IMPORTANT: Before You Arrive:

- Please read everything in this booklet - CAREFULLY - please call the office with any questions.
- You must have a support person with you for the evaluation.
- If you use supplemental oxygen, you must inform your oxygen provider regarding your travel plans.
- Please wear loose fitting clothes and comfortable shoes.
- Please contact the office at +91-79-30101100 with any questions or concerns.
NEW PATIENT BINDER CONTENTS

This binder includes the following sections that will help to guide you through your transplant journey.

Welcome Letter

Your Transplant Journey.................................................................Tab 1
Caregiver Expectations.................................................................Tab 2
Getting Ready for Your Transplant....................................................Tab 3
Medicines and Allergies.................................................................Tab 5
Review of Systems and Conditions....................................................Tab 6
Record Release Forms.................................................................Tab 7
Your Transplant Team.................................................................Tab 8
Testing for Transplant Evaluation....................................................Tab 9
Dear Mr. / Ms. ________

Welcome to CIMS Transplant Services. At CIMS, we are committed to the quality of care and want you to have a positive experience.

We have included a new patient binder compiled especially for you. In it you will find:

- Your Transplant Journey (Itinerary) — This is your personal road map of your visit as you navigate through CIMS for your transplant evaluation.
- Caregiver Expectations — Please have your caregiver(s) review this section as they make the commitment to help you during your transplant journey.
- Getting Ready for Your Transplant — You will find a consent form for transplant. Please read it over, but do not sign it. Your doctor will go over the content with you, give you an opportunity to ask questions and you will sign it at the time of your evaluation.
- Medicines and Allergies — Kindly note down list of your medicines, dosages, prescribing doctor(s), and for what reason you are taking each. Please include any over-the-counter medicines, dietary supplements, and herbal supplements. *Please fill completely and give it to your transplant coordinator during your evaluation.
- The Transplant Team — During your evaluation, you will meet with various members of the team who will explain their roles in the transplant process.
- Diagnostic Testing for Transplant Evaluation — Included is a list of tests that may be included as part of your evaluation.

If you have any questions, please call the Transplant OPD at +91-79-30101100 - Ext. 1288

Sincerely,

Cardiothoracic Transplant Team
Personal Information:
Name: __________________________________________________________________________
Date of Birth: ____________                        Place of Birth: _____________________________________________________________________
Address: _________________________________________________________________________
City: _______________                         State: __________                       Zip: __________
How long does it take you to get to CIMS Hospital?_________________________________________
Do you drive?  □ NO  □ YES
Does your Primary Caregiver drive? □ NO  □ YES
Phone Numbers: __________________           __________________               __________________
Home                                              Cell                                               Work
Email Address: ________________________________________________________________
Religion: ______________________
Education Completed (check highest level):
School □  Graduate □  Post Graduate □  Other ________□
Occupation: ___________________________________________________
Check the one that closest applies to your situation:
Job □  Business □  Unemployed □  Disabled □  Retired □
Marital Status: Single □  Married □  Widowed □  Separated □  Divorced □
With whom do you live? ________________________          Relationship: ____________________
List any special needs:          Visually impaired □                   Hearing impaired □
Reading Impaired □                   Physically impaired □
Did anyone help you to complete this paperwork? NO □  YES □  Who? _______________________
Can you speak: English □           Hindi □           Gujrati □           Please specify: _______________________
Can you write: English □           Hindi □           Gujrati □           Please specify: _______________________
Do you have a Living Will?         NO         YES
In what kind of dwelling do you live? 1 Level Home □       Multi Level Home □       Apartment □
Number of stairs: Car to front door _____ Front door to bathroom _______ to bed room _____
Do you have a full bathroom accessible on the first floor?       NO       YES
Have you ever travelled outside the INDIA?       NO       YES
Where/When: _________________________________________________________________
Providers:

Family Doctor: ________________________________ Phone: ____________
Local Cardiologist: ________________________________ Phone: ____________
Pharmacy: ________________________________ Phone: ____________
Local Laboratory: ________________________________ Phone: ____________
Home Care Agency: ________________________________ Phone: ____________
Ambulance Service: ________________________________ Phone: ____________
Local Hospital used for emergency: ________________________________ Phone: ____________
Equipment Supplier: ________________________________ Phone: ____________

Emergency Contact:

Name: ________________________________ Relation: ____________
Address: ________________________________ Phone: ____________

Social History:
Have you ever smoked cigarettes? □ NO □ YES
Date Quit: ____________
Packs per day: ____________
Have you ever used other tobacco products? □ NO □ YES
Date Quit: ____________ Product: ________________________________
Have you ever used recreational drugs? □ NO □ YES
When did you last use? ___/___/___
Do you drink alcohol? □ NO □ YES
How many drinks per day? ____________
Do you have any pets? □ NO □ YES
Type? ________________________________
What are your hobbies? ________________________________

Dental History:
When was your last dental exam? ___/___/___ How often do you go? Every 6 mo. Every 12 mo.
Do you wear dentures? □ NO □ YES Full dentures □ Partial Plate □
Prosthetic and Access Devices:

Do you currently use any of the following:

- Eyeglasses or contacts
  - [ ] NO
  - [ ] YES
  Specify: ________________________

- Implants
  - [ ] NO
  - [ ] YES
  Specify: ________________________

- Pacemaker/defibrillator
  - [ ] NO
  - [ ] YES
  Brand and Serial #: ______________

- Artificial limb
  - [ ] NO
  - [ ] YES
  Specify: ________________________

- Joint replacement
  - [ ] NO
  - [ ] YES
  Specify: ________________________

Do you use:
  - [ ] Walking Stick
  - [ ] WALKER
  - [ ] WHEELCHAIR

Oxygen Use:

Do you currently use oxygen?

- Exercise:
  - [ ] NO
  - [ ] YES
  Liters: ______

- Rest:
  - [ ] NO
  - [ ] YES
  Liters: ______

- Sleep:
  - [ ] NO
  - [ ] YES
  Liters: ______

- At all times:
  - [ ] NO
  - [ ] YES
  Liters: ______

- CPAP/BiPAP:
  - [ ] NO
  - [ ] YES
  Setting:____________________

Nutritional Assessment:

Do you follow a special diet?

- [ ] NO
  - [ ] YES
  Specify:_____________________

Have you had a recent change in weight?

- [ ] NO
  - [ ] YES
  Specify loss/gain (in pounds): _______

Do you attend physical rehab or other exercise program?

- [ ] NO
  - [ ] YES
  Where:_______________

Do you drink tea/coffee?

- [ ] NO
  - [ ] YES
  How much per day?__________

Do you drink sugar drinks/soda/pop?

- [ ] NO
  - [ ] YES
  How much per day?__________

Pain Assessment:

Do you have pain?

- [ ] NO
  - [ ] YES
  Location/Intensity: _________

How do you manage your pain, if applicable?

Are you treated by an MD for pain? What doctor manages this pain?

