KIDNEY TRANSPLANT PROGRAM

After your transplant

Duke Transplant Center

TABLE OF CONTENTS

Kidney Transplant: After Discharge Care

Congratulations

Congratulations on your new kidney transplant! As you are recovering, we will begin to prepare you to go home. This booklet has important information, including specific guidelines on how to take care of yourself once you arrive home. The transplant coordinators, doctors, nurses and pharmacists will review the material with you.

It is necessary that you understand how to take care of yourself and your new kidney before you are released from the hospital. You must know which medications to take, at what time, what amount and for what reason. You must also know the signs and symptoms that could indicate problems with your transplant, how to watch for them, and how to report them.

You will be responsible for monitoring your health at home and for keeping daily records. You must bring these records with you to each follow-up appointment at the transplant clinic. This will allow us to monitor your condition with you, and to be on the lookout for any problems that may occur.

While a kidney transplant represents a great hope for people with end-stage renal disease, various complications can occur after kidney and pancreas transplantation. These may include rejection, infection, technical complications, and recurrence of your original kidney disease. While complications out of your control are always possible, it is important to remember that the single most important factor in the outcome of your transplant is **you**. The best outcomes occur when you follow your health care team’s instructions, monitor yourself for signs of rejection and infection, take your medications as directed, communicate with your coordinator regularly via phone and MyChart, and attend your regularly scheduled appointments. By communicating openly and freely with your team, we can stay on top of any issues and intervene early. Kidney transplantation is a lifelong commitment that will affect every aspect of your life. So take your responsibility seriously and take good care of yourself.

The Duke Kidney Transplant Team knows that going through a kidney transplant can be a trying time, and we want to help you through this process. Please let us know any way we can help ease your transition to a well-functioning transplant. We look forward to working closely with you.

What to Expect during Transplant Admission

During your hospitalization you will be cared for by a team of doctors, nurses, transplant coordinators, pharmacists, social workers and dietitians. Patients are usually in the hospital for 4-6 days after a kidney transplant. The surgery itself takes about four hours. In most cases, an incision will be made in your lower abdomen on either the right or left side. Furthermore, your own kidneys will not be removed. Once the kidney is attached to your blood vessels and bladder, the incision is closed and you will be taken to the recovery area and then to either the Intensive Care Unit (ICU) or the transplant ward at the hospital.

When you wake up from surgery, there will be an IV in your neck. Eventually, it will be moved to your arm. There will be a catheter in your bladder to drain urine; this will stay in place for three days. There may be a drain placed inside your abdomen at the time of surgery; this will be removed when the drainage from inside your incision is less than 30 ml (1 ounce) per day. If the surgeon places an internal stent in your bladder (to aid in draining urine from your kidney to your bladder) it will be removed 4-6 weeks after transplant as an outpatient procedure. If you have a PD (peritoneal dialysis) catheter it will most likely not be removed at the time of transplant but will need to be removed once your kidney function is stable.

Initially, you will receive pain medication through your IV. Soon you will be able to take pain medications by mouth, as well as eat and drink normally. While you are in the hospital, you will receive some IV medications to help prevent rejection. Your vital signs and blood sugar levels will be checked frequently. Your nurses will be carefully recording the amount of urine you are making, IV fluids you are receiving, and oral fluids you are drinking.

You will be given a device called an incentive spirometer to help exercise your lungs. Your nurse will instruct you on how to use it properly. You will need to use the incentive spirometer every hour you are awake to help keep your lungs functioning properly and to prevent pneumonia. It is very important that you are out of bed and walking in the hallway at least three times per day to keep your strength up; in most situations, we will be encouraging you to get out of bed starting the first day after your transplant. Your nurse will help you do this in a safe manner.

You will have blood drawn every morning to check on your kidney function and to make sure your blood cell counts are stable. While it is impossible to determine exactly what tests you will need following your transplant, there are several that are routinely administered to transplant patients. A kidney ultrasound may be ordered to check the blood flow through your transplanted kidney. A bladder scan may be performed after your urinary catheter is removed to make sure your bladder is emptying properly. Some patients require dialysis treatments after transplant while waiting for the new kidney to work. This happens commonly and does not mean that in time your kidney will not work long term.

Prior to discharge from the hospital, you and your caregiver will need to complete education sessions with a pharmacist, a dietitian, a diabetes educator, and a transplant coordinator. Each of these team members will come by your hospital room to arrange a time to for teaching when your caregiver can also be present. In these teaching sessions, you will review all aspects of post-transplant care and will have the opportunity to ask any questions you may have. It is the goal of the transplant team that you and your caregiver are confident and prepared to be discharged. Don’t leave the hospital without feeling fully educated and prepared.

Immune System

The immune system is your body’s defense against something foreign or unknown that enters your body. The immune system is made of certain cells and tissues that work together to protect your body. When your body detects a foreign substance, these cells and tissues work together in order to recognize and respond to that foreign substance. Specialized white blood cells and antibodies are activated to fight off the foreign substance and learn how to fight that foreign substance again in the future.

Your transplanted organ is new and foreign to your body. Without the use of immune suppressing medications your body’s immune system will recognize your transplanted kidney as foreign and may begin to attack it. This is called *immune response*. Preventing this natural response of the body’s immune system is called *immunosuppression* and is critical to allow the kidney transplant to work as well as possible for as long as possible. Immunosuppressant medications are given in order to lower your immune response. Your immune system will then have a decreased ability to recognize and destroy foreign substances.

In order for immunosuppression to work, your body needs to have just the right level of immunosuppressant medicine at all times. To make sure this happens, your health care provider will tell you exactly how much medicine to take and exactly when to take it. In the early days after transplant we will be making frequent changes to your doses. It is very important to follow your health care provider’s instructions. Failing to make a medication change or missing a single dose can open a window for rejection to take place.

Immunosuppressant medications will need to be taken **lifelong**. Your body will never ‘learn’ that your transplanted kidney belongs in your body.

Rejection

Transplant rejection occurs when your immune system attacks the new transplanted organ in the same way it would attack a virus or bacteria. Your transplanted kidney is foreign to your body and your immune system is trained to recognize and attack all foreign intruders. Transplant rejection can cause severe damage to the transplanted organ. There are different types of rejection, but acute rejection is the most common form and is typically reversible. Acute rejection occurs when the body recognizes the kidney as foreign. Early diagnosis and treatment are essential in treating these episodes.

Many people have **no** symptoms of rejection. However, some people may experience pain at the transplant site, fever, weight gain, swelling, decrease in urine, or flu-like symptoms (chills, nausea, tiredness, body aches).

