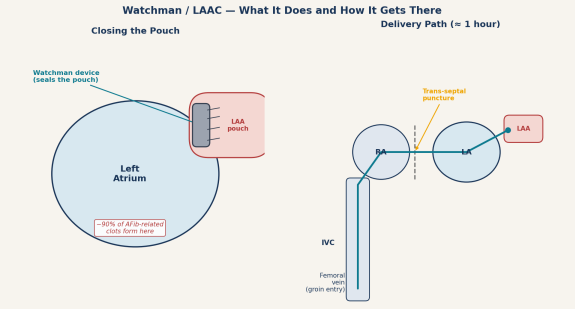
# Understanding the Watchman (LAA Closure)

Closing the left atrial appendage to prevent AFib-related stroke when long-term blood thinners aren't a safe option

**About 90% of AFib-related clots form in the LAA. Sealing it off can prevent stroke without lifelong anticoagulation — when you're the right candidate.**




**Online:** https://go.riasalimd.com/watchman-guide


## Rias KS Ali, MD FACC

Board Certified in Interventional Cardiology & Cardiovascular Disease

4740 Mile Stretch Drive, Holiday FL 34690 | Office: (727) 943-5200 | Fax: (727) 943-5201 | RiasAliMD.com



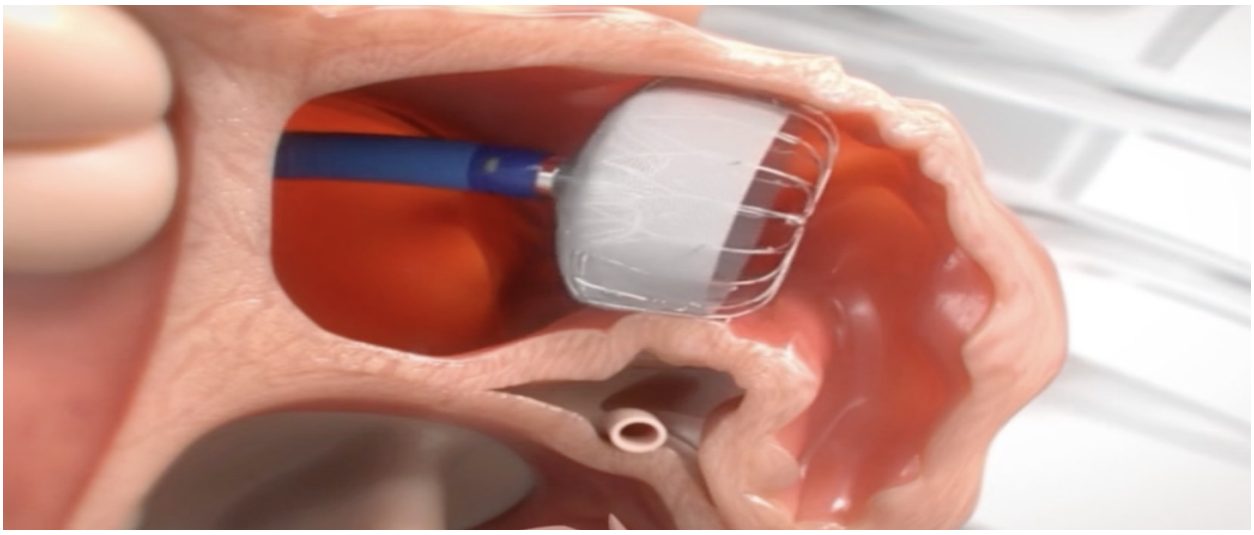
Last Updated: August 2026

## Names & Terms You Will Hear

| Term | Meaning |
|---|---|
| Left atrial appendage closure (LAAC) | A one-time procedure that seals the LAA. The LAA is a small pouch in the heart. Most AFib clots start there. |
| Left atrial appendage occlusion (LAAO) | The same procedure. Just a different name. 'Closure' and 'occlusion' mean the same thing here. |
| Watchman / Watchman FLX | The most-used device. Boston Scientific makes it. The FLX is the newer model. The FDA cleared it in 2020. |
| Amplatzer Amulet | A rival device. Abbott makes it. The FDA cleared it in 2021. A study showed it works as well as the older Watchman. |
| Percutaneous LAA closure | 'Percutaneous' means through the skin. The tube goes in through a small nick in a leg vein. There is no chest cut. |
| AFib stroke-prevention option | A way to lower stroke risk without a daily pill. It is used when blood thinners are not safe to take for life. |