_____________________________________________________________________________
**Health Maintenance Assessment:**

- Have you had a chest x-ray? [ ] NO [ ] YES  Date/Location: _________________
- Have you had a DEXA scan? [ ] NO [ ] YES  Date/Location: _________________
- Have you had a mammogram? [ ] NO [ ] YES  Date/Location: _________________
- Have you had a pap-smear? [ ] NO [ ] YES  Date/Location: _________________
- Have you had a colonoscopy? [ ] NO [ ] YES  Date/Location: _________________

**Were you ever vaccinated for?**

- Flu / H1N1 [ ] NO [ ] YES  Date:
- Chicken Pox [ ] NO [ ] YES  Date:
- Mumps [ ] NO [ ] YES  Date:
- Hepatitis A [ ] NO [ ] YES  Date:
- Hepatitis B [ ] NO [ ] YES  Date:
- Pneumonia [ ] NO [ ] YES  Date:
- Measles [ ] NO [ ] YES  Date:
- Shingles [ ] NO [ ] YES  Date:
- Tetanus [ ] NO [ ] YES  Date:
- Rubella [ ] NO [ ] YES  Date:
- Other _________________ [ ] NO [ ] YES  Date:

**Other:**

In the past (3) months, have you had physical difficulties affecting your living activities?

[ ] NO  [ ] YES  Please describe what activities are limited: __________________________

- Death in the Family [ ] NO [ ] YES  Job issues [ ] NO [ ] YES
- Financial Difficulties [ ] NO [ ] YES
- Family member with health issues [ ] NO [ ] YES
- Other [ ] NO [ ] YES  Please describe:
- Have you ever had a blood transfusion? [ ] NO [ ] YES  If Yes Specify Date: _________________
- Would you accept blood products? [ ] NO [ ] YES
# Family History

<table>
<thead>
<tr>
<th>Family Member</th>
<th>Present Age</th>
<th>Age at Death</th>
<th>Medical History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother</td>
<td>Sister</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother</td>
<td>Sister</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother</td>
<td>Sister</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother</td>
<td>Sister</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother</td>
<td>Sister</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse/Partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son</td>
<td>Daughter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son</td>
<td>Daughter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son</td>
<td>Daughter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son</td>
<td>Daughter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal Grandfather</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal Grandfather</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Grandfather</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Grandfather</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CAREGIVER EXPECTATIONS

Please have your caregiver(s) review this section as they make commitment to help you through your transplant journey.
CAREGIVER PLAN

PLAN OVERVIEW
This plan outlines the following information:

- The role of your caregiver.
- Family and friends who will be involved in caring for you after your transplant.
- Tools for organizing the caregivers when you are recovering.

When an organ becomes available, you will immediately travel to Ahmedabad for your transplant. You will stay in the hospital until you sufficiently recover from your transplant surgery. When you leave the hospital, you may need to stay in _________. You have many options for lodging near the CIMS campus. These options are outlined in the provided attachments.

The main goal of the plan is to have one of your caregivers be with you at all times, until such time your transplant surgeon deems you able to be on your own. Hopefully, each caregiver will be able to stay for 5-7 days. It will be helpful for caregivers to overlap for a portion of a day to relay information.

THE CAREGIVER ROLE

- The primary caregiver will accompany you for your evaluation in Ahmedabad. Your Caregiver Team, however, can be many people.
- Caregivers can be family members or friends. They do not have to be a nurse or medical professional but someone who knows you and can help you with such things as preparing meals, reminding you about taking medicines, doing laundry, and arranging transportation to clinic appointments. You initially will have weekly appointments. You also need to have someone stay with you during your appointments.
- It is required that you have a caregiver stay with you after your transplant, following your discharge from the hospital.
- A caregiver is required to be with you 24 hours a day, 7 days a week. This could be for period as short as 2 weeks, as long as 6 weeks, or longer, depending on your recovery.
- You are not permitted to drive for 6 to 8 weeks after your transplant. The transplant surgeon will let you know when you may begin driving again. Your Caregiver Team will help you with transportation until that time.
- Many people can share the role of caregiver and take turns staying with you. It is important to understand that you should not be alone until the transplant team determines it is safe for you to resume your independence.

BEING A CAREGIVER

The caregiver role is not a "nursing" role, but it is that of a nurturing family member or friend. Their caregiving will include:

- Helping you to get to and from the bathroom, if needed, after you leave the hospital after transplant surgery.
- Making sure you are taking medicines at the right time and in the right amounts.
- Making sure you are measuring and recording all of the information the transplant team has requested.
- Making sure you get to all of your scheduled clinic appointments and/or testing.
- Noticing if you are behaving in an unusual or abnormal way.
- Contacting your nurse coordinator if anything seems wrong.
- Shopping for food and preparing meals in accordance with given dietary guidelines.
- Running errands as needed (for example, filling prescriptions),
- Providing support, encouragement, and entertainment.
- Helping to keep friends and family informed of your status according to your needs and wishes.
- Helping you to comply with all parts of your treatment plan.
CAREGIVER CONTACT INFORMATION

How will your caregivers be contacted? How much time can they give? What is their role in your life? Do they need help with expenses that build up while providing care?

When you get the call from CIMS that an organ is available and you are on the way to the hospital, please let your caregivers know.

<table>
<thead>
<tr>
<th>NAME</th>
<th>ROLE (FAMILY/FRIEND)</th>
<th>AVAILABILITY</th>
<th>NEEDS HELP WITH EXPENSES</th>
<th>PHONE#1</th>
<th>PHONE#2</th>
<th>PHONE#3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GETTING READY FOR YOUR TRANSPLANT

Please take some time and read your consent form for transplant.

Do not sign the form until you are with the doctor or transplant coordinator.

Attached, please find an informed consent providing you with information regarding your potential transplant. We ask that you take the time to read this consent prior to your evaluation and bring the consent along with a list of any questions you may have to your evaluation appointment.

At the time of your appointments your health care team including a transplant surgeon will review the consent with you and provide you the opportunity to answer any questions you may have.

At the time of your appointment you and the physician will review and sign the consent.

Thank you
HEART TRANSPLANT CONSENT FORM (ADULT)

I, ________________________________________________________, have been asked to carefully read
(name of patient or substitute decision-maker)
all of the information contained in this consent form and to consent to the procedure described below on behalf of ___________________________________________________. I have been told that I should ask
(name of patient)
questions about anything that I do not understand. (If the decision-maker is not the patient, references to "I," "my" or "me" should be read as if referring to "the patient," when applicable).

I have indicated a desire to undergo a heart transplant. I understand that this procedure would include the implantation of a heart from a brain dead donor. I acknowledge that my physician(s) explained to me which type of heart I am likely to receive.

I understand that I am being given information about a heart transplant, its risks and alternatives to help me make an informed decision whether to voluntarily and freely undergo the procedure. The information in this consent form, in addition to discussions with my physicians and other health care providers and any other written material they may provide, is intended to give me the information I need to make my decision.

By signing this consent form, I will be acknowledging that I have read and understood all of the information given to me and that I voluntarily choose to undergo a heart transplant. I know that I am free to change my mind and withdraw my consent at any time prior to the procedure.

