# Table of Contents

**Introduction**
- Introduction
- Your Bard® PowerPort® Implanted Port
- How Your Port Is Used

**Identification**
- How to Know Your Port is a Bard® PowerPort® Device

**Access**
- How is Your Port Accessed?

**Care**
- Care of Your Port

**Heparin Lock**
- About Heparin Locks

**Power Injection/CECT Scans**
- About Power-Injected CECT Scans
- What Your Clinician Should Know

**Q & A**
- Common Questions and Answers

**Talk to Your Clinician**
- What to Tell Your Doctor or Nurse

**Patient and Companion Checklist**
- Patient and Companion Checklist
**Introduction**

Your doctor has prescribed a Bard® PowerPort® or PowerPort® Groshong® implantable port because your treatment requires repeated injections of medicine into your blood. You may also need power-injected Contrast-Enhanced Computed Tomography (CECT) scans. This port will allow you to receive all of these treatments without the need for more needle sticks in your arm or leg veins.

Please read all of the information in this Patient Guide. It is designed to help you understand and feel comfortable with your port.

Not every port is able to receive fluid at a high rate (power injection). You should inform your nurse that your port is a Bard® PowerPort® or PowerPort® Groshong® implantable port. You should also carry your port patient identification card with you. This card lets nurses know that you have a Bard® PowerPort® or PowerPort® Groshong® implantable port. It also gives them important information they should know about the port.

If you have questions about your port, please talk to your doctor or nurse.
Your Bard® PowerPort® Implanted Port

Your Bard® PowerPort® implanted port is a small device (about the size of a quarter). It is used to carry medicine into the bloodstream. The port has one or two small basins that are sealed with a soft silicone top, called a septum. The port is placed under the skin on your chest or arm. The port connects to a small, soft tube called a catheter. The catheter is placed inside one of the large central veins that take blood to your heart. When a special needle is put into the septum, it creates “access” to your bloodstream. Medicine and fluids can be given through the needle and blood samples can be withdrawn.

Your port has three bumps on top of each septum. The port with one septum is also shaped like a triangle. These features help the nurse know that your port can be power injected.

How does the Groshong® Valve Work?

The valve works when pressure is applied to it. When a negative pressure (suction) is applied (usually by a syringe), it causes the valve to open inward, allowing your blood to flow through the catheter into the syringe. When a liquid, (e.g. medication, nutritional supplements, saline or blood) is introduced into the catheter lumen, the positive pressure pushes the valve open outwards, letting liquid enter the bloodstream. At neutral pressure, the valve remains closed, reducing the risk of air entering or fluids moving in or out of the catheter.

Why use the Groshong® Catheter?

Some patients may be hypersensitive to heparin or suffer from heparin induced thrombocytopenia (HIT). The Groshong® catheter may be flushed with sterile normal saline and does not require heparin to maintain patency. Additionally, the Groshong® port catheter grants longer periods between maintenance flushes which means less trips to the hospital.

How Your Port is Used

Your doctor or nurse can give medicines or fluids through your port. They may also take blood samples. They will not need to stick the veins in your arms with a needle. This makes it more comfortable for you. The medicines mix better in the blood, because the port delivers medicines into a large central vein.
The Bard® PowerPort® or PowerPort® Groshong® implanted port is used with a Bard® PowerLoc® Safety Infusion Set needle. Your port can receive a power injection when used with this needle. This will help tissue in your body show up more clearly during medical imaging. This helps your doctor monitor the status of your condition. Power-injected CECT scans are safe and non-invasive. They give important information about your disease and treatment.

**Identification**

**How to Know Your Port is a Bard® PowerPort® or PowerPort® Groshong® Implantable Port**

Your doctor or nurse gave you a packet when you received your port. This packet had a bracelet, key ring card, and identification card inside. These items help the nurse or doctor know that you have a Bard® PowerPort® or PowerPort® Groshong® implantable port. You should always keep your patient identification card with you. Show it to the nurse before your port is accessed for treatment.

You can tell the nurse you have a Bard® PowerPort® or PowerPort® Groshong® implantable port.

Your patient chart should also show that you have a Bard® PowerPort® or PowerPort® Groshong® implantable port.

The port has a special triangle shape and three bumps on top of the septum. Your doctor or nurse can feel these bumps and the triangle port shape to know that you have a Bard® PowerPort® implantable port.

Ask your doctor or nurse to help you feel the shape and bumps of your port.

A trained clinician can also recognize the Bard® PowerPort® implantable port in an X-ray. A special symbol located on the port is visible under x-ray.
Access

How is Your Port Accessed?

Your doctor or nurse will use the port when they need to administer medicine and fluids or withdraw blood samples. To do this, they will access the port by placing a special needle, called a Huber needle, into the port. You may feel a mild pricking when they put the needle into the port. This sensation often gets milder over time. Ask your doctor or nurse what you should expect.

Care

Care of Your Port

After your port is placed, your doctor will place a small bandage over the incision. For the first few days, you should avoid heavy exertion and follow any special guidance from your doctor or nurse to care for the small incision. The incision will not take any special care once it is healed. You can then resume normal activities.

Heparin Locks

About Heparin Locks

Sometimes blood can clot and block the catheter. Clots prevent medicine and fluid from flowing through it. Blood will not clot when it is thinned with a medicine called heparin. Ports with open-ended catheters are often filled with a sterile mixture of saline and heparin to prevent clots. This process is called a heparin lock. If your port will not be used for a long period of time, the doctor or nurse will usually change the heparin lock every four weeks.