| Trans-septal puncture | A small needle hole in the wall between the two top heart chambers. It lets the tube reach the LAA. A heart ultrasound guides it. |
| Peri-device leak (PDL) | A small gap between the device and the LAA wall. It shows up on a later scan. Most gaps are tiny and cause no harm. |

## What Is the Watchman (LAA Closure)?

- The left atrial appendage (LAA) is a small pouch on the side of the heart's top-left chamber. In AFib, blood pools in it and forms clots. A clot can travel to the brain and cause a stroke.
- Watchman is a one-time procedure. A doctor places a tiny mesh device inside the LAA to seal the pouch. Over about 45 days, a thin layer of your own tissue grows over it.
- About 90% of AFib clots form in the LAA. Sealing the pouch lowers stroke risk. And you may not need a blood thinner for life.
- Two devices are FDA-cleared in the U.S.: the Watchman FLX (Boston Scientific) and the Amplatzer Amulet (Abbott). They work about the same. The choice depends on the shape of your LAA.
- The procedure takes about an hour. The doctor works through a small nick in a leg vein. Most patients go home the next day.

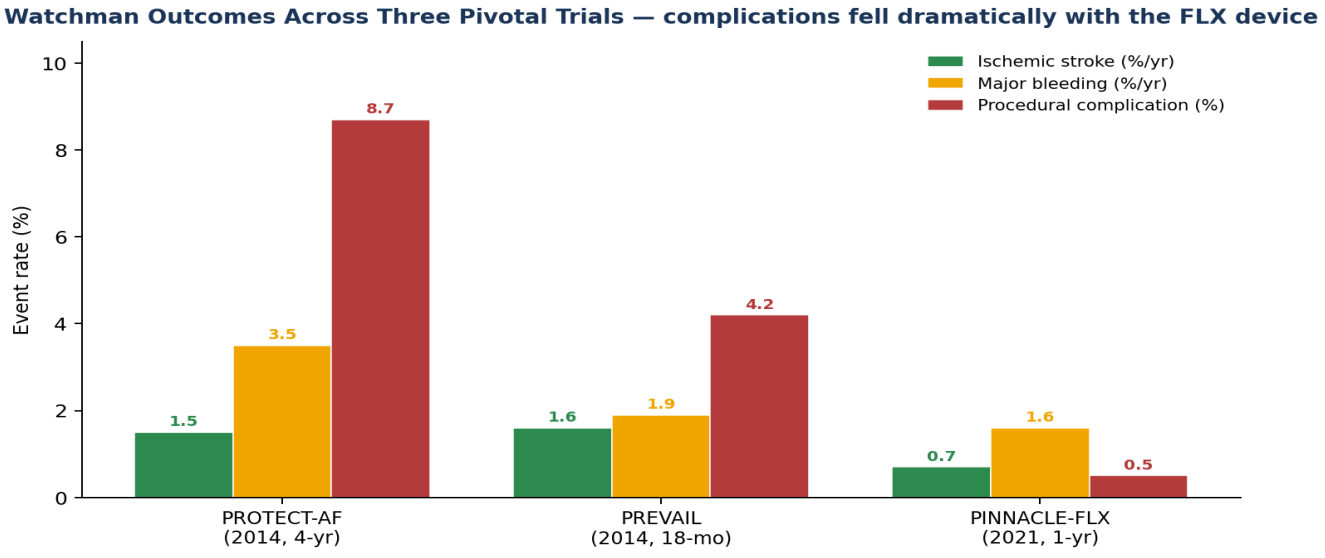


*The Watchman device deployed inside the left atrial appendage (LAA). The expandable fabric mesh seals off the pouch where ~90% of AFib-related clots form. Once tissue grows over the device (~45 days), the LAA is permanently closed and most patients can stop their oral anticoagulant. (Anatomic illustration; Boston Scientific source.)*

