Preparing and recovering from heart surgery can be an overwhelming experience. Zimmer Biomet’s mission is to help alleviate pain and improve the quality of life for people around the world; before, during, and after surgery.

Although you may have many questions about your surgery, below is a potential list of questions to ask your healthcare professional during your visit to help provide “peace of mind” prior to your procedure and to educate on topics that may be relative to you.

### Preparing for Heart Surgery

1. **Will my breastbone be cut or will this procedure be done minimally invasive?**
   
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

2. **How large will my incision(s) be?**
   
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

3. **At what point of the surgery will my breastbone be placed back together?**
   
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

4. **What are my options to help my breastbone be placed back together?**
   
   Your breastbone will be treated with a type of wires that wrap around and/or through your bone or with a plate and screw technology similar to what is used in orthopedic procedures.

   SternaLock Blu® is a plate and screw system for use in sternal closure or sternal reconstruction procedures. The implants are intended to remain as permanent fixtures that are not removed at a later time, unless removal is necessary to re-access the heart, or other complications, such as infection, arise. The plates and screws provide added stability to the breastbone to help facilitate the breastbone healing process after the bone is cut open for heart surgery. If re-operation on your heart is necessary, the plates can be cut for re-accessing the heart.¹

   - **Patients treated with SternaLock® Blu**
     - experienced improved and faster healing at three and six months.³

   - **2.6x more patients healed at 3 months**

5. **Does my health history raise any special concerns about complications?**
   
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

   SternaLock Blu plates and screws provide added stability to the breastbone to help facilitate the breastbone healing process after the bone is cut open during heart surgery. Enhanced stability of the breastbone helps improve sternal healing, which can reduce the risk of sternal complications and lead to improved recovery.²

   - **Patients treated with SternaLock® Blu**
     - experienced fewer sternal complications.¹

   - **0% vs 5% sternal complications rate**
1. **If I receive rigid fixation will it help improve my recovery time?**
   Depending on your type of breastbone closure, rigid fixation may facilitate in enhanced recovery after surgery.

2. **How long will my recovery take?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

3. **Will I need to go to a cardiac REHAB facility or can I go home?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

4. **When will I be referred to a cardiac REHAB facility?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

5. **What type of REHAB is required to help my breastbone heal?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

6. **How much pain should I expect and how will it be managed?**
   You should ask your doctor about pain management and your options of closure during your in-office visit.
   The SternaLock Blu Study found that 88% of patients treated with SternaLock Blu had no pain at 3 months as compared to 76% of patients treated with wire closure.²,³

7. **When will I be able to return to work?**
   The SternaLock Blu study found that patients who received SternaLock Blu were able to return to work 6 weeks after surgery. Most patients with SternaLock Blu had less interference with activities and less physical limitations attributed to pain. The SternaLock Blu Study found that at 6 weeks, 70% of scores reported by SternaLock Blu patients indicated they had no difficulty using their arms, compared to 59% of patients who were treated with wire closure.²,³
   Activity levels and healing times may vary for each patient. This requires medical guidance from a healthcare professional, please ask your doctor for more information.
8. **When will I be able to drive again?**

Most patients from the SternaLock Blu Study that received SternaLock Blu were able to drive a vehicle 6 weeks after surgery. Most patients with SternaLock Blu had less interference with activities and less physical limitations attributed to pain. The SternaLock Blu Study found that at 6 weeks, 70% of scores reported by SternaLock Blu patients indicated they had no difficulty using their arms, compared to 59% of patients who were treated with wire closure.³⁴

Activity levels and healing times may vary for each patient. This requires medical guidance from a healthcare professional, please ask your doctor for more information.

9. **When can I lift weights and at what time points?**

Surgeons may advise that patients can do the following after heart surgery during the following time points: lift less than 10 pounds 4-6 weeks after surgery, and 10 pounds or greater at 3 months after surgery.⁵⁶

Activity levels and healing times may vary for each patient. This requires medical guidance from a healthcare professional, please ask your doctor for more information.