Evaluation Process:

I will be evaluated before surgery by the transplant team consisting of, but not limited to surgeons, medical specialists, transplant coordinator, social worker, financial coordinator, and dietician to help determine if I can successfully undergo a heart transplant and the urgency of my need for a transplant. As part of the pre-surgical evaluation process, I will need to be available and willing to undergo any or all of the following tests and procedures and any other tests or procedures the physicians may believe are necessary:

- **Blood tests** to help determine the extent of my heart disease, and to determine my blood type for organ matching. My blood will also be tested for the presence of or immunity to specific viruses to determine the risk of certain illnesses and the possible need for treatment after transplantation. Ongoing drug and alcohol testing may be performed in connection with both the medical and psychosocial components of the evaluation process and post-transplant monitoring.

- **Cardiac tests** that may include electrocardiogram (EKG), echocardiogram, MUGA scan, stress tests and/or heart catheterization. My physicians will review these test results to determine if the severity of my heart disease. (If I have a cardiac catheterization, the persons performing the procedure should give me more information about the procedure and its risks.)

- **Metabolic Exercise Testing** to measure the degree to which my heart limits my activities. This is one way to determine-if my heart is sick enough to consider being placed on the heart transplant list.
Pulmonary Function tests (breathing tests) to help analyze my lung function.

Ultrasound (pictures created by sound waves). To screen for diseases of my liver, pancreas and other abdominal organs.

Peripheral Arterial Dopplers of my extremities (sound waves bounced off blood vessels to my extremities) this test helps to show if I have hardening of the arteries or blockages in the circulations to my arms and legs.

Carotid Arterial Dopplers (sound waves bounced off blood vessels in my neck) to check for any problems with the main blood supply to my brain.

CT Scan/MRI/Chest x-ray (complex x-rays that show detailed pictures of my organs) Help to determine the presence of or extent of disease in other organs or blood vessels in my body and to help surgeons plan for the surgery (If have CT Scan/MRI, the person(s) performing the CT Scan/MRI should give me more information about the scan and its risks.)

Heart biopsy (removal of a tiny portion of my heart through a catheter and examination of this portion through a microscope) to help determine the nature of my disease and its severity. (If I have a heart biopsy, I will receive a separate explanation of the heart biopsy and its risks and be asked to sign a separate consent form.)

Social and/or Psychiatric Evaluation (interview) to assist in determining my ability to cope with the stress of transplantation and to follow a rigorous treatment plan.

Other testing requested may include; mammogram (special x-ray to check for cancer of the breast), Pap smear (an examination of tissue from the cervix), PSA (blood test to check for cancer of the prostate), pregnancy test (for women of child bearing age), colonoscopy and dental exam.

I understand that as I progress through the pre-surgery evaluation process, the doctors may decide at any time that I am not a heart transplant candidate. If the doctors decided that I am not a heart transplant candidate they will notify me of their decision and other possible treatment options will be discussed. I know that if I am listed for heart transplant that I am free to change my mind and withdraw my consent at any time prior to the procedure.
Listing:

It has been explained to me that there are more people waiting for heart transplants than there are available hearts. Factors that will be considered if and when I receive a transplant include my need for transplant, my blood type, body weight/height and the length of time I have been on the waiting list will contribute to the possibility of obtaining a donated heart. Need for transplant is determined by a Status based upon my test results with 4 possible types:

- 1A top priority – critically ill, requiring placement of invasive monitoring, intravenous medications or a temporary support pump. Some patients may also be this status if they have a mechanical assist device (heart pump).
- 1B – require special intravenous medications (inotropes) to help the heart function adequately while waiting either in the hospital or at home or be supported without complications on a mechanical assist device (heart pump)
- 2 – does not require special intravenous medications to maintain adequate heart function – usually waiting at home
- 7 – on the list but not currently in the active list (infection, patient request, etc.)

The rules for being listed and my position on the list are determined by an Indian Govt Laws for HOTA/THOA. Upon completion of my evaluation the multidisciplinary team will utilize the patient selection criteria and the results of my testing to determine my suitability for placement on the waiting list for transplantation. Completing the evaluation process and being listed with NOTTO as a candidate for transplantation does not guarantee that I will receive a transplant. I could become inactive on the waiting list if there is a significant change in my medical condition that may temporarily prevent me from receiving a transplant. I am also aware that I could become too ill to undergo transplant or die of my disease before an organ is available.
HEART TRANSPLANT CONSENT FORM (ADULT)

Confidentiality:

CIMS is required by law to maintain the privacy/confidentially of my health information. All information that is obtained in connection with this procedure, which can be linked to me, will remain as confidential as possible within the requirements of state and central government law. Records will be kept regarding this procedure and will be made available for required reviews/audits by representatives of regularity agencies (HOTA, NOTTO and Department of Health) and my insurance provider. Hospital personnel who are involved in the course of my care may review my medical records.

NOTTO Registry:

I understand that if I do become a transplant candidate, state and central government regulations require that some personal health information about me be sent to the NOTTO registry.

Financial Issues:

I have been advised that a financial counselor is available to talk to me about the costs associated with the surgery and the medications needed during and after surgery and to answer questions about sources of payment. I understand that I will have to arrange for payment of the costs that may not be covered by insurance. I also understand that I may not be able to undergo a transplant if I have not made acceptable financial arrangements for payment of costs when a suitable heart becomes available.

Risks Involving Medical Costs and Insurance:

I understand that after I have a heart transplant, health insurance companies may consider me to have “pre-existing” heart disease or other transplant related medical problems and refuse to pay for medical care, treatment or procedures related to those conditions. I also understand that because of my condition, after the surgery, my health insurance and life insurance premiums could be raised and remain higher and that in the future, insurance companies could refuse to insure me.

Source of Organ:

I will be placed on an organ waiting list to receive a heart from the agency that coordinates the retrieval and distribution of organs for transplantation. Hearts are obtained from patients whose heart is still beating, but the patient is determined to be brain dead. Government has established rules governing who can be listed as a prospective heart recipient and who will receive organs as they become available. I understand that completing the evaluation process and being listed for transplantation does not guarantee that I will receive a transplant.
Because there are more people waiting for transplants than there are available donated organs, CIMS evaluates all available donors for suitability for transplantation. I understand that there may be organ donor risk factors that affect the success of the transplanted organ or my overall health. These may include but are not limited to the donor’s medical and social history (high risk behaviors), older aged donors, the presence of the human immunodeficiency virus (HIV) or other infectious diseases that may not be detected in an infected donor, as well as organs with a longer length of time from donation to transplantation. There is a small risk that a cancer in the donor is far too early for diagnosis or was being adequately prevented by the doctor. Such an occult cancer may be contained within the transplanted organ and be initially unable to detected. A surgeon will discuss with me the particular risk factors related to my identified donor prior to transplantation.

At that time I would be able to accept or decline the heart offer based upon the information presented to me.

