

All-India Institute of Medical Sciences
Ansari Nagar, New Delhi-29
(RESEARCH SECTION)

Ref. No. 27/Prop./PMSD/RG/18-19/RS

Dated: 20.12.2018

Subject: Purchase of Procure of Impulse Oscillometry(IOS) System with Body Plethysmography and Diffusion Study for the Deptt. of PMSD, AIIMS, New Delhi-29 on proprietary basis- Inviting comments thereon.

The request has been received from Prof. Randeep Guleria, Director, AIIMS to purchase the subject item from M/s.P.K.Morgan(India) Pvt. Ltd (Mfg. M/s.Vyair Medical (Formerly known as Care Fusion 234 GmbH, Leibnizstrass 7, 97204, Hoechberg, Germany) on proprietary basis. The proposal submitted by M/s.P.K.Morgan(India) Pvt. Ltd and Performa Invoice and Departmental PAC certifications are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within issue of 15 days giving reference **No. 27/Prop./PMSD/RG/18-19/RS** The comments should be received by office of Stores Officer (RS), Research Section at AIIMS on or before **05/01/2019 upto 12:00 p.m.**, failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

STORES OFFICER (RS)

Encl: Related documents enclosed.

1. PAC Certificate enclosed.

2. Performa Invoice

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR, NEW DELHI-110029

PROPRIETARY/SPECIFIC BRAND GOODS CERTIFICATE

1. Item/Type/Model No. required Along with specification	Impulse Oscillometry (IOS) System with Body Plethysmography and Diffusion Study
2. Is the item a spare part attachment or accessory for existing equipment.	Impulse Oscillometry (IOS) System with Body Plethysmography and Diffusion Study
3. Name of the manufacturers/supplier of the item proposed by the Indentor.	M/s P.K. Morgan
4. Are they sole manufacturers/sold distributors of the item.	Sole Manufacturer (CLOSE SYSTEM)
5. Is there any other item with similar/equivalent specification available in the market to meet the job requirement envisaged, if the answer is yes, why the same can't be procured. Demanding officer should bring out comparative functional advantages/cost effectiveness of the recommended item from those offered by other.	Proprietary, Certificate Enclosed
6. What were the efforts made to locate alternative source of supply or use other substitutes.	No
7. Why open/limited tender can't be resorted to, for locating alternative source.	Proprietary item (Close System)
8. Are the proprietary items certifying that the rates are reasonable or not.	Impulse Oscillometry (IOS) System with Body Plethysmography and Diffusion Study is proprietary product (certificate enclosed) and best of my knowledge the price quoted by the firm should be reasonable.
9. Any other justification for procuring item from single source.	

Signature of **DR. PAVAN TAVARI**
MD (Gen. Dis. (Pulmonary Medicine & Sleep Medicine))
Department of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Ansari Nagar, New Delhi-110029

Signature of **DR. P.K. MORGAN**
COUNTERSIGNATURE
(Head of the Department)
MD, Sleep Physiology, COPD & Sleep Medicine
Professor & Head
Department of Sleep Medicine
All India Institute of Medical Sciences

I certify that the item at Sr. No. 1 above is required to be procured on single tender basis as the supply is definitely known/ the specified brand proposed was 'advantages' in meeting the functional requirements and limited tender system could be dispensed with as they would serve no useful purpose in this particular case.

(Strike out whichever is not applicable)

SPECIFICATIONS For:

Impulse Oscillometry (IOS) System with Body Plethysmography and Diffusion Study :

A State of the Art System for the measurement, computation & Printout and Storage of Data/Graphics in full for: -