**Important — Watchman does NOT cure AFib.** You still have AFib after the procedure. Watchman seals the pouch where most clots form. But the off-beat rhythm goes on. So you may still need rate care, rhythm care, or ablation to feel better. And about 10% of AFib clots form outside the LAA. So Watchman lowers stroke risk, but does not erase it.

## Why It Matters

- AFib raises stroke risk about five times. Blood thinners (a DOAC or warfarin) are the usual way to lower that risk. But some people cannot take a blood thinner safely for life.
- Two large trials, PROTECT-AF and PREVAIL, showed Watchman works as well as warfarin to prevent stroke. The 4-year PROTECT-AF data also showed fewer heart-related deaths.
- A 2021 trial, PINNACLE-FLX, showed the newer device has far fewer problems: 0.5% versus about 8.7% in the first PROTECT-AF trial. A better device and more skilled doctors drove that drop.
- The chart below makes this clear. Stroke prevention stayed steady. At the same time, the procedure grew much safer across the three key trials.
- PRAGUE-17 was the only trial to test Watchman head-to-head against a DOAC. Results were about the same at 4 years. So Watchman is a sound choice when a DOAC is hard to take.
- Take a person with a high stroke score who already had a bad bleed on a DOAC. That person faces too much stroke risk with no protection. For them, Watchman is the right answer.




*Three pivotal trials of the Watchman device. Stroke prevention has held steady from PROTECT-AF (2014) through PINNACLE-FLX (2021), while procedural complication rates fell from ~8.7% to 0.5% as the device and operator experience improved.*

## Treatment Options

- Watchman IS the treatment in this guide. The steps below show how it works and what to expect.
- Before the day: a heart ultrasound through the throat (TEE) or a heart CT scan measures the LAA. This picks the right device size. See the separate TEE guide.
- On the day: you get light sleep medicine. A thin tube goes in through a leg vein. It travels up to the heart, crosses to the left side, and sets the device in the LAA.
- Right after, the doctor uses a heart ultrasound to check two things. The seal must be tight. The device must be stable. Then the tube comes out.
- Most patients go home the next day. The only rule is no heavy lifting for 5 to 7 days.
- Blood thinners do NOT stop right away. You take one of two plans for about 45 days. Plan A: a DOAC, then aspirin alone. Plan B: aspirin plus a second pill, clopidogrel. Your doctor sets the plan for you.
- A follow-up scan at 45 days checks that the device is sealed and covered by tissue. Another scan at 12 months is routine. If the seal holds, most patients stay on aspirin alone for life.

## Candidacy — Who Watchman Is (and Isn't) For

| Tier | Who fits | What we advise |
|---|---|---|
| Ideal candidate | CHA2DS2-VASc score of 2 or more, plus a past major bleed on a thinner or a clear reason a thinner is unsafe. | Strong fit — start the workup. |
| Reasonable candidate | CHA2DS2-VASc score of 2 or more, a high bleed risk (HAS-BLED 3+), frequent falls, or real trouble with a DOAC. | Good option — talk it through. |
| Marginal candidate | CHA2DS2-VASc score of 2 or more, but a DOAC works fine — or the wish for Watchman is the only driver. | Weigh with care — a DOAC stays first. |
| Not a candidate | CHA2DS2-VASc score of 0–1, a clot in the LAA, a poor LAA shape, less than a year to live, or an active infection. | Do not proceed. |