Blood tests will be ordered routinely to evaluate the function of your transplanted kidney. If the transplant team notices a significant increase in your creatinine, an ultrasound of the kidney may be ordered to evaluate blood flow to the transplanted kidney. A kidney biopsy may be needed to determine if rejection is taking place. During a kidney biopsy, you are given an injection of a numbing medication called lidocaine into your abdomen around your kidney. A small piece of tissue will be taken from your transplanted kidney with a needle. A pathologist will then look at that sample of tissue under a microscope to determine if rejection is taking place. Preliminary results of the biopsy may be ready in a few hours, but the final results take about 24 to 36 hours.

If transplant rejection is diagnosed, your health care provider will inform you of the necessary treatment. You may need to be admitted to the hospital for IV medications to help stop your immune system from rejecting the transplanted organ. Prompt diagnosis and treatment are required to prevent permanent damage to the kidney. Without prompt treatment, your kidney may not work as well or last as long.

In order to avoid rejection, take medications exactly as directed by your health care provider. Missing even one dose of your immunosuppressant medication can put you at risk for rejection. Keep all follow-up appointments and get your blood drawn in between your appointments as directed by your health care provider.

Medications

The Duke Cancer Center Pharmacy will be used to fill your first month of medications. Using this pharmacy ensures all of your medications will be filled prior to your discharge and will be delivered to your room. A pharmacy technician will assist you in packing a one week supply of your medications in your weekly pill box. The Duke Cancer Center Pharmacy is classified as a specialty pharmacy and will be able to mail medications to you in the future if you so choose.

The personal cost of the transplant may be high especially during the first year after the transplant operation. Your direct costs for transplant medications are determined by your insurance plan coverage. For some individuals, Medicare, Medicaid, and/or private insurance companies may cover all or part of the costs of the medications. Any change in your insurance plan may result in changes to the cost associated with your medications. Please obtain detailed information from any new plans before making a change in coverage to avoid unexpected additional medication costs. You should call and review any new insurance plan with your financial coordinator prior to making a change.

Do:

- Take your medication according to your **most recent** medication list, the doses of your medications will change periodically
- Check with your insurance company if they have a specific mail order pharmacy that you must use
- Store all medications away from heat and direct light, at room temperature
- Throw away any unused medicine after the expiration date, check with your pharmacy regarding proper disposal method
- Keep track of how many refills you have on each medication
- Ask your pharmacy if they carry your medication in stock
- Ask your pharmacy if they deliver medications and how to re-order medications
- Always keep a list of your medications on you
- Call for refills of medications *at least one week* prior to being out of medications
- Carry your medications in their original bottles while traveling
- Take your medications the same time, same way, every day
- Set alarms on your phone to remember medication administration times
- Pack your pill box once per week to have all of your medication doses ready

Don't:

- Do not rely on the labels on the pill bottles; always follow the instructions given to you by the transplant team with how much of your medication take
- Don't take any new over-the-counter or prescription medications prescribed by other physicians without checking with the transplant office

Transplant Medications

Taking your transplant medicines on time, every day, is an important part of taking care of yourself and your new organ. The chances of side effects and other problems will be lower if you take your transplant medicines as ordered. Every medicine your doctor prescribes for you is important for your health and the health of your new organ. Stopping any of your medicines or even skipping a single dose without guidance form your doctor could harm your new organ.

Do not switch back and forth between brand name and generic medications. Either will work fine, but it is important to be consistent in which formulation you are taking. We will be monitoring drug levels of your immunosuppressant medications, but it is important for you to be consistent in the brand/generic formulation you are taking.

During your hospitalization, you may be given *induction* medications to lower your immune system initially. These powerful IV medications will drastically lower your immune response to help prevent rejection of your transplanted kidney. Examples of these induction medications are Simulect, Campath, Thymoglobulin and Methylprednisolone.

You will need to take medications to suppress your immune system as long as your transplant is working. You can never discontinue these medications, unless instructed to do so by your transplant physician. Remember, stopping or changing the doses of your medications without the approval of your doctor can make you very sick and can result in the loss of your transplanted organ, and possibly your life. Examples of these maintenance medications are Myfortic/Cellcept, Tacrolimus/Prograf, Sirolimus/Rapamune, and prednisone.

If you have any episodes of rejection, your health care provider may increase the doses of your immunosuppressant medications. You may also need to be admitted to the hospital for IV treatments of methylprednisolone or thymoglobulin. These medications are given to help stop your immune system from rejecting the transplanted organ.

Antibiotics and Antivirals

You will be on some medications after transplant to help prevent bacterial and viral infections. You will take these medications for a few months after transplant; your transplant team will let you know when these medications are to be stopped.

Other Medications

You may be on many other medications after your transplant in addition to your immunosuppressant and anti-microbial medications. You may be on blood pressure medications, blood sugar medications, cholesterol medications, stool softeners and medications to reduce stomach acid. For a limited time after transplant you may need narcotic pain medications. Follow the instructions of your transplant team when taking all medications.

Tacrolimus (Prograf)

What does tacrolimus do?

Tacrolimus suppresses your immune system, making it less able to fight infections and prevents rejection of your kidney transplant

How should I take tacrolimus?

Take tacrolimus at the same time every day, 12 hours apart. Blood tests to measure your tacrolimus level are performed when the level is at its lowest, typically 12 hours after the last dose. Therefore, you will not take your tacrolimus on the mornings you are having labs drawn until AFTER your blood has been taken. You may take your regular dose of tacrolimus after the blood tests have been completed.

Why is a tacrolimus level important?

Regularly checking tacrolimus levels helps make sure that you are receiving the appropriate dose. Your dose of tacrolimus will change over time based on your level. Your transplant coordinator will inform you of any dose adjustments that need to be made with your tacrolimus dose. Always follow the dosing instructions given to you by the transplant team, they may be different from the dosing instructions on you bottle of medication.

What if I miss a dose of tacrolimus?

If you miss a dose and it is still within three hours of the time the dose was due, you may take the dose. If it is more than three hours later than your dose was due, wait and take the next scheduled dose. Do not take double doses. Contact your transplant coordinator if you miss more than one dose or if you are vomiting and unable to keep your medicine down.

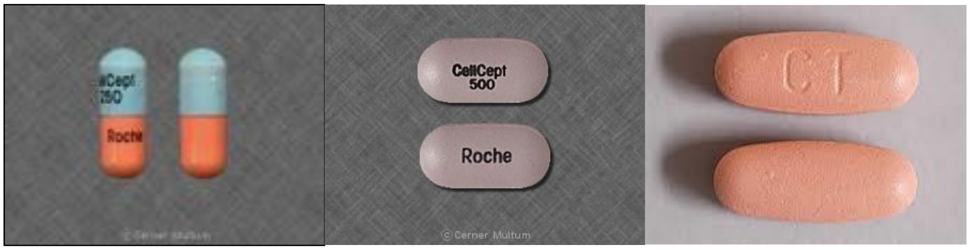
What should I avoid when taking tacrolimus?

