



**Nuclear Medicine Accreditation Approval Report**

September 27, 2016

**Privileged and Confidential • Peer Review**

Release or disclosure of this document is prohibited in accordance with Code of Virginia 8.01-581.17

Michael Banas, M.D.  
Great Lakes Cardiovascular  
Attn: Scott MacLean  
5959 Big Tree Rd.  
Orchard Park, New York 14127

**SUBJECT: NMAP ID# 52753, Great Lakes Cardiovascular, Unit # 01**

Dear Dr. Banas:

**The American College of Radiology’s Committee on Nuclear Medicine Accreditation is pleased to inform you that the above-named nuclear medicine unit has been GRANTED ACCREDITATION for a period of three years.**


Accreditation is only granted if your facility has met all of the testing criteria established by the ACR Committee on Nuclear Medicine Accreditation for 1) clinical image quality and 2) phantom image quality. Your nuclear medicine unit’s results are presented in the following table:

<b>NMAP ID-Unit #: 52753-01</b>	<b>Unit Year &amp; Manufacturer: 2015 General Electric Medical Systems</b>
<b>Clinical Image Quality</b>	
<b>Nuclear Cardiology</b>	<b>ACCEPTABLE</b>
MPI Cardiology 1	ACCEPTABLE
MPI Cardiology 2	ACCEPTABLE
<b>Phantom Image Quality</b>	
<b>Planar</b>	<b>ACCEPTABLE</b>
Tc-99m/Co-57	ACCEPTABLE
<b>SPECT</b>	<b>ACCEPTABLE</b>
Tc-99m	ACCEPTABLE
<b>Overall Accreditation Outcome</b>	<b>ACCREDITATION GRANTED</b>

Standardized scoring procedures were used in the review of all images and data submitted for evaluation:

1. The **clinical images** must be passed by two nuclear medicine physician reviewers in order to receive accreditation. During the review, image quality categories are scored for each film. Additional comments may be provided by the reviewers to further improve image quality. They are recorded in the clinical image evaluation section of this report.
2. The **phantom images** are scored and evaluated by two medical physicists, using standardized evaluation methods. The filmed phantom images and measured phantom results must be judged to be adequate. Additional comments may be provided by the reviewers to improve image quality. They appear in the phantom image evaluation section of this report.

**Requirements for Maintaining Accreditation**

- Please post the ACR Accreditation Certificate in a location visible to patients.
- As soon as possible, you must update your records on your accreditation home page if your facility:
  1. Changes **supervising nuclear medicine physician** (i.e., lead interpreting physician), **total physician group**, **all nuclear medicine technologists**, **facility owner** or **facility address**.
  2. Changes (either addition or replacement) its nuclear medicine units as soon as possible so that we may advise you of the appropriate required testing to maintain accreditation.
  3. Changes to your Medicare Enrollment number and/or National Provider Identifier (if applicable).
  4. Is permanently closing.
- Approximately 8 months prior to the expiration of your accreditation, we will send you a package to begin the accreditation renewal process. The entire process should take approximately six months so it will be important to return these completed materials in a timely manner so that your accreditation does not expire. Expiration of your accreditation could affect reimbursement from payers.
- It is expected that your facility will continue to maintain the demonstrated level of quality. If requested by the ACR, you must participate in either a mailed review of image quality or an on-site survey by an ACR team. Failure to participate in a requested review or on-site survey could result in a revocation of accreditation.
- Facilities can download the new ACR certification mark and add this to reports, letterhead and referral pads.
- Although you may advertise the ACR accreditation status of your nuclear medicine equipment, the ACR logo may not be used in your advertisements.  is a registered trademark and service mark of the American College of Radiology.

The ACR's Committee on Nuclear Medicine Accreditation sincerely hopes you will find the enclosed report helpful in improving image quality at your facility. Please visit the ACR website at [www.acraccreditation.org](http://www.acraccreditation.org) or call the ACR Nuclear Medicine/PET Accreditation Information Line at (800) 770-0145 if you have any questions.

Finally, we hope you proudly display your new ACR Accreditation Certificate so that it is visible to all of your patients. It signifies that your facility provides this essential service to your community at the highest standards of the radiology profession.

Sincerely yours,



Munir Ghesani, M. D.  
Chairman – Committee on Nuclear Medicine Accreditation

## I. Clinical Image Evaluation

The following are all of the attributes evaluated by the clinical image reviewers. An "X" next to a specific attribute represents a characteristic that is suboptimal and should be corrected.

