



# National Center for Mental Health

October 09, 2024

## NOTICE OF AWARD

**BIOSYN HEALTHCARE SYSTEMS, INC.**  
Unit 1404 South Center Tower, Madrigal Business Park  
Market St., Ayala Alabang, Muntinlupa City  
Tel No: 0917-123-9899  
Email: ericaquinotahpi@gmail.com

Dear Sir/Madam,

Please be advised that as a result of **Public Bidding** conducted by National Center for Mental Health for the **One (1) Lot of Supply, Delivery, Installation, Testing, and Commissioning of Branded and Brand-new Magnetic Resonance Imaging (MRI) System inclusive of All Integral and Critical Components** and is hereby **awarded** to your company the following:

ITEM CODE	ITEM DESCRIPTION	QTY	UOM	UNIT PRICE	TOTAL PRICE
RA D- 01	<p><b>One (1) Lot of Supply, Delivery, Installation, Testing, and Commissioning of Branded and Brand-new Magnetic Resonance Imaging (MRI) System inclusive of All Integral and Critical Components</b></p> <p><b>Brand / Model: GE Sigma Prime</b> <b>Country of Origin: China</b></p> <p><b>A. GENERAL REQUIREMENTS</b></p> <ol style="list-style-type: none"> <li>1. The machine should be branded, brand new and a recent model (at least 2021)</li> <li>2. The machine should be able to image the whole body.</li> <li>3. The machine should be compatible and connected to our existing RISPACS with non-expiring Modality Work List License, at no additional cost to the Procuring Entity</li> </ol> <p><b>B. MAGNET SYSTEM</b></p> <ol style="list-style-type: none"> <li>1. Superconducting Magnet: at least 1.5 Tesla active shielded</li> <li>2. Magnet length: 175 cm or below</li> <li>3. Magnet bore: at least 60 cm</li> <li>4. Shimming: active and passive</li> <li>5. Magnet cooling (Cryogen): Helium (Zero boil off)</li> </ol>	1	lot	₱119,980,000.00	₱119,980,000.00

*"There is no Health without Mental Health"*



6. Magnetic field homogeneity: The magnetic field homogeneity should be equal to or less than:

- 45 cm DSV: 1.0 ppm
- 40 cm DSV: 0.45 ppm
- 30 cm DSV: 0.15 ppm
- 20 cm DSV: 0.06 ppm
- 10 cm DSV: 0.02 ppm

**C. GRADIENT SYSTEM**

1. Maximum gradient amplitude (mT/m): At least 33 mT/m
2. Maximum slew rate (T/m/s): At least 100 T/m/s
3. Maximum Field of View (in xyz): 50x50x50 cm
4. Noise reduction:
  - With noise reduction
  - With vibration reduction

**D. RF SYSTEM**

- Water cooled
  - The RF computer (transmitter and receiver should be computer controlled and fully digital type
1. RF amplifier type: Solid state
  2. RF Transmitter power: 10 kW or better
  3. Number of Independent Digital RF receiving channels: At least 16

**E. RF COILS**

1. Main body coil integrated to the magnet: Must be quadrature
2. Head-Neck Neurovascular Array: With at least 16 channels
3. Spine or Posterior Array embedded in the table: With at least 12 channels
4. Anterior Array: With at least 9 channels
5. Flex coil for shoulder, knee, and hip: With at least 8 channels
6. Flex coil for wrist and hand: With at least 8 Channels
7. Coil of foot and ankle: With at least 8 channels
8. Breast Array: With at least 8 channels (optional)

**F. PATIENT TABLE**

1. Should be fully motorized, computer controlled
2. Movements in vertical and horizontal directions
3. Should be able to withstand patient load of 200 kg

- 4. With emergency switch for quick release of tabletop
- 5. With automatic sensing coil ports
- 6. Should have patient alarm

**G. MAIN COMPUTER CONSOLE AND WORK STATION (IMAGE PROCESSING AND APPLICATION SOFTWARES)**

**1. Main Operator Console Computer System**

- Manufacturer's specification
- Multitasking capabilities (scan, film, and post processing) at the same time
- Simultaneous scan and recon
- With two-way intercom system and Emergency stop button
- Image reconstruction speed of at least 60,000 FFT/second at 256x256 matrix
- With CD/DVD writer
- With noise and artifact reduction during reconstruction
- With deep learning-based reconstruction in all anatomies

