



No: AIIMS/R/CS/GM/2022/ST

Date: 24/08/2022

Call for Objection

Subject: Inviting comments/objection, if any before declaring proprietary article for procurement of "Comprehensive Skill Lab Cardiovascular System and Respirator System Examination" for General Medicine Department at AIIMS, Raipur.

General Medicine Departments at AIIMS, Raipur has to procure Comprehensive Skill Lab Cardiovascular System and Respirator System Examination through Proprietary Article basis.

The proposal submitted by M/s Kyoto Kagaku Co. Ltd. Japan who is sole manufactures and M/s B R Biomedical Pvt. Ltd., Malviya Nagar, New Delhi is the Local Agent of this item along with Proprietary Article Certificate are attached & uploaded on CPP Portal & Institute website.

The above documents are being uploaded for open information to submit objections, comments if any from any manufacturer/supplier before declaring proprietary article of the said equipment/items to be procured, within 07 days (i.e. 30/08/2022) from the date of issuance/uploading of the notification.

The objection should be raised in the technical compliance sheet as enclosed, if any Firm claiming suitability of their product with respect to specification mentioned.

The comments should be sent to the office of Central Store Office on above address at AIIMS Raipur in a sealed envelope with above reference on sent to respective mail address storesofficer.cp@aiimsraipur.edu.in on before 30/08/2022 up to 05:00PM from the date of uploading on institutional website, failing which it will be presumed that any other manufacture/vendor is having no comment to offer and case will be decided on merits.

Sr. Procurement cum Stores Officer
AIIMS Raipur (CG)

वरिष्ठ खरीद एवं भंडार अधिकारी
Sr. Procurement cum Stores Officer
अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग.)
All India Institute of Medical Sciences, Raipur (C.G.)

Enclosure:-

1. PAC Certificate by Manufacturer.
2. PAC Certificate by Department.
3. Technical Specification.

All India Institute of Medical Sciences, Raipur (Chhattisgarh)

Tatibandh, GERoad,
Raipur-492 099 (CG)
www.aiimsraipur.edu.in

Proprietary Article Certificate

File Number and Reference		
1	Description of article	Cardiovascular, chest & lung examination simulator.
2	Forecast of quantity/annual requirement	—
3	Approximate estimated value for above	
4	Maker's name and address	KYOTO KAGAKU CO. LTD. JAPAN.
5	Name(s) of authorised dealers/stockists	B.R. BIOMEDICALS (P) LTD. NEW DELHI
6	<p>I approve the above purchase on PAC basis and certify that:-</p> <p>Note- Tick to retain only one out of (b), (c-1) or (c-2) whichever is applicable and cross out others. Please do confirm (a) by ticking it – without which PAC certificate will be invalid.</p>	
6 (a)	This is the only firm who is manufacturing/stocking this item. AND	✓
6 (b)	A similar article is not manufacturing/sold by any other firm, which could be used in lieu OR	✓
6 (c-1)	No other make/brand will be suitable for following tangible reasons (like OEM/warranty spares): OR	

	
6 (c)	No other make/brand will be suitable for following intangible reasons (if PAC was also given in the last procurement cycle, please also bring out efforts made since then to locate more sources): OR	

	Reference of concurrence of finance wing to the proposal (Action will be taken by stores & Account Department)	_____

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History of PAC purchase of this item for past three years may be given below (if any)			
Name of the Supplier			
Order/Tender reference & Date	Quantity Ordered	Basic Rate on order (₹)	Adverse Performance Reported if any

Indenter's Signature & Seal-----

[Signature]

अफसल ए सुलतमान
Afsal A Sulatman
सहायक नर्सिंग अधीक्षक
Assistant Nursing Superintendent
एम्स रायपुर (छ.ग.) / AIIMS Raipur (C.G.)

Date:-

27.06.22

Seal & Signature of HOD

[Signature]
27.06.22

Prof. (Dr.) Vinay R Pandit
Professor & Head (Department of General Medicine)
All India Institute of Medical Sciences, Raipur (C.G.)



Comprehensive Clinical Examination Skills Lab

Clinical Examination skills lab for Teaching and training in Comprehensive cardiovascular and Respiratory/chest examination and Lungs sound auscultation using Stethoscope and ECG Data