Avoid eating grapefruit or drinking any beverages that contain grapefruit, it will alter the level of tacrolimus in your bloodstream. **Many medications interact with tacrolimus and change the concentration of tacrolimus in your blood stream.** Do not take any medications prescribed by doctors outside of the transplant team without first checking with your transplant coordinator.

What side effects may I notice from taking tacrolimus?

Common side effects of tacrolimus are nausea, headache, mild tremors, numbness or tingling sensation in hands, hair loss and increase in blood sugar. Severe side effects of tacrolimus include dizziness, seizures, and muscle weakness. Many of the side effects improve after your body gets used to being on tacrolimus. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Mycophenolate (Cellcept or Myfortic)



What does it do?

Mycophenolate suppresses your immune system, making it less able to fight infection and helps prevent rejection of your kidney transplant.

How should I take it?

Take mycophenolate at the same time every day, 12 hours apart. Swallow capsules whole and do not crush tablets. **Avoid contact with the contents of the capsules or broken tablets.** If you do have contact with the inside contents, wash your skin with soap and water.

What if I miss a dose?

If you miss a dose and it is still within three hours of the time the dose was due, you may take the dose. If it is more than three hours later than your dose was due, then wait and take the next scheduled dose. Do not take double doses. Contact your transplant coordinator if you miss more than one dose or if you are vomiting and unable to keep your medicine down.

What should I avoid when taking it?

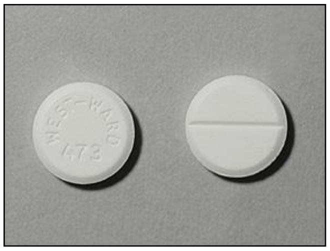
Antacids and vitamin/mineral supplements can interact with mycophenolate. If you do need to take antacids or mineral supplements, do not take them at the same time as mycophenolate. Take them at least one hour before or two hours after your dose of mycophenolate.

Mycophenolate can cause birth defects. Women of childbearing potential must use two forms of effective birth control while taking mycophenolate. If you are taking mycophenolate and desire to become pregnant in the future, communicate with your transplant team to devise a plan to safely transition you to a different immunosuppressant medication at least 3 months prior to attempting to conceive.

What side effects may I notice from taking it?

Common side effects of mycophenolate include GI distress such as nausea, vomiting, diarrhea. It can also decrease your white blood cell counts. Severe side effects of mycophenolate include blood in urine, blood in bowel movements, difficulty breathing and dizziness. Many of the side effects improve after your body gets used to being on mycophenolate. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Prednisone



What does it do?

Prednisone is a steroid that reduces inflammation and suppresses your immune system, making it less able to fight infections and helps prevent rejection.

How should I take it?

Prednisone should be taken once daily. Take with food to avoid stomach upset. Your prednisone dose will gradually decrease over time; refer to your medication schedule for your exact dose each day.

What if I miss a dose?

Since prednisone is taken once daily, you should take it as soon as you remember. If it is almost time for your next dose, take only that dose. Do not take a double dose of medication to catch up.

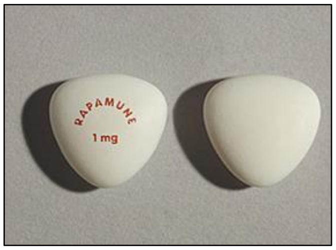
What should I avoid when taking it?

Do not suddenly stop taking prednisone. You may need to gradually reduce the dose, so that your body can adjust. Follow your medication schedule for instructions on how to reduce your prednisone dose over time. Contact your transplant coordinator if you have questions about your prednisone dose.

What side effects may I notice from taking it?

Common side effects of prednisone include increased appetite, increased blood sugar and increased blood pressure. Other side effects include sweating at night, increased stomach acid, muscle weakness, increased thirst, irregular heartbeat, unusual tiredness and mood changes. Many of the side effects improve after your body gets used to being on prednisone. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Sirolimus (Rapamune)



What does it do?

Sirolimus suppresses your immune system, making it less able to fight infections and helps prevent rejection of your kidney transplant

How should I take it?

Take sirolimus at the same time every day, once daily. On the days that you are getting your labs drawn, be sure that you wait until after your blood is drawn to take your dose of sirolimus, since a sirolimus level will need to be measured.

Why is a sirolimus level important?

Regularly drawing sirolimus levels help make sure that you are receiving the appropriate dose of immunosuppression. If your sirolimus level is too low, you may have rejection of your transplanted kidney. If your sirolimus level is too high, you may have side effects. Your dose of sirolimus will change over time based on your sirolimus level. Your transplant coordinator will inform you of any dose adjustments that need to be made with your sirolimus dose. Always follow the dosing instructions given to you by the transplant team. They may be different that the dosing instructions on you bottle of medication.

What if I miss a dose?

Since sirolimus is taken once daily, you should take it as soon as you remember. If it is almost time for your next dose, take only that dose. Do not take a double dose of medication to catch up.

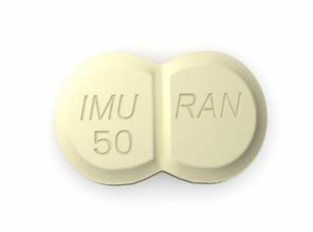
What should I avoid when taking it?

Avoid eating grapefruit or drinking any beverages that contain grapefruit. Grapefruit will alter the level of sirolimus in your bloodstream. **Many medications interact with sirolimus and change the concentration of sirolimus in your blood stream.** Do not take any medications prescribed by doctors outside of the transplant team without first checking with your transplant coordinator.

What side effects may I notice from taking it?

Common side effects of sirolimus are elevated cholesterol, elevated blood pressure, GI distress, decreased wound healing, and mouth sores or ulcers. Severe side effects of sirolimus include rash, acne, joint pain, difficulty breathing, and rapid heart rate and decreased red blood cell counts. Many of the side effects improve after your body gets used to being on sirolimus. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Azathioprine (Imuran)



What does it do?

Imuran suppresses your immune system, making it less able to fight infections and helps prevent rejection of your kidney transplant.

How should I take it?

Take Imuran at the same time every day, once daily.

What if I miss a dose?

Since Imuran is taken once daily, you should take it as soon as you remember. If it is almost time for your next dose, take only that dose. Do not take a double dose in order to catch up.

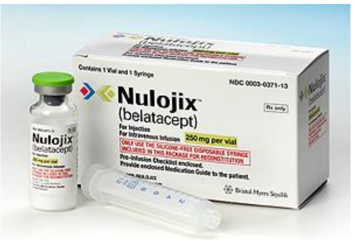
What should I avoid when taking Imuran?

Many medications interact with Imuran and change the concentration of Imuran in your blood stream. Do not take any medications prescribed by doctors outside of the transplant team without first checking with your transplant coordinator. Always check with your transplant coordinator before taking any over the counter medications.

What side effects may I notice from taking it?