- * Spirometry & Flow Volume Parameters.
- * Maximum Voluntary Ventilation (MVV).
- * Lung Volumes & capacities including TGV, RV & TLC.
- * Airway Resistance & Conductance – Raw (Insp, exp, tot), SRaw, Gaw, SGaw.
- * Single Breath Diffusion Capacity (DLCO-sb), by Carbon Monoxide (DLCO - sb, DLCO sbc, VA sb, KCO, KCOc etc.)
- * Diffusion Capacity of Lungs – Intrabreath (DLCO IB, DLCO IBc, VA IB, KCO IB, KCO IB)
- * Respiratory Muscle Screening – MIP / MEP
- * Pre & Post Bronchodilator tests
- * System Should have Impulse Oscillometric Impedance Measurement (IOS) with Tidal Breathing
- * Respiratory Impedance & Small Airway Obstruction by impulse Oscillometry with minimal patient co-operation
- * Respiratory resistance Analysis (Rrs and Xrs)
- * Impedance and Resistance at different frequencies ranging from R 5 to R 20 +/- 1 Hz
 - Cooperation-independent determination of Resistance
 - Z 5 Hz = Total Respiratory Impedance at 5 Hz
 - R5 Hz = Total Airway Resistance (Resistance) at 20 Hz
 - R20 Hz = Proximal Airway Resistance (Resistance) at 20 Hz
 - X5 Hz = Peripheral Capacitive Reactance at 5 Hz
 - Fres = Resonance Frequency
 - Ax = Reactance Area between the negative Reactance Trend and Zero
 - VT, BF, VCmax, IRV, ERV etc.
 - Should have Automatic Interpretation

Impulse Oscillometry System incorporating Spirometry and Impulse generating module (Impulses of alternating direction) :

Pulse Interval : 0.1 to 10 s
Impulse length : 40ms
Frequency Range of Single Impulse : 0 - 100 Hz
Maximum Impulse Pressure : 0.3 kPa/3 cm H₂O
Reference Impedance : 2 cm H₂O/H₂O/(L/s) at 10L/s
Accuracy : < +/- 2 %

Dr. Ravan
DR. RAVAN TONARI
MD (Genl), DM (Pulmonary Medicine), Senior Consultant
Pulmonary Medicine & Sleep Disorders
Pulmonary Medicine & Sleep Disorders

System should Incorporate Precision Bidirectional Re-usable Heated Pneumotach Transducer (Gold Standard) for highest accuracy, reliability & reproducibility.

* Flow Range : 0 – 20 L/s
Accuracy : 0.2 – 12 L/s, +/- 2%
Resistance : < 0.5 cmH₂O/L/s (0.05 kPa/L/s at 10 L/s)

* Volume Range : +/- 20 L
Accuracy : +/- 3% or +/- 50 ml
Resolution : 1

Cooperation independent determination of resistance with Tidal Breathing
The System should have Single Key Stroke function and 20 seconds of quiet breathing to Complete the test.

Should Provide Lung Model Interpretation chart that visualizes the degree of Central and Peripheral Obstruction.

Should have in addition to Numerical parameters, an Interpretation Graph which gives an easy-to-comprehend visual overview of the results, differentiated into Central and Peripheral Airways.

Determination of complete parameter spectrum Respiratory Impedance with every single pulse. Quick and low cost noninvasive determination of Respiratory Impedance with low technical expenditure.

Should have Graphical interpretation of the results on the basis of a simple lung-thorax model.

Recorded parameters provide valuable information for early diagnosis of pulmonary diseases.

The System has facility to record upto 10 trials within Pre, Post or Trial measurement modes and automated interpretation & classification. Facility to customize Report format.

Should incorporate Linear Gas Analyzers:

* Carbon Monoxide Analyzer, Range 0-0.33% CO , Accuracy +/- 0.003%
Range 0-0.33% CO, Accuracy +/- 0.003%
Resolution : 0.0005%. Response Time < 350 ms
Multigas Analyser for CO & CH₄
Resolution : 0.0005%. Response Time < 350 ms

* Body Box (size 830 Litres or more) should have extra ordinary stable construction of aluminum and Security Glass having good thermal conductivity and Visibility from all directions (from inside as well as from outside).

* System has quick thermal equilibrium. Intercom provided for communication with patient while sitting inside the box.

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DR. PAWAN TIWARI
(Pulmonary Critical Care & Sleep Medicine)

* Patient friendly Mouthpiece Assembly. Facility of quick release for easy cleaning & sterilization.

Should Incorporate Precision Pressure Transducers for Box, Mouth and Flow.

Should have Facility for Automatic BTPS corrections.

- * Gas Control Module with automatic filling circuit.

- * Fully automatic Test Procedure and Rapid & accurate calibration.

The parameters should be measured with highest accuracy & reproducibility.

- * Facility to display real time Flow Volume and Volume Time Tests.

- * Facility to display overlaying of previous Test Curves for comparison.

- * Facility to customize Report format.

- * Facility to incorporate normal predicted values provided by user department.