Surgery:

When a donor organ becomes available I will be expected to come to the hospital as soon as possible. I understand that I may be called in for transplant and at any time the surgery can be canceled if the transplant team determines that the donor is not appropriate for me. At the time of surgery the surgical risks will be reviewed with me and a separate consent for the procedure will be obtained. The type of anesthesia and the risks of the anesthesia will be explained to me by a representative of the anesthesia department and I will be asked to sign a separate consent form. I will be put under general anesthesia, which means that I will be given drugs to put me to sleep, block pain and paralyze parts of my body. I will also be placed on a machine to help me breathe. A catheter may be placed in my wrist to continuously monitor my blood pressure. Intravenous lines may be placed in a large vein in my neck, shoulder, or groin (central lines) for fluid administration. The surgeon(s) will make an incision in my chest as large as necessary to safely locate and remove my organs and safely implant the donated organs. Through this incision my heart will be removed and a donated heart will be placed into my chest. While I am still in the operating room, drains will be put into my body to allow fluids to be removed and help me to heal. These drains may remain after the surgery at the discretion of the surgeon. Special massaging sleeves will be used to keep blood flowing through my legs to prevent dangerous blood clots. The entire operation should take approximately six (6) to twelve (12) hours.
Risks of Surgery:

I understand that there are inherent risks in all surgeries, especially surgeries conducted under general anesthesia. The risk of having some type of complication (problem), minor or major, from heart transplant surgery is relatively common. Most complications are minor and get better on their own. In some cases, the complications are serious enough to require another surgery or medical procedure and there is the potential for one or more complications to cause serious injury or death. Immediately following the surgery, I will experience pain. My pain will be carefully monitored and controlled under the guidance of the transplant team. I understand that my individual response to the newly transplanted organ cannot be predicted. There may be a delay in the full function of my transplanted heart (graft dysfunction). Such a delay may increase the length of my hospital stay and increase the risk of other complications. There is a possibility that the transplanted heart will not function (primary graft failure) appropriately, this dysfunction may be very mild dysfunction to severe. If heart dysfunction is severe life-sustaining treatments such as a ventricular assist device (VAD – heart pump) or External Corporeal Membranous Oxygenation (ECMO) may be needed. These devices would be used until my transplanted heart recovers or a second transplant may be needed.

I have been told that there is a small risk after heart transplant that the upper portion of my vena cava (the main vein returning blood to the heart) may become narrowed, or that tricuspid regurgitation (the heart valve between the right upper heart chamber and the right lower heart chamber does not close completely when the right lower heart beats) may occur. I have been told that there is about an 8% risk that my transplanted heart may develop coronary artery vasculopathy, which is a narrowing of the coronary arteries, within the first year following transplantation. The greatest risk of coronary artery vasculopathy occurs at 5 years and 10 years post-transplant, when the rate rises to approximately 31% and 52% respectively. Drugs to prevent rejection and certain characteristics of the donated heart may contribute to coronary artery disease.

Other risks associated with the surgery include:

- Death. I understand that my particular risk of death may vary based upon my medical history and condition. I acknowledge that a physician has spoken to me about my individual risk of death.
Rejection. Rejection of my transplanted organ may occur immediately after surgery or anytime following transplantation. The reasons for rejection are varied and complex. The treatment for rejection is also complex. It may be necessary for me to take additional drugs or to increase the amount of drugs I am already taking to treat the rejection and maintain organ function. I understand that the treatment to counter rejection may not be successful and my transplanted organ may cease to function necessitating further medical treatment.

Blood clots. These clots usually develop in the legs and can break free and move through the heart to the lungs. In the lungs, they can cause serious interference with breathing, which can lead to death. Blood clots are treated with blood-thinning drugs that may need to be taken for an extended period of time.

There is a possibility that the chest will be left open for several days following heart transplant or very rarely that the sternum (breast bone) will not be able to be closed due to the size of the heart and the space in the chest from my diseased heart. In this case my chest is closed using the muscles from the chest wall and skin.

All heart transplant recipients come out of the operating room with temporary pacing wires to secure that the heart rhythm is strong enough. If the heart does not return to a normal rhythm consideration is given to implant a permanent pacemaker.

Bleeding, either during surgery or after surgery that may, in a small percentage of cases, requires blood transfusions or blood products. The use of blood products is extremely unlikely. These risks include, but are not limited to bleeding, which may require the use of blood or blood products, infection, stroke, heart attack or death. If needed, blood and/or blood products have the following general risks; reactions resulting in itching, rash, fever, headache or shock; respiratory distress (shortness of breath); kidney damage; systemic infection; exposure to blood borne viruses including hepatitis (an inflammatory disease affecting the liver) and Human Immunodeficiency Virus (HIV, the virus that causes AIDS); and death. Alternatives to transfusion include the use of devices that filter and return blood lost in surgery to me or by providing medications that boost my blood count prior to an elective procedure. Bleeding and/or severe anemia could put my life in danger or cause permanent brain damage. I understand that substitutes for blood or plasma might not work well enough. Blood and/or blood products might offer the only chance to preserve my life.

I refuse the transfusion of blood or blood products.

Infection, including surgical incision site, chest cavity, respiratory and urinary tract infections. Infections can result from bacteria, viruses or fungi. The risk of infection is higher for transplant recipients than other surgical patients because the treatments needed to prevent rejection make the body less capable of fighting infection. The sites where tubes are placed in my body (e.g., tubes to help me breath, tubes in my veins to provide fluids, nutrition and to monitor important body functions) may cause pneumonia, blood infections and local infections where the tubes enter my body.

Injury to structures within the surgical area.
Damage to nerves, either by direct contact within the chest or from pressure or positioning of the arms, legs or back during the surgery. Nerve damage can cause numbness, weakness, paralysis and/or pain. In most cases these symptoms are temporary, but in rare cases they can last for extended periods or even become permanent.

Sometimes prolonged mechanical ventilation is needed to provide support for the lungs. If I require a ventilator for a prolonged period consideration will also be given to having a tracheostomy (temporary surgical hole into the windpipe) performed to help promote airway clearance.

Malignancy: the risk of some cancers is higher for transplant patients than for the general population. This is because the medications needed to prevent rejection also make the body less capable of resisting cancer. Skin cancer is the most common type of cancer seen in transplant recipients. Some viruses that cause common illnesses in the general population remain in the bloodstream. These viruses are associated with cancer in patients who are on immunosuppressant (anti-rejection) drugs. There is also a small chance of a malignancy coming with the transplanted organ.

There is a chance that my kidney function may deteriorate and require temporary or permanent dialysis as a result of my transplant surgery.

Pressure sores on the skin due to positioning.

Burns caused by use of electrical equipment that may be needed to stop bleeding or other equipment.

Damage to arteries and veins.

Heart attack.

Stroke.

Permanent scarring at the site of the incision.

My physicians cannot predict how my body will respond to the heart transplant. It is also not known whether and how the condition that caused my underlying heart disease will adversely affect the transplanted heart.
Post-Surgical Care and Recovery:

After the surgery, I will be cared for by a specialized transplant team. This may occur in either an intensive care unit, specialty recovery unit or transplant ward where I will be closely monitored. My length of stay in the hospital will depend on the rate of my recovery. I will remain in the hospital as long as my physician(s) feel hospitalization is necessary for my recovery. The hospitalization time can vary depending on the severity of my illness prior to transplant or complications after surgery.