If you are allergic to heparin or have Heparin Induced Thrombocytopenia (HIT), you should tell your doctor or nurse anytime the port is used.

PowerPort® Groshong® ports can be locked using only sterile normal saline without heparin for 90 days, if required. This is a good option if you are allergic to heparin.

Power Injection/CECT Scans

About Power-Injected CECT Scans

CECT scans are simple, safe, and non-invasive procedures. These scans aid in disease diagnosis and treatment. They are more sensitive than x-rays. Your doctor may see small differences in your soft tissue that they may not see with normal x-rays.

The clinician will inject a special fluid through your port before doing a CECT scan. This fluid, called contrast media, makes the picture taken with the scan much clearer. For best results, the contrast media is infused into your blood at a high rate. This process is called power injection.
A Bard® PowerPort® or PowerPort® Groshong® implanted port, when used with a special needle, allows clinicians to perform power-injected CECT scans. They will not need to put a needle into your arm or leg veins.

What Your Clinician Should Know

Show your Bard® PowerPort® or PowerPort® Groshong® implanted port patient identification card to the clinicians that do your CECT scan. This tells them that you have a PowerPort® implanted port.

Q & A

Common Questions and Answers

How do I care for my port?

During the first few days after receiving your port, avoid any heavy exertion and follow all special instructions that your doctor or nurse gives for care of the small incision. Follow the instructions of your healthcare provider for care and maintenance of your port once it is implanted.

After each treatment, and occasionally between treatments if your port is not used often, the port and catheter are flushed with a special solution. If your doctor has asked you to help with these procedures, you will receive special training and information to help you accomplish this.

Will the port affect my daily activities?

Once the incision heals, you should be able to return to your normal activities. Ask your doctor or nurse about specific activities and when to resume them.
Will I need to wear a bandage over the port?
A bandage will be needed until the incision heals. A bandage may be applied to stabilize and protect the needle while you are receiving treatment.

Do I have to stop wearing certain types of clothing?
Ask your doctor or nurse. The answer will depend on where your port is placed.

Who pays for the port?
Insurance policies vary. Check with your insurance company.

Will the port activate security alarms?
Security systems may detect the small amount of metal in the device. If this occurs, simply show the Patient Identification Card for your device.

How long will I have my port?
The port can stay in place as long as your doctor determines that you need it.

Will my port need to be accessed when not in use?
Yes. It will need to be flushed every 28 days, or every 90 days for PowerPort® Groshong® ports.

Can the device be removed if I no longer need it?
Yes. The port can be removed with a minor surgical procedure similar to the one used to place it.

What if my nurse has not seen a patient with a Bard® PowerPort® or PowerPort® Groshong® implanted port before?
Always show your nurse your patient identification card. This card gives your clinician needed information about the port. If they have more questions, they can call the Clinical Information Hotline at 800-443-3385.

Can I get a CT procedure with a Bard® PowerPort® or PowerPort® Groshong® implanted port?
Yes. The materials used in the Bard® PowerPort® or PowerPort® Groshong® implantable port are safe for use in CT and CECT procedures.

Can I get an MRI procedure with a Port in place?
Yes. You may get an MRI with this device. There may be some specific conditions for your device. Be sure your clinician checks the MRI guidelines for the device. If they have more questions, they can call the Clinical Information Hotline at 800-443-3385.

What do I do if I have a question or suspect a problem?
You may see some redness and tenderness in the area after the procedure. This should go away in 24 to 48 hours. Contact your doctor or nurse if you notice unusual changes in the skin such as increased swelling, redness or soreness. If you have pain, fever, chills, shortness of breath, or dizziness, contact your doctor right away.

What do I do if my doctor or nurse is unavailable?
You will be given a wallet-sized Patient Identification Card. This card has important information about the port. With this information, other medical personnel will be able to help you.

Talk to Your Clinician
As a new patient with a port, the best way to be involved is share information and concerns with your doctor or nurse. Speak up. Ask about your
concerns, or if you see anything that seems odd.

**What to Tell Your Doctor or Nurse.**
- You have a Bard® PowerPort® or PowerPort® Groshong® implanted port.
- If you notice any redness or swelling at the site of your port after the wound heals.
- If you have a fever.
- If you have allergies to any medicines or materials.
- If you have an allergy to heparin.
- If you have ever been treated for Heparin Induced Thrombocytopenia (HIT).
- If you have ever been treated with radiation before.
- If you have ever been diagnosed with lung disease.
- If you have ever been diagnosed with, or treated for blood clots in your veins (venous thrombosis).
- If you have ever been diagnosed with any tissue disease or suffered from tissue erosion.
- If you have been diagnosed with or tested for “pinch-off” syndrome.
- If other clinicians have ever had difficulty drawing blood or putting fluids through your port. Let them know if other clinicians have asked you to change position to allow blood or fluid to flow.

**Patient and Companion Checklist**
- The Bard® PowerPort® or PowerPort® Groshong® implantable port is a new kind of implantable port. It provides access for IV treatments and Power-injected Contrast-Enhanced Computed Tomography (CECT) scans.

- Patients should get an identification card, bracelet, and key ring card when the Bard® PowerPort® or PowerPort® Groshong® implantable port is placed. These can let the clinician know the port is a Bard® PowerPort® implantable port.

- Patients should keep their identification card with them. They may also wear the bracelet and carry the key ring card.

- Show the identification card to the nurse when the port is accessed. This card has important information for the nurse. If they need more information, they may call the Clinical Information Hotline at 800-443-3385.

- Speak up. Share information with clinicians. Ask about anything that concerns you or seems unusual.