- * System Software should be compatible with Windows 7/8 Operating System.

- * System should be compatible with ATS/ERS guidelines and Meets International Safety Standards, CE, ISO & US FDA etc.

System should be supplied with manufacturers mobile Trolley with Isolation Transformer

To be supplied with standard accessories, computer Interface, 3 Litre Precision Calibration Syringe, connecting Cables, PFT Software and Manual.

Additional Accessories :

10 X Noseclips

05 X Pneumotach Screen Standard

02 X Drying Tube - Sample Tube

02 X MicroGard Oval Bacterial and Viral Filters pk/50.

05 X U Band Tube

COMPUTER/PRINTER :

Dell Computer with core i5 Processor, 8GB RAM,

18.5" TFT Colour Monitor, Full keyboard,

Serial, USB Ports, DVD R/W, Mouse,

Hard Disc Drive (1x 500 Gbyte),

HP Deskjet Printer,

1 No.

One KVA Online UPS - APS

Diffusion Gas Mixture Cylinders

2 Nos

Pawan
DR. PAWAN TIWARI
MD (Peds), DM (Pulmonary Critical Care & Sleep Medicine)
Assistant Professor
Dept. of Pulmonary Medicine & Sleep Disorders
Postgraduate Institute of Medical Sciences

WARRANTY

- As per AIIMS rules and should be quoted with 5-year comprehensive warranty (including all spares, batteries, circuit and other accessories) and another five years (from 6th to 10th year) of comprehensive maintenance warranty.
- Company will be responsible to maintain equipment and accessories in working condition irrespective of the cause/reasons/conditions/nature for not working of the equipment/accessories. Company will replace all the required parts/spares /accessories, labour/service during WARRANTY/CAMC period without any extra charges/taxes" (including and not limited to physical damage).
- 95% uptime of the machine. Facility for good after sale & service with trained engineers posted in Delhi. In case the down time exceeds 5% in a calendar year, the comprehensive warranty will be extended beyond 5 years for double the number of days for which the unit is non-functioning. Similar clause will apply each year of CMC. In case of any breakdown, fault, repair should be undertaken within 48 hours of receipt of such information. Failure to do so shall make the company liable for a penalty of Rs.1000/- per day.

Pawan
DR. PAWAN TIWARI
MD (Med), DM (Pulmonary Critical Care & Sleep Medicine)
Assistant Professor
Deptt. of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Anand Nagar, New Delhi-110029

morgan

P. K. Morgan (India) Pvt. Ltd.
Telephone : 011-26435838
Telefax : 011-26232447
E-mail : pkmorgan@vsnl.com

Proprietary Certificate

This is to certify that the CareFusion Impulse Ocillometry System
With Body Plethysmograph and Diffusion Study, Quoted in our offer
No. PKM(I)-0783 is the proprietary equipment Of M/S. CareFusion.

Date : 17 - 11 - 2015

For P. K. Morgan (India) Pvt. Ltd.



(Authorised Signatory)



Registered Office :
110 Chiranjiv Tower
Nehru Place,
New Delhi - 110019


DR. PAWAN TIWARI
MD (Med), DM (Pulmonary Critical Care & Sleep Medicine)
Associate Professor
Deptt. of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Anand Nagar, New Delhi-110029



November 28, 2018

VYAIRÉ MEDICAL PRIVATE LIMITED
135-137, First Floor
AHW Rectangle One Building
D-4, Saket District centre
Saket, New Delhi- 110017
Mobile: +91-9167636673
www.vyairé.com

REPRESENTATION CERTIFICATE

This is to certify that:

P.K. Morgan (India) Private Limited
110, Chiranjiv Tower, Nehru Place,
New Delhi – 110019.
India

Are representative for:

Vyairé Medical (Formerly Known as CareFusion 234 GmbH, Leibnizstrasse 7, 97204,
Hoechberg, Germany)

For Northern India, and will provide after sales services for Vyairé Medical Respiratory
Diagnostics Systems, including Spirometers, Pulmonary Function Systems, Body
Plethysmographs and Cardio-Pulmonary Exercise Test Systems etc.

This representation certificate is valid for the period of 12 month.

Thank you.