After I leave the hospital, I will still be recovering. I understand it will probably take four (4) to six (6) weeks before my physician(s) will allow me to resume normal activity, including driving a care. If I experience any post-operative complications, my recovery time could be longer. During the recovery period, a team of physicians will follow my progress. Initially the transplant team will see me frequently with decreasing visits based on my recovery. I understand that I will need to be monitored on a long-term basis, and I agree to make myself available for examinations, laboratory tests and biopsies to monitor my transplanted heart. My primary care physician will be given information about my progress and the transplantation team will make every effort to transition my routine medical care to my primary care physician. However, the transplant team will continue to follow me for immunosuppression management and monitoring of any transplant associated complications. I understand that it is necessary to have a primary care physician who will continue to care for my general health needs. Transplant coordinators and physicians are available 24 hours a day to assist my local doctor in caring for me.

Risks Associated with Use of Medication and Biologicals:

The goal of various drugs and biological agents during and after transplantation is to help my body tolerate the donated organ. I understand that I may receive immunoglobulin (biological agent), monoclonal antibody (biological agent) or similar products before and/or during the surgery. The use of these drugs and biochemical is called “induction therapy,” which may decrease the need for steroids and reduce the amounts of other medications needed to keep the heart from being rejected by my body. I acknowledge that the use of induction therapy has been discussed with me by my physicians and I understand that the risks of using this therapy include, but are not limited to, anemia, reactions such as chills, fever, headache, hives, sudden sweating, shortness of breath, wheezing, chest tightness, increased risk of infection, increased risk of bleeding, fast heart rate, decreased blood pressure, involuntary muscle movements (rigors) and/or decrease in white blood count. In rare cases, severe allergic response (anaphylaxis) may occur. Prior to induction therapy medications to reduce fever and prevent an allergic response may be given.
I understand that I will be required to take medications and/or biological agents for the rest of my life to prevent my body from rejecting the transplanted heart. My physicians will determine the types and amounts of drugs I will receive and may need to periodically adjust my drug therapy. There are a number of long term risks of transplantation related to anti-rejection drug therapy. These include: the development of malignancies and rare neurologic diseases, susceptibility to certain common viruses, an increased risk of coronary artery disease (perhaps related to elevated cholesterol) and kidney dysfunction. The risk of some cancers is higher for transplant patients than for the general population. This is because the medications needed to prevent rejection also make the body less capable of resisting cancer. Skin cancer is the most common type of cancer seen in transplant recipients. Some viruses that cause common illnesses in the general population remain in bloodstream. These viruses are associated with cancer in patients who are on immunosuppressant (anti-rejection) drugs. Examples of some of these medications and agents and some side effects or risks include, but are not limited to, those listed below. Following transplantation I will be further instructed regarding the medications and agents specifically ordered for me.

<table>
<thead>
<tr>
<th>Medication</th>
<th>Side Effects/Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steroids such as prednisone</td>
<td>Muscle weakness, bone fragility, unusual fat deposits, thinning hair, agitation, elevated blood sugar, weight gain, cataracts.</td>
</tr>
<tr>
<td>Tacrolimus</td>
<td>Headache, tremors, numbness and tingling of the extremities, mental confusion, elevated blood sugar, elevated cholesterol, abnormal kidney function, anemia, decreased ability of the blood to clot, hair loss.</td>
</tr>
<tr>
<td>Sirolimus</td>
<td>Headache, tremors, high blood pressure, abnormal kidney function, elevated cholesterol, rapid heart rhythm, cough, decreased ability of the blood to clot, joint pain.</td>
</tr>
<tr>
<td>Cyclosporine</td>
<td>Tremor, high blood pressure, abnormal kidney function, decreased ability of the blood to clot, overgrowth of gums, excessive hair growth.</td>
</tr>
<tr>
<td>Azathioprine</td>
<td>Inflammation of the pancreas, diarrhea, decreased ability of the blood to clot.</td>
</tr>
<tr>
<td>Mycophenolic acid products</td>
<td>Anemia, decrease in ability to fight infection, swelling of feet/lower legs, gastrointestinal upset, diarrhea.</td>
</tr>
</tbody>
</table>

Other medications may be required for the rest of my life to treat or prevent various infections. My potential need for these medications may be determined by the blood work obtained during the evaluation process. I understand that in addition to the anti-rejection drugs, I may be required to take other drugs for cholesterol, blood pressure, and blood sugar control. Following transplantation I will be further instructed regarding the medications specifically ordered for me.
Psychosocial Risks Related to Transplantation:

Possible psychosocial risks may include but are not limited to depression, Post Traumatic Stress Disorder (PTSD), generalized anxiety, anxiety regarding dependence on others and feelings of guilt.

Benefits:

I understand that the benefit of heart transplantation to me is the hope of living longer and at a greater level of functioning than my underlying disease would have likely permitted. I also understand that this potential benefit cannot result from the surgery alone, but it dependent upon my following a rigorous treatment plan prescribed by my physicians.

Alternatives:

I understand that I have the choice NOT to undergo this surgery. If I choose not to undergo the surgery, treatment for my heart disease will be returned to my referring physician and primary care physician (PCP) and continued by them. I acknowledge that the kinds of treatment available to me based on my particular condition and my prognoses based on those treatments have been fully explained to me. I understand that if I do not undergo the transplant surgery, my condition is likely to worsen and limit my life expectancy and or my quality of life.

Transplant Program Changes:

If there are any changes within the transplant program, including voluntary inactivation, which may impact transplantation, I will be notified by a representative of the program.
HEART TRANSPLANT CONSENT FORM (ADULT)

I understand my physician(s) will perform or be present for the key portions of the surgery. Representatives of medical device companies may be present to provide devices, and observe and advise on their use. Who will participate and in what manner will be decided at the time of the procedure and will depend on the availability of individuals with the necessary expertise and on my medical condition.

I understand that the physician(s) or others may choose to photograph, televise, film or otherwise record all or any portion of my procedure for medical, scientific or educational purposes. I consent to the photographing, televising, filming or other forms of recording of the procedure(s) to be performed, including appropriate portions of my body, body functions or sounds, provided my identify is not revealed. I understand and agree that 1) any photographs, films, or other audio or visual recordings created will be the sole property of the facility: and 2) the facility or any appropriate staff member may edit, preserve, or destroy all or any part of the photographs, films, or other audio or visual recordings. Such recordings are not part of the medical record and I understand I cannot obtain a copy.

I authorize the disposal or retention, preservation, testing, or use for scientific, educational or other purposes of all or any portion of specimens, tissues, body parts, or other things, including prostheses and medical/surgical appliances, that may be removed from my body.

I understand the hospital may require that all jewelry and/or body piercing hardware be removed prior to surgery.

MY SIGNATURE BELOW ACKNOWLEDGES THAT:

1. I have read (or had read to me), understand and agree to the statements set forth in this consent form.
2. A physician or physician’s representative has explained to me all information referred to in this consent form. I have had an opportunity to ask questions and my questions have been answered to my satisfaction.
3. All blanks or statements requiring completion were filled in before I signed.
4. No guarantees or assurances concerning the results of the surgery have been made.
5. I am signing this consent voluntarily.
6. I understand that I can withdraw my consent at any time prior to the surgery.