**2. Application Software**

**i. Imaging modes, Pulse Sequences, and capabilities**

The following must be available with the MRI system:

- Spin echo (SE)
- Fast Spin Echo (FSE)
- Gradient Echo (GE)
- Spoiled Gradient Echo
- Fast Steady State sequence
- FLAIR
- Fat and water saturation/separation
- 2D and 3D time of flight
- 2D and 3D phase contrast
- Non contrast MRCP
- Dual Echo Fast Gradient Echo
- Echo Planar Imaging (EPI)
- Short T1 Inversion Recovery (STIR)
- Double Inversion Recovery (DIR)
- Triple Inversion Recovery (TIR)
- SWI
- Motion Correction
- Spectroscopy
- Perfusion Study
- Tractography
- Diffusion Tensor Imaging
- Metal Artifact Reduction and Correction
- Compressed Sensing
- Whole body DWI
- Enhanced Diffusion weighted imaging

- Multi shot Diffusion
- Respiratory gating/ trigger
- Deep Learning Reconstruction
- Volumetric imaging on T1, T2, FLAIR, PD
- Viability imaging
- Dynamic body imaging
- Dynamic brain function which includes blood flow, blood volume, mean transit time, time to peak signal intensity
- Whole body metastasis screening
- Non contrast vascular imaging
- Fat suppression
- Cerebral blood flow measurement
- Non contrast MRA

### 3. MRI Workstation

- With three (3) sets of radiologist workstations with dual monitors and DICOM viewers with non-expiring licenses, Windows operating software, Microsoft Office, and tables and chairs
- Should be able to perform Neuro image processing like Perfusion, Diffusion, Perfusion Diffusion Mismatch, Spectroscopy
- Should be able to perform body image processing

## H. OTHER REQUIREMENTS

### 1. Accessories

- One (1) MRI compatible CCTV system for patient observation
- One (1) unit Music system for the patient
- One (1) unit Two-way intercom system
- One (1) MRI compatible wheelchair
- Two (2) MRI compatible IV stand
- One (1) MRI compatible coil cabinet
- Two (2) Hand held metal detectors
- One (1) Laser printer or photopaper or dry film printer
- One (1) heavy duty printer and scanner with refill-able ink tank
- Two (2) MRI compatible Fire Extinguishers
- One (1) MRI compatible *patient stretcher/gurney/trolley*
- One (1) MRI Compatible transfer board
- Two (2) MRI compatible medical oxygen regulator/guage
- Two (2) MRI compatible oxygen tanks (at least 40 liters)
- One (1) Oxygen monitor in the Magnet room
- One thousand pieces (1000) ear plugs
- One thousand pieces (1000) Head set covers
- One (1) MRI compatible suction machine (optional)

