CURRENT DRAINAGE PRACTICE IS SUB-OPTIMAL

36% of cardiac surgery patients experience clogged chest tube, increasing risk of blood build-up in chest cavity

19% of patients affected by complications from fluid build-up in chest cavity

Large variability in assessing air leaks

IMPACT

SUB-OPTIMAL DRAINAGE IMPAIRS OUTCOMES

Complications from fluid build-up in chest cavity lead to:

| **5x** higher in-hospital mortality rate | **13 day** increase in hospital length of stay | **5x** higher postoperative transfusion rate |

Variability of analog air leak assessment results in:

| **2x** longer air leak duration | **1 day** increase in hospital length of stay | **Less agreement** within care team on air leak severity |

*References:

Caution: Federal (U.S.) law restricts Thoraguard to sale by or on the order of a physician. Thoraguard is not cleared for use outside of the U.S.

Introducing

THORAGUARD,

a transformative digital drainage system for cardiothoracic surgery

CENTESE

4156 S. 52nd St.
Omaha, NE 68117
info@centese.com
(402) 417-0740
www.centese.com
Patient outcomes can hinge on chest tube patency or the accuracy of air leak tracking. Yet, surgical drainage systems have seen little innovation and remain unreliable. The result can be complications, longer hospital stays, wasted resources, and unnecessary costs.

**Bringing Digital Intelligence to Drainage**

Thoraguard integrates sensors and software to transform surgical drainage with digital intelligence

- System delivers **automated clog clearance** for the first time ever, clearing chest tubes without human intervention
- **Precise, objective and easy-to-read data** on fluid output levels and air leak trends enables you to make the right patient decisions, quicker
- Self-monitoring system **notifies care team** in the event of disruption
- Same system **works for both cardiac and thoracic surgery**

**THORAGUARD IN CARDIAC SURGERY**

- **First and only automated clog clearance system** clears proprietary 20 Fr. chest tube every 5 minutes, with no human manipulation
- Digitally measures and displays hourly drainage volume and trends to provide objective data for decision-making
- Actively monitors system and alerts care team in the event of abnormal drainage rate, line kinks or other system disruption
- Displays data on simple and intuitive touchscreen
- Incorporates soft and flexible small-bore chest tubes

**THORAGUARD IN THORACIC SURGERY**

- Digitally measures and displays air leak rate and 24-hour trends to assist in objective discharge decisions
- Actively monitors system and alerts care team in the event of abnormal air leak rate, line kinks or other system disruption
- **Compact and self-contained system** enables early patient ambulation
- **Rapid set-up; no water required**
- **All-in-one solution** incorporates digital monitor, suction control, canister, and chest tubes for use throughout hospital