Common side effects of Imuran include nausea, vomiting and decreased white blood cell counts. Many of the side effects improve after your body gets used to being on Imuran. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Belatacept (Nulojix)



What does it do?

Belatacept is an IV medication that suppresses your immune system, making it less able to fight infections and helps prevent rejection of your transplanted kidney.

How should I take belatacept?

Belatacept is given once every 28 days at an infusion center. The actual infusion takes 30 minutes, though in the outpatient setting we ask that you allow approximately two hours for your infusion appointment. That allows time for your IV to be placed, the drug to be mixed and prepared by the pharmacy and for the infusion to take place. Your first few months of belatacept will be given in the Duke Infusion Center. After that point, if you would prefer to switch your infusions to a center closer to your home that can be arranged through your transplant coordinator.

What if I miss a dose of belatacept?

Your belatacept dose must be taken within three days of your scheduled treatment time. Going outside of that time window places you at risk of rejection. Contact your transplant coordinator immediately if you miss a scheduled belatacept infusion. Always make sure you have your next infusion scheduled before you leave the infusion center.

What should I avoid when taking belatacept?

Do not take any medications prescribed by doctors outside of the transplant team without first checking with your transplant coordinator. Always check with your transplant coordinator before taking any over the counter medications.

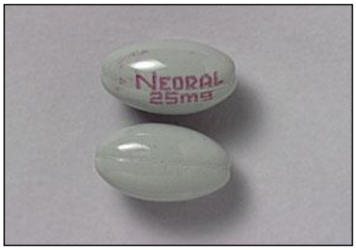
What else should I know about belatacept?

All immunosuppressant medications increase your risk for certain types of cancer. Belatacept specifically increases your risk of developing post-transplant lymphoproliferative disorder (PTLD).

What side effects may I notice from taking it?

Common side effects include nausea, vomiting, diarrhea, headache and swelling in your legs. Severe side effects include confusion or problems with memory and changes in your mood or behavior. Many of the side effects improve after your body gets used to being on belatacept. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Cyclosporine (Gengraf, Neoral, Sandimmune)



What does it do?

Cyclosporine suppresses your immunes system, making it less able to fight infections and helps prevent rejection of your transplanted organ.

How should I take it?

Cyclosporine should be taken at the same time every day, 12 hours apart. On the days that you are getting your labs drawn, be sure that you wait until after your blood is drawn to take your dose of cyclosporine, since a cyclosporine level will need to be measured.

Why is a cyclosporine level important?

Regularly checking a cyclosporine level helps make sure that you are receiving the appropriate dose of immunosuppression. Your dose of cyclosporine will change over time based on your drug level. Your transplant coordinator will inform you of any dose adjustments that need to be made with your cyclosporine dose. Always follow the dosing instructions given to you by the transplant team; they may be different that the dosing instructions printed on your bottle of medication.

What if I miss a dose?

If you miss a dose and it is still within three hours of the time the dose was due, you may take the dose. If it is more than three hours later than your dose was due, then wait and take the next scheduled dose. Do not take double doses. Contact your transplant coordinator if you miss more than one dose or if you are vomiting and unable to keep your medicine down.

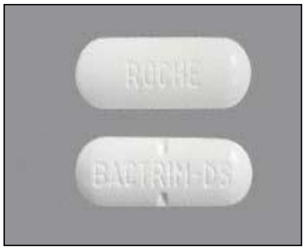
What should I avoid when taking it?

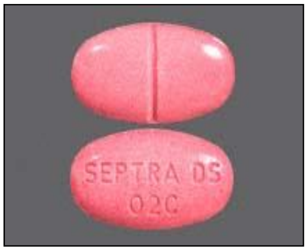
Cyclosporine and prograf are very similar antirejection medications. You may take either cyclosporine or prograf, but you will never be taking both of them at the same time. Avoid grapefruit while taking cyclosporine. There are several brands of cyclosporine and they are not all absorbed from the stomach equally. Make sure you always use the same brand.

What side effects may I notice from taking it?

Common side effects of cyclosporine include nausea, headache, elevated blood pressure and tremors. Other side effects include bleeding or swelling of your gums, vomiting, diarrhea, hair growth, chest pain, irregular heartbeat. Many of the side effects improve after your body gets used to being on cyclosporine. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Sulfamethoxazole/Trimethoprim (Bactrim)





What does it do?

Bactrim is an antibiotic used to help prevent bacterial infections, specifically a certain type of pneumonia that can develop in individuals who are taking immunosuppressive medications. You will take this medication three times per week for one year post transplant. If you are allergic to sulfa drugs, you will be given another antibiotic medication to take.

How should I take it?

Take as instructed by the transplant team with a full glass of water. Do not stop taking this medication until directed by the transplant team.

What if I miss a dose?

Take your dose of Bactrim as soon as you can. If it is almost time for your next dose, take only that dose. Do not take a double dose of medication to catch up.

What should I avoid when taking it?

You may be more sensitive to light while taking this medication. Be sure to protect your skin when you are outside by using sunscreen, light colored clothing and a hat.

What side effects may I notice from taking it?

Common side effects of Bactrim include nausea and diarrhea. Severe side effects include allergic reactions, difficulty breathing, and unusual weakness, dizziness, yellowing of the eyes or skin. Many of the side effects improve after your body gets used to being on Bactrim. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Valganciclovir (Valcyte)

What does it do?

Valcyte is an antiviral agent used to help prevent viral infections after transplant. About 80% of the population has been exposed to a certain virus (CMV) at some point in life that can live dormant in the body for the rest life. When the immune system of someone previously exposed to the virus is suppressed, this virus can flare up and cause problems. Valcyte is used daily for approximately six months after transplant to help prevent either infection (if you were never exposed to CMV but your donor had been) or reactivation of your own CMV. You may also have to take this medication again in the future if you become sick with CMV.

How should I take it?

Take valcyte with food at the same time each day. Take valcyte exactly as instructed by the transplant team. Depending on your kidney function, your dose may need to be adjusted.

What if I miss a dose?

If you miss a dose, take it as soon as you can. If it is almost time for your next dose, take only that dose. Do not take a double dose in order to catch up.

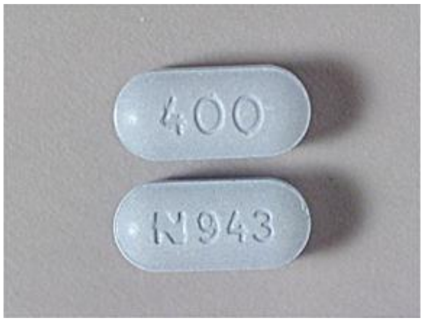
What should I avoid when taking it?

Valcyte may harm your unborn baby and alter sperm production. Both men and women must use effective birth control continuously while taking valcyte.

What side effects may I notice from taking it?