### MPI CARDIOLOGY 1

ATTRIBUTE	DEFICIENCIES	POSSIBLE CAUSE(S)
<b>A. REPORT IDENTIFICATION</b>	<input type="checkbox"/> Patient name <input type="checkbox"/> Patient identifier <input type="checkbox"/> Date of exam <input type="checkbox"/> Referring physician (or other) <input type="checkbox"/> Indication for exam <input type="checkbox"/> Exam type <input type="checkbox"/> Date of authentication <input type="checkbox"/> Time of imaging post-radiopharmaceutical administration (if pertinent) <input type="checkbox"/> Radiopharmaceutical, dosage, route of administration <input type="checkbox"/> Views obtained <input type="checkbox"/> Pharmacological/other interventions <input type="checkbox"/> Symptoms to interventions <input type="checkbox"/> Patient preparation <input type="checkbox"/> Body (description of findings) of report <input type="checkbox"/> Impression of report <input type="checkbox"/> Documentation of communication of urgent or significant unexpected findings	<input type="checkbox"/> No established format <input type="checkbox"/> Other
<b>B. FILM IDENTIFICATION (or attached computer printout)</b>	<input type="checkbox"/> Patient name <input type="checkbox"/> Patient identifier <input type="checkbox"/> Date <input type="checkbox"/> Institution <input type="checkbox"/> Study type <input type="checkbox"/> Images labeling, including R and L markers <input type="checkbox"/> Technologist's initials <input type="checkbox"/> Time of imaging post-radiopharmaceutical administration (if pertinent) <input type="checkbox"/> Other	<input type="checkbox"/> Technical error <input type="checkbox"/> No established labeling method <input type="checkbox"/> Other
<b>C. ACQUISITION</b>	<input type="checkbox"/> Acquisition inadequate <input type="checkbox"/> Other	<input type="checkbox"/> Poor positioning <input type="checkbox"/> Too short acquisition time <input type="checkbox"/> Large radius of rotation <input type="checkbox"/> Inadequate number of counts/stop <input type="checkbox"/> Inadequate sampling angle <input type="checkbox"/> Wrong collimator <input type="checkbox"/> Wrong acquisition matrix (computer) <input type="checkbox"/> Patient motion <input type="checkbox"/> Liver/gut artifact <input type="checkbox"/> Nonuniform field <input type="checkbox"/> Center of rotation error <input type="checkbox"/> Attenuation artifact <input type="checkbox"/> Infiltrated dose <input type="checkbox"/> Arrhythmia artifact <input type="checkbox"/> Other

<b>D. PROCESSING</b>	<input type="checkbox"/> Processing inadequate <input type="checkbox"/> Other	<input type="checkbox"/> Overfiltration obscures anatomy/lesion <input type="checkbox"/> Underfiltration obscures anatomy/lesion <input type="checkbox"/> Wrong short axis, horizontal long axis, vertical long axis orientation <input type="checkbox"/> Wrong short axis slice thickness <input type="checkbox"/> Wrong horizontal long axis slice thickness <input type="checkbox"/> Wrong vertical long axis slice thickness <input type="checkbox"/> Stress and rest images not oriented to similar axis <input type="checkbox"/> Inadequate gating interval <input type="checkbox"/> Other
<b>E. DISPLAY</b>	<input type="checkbox"/> Display inadequate <input type="checkbox"/> Other	<input type="checkbox"/> Blurred images <input type="checkbox"/> Imager/film/processor artifacts <input type="checkbox"/> Wrong image size <input type="checkbox"/> Wrong image intensity <input type="checkbox"/> Inadequate data set (all images not submitted) <input type="checkbox"/> Other
<b>F. RADIOPHARMACEUTICAL</b>	<input type="checkbox"/> Suboptimal biodistribution <input type="checkbox"/> Other	<input type="checkbox"/> Poor radiopharmaceutical preparation <input type="checkbox"/> Technical factors <input type="checkbox"/> Wrong radiopharmaceutical <input type="checkbox"/> Previous radionuclide study <input type="checkbox"/> Other
<b>G. ADDITIONAL RECOMMENDATIONS</b>	<input type="checkbox"/> Recommend reviewing the ACR Practice Guideline for the Performance of Cardiac Scintigraphy	
<b>H. ADDITIONAL COMMENTS</b>		