7. I hereby consent and authorize Dr. _______________________________ (“my physician(s)”) and/or those associates, assistants and other health care providers designated by me physician(s) to perform the procedure(s) described in this consent form. I understand that during the course of the surgery, conditions may become apparent that require my physicians or their designees to perform additional procedures or medical acts that they believe are medically necessary to achieve the desired benefits or for my well-being, including but not limited to the administration of blood or blood products. I authorize and request my physician(s) or their designees to perform any additional medical products. I authorize and request my physician(s) or their designees to perform any additional medical acts or procedures that they, in the exercise of their sole professional judgment, deem reasonable and necessary; and I waive any obligation on their part to stop or delay the continuation of my surgery in order to obtain additional consent.

__________________________
Witness

__________________________
Signature of patient or person authorized to consent for patient

__________________________
Date

__________________________
Date

__________________________
Time

__________________________
Time

__________________________
Relationship to patient if signer is not patient
HEART TRANSPLANT CONSENT FORM (ADULT)

I have explained to the prospective transplant recipient signing above all of the information contained in this consent form. No guarantee or assurance has been given by me as to the results that may be obtained.

__________________________
Signature of physician or physician's representative

__________________________  ___________  ___________
Date  Time

__________________________
Print physician name or physician’s representative
MEDICINES AND ALLERGIES

Please list your medicines, dosage, which doctor prescribed them, and what you are taking them for. Also include any over-the-counter medicines, including herbal or dietary supplements and vitamins. Please list any medication allergies you have experienced in the past, and what those allergies have been.

## MEDICINES AND ALLERGIES

### LIST YOUR MEDICINES

<table>
<thead>
<tr>
<th>MEDICINES</th>
<th>DOSE</th>
<th>FREQUENCY</th>
<th>PRESCRIBING MD</th>
<th>REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# MEDICINES AND ALLERGIES

**DO YOU HAVE ANY ALLERGIES TO MEDICINES?**

<table>
<thead>
<tr>
<th>ALLERGY</th>
<th>WHAT KIND OF REACTION DO YOU HAVE?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LIST THE HERBAL SUPPLEMENTS AND/OR VITAMINS THAT YOU TAKE**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you self-administer your own medicines? ________________________________

If not, who helps you? ________________________________________________
REVIEW OF SYSTEMS AND CONDITIONS

This review of systems and conditions will help us to understand the problems that affect you now. Please indicate issues you have now or have had in the past. Please read it over, but do not fill or sign it. Your doctor will go over the content with you, give you an opportunity to ask questions, and you will sign it at the time of your evaluation.

### CARDIOVASCULAR
- Hypertension
- Chest Pain
- Rheumatic fever
- Mitral valve prolapse
- Phlebitis/blood clots
- High Cholesterol
- Irregular heartbeat
- Anemia
- Other

### GASTROINTESTINAL
- Stomach ulcer
- Liver disease
- Acid reflux
- Esophageal cancer
- Stomach cancer
- Colon cancer
- Other

### ENDOCRINE
- Diabetes
- Low blood sugar
- Thyroid disease
- Thyroid Cancer
- Other

### GYNECOLOGICAL DISEASES
- STD
- Breast cancer
- Abnormal Pap Smears
- Other
### INFECTIOUS DISEASES
Check if Yes
- [ ] HIV
- [ ] Meningitis
- [ ] Hepatitis
- [ ] Mono
- [ ] C-Diff
- [ ] MRSA
- [ ] Other

### RESPIRATORY
Check if Yes
- [ ] Shortness of breath
- [ ] Persistent cough
- [ ] Wheezing
- [ ] Chronic lung disease
- [ ] Lung disease
- [ ] Lung cancer
- [ ] Other

### MUSCULODKELETAL
Check if Yes
- [ ] Gout
- [ ] Joint pain/swelling
- [ ] Arthritis
- [ ] Leg pain/cramping

### SKIN
Check if Yes
- [ ] Open wounds/ulcer
- [ ] Rashes
- [ ] Poor healing
- [ ] Lesions
- [ ] Bruising
- [ ] Cancer: Type
- [ ] Other

### NEUROLOGICAL
Check if Yes
- [ ] Persistent headaches
- [ ] Seizures/concusions
- [ ] Stroke
- [ ] Numbness/tingling (hands/feet)
- [ ] Sleep problems
- [ ] Brain tumor
- [ ] Other

### UROLOGICAL
Check if Yes
- [ ] Blood in uriine
- [ ] Enlarged prostate
- [ ] Difficulty passing urine
- [ ] Urgency/frequency
- [ ] Prostate cancer
- [ ] Bladder cancer
- [ ] Other
Patient Consent for Health Information
To be Communicated By E-Mail

Emergency Contact:
Name: ____________________________________________________________
Address:___________________________________________________________
__________________________________________________________________
E-Mail Address:_____________________________________________________
Telephone Number: _________________________________________________

1. E-MAIL RISKS AND YOUR RESPONSIBILITY

At the discretion of CIMS, its staff, physicians and agents and upon your agreement to the terms outlined within this consent form, you may use e-mail to communicate with CIMS. These e-mails may contain your personal health information. If you decide to use e-mail to communicate with CIMS, you should be aware of the following risks and your responsibilities:

a) As the Internet is not secure or private, unauthorized people may be able to intercept, read and possibly modify e-mail you send or are sent by CIMS.

b) You must protect your e-mail account, password and computer against access by unauthorized people.

c) Since e-mail can be used to spread viruses, some which cause e-mail messages to be sent to people who you do not intend to send e-mail messages to, you should install and maintain virus protection software on your personal computer.

d) Since e-mails can be copied, printed and forwarded by people to whom you send e-mails, you should be careful regarding whom you send e-mails.

2. CONDITIONS FOR THE USE OF E-MAIL

By consenting to the use of e-mail with CIMS, you agree that:

a) CIMS may forward e-mails as appropriate for diagnosis, treatment, reimbursement, and other related reasons. As such, CIMS staff members, other than the recipient, may have access to e-mails that you send. Such access will only be to such persons who have a right to access your e-mail to provide services to you. Otherwise, CIMS will not forward e-mails to independent third parties without your prior written consent, except as authorized or required by law.

b) Although CIMS will try to read and respond promptly to your e-mails, CIMS staff may not read your e-mail immediately. Therefore, you should not use e-mail to communicate with CIMS if there is an emergency or where you require an answer in a short period of time.

c) If your e-mail requires or asks for a response, and you have not received a response within a reasonable time period, it is your responsibility to follow up directly with CIMS.
d) You should carefully consider the use of e-mail for the communication of sensitive medical information, such as, but not limited to, information regarding sexually transmitted diseases, AIDS/HIV, mental health, development disability, or substance abuse.

e) You should carefully word your e-mail messages so that the information that you provide clearly describes the information that you intend to convey.

f) You are responsible for correcting any unclear or incorrect information.

g) CIMS reserved the right to save your e-mail and include your e-mail or information contained within your e-mail in your medical record.

h) It is the patient’s responsibility to follow up and/or schedule an appointment if warranted or recommended by CIMS.

i) E-mails may not be the only form of communication that CIMS will use to communicate with you. Additionally, CIMS may decide that it is not in your best interest to continue to communicate with you by e-mail. In such case, CIMS will notify that it no longer intends to communicate with you by e-mail.

