

Number of Open Heart Surgery

The number of heart and aorta surgeries using cardiopulmonary bypass machine per year (including emergency surgery)



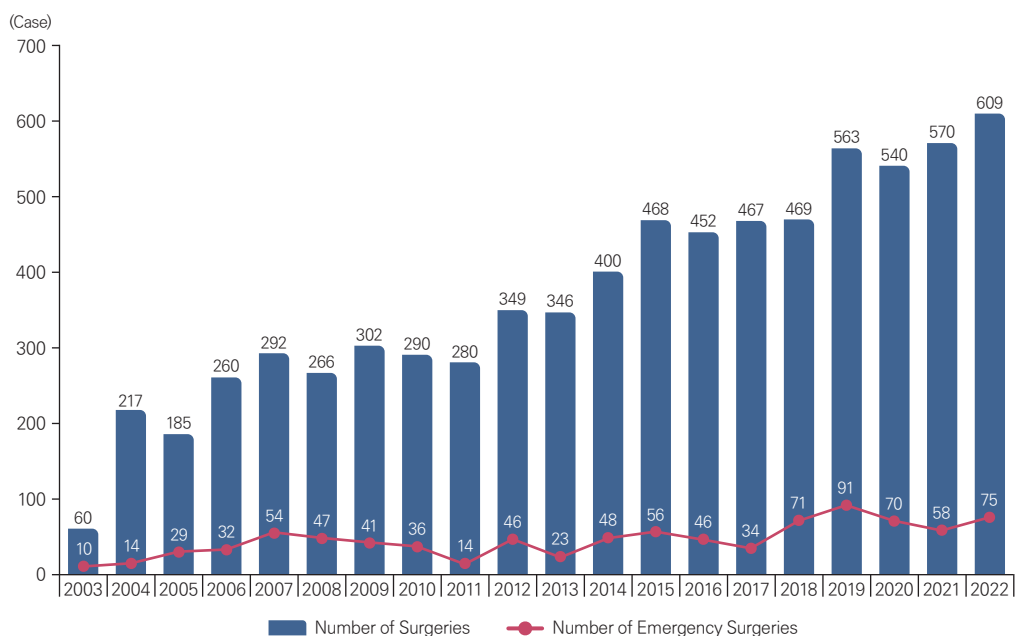
Definitions

- ◆ **Open heart surgery:** The heart and aorta surgery using cardiopulmonary bypass machine (CPB)+off-pump CABG.



Result

May 1, 2003 – December 31, 2022



Interpretation

- ◆ With the initial 60 cases of open heart surgery since the foundation of SNUBH in May 2003, the annual number of open heart surgery has been ≥ 200 cases. The growth was facilitated with the hospital extension in 2013, increasing the annual number to ≥ 500 cases. In 2022, more than 600 open heart surgeries performed.

Data source SNUBH EMR (Electronic Medical Record), Department of Cardiothoracic Surgery Surgical Patient Data Base

30-Day Mortality Rate, Open Heart Surgery

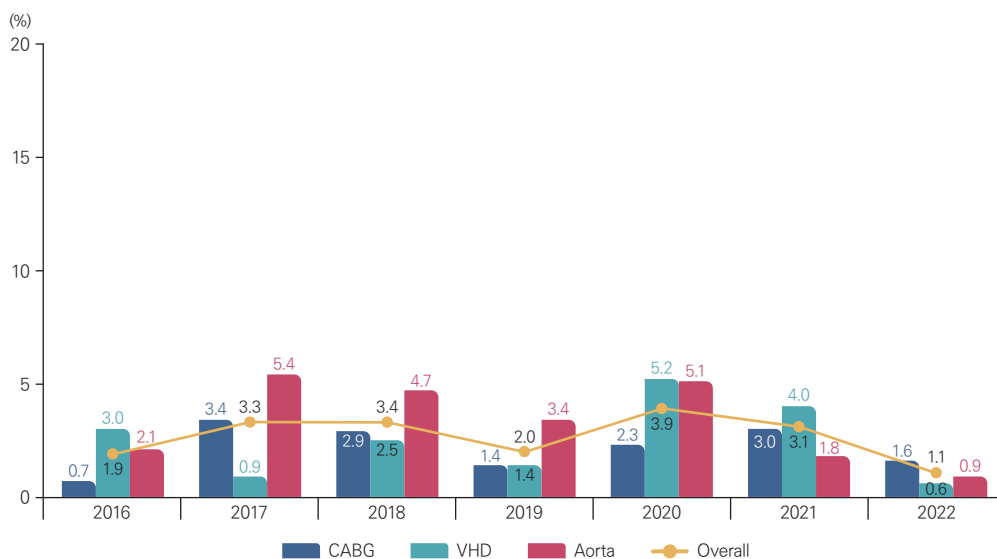
The number of deceased patients within 30 days of open heart surgery divided by the number of surgeries (excluding emergency surgeries)

Definitions

- ◆ **Within 30 days after surgery:** The number of patients who received the surgery but passed away within 30 days.
- ◆ **Open heart surgery:** The heart and aorta surgery using CPB+off-pump CABG.
- ◆ **CABG:** Coronary artery bypass surgery.
- ◆ **VHD:** A surgery performed on the heart valve.
- ◆ **Aorta:** A surgery performed on the aorta.