Common side effects include stomach upset, nausea, vomiting, unusual weakness, reduction in your white blood cells. Other side effects include increasing your risk of bleeding by lowering red blood cells and platelets. Many of the side effects improve after your body gets used to being on valcyte. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Acyclovir



What does it do?

Acyclovir is an antiviral agent used to help prevent viral infection called Herpes Simplex Virus (HSV) after transplant. You may have been exposed to HSV at some point in your life that can live dormant in your body for the rest of your life. However, when your immune system is suppressed, these viruses can flare up and cause problems. You may be on this medication instead of valcyte for three months post-transplant to help prevent HSV.

How should I take it?

Take acyclovir with food at the same time each day.

What if I miss a dose?

If you miss a dose, take it as soon as you can. If it is almost time for your next dose, take only that dose. Do not take a double dose in order to catch up.

What side effects may I notice from taking it?

Common side effects include rash and lower back pain. Other side effects include blood in urine and unusual bleeding or bruising. Many of the side effects improve after your body gets used to being on acyclovir. Please contact your transplant coordinator regarding any side effects that you are experiencing.

Administration

The following is a sample medication chart of medications you may be on after transplant. Your transplant pharmacist will give you a specific list that includes every medication you will need to take prior to your discharge from the hospital.

Transplant Medications	Dose	Number	9am Box 1	1 pm Box 2	5 pm Box 3	9 pm Box 4	Helpful Notes
Prograf (Tacrolimus) Prevents rejection	5 mg	5 x 1 mg capsules	5 mg			5 mg	No grapefruit or grapefruit juice
Myfortic (Mycophenolate) Prevents rejection	720 mg	4 x 180 mg tablets	720 mg			720 mg	Do not crush or chew
Prednisone Prevents rejection	20 mg	4 x 5 mg tablets	20 mg				Take with food
Bactrim DS (Trimethoprim-sulfamethoxazole) Prevents bacterial infection	1 tablet	1 tablet (take on Mon/Wed/Fri)	1 tab				Take with food
Valcyte Prevents viral infections	450 mg	1 x 450 mg	450 mg			450 mg	
Protonix Acid reducer	40 mg	1 x 40 mg	40 mg				
Miralax (polyethylene glycol) Laxative	17 grams	17 grams	17 grams				Do not take if having loose stools
Ultram (Tramadol) Reduces pain	25 mg	One-half tab every 6 hours					As needed for pain

Over the Counter Medications for the Abdominal Transplant Recipient

**Medications presented below are safe to use in abdominal transplant patients
**If you are diabetic, select "Sugar Free" products
** Do NOT use any Pepto-Bismol Adult or product with bismuth subsalicylate.

Complaint	OTC Generic Name	OTC Brand Names
Abdominal bloating/Gas	Simethicone	Gas-X®, Mylicon®, Mylanta Gas®
Allergies	Diphenhydramine, loratadine, cetirizine, fexofenadine, cromolyn nasal spray	Benadryl®, Claritin®, Zyrtec®, Allegra®, NasalCrom® **Avoid:** products with D (D = decongestant), Claritin D, Zyrtec D, Allegra D
Congestion	Guaifenesin *Do not use any decongestants like pseudophedrine (Sudafed®) or phenylephrine (Sudafed PE®)*	Mucinex®, Robitussin (plain)®, Tab Tussin 400, Coricidin HBP® Chest Congestion and Cough (contains dextromethorphan too)
Constipation *If lasts for > 3 days or if you have abdominal pain and fever, notify coordinator*	Docusate, senna, bisacodyl, polyethylene glycol 3350, psyllium Milk of magnesia *must be separated from transplant meds by at least 2 hours*	Colace®, Senokot®, Dulcolax®, Miralax®, Metamucil® Phillips® Milk of Magnesia
Cough	Dextromethorphan, guaifenesin *Products are available without sugar or alcohol if you are a diabetic*	Robitussin®, Delsym®, Mucinex® With both dextromethorphan and guaifenesin: Robitussin DM®, Coricidin HPB®
Diarrhea *If lasts for > 24 hours or if you have abdominal pain and fever, notify coordinator*	Loperamide *Do not exceed recommend doses*	Immodium®A-D, Immodium® Multi-Symptom Relief (with simethicone)
Dry Nose	Sodium Chloride nasal spray	Ocean® Spray
Low-grade fever, joint aches, headache *Contact coordinator for temp > 100.4	Acetaminophen Do NOT use ibuprofen (Motrin, Advil) or Naproxen (Aleve). Do not take aspirin unless instructed to do so by transplant physician.	Tylenol® *Do not exceed 3000 mg in 24 hours*
Nausea	Calcium carbonate	Tums®
Sneezing, runny nose	Chlorpheniramine, Chlorpheniramine and acetaminophen	Chlortrimeton® Coricidin HBP® Cold and Flu
Sore throat	Menthol, Benzocaine	Halls®, Chloraseptic®, Vicks®, Ludens®
Sleep	Diphenhydramine	Benadryl®, Zzzquil®, Simply Sleep®, Unisome®

Infections

Your immune system is the part of your body that is responsible for fighting infection. After your transplant, you will be taking medications to lower your immune system response in order to help prevent rejection. However, with a lower immune system, you become more susceptible to infections. You are the most susceptible to infections in the first few months following transplant and for the first month after any rejection treatments.

Common infections that may occur within the first few months after transplant are wound infections, urine infections, lung infections (pneumonia), and reactivation of previous viral infections. You will be monitored in clinic closely for any signs or symptoms of these infections.

Latent Virus Reactivation

A latent virus is a virus that lies dormant (not active) in your body. After transplant, it is possible to have some latent viruses reactivate in your body. These are viruses that you or your transplanted organs were exposed to in the past. Under the setting of immunosuppression these viruses may replicate and cause damage to your body. Viruses that may reactivate include CMV, BK, Herpes and varicella.

You will have labs drawn to check for CMV and BK monthly for your first year post transplant. If these viruses are detected, appropriate adjustments in your immunosuppressant medications will be made and treatments will be ordered if necessary.

BK virus is a virus that can travel to your kidneys and urinary tract. In many people, the virus remains inactive, and symptoms of the infection never occur. A weakened immune system can trigger symptoms of this virus. BK can be detected in blood work. Most people have no symptoms of BK infection; it is discovered with a blood test. If you do have symptoms of BK, they may include blood in your urine, painful urination, and/or flu-like symptoms. BK is a serious infection that can damage your new kidney and is treated by a reduction of you immune suppressive medications. It is important as always that you follow the directions of your transplant team. If BK is detected in your blood work, your transplant team will inform you of what medication adjustments or treatments are needed. During treatment for any infection you will be instructed to get frequent labs either at Duke or at an outside lab. Successful recovery requires close monitoring and frequent adjustments so compliance with instructions is vital.