3. INSTRUCTIONS

a) You shall immediately inform those individuals with whom you communicate with at CIMS of changes in your e-mail address.

b) You shall send e-mails only to such CIMS e-mail addresses as instructed.

c) You shall put your name and appropriate identifying information in the body of the e-mail.

d) You shall include the category of the communications in the e-mail’s subject line, for handling purposes (e.g. prescription, appointment, medical advice, billing question, etc.)

e) Prior to sending the e-mail, you shall review the e-mail to make sure it is clear and that all relevant or requested information is provided.

f) You shall withdraw your consent to communicate by e-mail by sending an e-mail to all of the e-mail addresses for which you had previously communicated.

4. PATIENT ACKNOWLEDGEMENT AND AGREEMENT

CIMS will use reasonable means to protect the privacy of your health information sent by e-mail. However, because of the risks outlined above, CIMS cannot guarantee that e-mail communications will be confidential. Additionally, CIMS will not be liable in the event that you or anyone else inappropriately uses your e-mail. CIMS will not be liable for improper disclosure of your health information that is not caused by CIMS’s intentional misconduct.

I acknowledge that I have read and fully understand this consent form. I understand the risks associated with the communications of e-mail between CIMS and me, and consent to the conditions outlined herein, as well as any other instructions that CIMS may impose to communicate with me by e-mail. Any questions I may have had were answered.

Patient Signature_________________________________________ Date__________________
YOUR TRANSPLANT TEAM
During your evaluation, you will meet with many members of the team who have an important role in your transplant process.

YOUR TRANSPLANT TEAM

TRANSPLANT COORDINATOR
Your heart transplant coordinator will introduce you to the transplant process and review your evaluation schedule. The visit will consist of a preliminary health screening, medicine review, and overview of the transplant process. Your heart transplant coordinator is here to answer any questions you may have today and in the future.

TRANSPLANT SURGEON
Your transplant surgeon will assess your physical capability and risks for transplant. The surgeon will review your heart disease and the medical management of your diagnosis, and will address all options available.

TRANSPLANT CARDIOLOGIST
Your transplant cardiologist will perform a medical history and physical, and will focus on the signs and symptoms of your heart disease. The cardiologist will assess other options besides transplant, including the medical management of your heart disease.

TRANSPLANT NUTRITIONIST
Your nutritionist will assess your nutritional status and dietary knowledge, and will provide education on recommendations for your diet. The nutritionist also will help you to develop, begin, and maintain a nutritional program.

TRANSPLANT SOCIAL WORKER
Your social worker will discuss your support team at home, your prescription insurance coverage, and other social parts of the transplant process. Most importantly, your social worker is here to answer any questions you may have.

TRANSPLANT PHARMACIST
Your pharmacist will meet with you to get a complete list of all medicines and supplements you take, both prescription and non-prescription, and ask you how to take medicines.
TESTING FOR TRANSPLANT EVALUATION

The tests in this section may be a part of your evaluation. Your doctor may also decide that you need additional testing based on the test results.

EVALUATION TESTING FOR YOUR HEART TRANSPLANT

The tests below may be a part of your evaluation. Your transplant coordinator will mark the tests that apply to you.

☐ ARTERIAL BLOOD GAS
Arterial blood gas is when blood samples are drawn to determine the content of oxygen and carbon dioxide in your blood.

☐ BLOOD TESTS
Blood tests are when blood samples are taken to determine your blood type and the status of multiple body systems.

☐ BONE DENSITY SCAN (DXA SCAN)
A bone density scan tells us whether you have moved forward to any stage of osteoporosis or may be at risk for bone fractures. The scanning process takes about 20 minutes, and you have to lie flat on a bed while a low dose x-ray arm moves around your whole body.

☐ CHEST X-RAY
A chest x-ray is a procedure used to evaluate organs and structures within your chest for symptoms of the disease.

☐ COLONOSCOPY
A colonoscopy allows a view of the entire inner lining of the colon (large intestine) and the rectum. The procedure involves the use of a long, flexible, tubular instrument (the colon scope) to take tissue samples while you lie on your left side with knees drawn toward your abdomen. You should tell your doctor about any allergies you’ve had with medicines or anesthetics, any bleeding problems, any medicines you are taking, or if you are pregnant. Do not eat any solid food for 24 to 48 hours before the test. Only eat or drink clear liquids, such as juices, broth, and gelatin. You will have to take a strong laxative the night the test.

☐ CT ANGIOGRAM (COMPUTED TOMOGRAPHY ANGIOGRAM)
A CTA procedure may be requested to visualize blood flow and pinpoint any specific circulatory issues or associated disease states. You will lie on a narrow exam table and slide into and out of an x-ray tube. To prepare for the exam, you should not eat or drink anything for several hours beforehand. Inform your doctor about all medicines and allergies.

☐ CT SCAN (COMPUTED AXIAL TOMOGRAPHY SCAN)
A CT scan is an x-ray procedure. You have to lie flat on a bed while passing through a donut-shaped x-ray machine to view inside your body. Pre-test preparations may tell you not to eat, drink, or take anything by mouth for 3 hours before testing if you are having an abdominal scan, pelvic scan, or any part of your GI tract scanned.

☐ DESATURATION TEST
A desaturation test monitors the oxygen concentration in your blood. It is performed in the Pulmonary Function Lab by placing a small device called an oximeter on your finger.

☐ DOPPLERS – CAROTID ARTERIAL
Doppler ultrasound is a special ultrasound technique that evaluates blood as it flows through the carotid arteries. Your carotid arteries are located on each side of your neck and carry blood from your heart to your brain.
□ EKG (ELECTROCARDIOGRAM)
An EKG is used to help diagnose specific cardiac problems, such as arrhythmia. The procedure involves attaching electrodes to your wrists, ankles, and chest to send signals to an EKG machine to show your heart rate.

□ HEART CATHETERIZATION (HEART CATH)
A heart cath procedure helps to provide a diagnosis for heart disease through a full exam of the heart and its blood flow. The test usually lasts 2 to 3 hours and is done while you lie flat on a padded, tilted table. You will also be instructed not to eat or drink for 6 hours before the test.

□ MAMMOGRAM (WOMEN ONLY)
A mammogram is used to detect breast cancer. There are two types of mammograms – a regular screenings mammogram and a diagnostic mammogram to follow-up on past treatments.

□ MRI (MAGNETIC RESONANCE IMAGING)
Your doctor may order an MRI procedure to look more closely at your brain, spine, pelvic area, joints, abdominal area, heart, or blood vessels. The procedure takes between 2 and 15 minutes. You have to lie on a sliding table in a large cylinder-shaped structure. Make sure your doctor knows about any implanted medical devices, patches, or pacemakers.

□ MYOCARDIAL VOLUME OXYGEN STRESS TEST (Mv02)
An Mv02 is a test that indirectly shows arterial blood flow to the heart during physical exercise. When compared to blood flow during rest, the test shows imbalances of blood flow to the heart’s left ventricular muscle tissue — the part of the heart that performs the greatest amount of work pumping blood.

