have the necessary equipment recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual

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Handwritten signature: J. Khandekar
DR. JAYANT V. KHANDEKAR
 PROF & HEAD OF THE DEPT OF C.V.T.S.
 L.T.M.M. College & L.T.M.C. Hospital,
 Sion Mumbai - 400 022.

Handwritten signature
Handwritten date: 30.12.23
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