Training lab Should comprise of the following

A) Bedside Cardiovascular Clinical Examination and Training System

1. State of the art clinical training system for comprehensive cardiovascular clinical examination using ECG data and Stethoscope
2. It should be life sized Torso model up to femoral arteries fixed on a platform trolley with Large monitoring screen (Min 20") for comprehensive bed side clinical examinations.
3. The system should have heart and breathing sounds recorded from the real patients and not computer-generated synthetic sounds.
4. Heart and breath sounds should have natural propagation and sound transitions across chest wall
5. The system should allow training in observation, auscultation, palpation of heart and breathing sounds as well as cardiac pulses, jugular vein and apex beat
6. The system should simulate realistic Respiration cycle to help students understand respiratory related phenomenon
7. It should have anatomically correct Auscultation, palpation and observation sites on life sized manikin as follows:
 - a) 5 Sites for Heart Sound Auscultation
 - b) 8 sites for arterial pulse palpitation
 - c) 2 sites for Jugular vein observation
 - d) 3 sites for apex beat palpitation
 - e) 3 sites for breathing sound auscultation
 - f) Abdominal respiration observation area
8. It should be suitable for training of students in identifying and differentiating heart sounds such as S1, S2, S3, S4 and systolic & diastolic Murmurs
9. It should have high quality reproduction of clinical examinations scenarios on a life size torso manikin body that comprises minimum 85 cases of-
 - a) Normal heart simulation - S2 split (-) HR60/72/84, S1 split (+), S2 split (+), S2 wide split, S3 gallop, S4 gallop, pulmonic ejection sound, S3 and S4 gallop, innocent murmur, midsystolic click sound,
 - b) Heart disease simulation- aortic stenosis, mitral regurgitation, mitral stenosis, aortic regurgitation, hypertrophic cardiomyopathy, mitral steno-regurgitation, pulmonic valvular stenosis, atrial septal defect, ventricular septal defect, Tricuspid regurgitation, Acute mitral regurgitation, Patent ductus arteriosus, Mitral valvular prolapsed, Dilated cardiomyopathy
 - c) Arrhythmia simulation- Sinus arrhythmia, Sinus tachycardia, Sinus bradycardia, Ventricular premature contraction (1,2,3), Sino-atrial block, Atrio-ventricular block, Atrial fibrillation, Atrial flutter
 - d) ECG arrhythmia simulation - Normal sinus R, Sinus tachycardia, Sinus arrhythmia, Apc solitary, Apc bigeminy, Ectopic pacemaker, Wondering pacemaker, Coronary sinus R, Sinus bradycardia, SS syndrome, Atrial fibrillation, Atrial flutter, Atrial flutter fib, Atrial flutter, AV block, AV block & crbbb, AV block (digital, mobitz), AV block (3:1 & 4:1), AV & crbbb, Paroxysmal atrial tachycardia, AV junctional R (svst), AV junctional R (pat), AV junctional R, AV junctional contraction, VVI pacemaker, Atrial pacemaker, Ventricular pacemaker, AV sequential pacemaker, icrbbb, crbbb, clbbb, clbbb (by ami), wpc syndrome, vpc (solitary, quadrigeminy, trigeminy, bigeminy, couplet), pvc (repetitive, R-on-T type), non-sustained VT, ventricular tachycardia, flutter, fibrillation), ventricular R (sinus cond), accelerated ventricular rhythm, agonal rhythm
10. It should simulate minimum 52 cases of arrhythmia along with real time dynamic ECG Chart for confirmation of findings
11. It should have Minimum 36 cases of total patient simulation including cases of normal Heart, Heart Diseases simulation, and arrhythmia simulation with corresponding sounds, pulses, apex beats and ECG
12. It system should provide explanation of all simulation/cases and its management to facilitate self learning and repeated training
13. It should have a large Touch screen to show ECG, Jugular Venous Pulses (JVP), Carotid Arterial Pulse (CAP) and Apex Cardiogram (ACG)

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14. Each case can be freeze framed for in depth learning and should also show the HR,BP,RR and temperature of patient
15. The cardiology model unit should reproduce heart sounds and murmurs which can be auscultated using real stethoscope from Aortic, Pulmonic, Tricuspid and Mitral areas
16. It should have bilateral palpable cardiac impulses at Brachial, Radial, Carotid, femoral arteries linked to the simulated scenario and underlying physiology of the patient
17. It should have Apex Beat Palpable at RV, LV, DLV. with Right ventricular lifting, Left ventricular heaving and left ventricular enlargement
18. It should be possible to arrange/customize the display of the monitor as per training and examination needs
19. It should be supplied with a state of the art compression system with computer controls for real life like experience of arterial palpitation as well as abdominal respiration.
20. Should provide physical finding training in bedside cardiovascular clinical examination skills with total more than 85 cases (**preprogrammed /programmable**) of total patient, arrhythmia and ECG simulation.
21. It should give actual training by using actual diagnostic instruments such as real stethoscope.
22. It should have facility for repeated practice for learners to differentiate various heart sounds & murmurs using their own ear.
23. It should have tracheal and bronchial breath sounds and abdominal movements to facilitate understanding of respiratory related phenomenon
24. It should be operated by a wireless controller/tablet with facility to operate upto five simulators simultaneously with one tablet during examination and for efficient scenario based training involving more than one patient and to enable learning with comparison between related cases
25. It should be possible to program a playlist of scenarios according to teaching needs.
26. The training model should have the dual facility of (A) Hearing the murmurs and other sounds by doctors stethoscope for individual students experience (B) Possibility of playing sounds on speaker system for group /classroom teaching by faculty
27. It should have an external speaker integrated in the trolley for demonstration and large group studies.
28. The complete training system including manikin, compression system, computer, monitor and speakers should be integrated in a wheeled trolley for easy movements in the department as per training needs. The complete system should be pre wired and ready to use without any set up time
29. The setup should be supplied complete with
 - i) Cardiovascular Workstation with above specifications with capability to be controlled and operated from a single wireless controller /Tablet for big class room teaching
 - ii) Stethoscope -10 nos