□ PAP SMEAR (WOMEN ONLY)
A pap smear is performed as a screening test for cervical cancer or any other abnormality of the reproductive system. Tissue samples are extracted from the cervix by your doctor.

□ PULMONARY FUNCTION TESTING (PFT)
PFT is a group of tests that measure the function of the lungs and show problems in the way a patient breathes. They also measure lung disease progression, or: response to different treatments. The procedure involves breathing through your mouth into a tube connected to a machine known as a spirometer.

□ QUANTITATIVE VENTILATION PERFUSION SCAN (VQ SCAN)
A VQ scan measures which lung is getting the most blood flow and which lung receives the most air during inspiration. This radiology study is conducted in two phases. During the first process, contrast material is injected into your vein which will light up the lung arteries and veins. In the second process, you will be required to inhale contrast material.

□ 6-MINUTE WALK DISTANCE (SMW)
An SMW is an exercise test where you will be asked to walk as fast, as far, and as long as you can tolerate for up to a total of 6 minutes. You will be accompanied by a cardiopulmonary rehabilitation exercise physiologist or nurse and given oxygen as needed, and a pulse oximeter will continuously calibrate your pulse rate and oxygen concentration. If you experience chest pain, leg pain, shortness of breath, or fatigue, you may stop the test.

□ TEE (TRANSESOPHAGEAL ECHOCARDIOGRAM)
A TEE is a different way of producing echocardiograms of the heart. The procedure involves swallowing a very small instrument that uses sound waves to produce an electronic image. You will be asked not to eat or drink for several hours before the test.
TTE (TRANSTHORACIC ECHOCARDIOGRAM)
A TTE is a noninvasive imaging technique used for screening blood flow through the chambers of the heart. The test involves an instrument being placed on your ribs near the breast bone. The instrument is directed toward your heart and monitors the high frequency sound waves of your heart beat, converting them into a readable electrical impulse report.

ULTRASOUND
An ultrasound test is used for diagnostic or therapeutic purposes. It usually takes no more than 20 to 45 minutes and involves gliding a gel-covered stick over your skin. You will be told how to prepare, depending on the reason your doctor has requested the ultrasound. For example, you may be asked to fast for at least 8 hours before your test.
EVALUATION TESTING FOR YOUR HEART TRANSPLANT - PATIENT INSTRUCTIONS

MYOCARDIAL VOLUME OXYGEN STRESS TEST (MVO₂)

- Two hours, before the test, follow the instructions below:
  - Do not drink beverages that have caffeine.
  - Do not eat any food.
  - Do not use any tobacco products.

- On the day of your exercise test, you can take your medicines as you usually do. If you are a diabetic on insulin or oral diabetic medicines, please call your nurse coordinator who will tell you how to adjust your medicine for the period of time during which we have asked you not to eat.

- It is important that you wear comfortable walking shoes, such as tennis shoes, if you have them.

- Loose-fitting clothing is best for exercise testing (such as gym shorts, loose blouses or shirts that: button or zipper in the front, and loose sweat pants or slacks).

- If you have a defibrillator, please know your device settings.
EVALUATION TESTING FOR YOUR HEART TRANSPLANT
- PATIENT INSTRUCTIONS

24 HOUR URINE COLLECTION FOR CREATININE CLEARANCE

Please follow these instructions carefully:

- Take the prescription to your local lab to get a sample collection container.
- Drink the same amount of liquid during the 24-hour collection period that you would usually drink, unless otherwise instructed by your doctor.
- Do not drink alcoholic beverages during the 24-hour collection period.

Collection instructions:

1. Empty your bladder when you get up in the morning and throw away the urine. Write down the time that you do this.

2. For the next 24 hours, collect all of your urine into the sample container from your local lab.
   1. The final urine collection is to be made at the same time as your first discarded urine the day before.
   2. The collected urine must be kept chilled in the refrigerator or in a cooler with ice.

3. Write your name, date, and start and end times on the container label when the 24-hour urine collection is finished.

4. Take your samples and your prescription to the lab ASAP after the 24-hour collection period is finished.
Transplant Medicine Frequently Asked Questions (FAQ)

Transplant pharmacists:

One of the most important factors influencing the outcome of a transplant procedure is your relationship with your pharmacist. Organ availability and other practical aspects of transplant surgery sometimes seem to dominate the conversation, but making a strong connection with your pharmacist is vital to maintaining and regaining your health throughout every stage of the process. And now that many patients are facing uncertainty regarding the availability and affordability of their medications, it’s more important than ever to understand how we can all work together to make healing possible.

Every patient is different, but there are certain questions we hear quite often. If you have questions about the pharmaceutical aspects of transplant surgery, you may find an answer below - and you may think of more questions as well! Make notes and bring your list along with you the next time you visit with your transplant pharmacist. The value of an open honest relationship with your transplant cannot be overstated.

Will I have to take this medication for the rest of my life?

Yes. Almost everybody who receives a transplanted organ will need lifelong immunosuppressive therapy. Some patients may be able to reduce their dosage as time goes by in some cases, you may need additional medications to counteract undesirable effects of your main medications. Your doctor will collaborate to fine tune your medication regimen to your specific and changing needs.

After a while, your transplant medications needs may decrease. We generally settle on a core group of six medications to be taken three or four times a day.

We recommend that you fill your initial prescriptions before leaving the hospital. Be sure to plan ahead if you’re going out of town or won’t be able to get to your long term pharmacy in time to refill your prescriptions. It is vital that you continue to take your medications exactly as prescribed, without interruption. But if you find yourself stranded without your medication, you can call your transplant coordinator at any time of the day or night. The transplant team is always here for you, and we will help you get the medicine you need.

What about the medicines I already take, like blood pressure medication or my inhaler?

Depending on the organ you received, you may be able to discontinue some medicines unrelated to anti-rejection medication – for instance, if you received a new kidney, your high blood pressure may be better controlled, reducing the need for blood pressure medication. If your chronic condition contributed to your need for a transplant, the transplant surgery may correct the source of the underlying disease. It’s something to discuss with your physician and your pharmacist. Never discontinue a drug without consulting your transplant team.
How can I learn more about managing my medications?

As an integral part of the transplant process, CIMS provides specialized patient education. During these sessions, dedicated transplant team nurse coordinators and pharmacists will teach you about your specific medications, the side effects you can expect, and how taking them will affect your everyday life. We’ll also explain how food and other medications figure into your schedule. We’ll help you develop a strategy for ensuring that you’re always prepared to take your medications at the right time.

Are there any natural remedies that can help?

No. The immune system is complex, and so is transplant surgery. Your drug regimen is tailored to your situation and every drug we prescribe has a specific job to do. “Natural” remedies may interfere with the action or interaction of your medications. Never take any over-the-counter or herbal remedy without checking with your pharmacist or transplant nurse coordinator.

There are natural actions you can take to help in recovery. Eat a healthful, balanced diet, and get the rest you need. Try to find ways to reduce stress in your life. If your doctor gives you the go-ahead, get an appropriate amount of exercise. Your new organ will adapt more quickly in a healthy environment, so do your best to keep your body in good working order.