### About the Applicant



Molecular Imaging Services, Inc. Your Cardiac Imaging Specialists About Us Our Team Services Insights

#### **About Us**



#### Comprehensive Support

Molecular Imaging Services, Inc. (MIS) is a privately held company with headquarters in Newark, Delaware. We Specialize in cardiac PET and PET/CT in-office cardiology imaging solutions. Our comprehensive support approach has redefined the turnkey model with unparalleled clinical, operational and reimbursement resources and solutions. With the support of our Medical Advisor -Gary Heller, MD, - we have solidified physician education and quality assurance vital to your successful transition to a first class PET program.

- Molecular Imaging Services, Inc. is a Delaware company with a national reputation in providing cardiac PET services.
- Molecular Imaging Services, Inc. previously brought this technology to Delaware at another location in central New Castle County, at the Abby Medical Center in Newark, Delaware.
- That piece of equipment is at full utilization.
- This application seeks approval for adding only the second outpatient cardiac PET scanner in the State of Delaware.

## Brief Description of the Equipment and Costs

#### Discovery<sup>™</sup> STE<sup>16</sup> with Discovery Dimension Console

Internet Web Site: http://www.gehealthcare.com/usen/fun img

Whole-Body Integrated Positron Emission And Computed Tomography (PET/CT) Imaging System



#### S9116LE, S9116ME

deliver clinically relevant enhancements. These upgrades include scaleable PET, CT and advance applications.

The **Discovery STE**<sup>16</sup> performance can be attained through the primary configurations:

- (a) Factory fitted Discovery STE<sup>16</sup>
   (S9116LE) Fixed Site System
   (b) Factory fitted Discovery STE<sup>16</sup>
- (S9116ME) Mobile System

#### Introduction

The Discovery STE<sup>16</sup> PET/CT Scanner with

Willis, renal arteries and peripheral vascular arteries.

• The 6.3 MHU **Performix X-Ray Tube** demonstrates the highest reliability & delivers the power you need for Image Quality. The Performix Tube now comes standard with a one-year, non pro-rated warranty.

**micrVoxel**<sup>™</sup> **imaging** improves CT 3D and CT reformatted 2D resolution through the optimum choice of sub-millimeter slice thickness and reconstructed voxel size.

Unmatched Volume Image Quality

- The cost of the equipment is \$450,000, which will be paid as a five-year lease.
- The fit-out is projected to cost \$250,000.
- The entire \$700,000 expenditure will be covered by a five-year loan with an interest rate of 5.5%.

#### How Cardiac PET is Used to Assess Coronary Artery Disease



- Cardiac positron emission tomography (PET) is used for the diagnosis of coronary artery disease (CAD).
- A cardiac PET myocardial perfusion scan images blood flow to the heart muscle at rest and stress. It can detect coronary artery disease by demonstrating decreased blood flow, which may benefit from angioplasty or surgery.
- Cardiac PET provides improved accuracy, less radiation and increased efficiency in the detection of coronary artery disease compared to current modes of nuclear stress testing (SPECT).
- Cardiac PET is particularly helpful in patients who are heavy (have a high body mass index, or BMI), or have a large amount of breast/chest wall tissue, breast implants, or pleural or pericardial effusions.

### Cardiac PET Benefits



- **Higher accuracy** Cardiac PET is one of the most accurate methods of testing blood flow to the heart.
- **Lower downstream costs** Among other benefits from higher test accuracy, cardiac PET reduces unnecessary procedures and improves confidence in final results. The impact of this higher level of accuracy is lower costs by avoiding unnecessary testing.
- **Reduced radiation** Cardiac PET is the safest method to perform myocardial perfusion imaging with the lowest radiation exposures compared to all other options
- **Micro-vessel evaluation** This form of testing can be used to evaluate micro-vessels to get a better idea of cardiac health.
- Shorter testing times With cardiac PET, patients can be in and out of the office in 1 hour or less.
- Assessing response to treatment Cardiac PET can be used to evaluate patients' response to treatment.

### Independent Assessments of Patient Benefits

#### American Society of Nuclear Cardiology and Society of Nuclear Medicine and Molecular Imaging Joint Position Statement on the Clinical Indications for Myocardial Perfusion PET

#### Writing Group:

Timothy M. Bateman MD (Co-Chair), Vasken Dilsizian MD (Co-Chair), Rob S. Beanlands MD, E. Gordon DePuey MD, Garv V. Heller MD, PhD, and David A. Wolinsky MD

- The joint position statement identified six factors that contributed to lowering costs, improving outcomes and enhancing satisfaction. This list includes:

- 1) high diagnostic accuracy;
  2) consistent high-quality images;
  3) low radiation exposure;
  4) short acquisition protocols;
  5) quantification of myocardial blood flow; and
  6) strong prognostic power.

### Patient Access/Need



- Throughout the U.S., use of cardiac PET for the diagnosis CAD has increased significantly over the past decade.
- This modality has experienced double digit yearover-year growth for the past five years.
- Currently Delaware has only one dedicated outpatient cardiac PET scanner. That equipment is located at the Abby Medical Center in Newark, Delaware.
- That piece of equipment is at full utilization. So, it is effectively unavailable for the vast majority of Delawareans.
- Outside of this single piece of equipment, the closest cardiac PET scanners are located in Philadelphia and Baltimore.

## Projections on Use of the Equipment



- Molecular Imaging Services, Inc. will lease this equipment to community cardiologists using a block lease arrangement.
- Currently, cardiologists have indicated sufficient interest to immediately generate **80 tests monthly.**
- This will allow the applicants to be profitable in the first year of business.
- In the second year of operations, the applicant are projecting **90 tests monthly.** In year three, the applicant is projecting **100 tests monthly**.

#### **Review Considerations**



Relationship of the Proposal to the Health Resources Management Plan-

Delaware aspires to be a national leader on each dimension of the "Triple Aim Plus One". The State desires better health outcomes, improved health care quality and patient experience, lower growth in per capita health care costs, and enhanced provider satisfaction.

This equipment achieves all of the State's objectives.

# Questions