Yours faithfully, for and behalf of Vyairé Medical


Manish Rai
Business Leader – South Asia
Respiratory Diagnostics
Phone: +91-9167636673,
Email: Manish.Rai@Vyairé.Com




DR. PULKIT TIWARI
MD (Med), DM (Pulmonary Critical Care & Sleep Medicine)
Assistant Professor
Deptt. of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Anand Nagar, New Delhi-110029



P. K. Morgan (India) Pvt. Ltd.
Telephone : 011-26435838
Telefax : 011-26232447
E-mail : pkmorgan@vsnl.com

Ref : PKM (I) - 0783

17th November, 2018

The Professor & Head
Department of Pulmonary Medicine and Sleep Disorders
All India Institute of Medical Sciences
New Delhi - 110029

CareFusion Master Screen Impulse Oscillometry (IOS) System with Body Plethysmograph and Diffusion Study :

A State of the Art System for the measurement, computation & Printout and Storage of Data/Graphs in full for :-

- * Spirometry & Flow Volume Parameters.
- * Maximum Voluntary Ventilation (MVV).
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- * Airway Resistance & Conductance - Raw (insp, exp, tot), SRaw, Gaw, SGaw.
- * Single Breath Diffusion Capacity (DLCO-sb), by Carbon Monoxide
DLCO - sb, DLCO sbc, VA sb, KCO, KCOc etc.]
- * Diffusion Capacity of Lungs - Intra-breath
[DLCO IB, DLCO IBC, VA IB, KCO IB, KCO IB]
- * Respiratory Muscle Screening - MIP / MEP
- * Pre & Post Bronchodilator tests
- * Impulse Oscillometric Impedance Measurement (IOS) with Tidal Breathing
- * Respiratory Impedance & Small Airway Obstruction by Impulse Oscillometry with minimal patient co-operation
- * Respiratory resistance Analysis (Hrs and Xrs)
- * Impedance and Resistance at different frequencies ranging from
R 5 to R 20 +/- 1 Hz
Cooperation-independent determination of Resistance
Z 5 Hz = Total Respiratory Impedance at 5 Hz
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Fres = Resonance Frequency
Ax = Reactance Area between the negative Reactance Trend and Zero
VT, BF, VCmax, IRV, ERV etc.
Should have Automatic Interpolation



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New Delhi - 110019



Page 1

Handwritten signature
P. K. Morgan (India) Pvt. Ltd.
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Nehru Place, New Delhi - 110019

Impulse Oscillometry System incorporating Spirometry and impulse generating module (Impulses of alternating direction) :

Pulse Interval : 0.1 to 10 s
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Frequency Range of Single Impulse : 0 - 100 Hz
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Determination of complete parameter spectrum Respiratory impedance with every single pulse. Quick and low cost noninvasive determination of Respiratory Impedance with low technical expenditure.

Facility for Graphical interpretation of the results on the basis of a simple lung-thorax model.

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The System has facility to record upto 10 trials within Pre, Post or Trial measurement modes and automated interpretation & classification. Facility to customize Report format.

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Carbon Monoxide Analyser, Range 0-0.33% CO, Accuracy +/- 0.003%,
Range 0-0.33% CO, Accuracy +/- 0.003%
Resolution : 0.0005%. Response Time < 350 ms
Multigas Analyser for CO & CH₄
Resolution : 0.0005%. Response Time < 350 ms



page 2

DR. PAVAN TIWARI
MD (Med), DM (Pulm Med), FRCR, FRCGS, FRCR (S), FRCR (C), FRCR (P)
Associate Professor
Deptt. of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Ansari Nagar, New Delhi-110029

* Body Box (size 830 Litres) has an extra ordinary stable construction of aluminium and Security Glass having good thermal conductivity and Visibility from all directions (from inside as well as from outside).

* System has quick thermal equilibrium. Intercom provided for communication with patient while sitting inside the box.

Patientfriendly Mouthpiece Assembly. Facility of quick release for easy cleaning & sterilization.

Incorporates Precision Pressure Transducers for Box, Mouth and Flow.

Facility for Automatic RTTPS corrections.

* Gas Control Module with automatic filling circuit.

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The parameters should be measured with highest accuracy & reproducibility.

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* Facility to display overlaying of previous Test Curves for comparison.

* Facility to customize Report format.

* Facility to incorporate normal predicted values provided by user department.

* System SeS Software should be compatible with Windows 7/8 Operating System.