Result

January 1, 2016 – December 31, 2022



Interpretation

- ◆ The 30-day mortality after open heart surgery is 1.1% in 2022.

Data source: SNUBH EMR (Electronic Medical Record), Department of Cardiothoracic Surgery Surgical Patient Database, MOIS Survival Data

Incidence of Complications after Open Heart Surgery (Bleeding Reoperation)

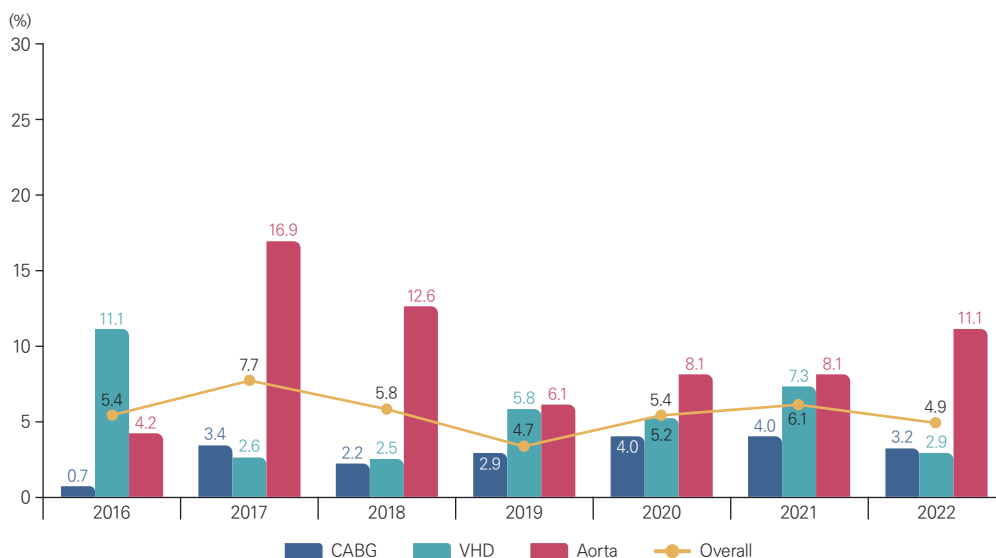
The proportion of patients showing a complication (bleeding reoperation) during the admission period after open heart surgery (excluding emergency surgery)

Definitions

- ◆ **Open heart surgery:** The heart and aorta surgery using CPB+off-pump CABG.
- ◆ **Length of stay:** For the patients who show hemorrhage during the postoperative admission period; the length of the period is not restricted.
- ◆ **Bleeding reoperation:** A case where postoperative bleeding leads to revision surgery.
- ◆ **CABG:** Coronary artery bypass surgery.
- ◆ **VHD:** A surgery performed on the heart valve.
- ◆ **Aorta:** A surgery performed on the aorta.

Result

January 1, 2016 – December 31, 2022



Interpretation

- ◆ Bleeding reoperation after open heart surgery is a complication exhibiting high frequency and it does not necessarily leads to a serious result such as death; nonetheless, since it may affect the rehabilitation and recovery during the admission period, consistent efforts should be made to reduce the incidence of hemorrhage as a postoperative complication.
- ◆ While the incidence is of an average level in consideration of the severity and the increase in elderly patients, the incidence of high-risk Aorta was shown to have steadily decreased each year.

Data source SNUBH EMR (Electronic Medical Record), Department of Cardiothoracic Surgery Surgical Patient Database

Incidence of Complications after Open Heart Surgery (Mediastinitis)

