Admn/Prop/68/2019-AIIMS.JDH Dated: - 02nd January 2020.

Subject: Purchase of Paediatric Plethysmography Machine for the Department of Pediatrics at AIIMS, Jodhpur on proprietary basis - **Inviting comments thereon.**

The Institute is in the purchase of Paediatric Plethysmography Machine for the Department of Pediatrics at AIIMS, Jodhpur from M/s Carefusion Asia (HK) Ltd, 1605B Sino Plaza, 255-257, Gloucester Road, Causeway Bay, Hong Kong on proprietary basis. The proposal submitted by M/s Carefusion Asia (HK) Ltd, Hong Kong and PAC certification by user are attached.

The above documents are being uploaded for open information to submit objection, comments, if any from any manufacturer regarding proprietary nature of the equipment giving reference Admn/Prop/68/2019-AIIMS.JDH. The comments should be received by office of Administrative Officer, Medical College at AIIMS, Jodhpur on or before 23rd January 2020 upto 03:00 PM failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Yours faithfully,

Administrative Officer

Enclosed: Related documents enclosed.

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CareFusion Asia (HK) Limited
1605B Sino Plaza
255-257 Gloucester Road
Causeway Bay, Hong Kong

carefusion.com

CareFusion
has joined BD

30TH August 2018

The AdministrativeOfficer
AIIMS,
Jodhpur

Subject: Proprietary Certificate
Reference: Carefusion Masterscreen IOS and Masterscreen BabyBody.

Dear Sir,

We, Carefusion 206, Inc. with offices at 3750 Torrey view Court, San Diego, CA 92130, USA ("Carefusion"), who are proven and reputable manufacturers of Cardio-Pulmonary, Spirometry and Pulmonary Function Equipment, having factories at Leibnizstrasse 7, 97204 Hoechberg, Germany, certify that the above referenced MasterScreen IOS and MasterScreen BabyBody are proprietary products of CareFusion.

Yours faithfully, for and on behalf of CareFusion,

Matthew Sanger
Business Manager Respiratory Diagnostics – Asia Pacific

Annexure-I

No	Item	Technical Specification	Qty
01.	**Paediatric Plethysmography Machine**	**Requirement** Whole body plethysmography machine for measurement of lung volume and airway resistance in newborn, infants, and preschool children. **General specifications** 1. The dimensions of the plethysmographic chamber should be sufficient to accommodate newborn, infants and children up to 20 Kgs and dimension of 127 x 71 x 128 cms (length x width x height), Cabin volume: 98 L, Cabin range: ± 80 mL at 1000 hPa Accuracy: ± 1% and Resolution: 0.04 mL. It should have sufficient space for manipulation of the mask and breathing apparatus while the patient is placed in the chamber. 2. The covering of box should be transparent with rapid access to the child 3. The compensation chamber should have identical thermal and mechanical characteristics as the plethysmographic chamber 4. The box should be made of polycarbonate/ Acrylic glass material that ensure adequate heat exchange and should not be excessively insulated. It is desirable that the net loss through the walls should equal net gain from infant and equipment to ensure rapid thermal equilibration.. 5. There should be non-compressible objects within the box 6. Frequency response (amplitude and phase) should be satisfactory to 10 Hz with the combined time constant should be 10 – 14 s (> 50-60% decay) or a half-life of 6 – 9 s. (Should meet ATS/ERS recommendation) 7. There should be a linear response of the box signal to known inputs over a range of appropriate breathing frequency detection /support /response should be in the range 20 – 100 bpm 8. It should be able to measure a volume change of as small as 1-2 ml during FRC measurements. 9. It should be able to measure FRC in range of volumes 30 – 500 mL, at frequencies 20 – 100 breath per minute. In addition to automatic selection of best curve, the software should preferably permit manual selection also. 10. It should preferably provide software for measurement of airway reactance and conductance. ~~11. Machine should have USA FDA/European CE certification.~~ **Specifications for breathing apparatus** 1. The pneumotachometer (PNT) must be linear over the range of flows encountered and it should remain linear when heated. 2. The combined dead space of the PNT and occlusion shutter should be 2.0-4.5 mL to minimize dead space. 3. The resistance of the combined apparatus should be <20% of the infant's intrinsic resistance at the highest flow likely to be encountered, i.e. in term neonates, <0.7 kPa. L/sec. at 166 mL/sec, whereas for a 1-yr-old, it may be 0.05 kPa.L/sec at 10 L/sec. 4. For airway resistance measurements system should be of single valve system 5. Automated closure should be feasible at end inspiration (EI),	01

		end expiration (EE). Programmable facility should be available. 6. Speed of valve opening and closing (excluding any lag time) should be <75 ms. 7. The reports of FRC should be based on at least two complete respiratory efforts against the occlusion with the occlusion for at least 10 s. The shutter must be able to withstand pressures of 1.3 bar without any leaks or compressive effects. 8. A "shutter test" should be incorporated within the software and calibration protocol, so that the shutter can be checked prior to each study occasion. 9. The shutter must be fixed/mounted on the support arm. (Once box is closed there is no manipulation can be done and is not allowed also). 10. Activation of the shutter should result in minimal volume change 10-20 ml within the box and be as quiet as possible to avoid disturbing the infant or altering sleep state. 11. Flow rate: 0 to ± 1500 mL/sec 12. Accuracy: ± 3% or ± 4mL/s (whichever is greater) 13. Resolution: 1 mL/s 14. Shutter balloon material: Latex balloon 15. Balloon volume: 0.7 Ml 16. **Specification for mask** 1. Dead space should be minimal and < 50% of tidal volume. 2. There should be different size of face masks for newborn, infant and child 3. Therapeutic putty or any other method to have good air tight sealing for masks is recommended & must be made available. **Accessories with the equipment** Face mask and other disposable accessories should be provided for 300 tests. **Training** The company should provide an application specialist to train the doctors for caring out test on site. All software should be included in the bid. The software should be upgradeable during the life of the equipment. **Demonstration** of the equipment is a must. **Warranty and CMC** 1. The bidder must quote for 5-years comprehensive warranty (including all spares, accessories and labour) from the date of completion of the satisfactory installation. The warranty charges should not be quoted separately. 2. The bidders should submit their quote (rates) for subsequent 5 years Comprehensive Maintenance Contract (CMC) (including all spares, accessories and labour) and these rates should be freeze. **Ambient temperature and pressure** As per ATS/ERS recommendation The company should ensure turn key installation	