* System is compatible with ATS/ERS guidelines and Meets International Safety Standards, CE, ISO & US FDA etc.

Supplied with manufacturers mobile Trolley with Isolation Transformer
Supplied with standard accessories, computer Interface, 3 Litre Precision Calibration Syringe, connecting Cables, PFT Software and Manual.

Additional Accessories :

10 X Noseclips

05 X Pneumotach Screen Standard

02 X Drying Tube – Sample Tube

02 X MicroGard Oval Bacterial and Viral Filters pk/50.

05 X U Band Tube



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Pawan

DR. PAWAN TIWARI
MD (Med), DM (Pulmonary Critical Care & Sleep Medicine)
Assistant Professor
Dept. of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Anand Nagar, New Delhi-110029

COMPUTER/PRINTER :

Dell Computer with core i5 Processor, 8GB RAM,
18.5" TFT Colour Monitor, Full keyboard,
Serial, USB Ports, DVD R/W, Mouse,
Hard Disc Drive (1x 500 Gbyte),
HP Deskjet Printer.

Total Cost

Euro 47,200.00
CIF Delhi

(Euro : Forty Seven Thousand Two Hundred Only)

One KVA Online UPS — APS

1 No. — Free of Cost

Diffusion Gas Mixture Cylinders

2 Nos — Free of Cost

Validity : This Offer is Valid for 60 days from the date of issue.

Payment : By Telegraphic Remittance in favour of :
M/s. CareFusion Germany 234 GmbH
Leibnizstrasse 7
S7204, Hoechberg,
Germany

Installation : Free of Cost by our trained engineers
& Training

Warranty : The equipment will carry 5 years warranty from the date
Supply/Installation

For P.K. Morgan (India) Pvt. Ltd.

page 4

P.L.L.



DR. P. K. MORGAN
MD (Med), DM (Pulmonary Critical Care & Sleep Medicine)
Assistant Professor
Deptt. of Pulmonary Medicine & Sleep Disorders
All India Institute of Medical Sciences
Ansar Nagar, New Delhi-110029





P. K. Morgan (India) Pvt. Ltd.
Telephone : 011-26435838
Telefax : 011-26232447
E-mail : pkmorgan@vsnl.com

No. PKM-I/SC-0048/2018-2019

17th November, 2018

The Professor & Head
Department of Pulmonary Medicine and Sleep Disorders,
All India Institute of Medical Sciences,
NEW DELHI - 110 029.

Dear Sir,

Sub : Service Contract for Impulse Oscillometry System with Body
Plethysmograph and Diffusion Study

Please refer to above. We wish to inform you that after the expiry of warranty
period, we would like to take the equipment under Service Contract. Our Charges
for CMC Charges will be as follows :-

NAME OF THE EQUIPMENT	SERVICE CONTRACT CHARGES.
Impulse Oscillometry System With Body Plethysmograph and Diffusion Study	CMC (With Spares)
6 Year after warranty period	Rs. 2,65,180.00
7 th Year after warranty period.	Rs. 3,40,950.00
8 th Year after warranty period.	Rs. 4,16,720.00
9 th Year after warranty period.	Rs. 4,92,490.00
10 th Year after warranty period.	Rs. 5,68,260.00

Note : The GST is payable in addition. At present GST @ 18%

The Service Contract will include Four visits of our trained Engineers in a Year
(each visit/ Three months). This will ensure the proper functioning & operation
of the equipment.

Thanking you,

Yours faithfully,
P.K. MORGAN (INDIA) PVT. LTD.

(Authorised Signatory)



Registered Office :
110 Chiranjiv Tower
Nehru Place,
New Delhi - 110019

DR. PAWAN TIWARI
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morgan

P. K. Morgan (India) Pvt. Ltd.
Telephone : 011-26435838
Telefax : 011-26232447
E-mail : pkmorgan@vsnl.com

RATE CERTIFICATE

We hereby confirm that the rates quoted in our offer No. PKM(I)-0783 for CareFusion Impulse Oscillometry System with Body Plethysmograph and Diffusion Study, are not higher than the rates offered to any other Govt. or private Hospitals & Medical Institutes.

Date : 17-11-2018

For P.K. Morgan(India) Pvt. Ltd.



(Authorised Signatory)



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110 Chiranjiv Tower
Nehru Place,
New Delhi - 110019


DR. PAWAN TIWARI
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