10. **What activities will I need to avoid after surgery?**

Activity levels and healing times may vary for each patient. This requires medical guidance from a healthcare professional, please ask your doctor for more information.

To learn more about recovery after heart surgery — visit [www.sternalock.com](http://www.sternalock.com) — and click on the "recovery after heart surgery" tab and view the recovery timeline.

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**Notes:**

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Questions to Ask Your Surgeon

Heart Surgery During COVID-19

1. **What are my options for faster recovery after heart surgery during COVID-19?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

   Depending on your type of breastbone closure, plates and screws may facilitate in enhanced recovery after surgery. Patients treated with SternaLock Blu plates and screws had improved sternal healing, fewer breastbone complications and improved recovery as compared to patients treated with wire closure following open-heart surgery.³ ⁴ ⁷

   To learn more about recovery after heart surgery — visit [www.sternalock.com](http://www.sternalock.com) — and click on the “recovery after heart surgery” tab and view the recovery timeline.

   ![HEALING MATTERS](image)
   - Patient treated with SternaLock® Blu experienced improved and faster healing at three and six months.³
     - 2.6x more patients healed at 3 months

   ![COMPLICATIONS MATTER](image)
   - Patient treated with SternaLock® Blu experienced fewer sternal complications.³
     - 0% vs. 5% sternal complications rate

   ![RECOVERY MATTERS](image)
   - Patient treated with SternaLock® Blu spent fewer days in rehab hospitals or skilled nursing facilities.⁴ ⁷
     - 237 total fewer days in rehab and recovery

2. **Do I have a greater chance of complications if I have surgery during COVID-19?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

   Patients that receive SternaLock Blu may have a greater chance of reducing the risk of complications after heart surgery.³ SternaLock Blu plates and screws provide added stability to the breastbone to help facilitate the breastbone healing process after the bone is cut open for heart surgery. Enhanced stability of the breastbone helps improve sternal healing, which can reduce the risk of sternal complications and lead to improved recovery.²

3. **What are my options so that I can recover at home instead of enrolling in a REHAB facility?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

4. **What extra precautions are being taken during the COVID-19 pandemic?**
   This requires medical guidance from a healthcare professional and dependent on the hospital, please ask your doctor for more information.

5. **Is my procedure considered elective or emergent?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

6. **Could my heart medication make me more vulnerable to coronavirus?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.

7. **Could this procedure overall make me more vulnerable to coronavirus?**
   This requires medical guidance from a healthcare professional, please ask your doctor for more information.
Questions to Ask Your Surgeon

Citations

1. SternaLock Blu IFU 01-50-1215
7. SternaLock Blu patients spent a total of 237 total fewer days in rehab hospitals or skilled nursing facilities over 6 months. 705 total days for wire cerclage patients (n=120) vs. 468 total days for SternaLock Blu patients (n=116).

The information herein is of a general nature and does not represent or constitute medical advice or recommendations and is for general education purposes only. The information includes descriptions of a medical device that a thoracic (heart) surgeon may choose for patients undergoing open-heart surgery. Zimmer Biomet manufactures medical devices, including metal plates and screws that may be used by your heart surgeon to hold together the sternum (breastbone) after heart surgery. We do not practice medicine; all questions regarding your medical condition must be directed to your doctor(s). Results with breastbone (sternum) plates and screws (rigid fixation) will vary due to health, weight, activity and other variables. Not all patients are candidates for this product and/or procedure. Only a medical professional can determine the treatment appropriate for your specific condition. Appropriate post-operative activities will differ from patient to patient. Talk to your surgeon about whether rigid fixation is right for you and the risks associated therewith, including but not limited to the risks of infection, implant wear, loosening, screw or plate breakage or incomplete bone healing. For a complete list of risks associated with Zimmer Biomet’s rigid fixation system, see Patient Risk Information at Sternalock.com. The SternaLock Blu study was funded by Zimmer Biomet.