Cytomegalovirus (CMV) is a very common virus that infects most adjusts in the US by the time they are 40 years old. Once you are infected with CMV, you will have the virus in your body for the rest of your life. Anyone who has had CMV infection can pass it on to others via bodily fluids. A weakened immune system can allow symptoms of this virus. CMV can be detected in blood work. Symptoms of CMV include weight loss, diarrhea and/or fatigue. If CMV is detected in your blood work, your transplant team will inform you of what medication adjustments or treatments are needed.

Prevention post-transplant

The best way to avoid infections post-transplant is through prevention. Please limit your exposure to visitors for the first 30 days post-transplant. The more people you are exposed to, the more germs you are exposed to. Avoid large crowds for the first few months post-transplant; always avoid contact with people with contagious illnesses. Often, colds and other illnesses will last longer than before transplant because of immunosuppression.

Be sure to use **hand sanitizer** or **wash** your hands frequently. Keep hand sanitizer in your car or purse, and keep some easily accessible at home. Make sure kitchen countertops and food preparation surfaces are kept clean. Do not eat or drink after other people or reuse the same drinking glass without washing it daily. The cleaner you can be, the fewer germs you will be exposed to.

Home Care and Activity

Post-transplant care requires adherence to a strict medical regimen in order to achieve best outcomes. You will be seen in clinic frequently after surgery to monitor recovery from surgery and effects of immunosuppression. It is very important that you keep all of your follow-up appointments and communicate any problems with the transplant team.

Activity post-transplant

While in the hospital, we will expect you to be out of bed within 24 hours after your surgery. You will need to be walking in the hall the day after your surgery. Inactivity after your transplant will make you weak, increases the chances of medical problems, and slows your recovery from surgery.

You will usually have some degree of weakness and less endurance than normal from surgery and limited activity before your transplant. After discharge you should be focused on increasing activity each day while incorporating some rest periods. Exercise strengthens your heart, conditions muscles, reduces stress, helps to reduce high blood pressure, helps to reduce cholesterol, and helps control blood sugar levels. Staying in shape is not easy, but exercise can prevent some of the side effects of your medications and is one of the best things you can do to help yourself live a longer and healthier life.

Most transplant patients are able to return to a normal activity level post-transplant. Regular exercise is important your overall health. Do not let having a transplant restrict healthy exercise. That being said, you have to start slowly and gradually increase your activity, especially in the early post op period (until your wound is healed inside and out). Do not lift more than ten pounds or do other activities that require you to bear down for the first eight weeks after your surgery. Lifting, pushing, or pulling too much early after transplant may cause hernias to develop. No abdominal or core exercises for the first 90 days post-transplant. Avoid sports or activities that would risk a direct hit to your abdomen. Focus on exercising large muscle groups through walking, treadmill, or using stationary bike. Get your heart rate up for 30 minutes each day.

Sexual activity may be resumed after your incision heals, typically about 1 month post-transplant. Follow safe sex practices to prevent sexually transmitted diseases. Some women do not menstruate when they have kidney failure or once they start dialysis. Menstruation will usually resume after your transplant. It is necessary to use birth control after transplant to prevent pregnancy. Generally, you need to wait at least one year after transplant before attempting to become pregnant. You should discuss this completely with your transplant physician before stopping birth control. Many immunosuppressant medications are harmful to the fetus and can cause significant birth defects. It may be necessary for the transplant team to change your medication regimen at least 3 months prior to attempting to conceive.

Do not drive until your staples are out and you are no longer taking any narcotic pain medication. Your doctor will typically clear you for driving a few weeks after your transplant.

Diet and fluid intake

Diet and nutrition are very important aspects of everyday care after a kidney transplant. To keep your new kidney and entire body healthy, the transplant team recommends you eat a well-balanced, low-salt, low-fat, low-cholesterol diet. Avoid concentrated sweets in the early post-transplant period since the medications you will be taking also increase your blood sugar. Sugar is hidden in many different places; please get into the habit of reading nutritional labels on the foods you consume. You should try to avoid sugary drinks such as sodas, sprite and colas.

Eat a healthy diet with plenty of protein, fruits and vegetables, but limit sodium intake to less than 2300 mg per day. Dietary restrictions of potassium and phosphorus are usually no longer needed with good kidney function; however the transplant team may inform you of restrictions for a short period of time.

It is important for you to increase your fluid intake after transplant. Drinking enough fluids, especially water, helps your body stay well hydrated and is important in maintaining good organ function. Your goal is to drink about 2 Liters (64 ounces) of fluids each day. As always, however, follow the instructions of your transplant team. There may be times when you are advised to limit your liquids (example, if you are still on dialysis at discharge, elevated blood pressures, having lots of swelling).

After transplant your immune system will be lower than it was prior to transplant, and you may be at a higher risk of getting a food borne illness. This risk is greatest in the first few months after transplant. Follow the following tips to help keep food safe from bacteria:

- Keep your hands and surfaces clean. Wash them often.
- Wash all fresh fruits and vegetables.
- Cook foods to the proper temperatures. All meat must be thoroughly cooked, no pink steaks or raw seafood.
- Hot food should be served and eaten hot. Cold food should be served and eaten cold. Do not consume food that has been sitting out and is lukewarm.
- Cook all deli meats to steaming hot.
- Keep cold foods chilled, refrigerate them promptly.
- Thaw food in the refrigerator. Never thaw at room temperature.
- Avoid unpasteurized milk or cheeses; be sure to check “sell-by” date and “use-by” date.
- Do not use expired products.
- Avoid grapefruit and grapefruit juices; these may interact with your medications.
- Alcohol intake should be limited, okay to drink one drink on occasion.
- When eating at restaurants, order off the menu, no buffets.

Wound care

After your transplant, you are allowed to shower daily. Do not submerge your wound under water (no baths) until your wound is completely healed. Let warm soapy water flow over your transplanted incision, pat dry. Do not use any lotions or powders on the wound. Do not cover the wound unless it is draining. If you need to cover the wound to protect your clothes use sanitary pads and paper tape to hold in place. These absorb well and are very effective in keeping the skin dry as well as being very economical. Staples will be removed approximately 3 weeks after surgery. Steri-strips (if used) will fall off on their own approximately 1 week after they are placed.

Blake Drain Care

You may have a drain placed in your abdomen at the time of your kidney transplant to help collect some of the drainage from the surgery. This drain will remain in place until the amount of fluid decreases to around 30 mL (about 1 ounce) or less per day. Many times, this drain will be removed prior to your discharge from the hospital. If the output from your drain is greater than 30 mL (1 ounce) per day, you will go home with the drain. Empty the bulb by removing the cap and squeezing the contents into a collection container. With the bulb squeezed, replace the cap. Typical drainage is pink tinged but clear; if drainage becomes thick or turns yellow or green, contact the transplant team immediately.

Wound Vac

On occasion, a device called a wound vac may be needed to assist with wound healing. This type of device helps promote blood flow to an open wound. Should a wound vac be needed after transplant, additional information and home health services will be arranged to help you care for your wound and wound vac.

