# LAAO STROKE PREVENTION: **Device-Related Factors Considerations**



# LAAO THERAPY SHOULD PROVIDE A SOLUTION FOR ALL STAKEHOLDERS WITH LIMITED COMPLICATIONS

# **DEVICE-RELATED THROMBUS (DRT)**

DRT is a complication that occurs when a thrombus, or clot, develops on a medical device.

**INCREASED RISK** Increased risk of stroke

and systemic embolismin the presence of a DRT.<sup>1</sup>

- 62% LOWER DRT RATE WITH AMULET LAAO AS COMPARED TO WATCHMAN FLX<sup>2</sup>
- > High-Risk DRTs result in increased thromboembolic events and mortality.<sup>3</sup> > Amulet LAAO had significantly fewer High-risk DRTs compared to Watchman LAAC.<sup>3</sup>

# **PERI-DEVICE LEAK (PDL)**

PDL results from incomplete closure of the left atrial appendage following LAAO device implantation when flow is allowed past the device.



### **GREATER RISK**

Greater risk of ischemic stroke or embolism at 5 years with **PDL ≤5 mm.**<sup>4</sup>

**39%** INCIDENCE OF DELAYED PDL AMONG PATIENTS UNDERGOING CLOSURE WITH WATCHMAN FLX<sup>5</sup>

> 2x higher risk of PDL-associated negative outcomes with Watchman LAAC, as compared to Amulet LAAO, in landmark head-to-head study.6

> SWISS-APERO Randomized Clinical Trial demonstrated superior complete closure at 45 days with Amulet compared to Watchman FLX.<sup>2</sup>

"The presence of DRT or PDL can significantly worsen patient outcomes and must be avoided in LAAO therapy. Both conditions can lead to severe complications such as increased thromboembolic risk." Dr. Xavier Freixa Rofastes, Hospital Clínic de Barcelona, Spain



# AMULET LAAO'S DUAL-SEAL TECHNOLOGY IS DESIGNED TO REDUCE DEVICE-RELATED FACTORS



## DEVICE-RELATED FACTORS

PRECEDED STROKES AND CV DEATH ~2X MORE OFTEN with Watchman LAAC vs. Amulet LAAO<sup>2</sup>

### "The design of Amulet allows for successful LAAO even in challenging anatomical scenarios unable to be closed by WATCHMAN FLX." Dr. Akash Makkar, Arizona Heart Arrhythmia Associates, U.S.





- **DISC** Delivers a complete ostial seal which prevents leaks in more patients and seals off area more prone to thrombus formation.
- LOBE Requires minimal depth and accommodates different shapes of LAA anatomy.<sup>8</sup>
- 3 WAIST Provides flexibility to accommodate all morphologies.

Single lobe devicedesign specifics



- Single lobe mechanism requires positioning more deeply inside appendage
  - This may predispose patent to higher clot formation compared to Amulet LAAO.
  - Deeper device implantation and larger uncovered LAA areas were associated with a higher incidence of DRT.<sup>9</sup>
- LAA closure often fails with single lobe LAAO devices in appendages that have shallow depth, multiple lobes, many trabeculations, wide orifice, shallow vertical take-off, or chicken wing anatomy.<sup>10</sup>

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## AMULET LAAO ENSURES EFFECTIVE CLOSURE IN A BROAD RANGE OF ANATOMIES, REDUCING STROKE RISK AND DRIVING FREEDOM FROM OACS <sup>7,8,11,12</sup>

Rx Only Important Safety Information

### AMPLATZER<sup>TM</sup> AMULET<sup>TM</sup> LEFT ATRIAL APPENDAGE OCCLUDER

### INDICATION FOR USE

The Amplatzer Amulet Left Atrial Appendage Occluder is a percutaneous transcatheter device intended to reduce the risk of thrombus embolization from the left atrial appendage (LAA) in patients who have nonvalvular atrial fibrillation and who are at increased risk for stroke and systemic embolism based on CHADS<sub>2</sub> or CHA<sub>2</sub>DS<sub>2</sub>-VASc scores, are suitable for short term anticoagulation therapy, and have appropriate rationale to seek a non-pharmacologic alternative to oral anticoagulation, taking into consideration the safety and effectiveness of the device.

### CONTRAINDICATIONS

- The Amplatzer Amulet Left Atrial Appendage (LAA) Occluder is contraindicated for patients:
- · With the presence of intracardiac thrombus.
- · With active endocarditis or other infections producing bacteremia
- Where placement of the device would interfere with any intracardiac or intravascular structures.

### POTENTIAL ADVERSE EVENTS

Potential adverse events associated with the device or implant procedure include, but are not limited to, the following: Air embolism; Airway trauma; Allergic reaction; Anemia; Anesthesia reaction (nausea, vasovagal reaction, confusion/altered mental status or other); Arrhythmia; Atrial septal defect; Bleeding; Cardiac arrest; Cardiac tamponade; Chest pain/discomfort; Congestive heart failure; Death; Device embolization; Device ension; Device malfunction; Device migration; Device-related thrombus; Fever; Hematuria; Hypertension/hypotension; Infection; Multi-organ failure; Myocardial infarction; Perforation; Pericardial effusion; Pleural effusion; Renal failure/dysfunction; Respiratory failure; Seizure; Significant residual flow; Stroke; Thrombocytopenia; Thromboembolism: peripheral and pulmonary; Thrombus formation; Transient ischemic attack; Valvular regurgitation/insufficiency; Vascular access site injury (hematoma, pseudoaneurysm, arteriovenous fistula, groin pain or other); Vessel trauma/injury.

### REFERENCES

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