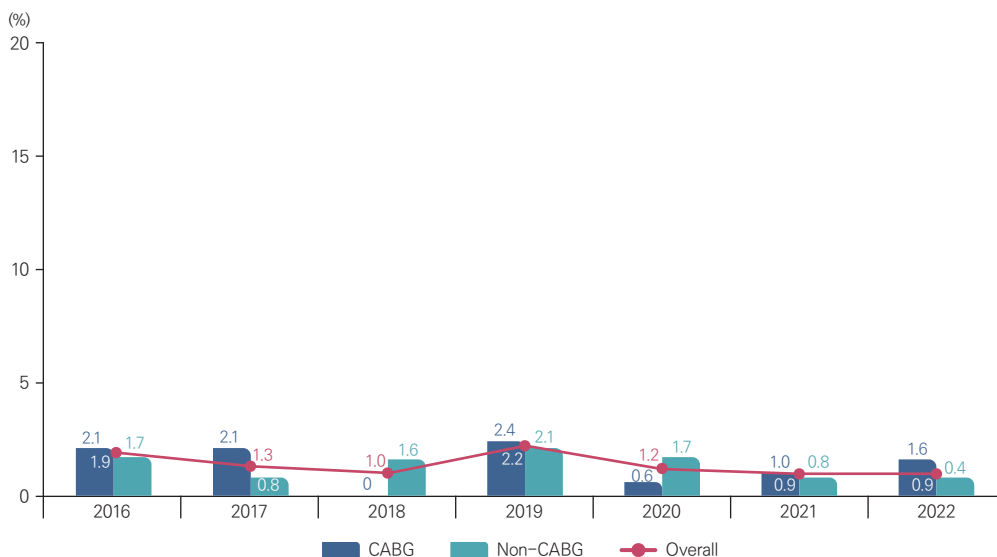
The proportion of patients showing a complication (mediastinitis) during the admission period after open heart surgery (excluding emergency surgery)

Definitions

- ◆ **Open heart surgery:** The heart and aorta surgery using CPB + off-pump CABG.
- ◆ **Mediastinitis:** A case where microbial infection has been identified in a patient who received open heart surgery involving sternotomy so that he or she is given an antibiotics treatment or therapy.
- ◆ **CABG:** Coronary artery bypass surgery.
- ◆ **Non-CABG:** Open heart surgery involving sternotomy except coronary artery bypass surgery.

Result

January 1, 2016 – December 31, 2022



Interpretation

- ◆ As mediastinitis is a common complication after coronary artery bypass surgery, compared to other open heart surgeries, the incidence showed an decreasing trend despite the increase in the number of surgeries for high-risk patients.

Data source SNUBH EMR (Electronic Medical Record), Department of Cardiothoracic Surgery Surgical Patient Database

Incidence of Complications after Open Heart Surgery (Stroke)

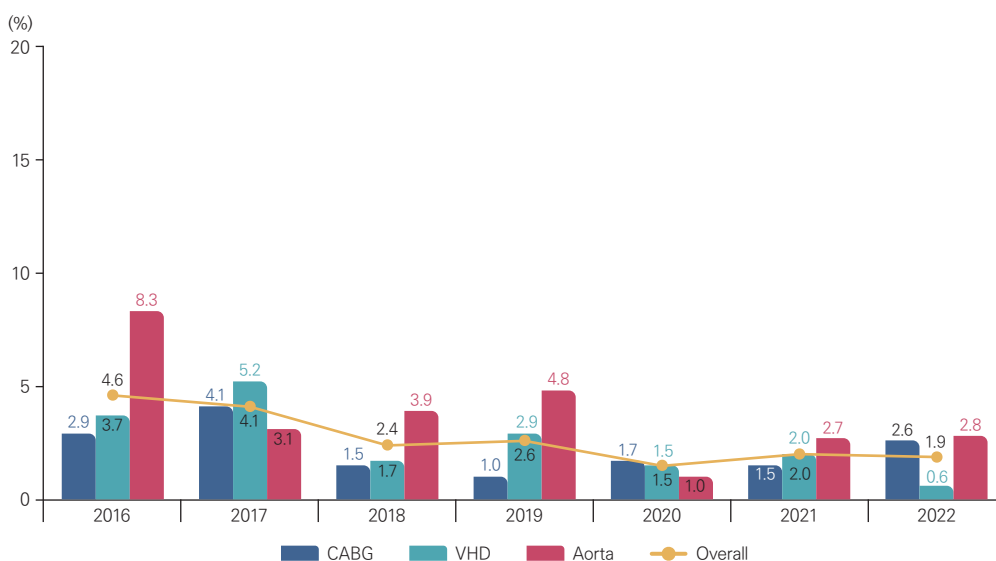
The proportion of patients showing a complication (stroke) during the admission period after open heart surgery (excluding emergency surgery)

Definitions

- ◆ **Open heart surgery:** The heart and aorta surgery using CPB+off-pump CABG.
- ◆ **Stroke:** A case where postoperative stroke (cerebral infarction, cerebral hemorrhage, etc.) confirmed based on CT and MRI occurs.
- ◆ **CABG:** Coronary artery bypass surgery.
- ◆ **VHD:** A surgery performed on the heart valve.
- ◆ **Aorta:** A surgery performed on the aorta.

Result

January 1, 2016 – December 31, 2022



Interpretation

- ◆ For open heart surgery using cardiopulmonary bypass machine, the incidence of stroke is a complication requiring attention and the incidence at SNUBH is shown to have consistently decreased.

Data source SNUBH EMR (Electronic Medical Record), Department of Cardiothoracic Surgery Surgical Patient Database