Urinary catheter care

You will have a urinary catheter placed in your bladder at the time of your transplant. Typically, this will remain in place for three days post-transplant. While your catheter is in place, be sure that the urinary drainage bag is kept below the bladder. It is important that anyone handling your urinary catheter bag is using good hand hygiene and strategies to prevent infection and contamination. Occasionally, a patient will be discharged from the hospital with the catheter still in place. You will be educated on how to care for the catheter prior to discharge.

Vital sign monitoring

It is important to keep track of your vital signs (blood pressure, heart rate, weight, and temperature) to monitor your recovery. Use the logs at the back of this notebook to keep a written record of your blood pressure, heart rate, temperature, blood sugar and intake/output. Bring the record to each clinic visit until instructed to stop. Recording vital signs is an important way you can help the transplant team help you do well after your kidney transplant.

Blood pressure: check twice per day, around the time you are taking your medications. Become familiar with your usual blood pressure and pulse rate. Blood pressure readings have two parts; the top number is called the systolic blood pressure and the bottom number is called the diastolic blood pressure. Notify the transplant team with: any systolic blood pressure readings greater than 170 or less than 100 or any diastolic values greater than 100. Your goal blood pressure is about 130 or less over 85 or less. During the first few weeks after your transplant, we will likely allow your blood pressure to run slightly higher than this goal.

Pulse: your pulse is the number of heart beats per minute. Notify the transplant team with any pulse greater than 120 or less than 60.

Weight: check your weight once per day, at the same time each day; notify the transplant team with any weight gain of greater than 2 lbs. in one day or 5 lbs. in one week

Temperature: check once per day, at the same time each day; notify the transplant team with temperature above 100.5 F. You should also check if you are feeling warm or having unprovoked sweating, as these may be signs of infection.

Blood Sugar: if instructed at discharge, check your blood sugars before breakfast, before lunch, before dinner and at bedtime; notify the transplant team if your blood sugar is greater than 400 or less than 70.

Intake and Output: record how much fluid you take in and how much urine you make; the goal is to drink 2 liters (64 ounces) of mostly water each day; notify the transplant team if your urine output amount changes drastically from one day to the next.

Health Maintenance Post-transplant

Please be sure you are following with a **primary care physician** to receive routine health exams and malignancy screenings, as necessary. Call the transplant coordinator for any new medications prescribed. Women over the age of 40 should have a yearly mammogram and Pap smear. Men over the age of 45 should have a yearly prostate exam. Everyone over the age of 50 should have a colonoscopy. Long term, the transplant team will closely follow your kidney transplant needs, but is not a substitute for your primary care physician.

It is recommended that you to stay up to date with vaccinations, especially the flu vaccine (yearly) and pneumonia vaccines (Pneumovax [every five years] & Prevnar [once before the age of 65 & once after the age of 65]). However, you cannot receive any live **virus vaccines** post-transplant (common examples include the **nasal** flu vaccine and the Shingles vaccine). Contact your transplant coordinator prior to vaccine administration to be sure that the vaccine is safe for you. If you are around anyone who has received a live vaccine, avoid all bodily fluids from that person for 14 days after vaccine administration. Live viruses will be shed in bodily fluids for 14 days after administration of the vaccine.

In order to prevent infections, use extra precautions when handling pets or gardening. Please wear gardening gloves when working with soil as numerous fungi and bacteria are present in soil. Please do not handle any animal excrement. Exercise caution with pets while your surgical wound is healing, do not allow pets to jump up on you.

Going back to work

It is our goal to make it possible for patients who have been employed to return to work after transplant. Most patients can go back to work about within 2-3 months after their transplant. Depending on the type of work you do, you may be able to return to work earlier than three months. Do not return to work until cleared by your transplant physician.

It may be best to start back to work part-time and eventually move toward full-time work; most patients are more “out of shape” than they realize & cannot immediately work a full day. We will assist you in dealing with your employer and insurance company by providing them with any information they require to help you get back to work again. Please let us know if you have FMLA paperwork that will need to be completed.

Patients and their families face a new lifestyle after transplantation that may cause them to feel nervous, stressed, or depressed. Stay in contact with you transplant social worker to aid you in dealing with emotional and psychological changes after transplant.

Cancers post-transplant

Immunosuppressive medications may slightly increase your risk for developing cancers. Skin cancer and lymphomas (cancers of the lymph glands and white blood cells) are the most common types of cancer seen post-transplant. Help prevent skin cancers by wearing a hat while outside, using sunscreen with SPF 30 or higher, and protecting yourself from the sun. We recommend you see a dermatologist annually for a full body skin exam. Early detection of cancer can by helped by monthly breast exams and testicular exams. PAP smears and skin cancer screenings should be done by your physician every year.

Dental Health

Follow up with your dentist for regular dental cleanings and check-ups. Unless you have a dental emergency we recommend you wait 6 months after your transplant for routine dental cleanings/procedures. Brush twice per day, floss daily. Notify the transplant team if you notice any mouth sores, ulcers or white patches in your mouth. Inform your transplant coordinator about upcoming dentist appointments as you may need a dose of antibiotics prior to routine dental procedures. Transplant recipients may have a greater risk for developing an oral infection after dental procedures.

Caregiving

When you have a kidney transplant at Duke, you are required to have a caregiver (friend or family member) that will be available to help you in several ways. You cannot go through this surgery alone. During your hospitalization, your caregiver will need to be present for multiple education sessions with a pharmacist, dietician, and transplant coordinator. These in depth education session will prepare you and your caregiver for all that is required to provide great care after you are discharged.

You will need someone to drive you to your weekly clinic appointments for at least the first month after transplant. We also request that your caregiver participate in clinic appointments for your first month post-transplant. There is a lot of new information discussed and medication changes that may be made in clinic.

Once home, you will need your caregiver to provide 24 hours care for at least the first two weeks once you are home. You may need assistance with setting up your weekly pill box, assistance with household chores and meal preparations, help with wound care, and assistance with keeping track of your logs for clinic.

Upon arrival home, please call with any questions or concerns. The first few weeks after transplant are the most critical, concerns and issues need to be addressed immediately.

Clinic Visits

After you leave the hospital, you will be seen frequently in the transplant clinic. You will typically be seen once per week for the first month. You will have appointments with your transplant surgeon, transplant nephrologist and transplant coordinator. Financial coordinators, social workers, dieticians, and transplant psychiatrists are available to meet with you as needed. During clinic, the nephrologist and surgeon who examine you will assess for signs of rejection, illness, and wound healing and general health issues. This is the best time to ask questions about your transplant, medications, or other problems that you have noted.