B) Comprehensive Bedside chest & Lungs examination Simulator

Should have following specifications

1. Simulator for comprehensive Lungs and chest examination with an actual stethoscope like in a real patient.
2. It should be Torso Manikin having realistic anatomical landmarks mounted on a platform trolley for comprehensive Chest and Lungs Examination
3. Manikin should be mounted on a rotatable base allowing easy anterior and posterior clinical examination as with the real patient
4. It should be possible to use actual stethoscope for effective lung sound auscultation training
5. All lung sounds should be recorded from real patients and should not be synthetic sounds
6. All sounds should have natural propagation and sound transition across the chest wall
7. It should comprise of minimum 36 actual lung sound cases for following chest sounds:
 - i) Normal sounds- Standard, Midley Weak, Midely strong, Loud heart sounds
 - ii) Abnormal sounds-Weak Left Lower area, Weak Left whole area, absent left, weak right lower
 - iii) area, weak right whole area, absent right, weak whole thorax, bronchial sounds

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- iv) Coarse Crackles- right lower area, both lower area, right middle area, left lower area, both
 - v) upper area, whole thorax
 - vi) Fine Crackles- both lower area, both lower and middle area, whole thorax 1, whole thorax 2
 - vii) Wheezes- upper and middle area, around trachea and upper area 1, polyphonic
 - viii) Rhonchi- Trachea and upper area, Polyphonic, with inspiratory wheeze, whole thorax
 - ix) Miscellaneous continuous sound-stridor, squawk
 - x) Miscellaneous- pleural friction rub left lower area, pleural friction rub left lower, pleural friction rub right lower and middle, Hamman's sign, vocal fremitus.
8. Each Case should be accompanied with detailed explanation and case reference with general descriptions and clinical data including patient histories, illustrations, radiographs and CT images for comprehensive teaching.
 9. Each case should be available with and without heart sound for examination and teaching purpose.
 10. Classification of the Lungs sound should be based on proven criteria of American Thoracic society
 11. It should have graphical display of respiration sounds on computer screen/Tablet
 12. It should have Atleast Seven auscultation sites on Anterior side namely- Trachea, upper right Lung Field, upper Left Lung Field, Middle left Lung Field, Middle right Lung Field, Lower right Lung Field, Lower Left Lung Field,
 13. It should have Atleast Eight auscultation sites on Posterior side namely- upper right Lung Field, upper Left Lung Field, Middle left Lung Field, Middle right Lung Field, Lower right Lung Field, Lower Left Lung Field, right costophrenic angle, left costophrenic angle
 14. It should have facility to play both posterior and anterior sounds simultaneously to allow examination by two or more students at a time
 15. It should Indicate inspiration and expiration through LED light so as to confirm rhythm of breathing during sound auscultation
 16. It should be operated by a wireless controller/tablet with facility to operate upto five simulators simultaneously with one tablet for efficient group teaching and examination
 17. It should be possible to program a playlist of scenarios according to teaching needs.
 18. It should have an external speaker integrated in the trolley for demonstration and group studies.
 19. Should have the facility to vary Sound volume (in five levels) , respiration rate and operating time to offer variety of training options as per teaching needs.
 20. It should have auto check facility to check for any error and keep the simulator in good condition
 21. It should be possible to detach the Manikin from Trolley and use it as stand alone unit.
 22. Should be supplied complete with – Manikin torso with Trolley, PC with software, Wireless controller/Tablet, Inbuilt Amplifier and external speakers
 30. The setup should be supplied complete with

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Chest and lungs examination Workstations with above specifications with capability to be controlled and operated from a single wireless controller /Tablet for big class room teaching
Stethoscope -10 nos

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February 12, 2021

Proprietary Certificate and Letter of Confirmation

Dear Sirs,

We hereby certify that Comprehensive Cardiovascular System Examination Simulator with facility of 36 pre-programmed simulation cases for normal heart, heart diseases and arrhythmia with corresponding heart & respiratory sounds, 52 cases of Arrhythmia and ECG simulation, natural sound propagation and transition across cheesy wall, Facility of Auscultation with real stethoscope at aortic, pulmonic, tricuspid and mitral area for comprehensive teaching and training in bedside clinical examination is a Proprietary product of Kyoto Kagaku Co. Ltd. Japan.

We also confirm that said product with these features and its published specification is not manufactured by any other manufacturer in the world.

We are pleased to confirm that BR Biomedical Pvt. Ltd D-71, Malviya Nagar, Main Road, New Delhi - 110 017, India is our exclusive distributor in India for MW10.

This certification/letter is valid from 12th February 2021 to 31st December 2023.

Yours faithfully,



Joji Araki
Senior Manager, Oversea Sales
For and on behalf of Messrs Kyoto Kagaku Co. Ltd.
15 Kitanechoya-cho Fushimi-ku, Kyoto, 612-8388, Japan