**MPI CARDIOLOGY 2**

ATTRIBUTE	DEFICIENCIES	POSSIBLE CAUSE(S)
<b>A. REPORT IDENTIFICATION</b>	<input type="checkbox"/> Patient name <input type="checkbox"/> Patient identifier <input type="checkbox"/> Date of exam <input type="checkbox"/> Referring physician (or other) <input type="checkbox"/> Indication for exam <input type="checkbox"/> Exam type <input type="checkbox"/> Date of authentication <input type="checkbox"/> Time of imaging post-radiopharmaceutical administration (if pertinent) <input type="checkbox"/> Radiopharmaceutical, dosage, route of administration <input type="checkbox"/> Views obtained <input type="checkbox"/> Pharmacological/other interventions <input type="checkbox"/> Symptoms to interventions <input type="checkbox"/> Patient preparation <input type="checkbox"/> Body (description of findings) of report <input type="checkbox"/> Impression of report <input type="checkbox"/> Documentation of communication of urgent or significant unexpected findings	<input type="checkbox"/> No established format <input type="checkbox"/> Other
<b>B. FILM IDENTIFICATION (or attached computer printout)</b>	<input type="checkbox"/> Patient name <input type="checkbox"/> Patient identifier <input type="checkbox"/> Date <input type="checkbox"/> Institution <input type="checkbox"/> Study type <input type="checkbox"/> Images labeling, including R and L markers <input type="checkbox"/> Technologist's initials <input type="checkbox"/> Time of imaging post-radiopharmaceutical administration (if pertinent) <input type="checkbox"/> Other	<input type="checkbox"/> Technical error <input type="checkbox"/> No established labeling method <input type="checkbox"/> Other
<b>C. ACQUISITION</b>	<input type="checkbox"/> Acquisition inadequate <input type="checkbox"/> Other	<input type="checkbox"/> Poor positioning <input type="checkbox"/> Too short acquisition time <input type="checkbox"/> Large radius of rotation <input type="checkbox"/> Inadequate number of counts/stop <input type="checkbox"/> Inadequate sampling angle <input type="checkbox"/> Wrong collimator <input type="checkbox"/> Wrong acquisition matrix (computer) <input type="checkbox"/> Patient motion <input type="checkbox"/> Liver/gut artifact <input type="checkbox"/> Nonuniform field <input type="checkbox"/> Center of rotation error <input type="checkbox"/> Attenuation artifact <input type="checkbox"/> Infiltrated dose <input type="checkbox"/> Arrhythmia artifact <input type="checkbox"/> Other

<b>D. PROCESSING</b>	<input type="checkbox"/> Processing inadequate <input type="checkbox"/> Other	<input type="checkbox"/> Overfiltration obscures anatomy/lesion <input type="checkbox"/> Underfiltration obscures anatomy/lesion <input type="checkbox"/> Wrong short axis, horizontal long axis, vertical long axis orientation <input type="checkbox"/> Wrong short axis slice thickness <input type="checkbox"/> Wrong horizontal long axis slice thickness <input type="checkbox"/> Wrong vertical long axis slice thickness <input type="checkbox"/> Stress and rest images not oriented to similar axis <input type="checkbox"/> Inadequate gating interval <input type="checkbox"/> Other
<b>E. DISPLAY</b>	<input type="checkbox"/> Display inadequate <input type="checkbox"/> Other	<input type="checkbox"/> Blurred images <input type="checkbox"/> Imager/film/processor artifacts <input type="checkbox"/> Wrong image size <input type="checkbox"/> Wrong image intensity <input type="checkbox"/> Inadequate data set (all images not submitted) <input type="checkbox"/> Other
<b>F. RADIOPHARMACEUTICAL</b>	<input type="checkbox"/> Suboptimal biodistribution <input type="checkbox"/> Other	<input type="checkbox"/> Poor radiopharmaceutical preparation <input type="checkbox"/> Technical factors <input type="checkbox"/> Wrong radiopharmaceutical <input type="checkbox"/> Previous radionuclide study <input type="checkbox"/> Other
<b>G. ADDITIONAL RECOMMENDATIONS</b>	<input type="checkbox"/> Recommend reviewing the ACR Practice Guideline for the Performance of Cardiac Scintigraphy	
<b>H. ADDITIONAL COMMENTS</b>		

## II. Phantom Image Evaluation

### Planar Images

Isotope: Tc-99m

**PASS**

A. Field Uniformity

Head 1	PASS
Head 2	PASS

B. Spatial Resolution

- High Resolution Collimator - Must resolve 7.9 mm rods with high contrast and greater

Head 1	PASS
Head 2	PASS

**Comments:**

Moderate non-uniformities on both heads (especially head 1). The reason for this should be investigated with service personnel. The resolution was good.

### SPECT Images

Isotope: Tc-99m

**PASS**

<b>Uniformity</b>	PASS
-------------------	------

Must resolve 11.1 mm rods with low contrast and greater

<b>Spatial Resolution (Rods)</b>	PASS
----------------------------------	------

Must resolve 19.1 mm spheres with high contrast and greater

<b>Contrast (Spheres)</b>	PASS
---------------------------	------

**Comments:**

The Tc-99m SPECT performance was good. The top slices of the phantom are missing. Please make sure to provide those in future submissions.