Lab studies will be checked in clinic, and may be needed in between clinic visits as well. This is a way to monitor for your kidney function and to check your drug levels of your immunosuppressant medications. Labs should be drawn in the morning before you take your morning dose of prograf (tacrolimus), rapamune (sirolimus), or gengraf, neoral (cyclosporine). Once your lab results are received, your transplant coordinator will review those results with the transplant nephrologist. Your transplant coordinator will give you a call once your lab results have been reviewed to discuss any medication adjustments that need to be made.

We will review the records you need to keep for us to review after discharge. These records are extremely important! Not keeping them accurately can delay or negatively impact your recovery from surgery.

Two of the most important determinants of how you will do after a kidney transplant are exclusively under your control: regular clinic attendance and compliance with medications.

Please bring the following things to clinic each visit:

1. Medication list
2. Pillbox with your medications
3. Vital sign log, blood sugar log, intake and output log
4. Caregiver
5. Any questions you may have

Problems to report immediately

When to call

1. Fever greater than 100.5 F
2. Nausea or vomiting that lasts for more than 4 hours
3. Diarrhea more than 3 times in one day
4. Inability to take medications or out of medications
5. New pain that is sudden or sharp
6. Drainage from wound that is cloudy, smells bad or becomes thick
7. Painful or difficulty passing urine
8. Weight gain greater than 2 lbs. in one day or 5 lbs. in one week
9. You are admitted to an outside hospital for any reason

Who to call

Transplant Nurse Coordinators are available 24 hours a day, 7 days a week to help you navigate urgent medical needs. We do not want you waiting until a convenient time to report the symptoms above.

How to call

Life threatening emergencies: **911**

During business hours (Monday-Friday, 8am-4:30pm): Please call the kidney transplant office at **919-613-7777** and ask to speak to your post-transplant coordinator. If you get a voicemail message and you need to report one of the above problems, do not leave a voicemail. Please proceed to instructions for urgent calls after hours.

Urgent calls after hours (evenings and weekends): Please call the hospital operator at **919-684-8111** and ask them to page the *kidney transplant coordinator on-call.* If you do not get a return call from the on-call coordinator within 15 minutes, please call again. Do not be afraid to call back several times if someone does not call you back.

Please recognize that the transplant coordinators **on call** are not at the hospital during non-business hours. They are working from home in order to provide assistance for **urgent medical needs**. Routine requests for prescription refills, appointments, and lab orders will need to be handled during business hours by either speaking with your coordinator or leaving a voicemail message. You can also leave messages with our administrative staff that will make certain your coordinator gets the message. .

Resources

Duke University Health System www.dukehealth.com

Duke MyChart www.dukemycharg.org/home

Medical records requests: 919-684-6831

Carolina Donor Services www.carolinadonorservices.org

Donate Life https://www.donatelife.net/

National Kidney Foundation www.kidney.org

National Foundation for Transplant www.nft.org

United Network for Organ Sharing www.unos.org

Medicare www.medicare.gov/

Other Transplant Information

www.transplanthealth.com

www.transweb.org

www.mytransplantlife.com

www.astellascares.com/transplant

www.secure.medactionplan.com/mymedschedule

Glossary

Hemoglobin –measures the oxygen carrying capacity of red blood cells in your blood

Hematocrit – measures the percentage of red blood cells in your blood

White blood count – the amount of white blood cells in your blood, changes can indicate infections

Creatinine – a protein filtered by your kidneys, an indicator of your kidney function

Potassium – an electrolyte needed for normal heart and muscle function

Phosphorus – an electrolyte needed for energy production within cells, also needed for bone health

Sodium – an electrolyte needed to regulate blood volume and maintain muscle function

Magnesium – an electrolyte needed to maintain nerve and muscle function

Calcium – an electrolyte needed to maintain nerve and muscle function, also needed for bone health

Cholesterol – measures the amount of fats in the blood

Glucose – measures the amount of sugar in the blood

Tacrolimus/Cyclosporine/Sirolimus level – the amount of medication detectable in your blood

Health Maintenance Records

Please use the following sheets to track your health data. Bring these sheets with you to every clinic appointment. Continue tracking your data until instructed by the transplant team to stop.

Duke Transplant Center
Kidney Transplant Program

Vital Sign Log

Name:
Month:
Year:

DAY	TIME	1	2	3	4	5	6	7
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	8	9	10	11	12	13	14
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	15	16	17	18	19	20	21
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	22	23	24	25	26	27	28
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	29	30	31				
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							

Vital Sign Log

Name:	**Month:**	**Year:**

DAY	TIME	1	2	3	4	5	6	7
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	8	9	10	11	12	13	14
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	15	16	17	18	19	20	21
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	22	23	24	25	26	27	28
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							
DAY	TIME	29	30	31				
WEIGHT	AM							
BLOOD PRESSURE	AM							
PULSE	AM							
TEMPERATURE	PM							
BLOOD PRESSURE	PM							
PULSE	PM							

Blood Glucose Log

Name:			**Month:**		**Year:**			
Date	**Breakfast**		**Lunch**		**Dinner**		**Bedtime**	
	GLUCOSE	INSULIN	GLUCOSE	INSULIN	GLUCOSE	INSULIN	GLUCOSE	INSULIN
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Blood Glucose Log

Name:			**Month:**		**Year:**			
Date	**Breakfast**		**Lunch**		**Dinner**		**Bedtime**	
	GLUCOSE	INSULIN	GLUCOSE	INSULIN	GLUCOSE	INSULIN	GLUCOSE	INSULIN
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Intake and Output Log

Date	Intake	Urine Output	Drain Output
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			

Intake and Output Log

Date	Intake	Urine Output	Drain Output
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			

Exercise Log

Exercise Log – Time Spent Walking, Swimming, or Biking, etc.						
DATE	Morning		Afternoon		Evening	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

Duke Transplant Center

330 Trent Drive	Toll free: 1-800-249-5864
DUMC Box 102347	Local number: 919-613-7777
Durham, NC 27710	Fax number: 919-668-3897

Program Specialists	**Medical Secretaries**
Rebeccah Jamieson-Drake	Loredana Velker
Traci Woody	Rosa Persaud
Kidney Clinician	**Pediatric Coordinator**
Melody Daniel, RN, BSN	Nicole Pranger, RN, BSN
Pre-Transplant Coordinators	**Post-Transplant Coordinators**
Carolyn Boone, RN, MSN	Judy Smith, RN, BSN
Rosalyn Carter, RN, MSN, CCTC	Leslie Hicks, RN, MSN
Geannine O'Brien, RN, BSN	Karen Hamilton-Persaud, MSN
Linette Alvis, RN, MSN	
Emma Wolcott, RN, BSN	**Inpatient Coordinator**
	Shalerie Headley RN, BSN, CCTC
Living Donor Coordinators	
Lauren Stim, RN, BSN	**Float Abdominal Coordinator**
Sarah Rusch, RN, BSN	Jami Brown, RN, BSN

Notes and Questions

____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____
____