<ul style="list-style-type: none"> <li>• One (1) set MRI phantom</li> <li>• Two (2) units air purifiers with at least 500m3/h CADR and H13 filters with ten (10) extra H13 filters</li> <li>• With appropriate MR cooling/ chiller system</li> <li>• Security straps, warning signs, and positioning aids</li> <li>• Fifteen (15) pcs Gadobutrol 5 ml contrasts</li> <li>• One (1) unit compatible pressure injector</li> <li>• Thirty (30) units each of syringes, tubings, contrast bottles compatible with the pressure injector</li> <li>• Three (3) units of UV light, at least 58W, non-ozone (optional)</li> <li>• One (1) unit MRI compatible pulse oximeter</li> <li>• One (1) unit Network attached storage, at least 100 TB storage and 5 bays</li> </ul> <p>2. Airconditioning</p> <ul style="list-style-type: none"> <li>• Two (2) units appropriate air conditioning system for the magnet room</li> <li>• Two (2) units appropriate air conditioning system for the equipment room</li> <li>• One (1) unit appropriate air conditioning system for the control room</li> <li>• One (1) unit appropriate air conditioning system for the recovery/preparation room</li> <li>• One (1) unit appropriate air conditioning system for the waiting area</li> <li>• Two (2) units appropriate air conditioning system for the reading and doctor's room</li> <li>• One (1) set of appropriate dehumidifier</li> <li>• All conditioning units must be inverter type</li> </ul> <p>3. MRI Room preparation</p> <ul style="list-style-type: none"> <li>• RF shielding for the MRI room should be provided.</li> <li>• Magnetic shielding should also be provided if needed.</li> </ul> <p>4. Civil works and Electrical works</p> <ul style="list-style-type: none"> <li>• The needed civil and electrical works are included (Plans are done by Engineering Section)</li> <li>• Step up or step down transformer if needed</li> <li>• The supplier must provide connection to the hospital's main power line</li> <li>• One (1) unit UPS for the MRI scanner and chiller with at least 10 minutes backup time</li> <li>• One (1) Transient voltage surge suppressor (TVSS) compatible with the MRI Scanner</li> </ul> <p>5. Warranty, Maintenance, Service</p> <ul style="list-style-type: none"> <li>• Three (3) years comprehensive warranty on</li> </ul>				
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<p>parts and services of the MRI machine to start after end users' acceptance</p> <ul style="list-style-type: none"> <li>• At least one (1) calibration per year</li> <li>• At least four (4) preventive maintenance per year</li> </ul> <p>6. Trainings</p> <ul style="list-style-type: none"> <li>• At least two (2) weeks or 80 hours off site training for 2 Radiologic Technologists to a health facility with the same MRI model at no cost to the Procuring Entity</li> <li>• At least two (2) weeks or 80 hours on site training for 2 Radiologic Technologists, Radiologists, and Physicist at no cost to the Procuring Entity</li> <li>• The Supplier shall provide training certificates upon completion of all training requirements</li> </ul> <p>7. Others</p> <ul style="list-style-type: none"> <li>• Product data sheet of the MRI in English should be submitted as attachment to support the Statement of Conformity to Section VII Technical Specifications.</li> <li>• Must pass the performance/ acceptance testing conducted by FDA or its accredited testing body</li> <li>• Must pass the requirements for FDA registration/ licensing</li> <li>• Undertaking to provide magnetic shielding, if necessary for the projects upon conduct of site inspection</li> <li>• Certification that the manufacturer has been in the business of manufacturing MRIs for at least <u>10 years</u></li> <li>• Certification that the brand being offered has at least <u>10</u> MRI installations in the Philippines in the last five (5) years and can be visited at End user's disposal</li> <li>• Certification that the brand that being offered has been in the local market for at least <u>10 years</u></li> <li>• Certification by the manufacturer that supplies, parts, and accessories shall be available for at least 15 years after expiration of warranty</li> <li>• Certification that service engineers trained on service and repair are available in the Philippines</li> <li>• Certification that the manufacturer has a local office in the Philippines for the last <u>10 years</u></li> <li>• MRI machine should be US FDA approved or <u>CE approved</u></li> </ul>								
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<ul style="list-style-type: none"> <li>• Certification of Manufacturer's ISO compliance to 13485:2016</li> <li>• Certification that the MRI machine proposed is a current model launched within the past 3 years (at least 2021)</li> <li>• Service and operations manuals, soft and hard copies</li> </ul> <p><b>I. TURN KEY</b></p> <ul style="list-style-type: none"> <li>• Room renovation and other civil works including floor, wall, ceiling finish, appropriate doors, and furniture in the MRI area</li> <li>• Electrical works within the MRI area</li> <li>• Plans and terms of references for the MRI area including civil works, electrical works, furniture are care of Engineering Section</li> </ul>				
<b>GRAND TOTAL</b>				<b>₱119,980,000.00</b>

You are hereby required to provide the following documents within ten (10) calendar days:

- Notarized Contract Agreement Form (legal size) for the Procurement of **One (1) Lot of Supply, Delivery, Installation, Testing, and Commissioning of Branded and Brand-new Magnetic Resonance Imaging (MRI) System inclusive of All Integral and Critical Components;**

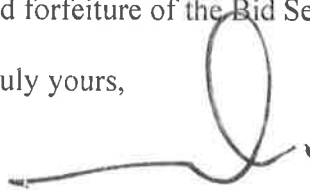
*Note: Signatory: NOEL V. REYES, MD, FPPA, MMHoA, Medical Center Chief II; and*

- Performance Security in any forms and amount stipulated below:

A. Cash / Cashier's Manager's Check Bank Guarantee	Five Percent (5%) of the Total Contract Price
B. Surety Bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission / GSIS	Thirty Percent (30%) of the Total Contract Price

Failure to provide any of the above shall constitute sufficient ground for cancellation of the Award and forfeiture of the Bid Security.

Truly yours,



**NOEL V. REYES, MD, FPPA, MMHoA**  
Medical Center Chief II

CONFORMED BY:

DATE AND TIME:

*[Handwritten Signature]*  
 RESUMABLE...  
 Oct 9, 2024 / 9:57 AM