## Device Choice — Watchman FLX vs Amplatzer Amulet

- Watchman FLX (Boston Scientific): one mesh cup made of nitinol metal with a fabric cover. It fits a wide range of LAA shapes. It is the current U.S. standard.
- Amplatzer Amulet (Abbott): a two-part design. One lobe sits inside the LAA. A disc caps the opening. It helps with a short or wide LAA.
- The Amulet IDE trial showed it is as safe and works as well as the older Watchman 2.5. The FLX and the Amulet give about the same results.
- Your LAA shape on the pre-procedure scan drives the choice — not a plain preference.

## What Happens After the Device Is In

- Day 0 to 1: you stay overnight for watching and a heart tracing (ECG). Most patients go home the next morning.
- Days 1 to 45: you keep taking a DOAC (or aspirin plus clopidogrel). This lets new tissue grow over the device.
- Day 45: a scan checks for a full seal and no clot on the device. If it is clean, you move to aspirin alone.
- Month 12: a second scan checks the long-term seal. If it holds, most patients stay on aspirin alone for good.
- Skipping the 45-day or 12-month scan is the single biggest risk you can avoid after Watchman.

### At-a-Glance — Four Candidacy Tiers

| Ideal Candidate | Reasonable Candidate | Marginal Candidate | Not a Candidate |
|---|---|---|---|
| • $CHA_2DS_2$-VASc score of 2 or higher | • HAS-BLED score of 3 or higher | • DOAC well-tolerated | • CHA2DS2-VASc 0–1 (low stroke risk) |
| • Prior major bleed on a thinner | • Frequent falls or trauma-prone work | • Preference-driven request | • LAA thrombus seen on TEE |
| • Clear contraindication to DOAC | • True DOAC intolerance | • No clear bleeding risk | • Unfavorable LAA anatomy |
| • Strong indication — proceed | • Discuss in detail | • DOAC usually remains first-line | • Life expectancy < 1 year |

## Risks, Benefits, and Alternatives

Every choice has trade-offs. Use this table to start the shared decision conversation.

| Option | Risks | Benefits | Alternatives |
|---|---|---|---|
| Watchman / LAAC (the procedure in this guide) | Fluid around the heart (~1–2%). Device slips out of place (rare with FLX). Small leak by the device. Bleeding at the leg vein. Stroke at or near the time of the procedure (rare). The risk is one-time. | Prevents stroke as well as warfarin (PROTECT-AF, PREVAIL). No life-long bleeding risk from a daily thinner. Fewer deaths at 4 years in long-term PROTECT-AF data. Most useful when a bad bleed has already happened on a thinner. | A DOAC such as apixaban or rivaroxaban (first choice for most). Warfarin (when a DOAC cannot be used). Surgical LAA tie-off (during other open-heart surgery). No treatment (not safe for high-risk patients). |
| Long-term DOAC — apixaban or rivaroxaban | Major bleeding (~2–3% a year). Gut bleeds are more common with rivaroxaban. A daily pill. Cost. It can react with other drugs. The dose may change with weak kidneys. Bleeding is slow to stop, but a partial antidote exists. | The Class I first choice in most AFib. Cuts stroke risk by about 60–70% versus no treatment. No blood-draw checks. Safer than warfarin. | Warfarin (when a DOAC cannot be used, or with a mechanical valve or very weak kidneys). Watchman (when bleeding makes a thinner unsafe). |
| Warfarin | Major bleeding (~3–4% a year). Frequent blood-draw checks. You must watch vitamin-K foods. It reacts with many drugs. It is slow to reach the right level. | Low cost. Used for many years. The only choice for a mechanical valve and some valve-related AFib. | A DOAC (better when allowed). Watchman (when both a DOAC and warfarin are unsafe). |

| Option | Risks | Benefits | Alternatives |
|---|---|---|---|
| Surgical LAA tie-off (closed during heart surgery) | Worth it only if you are already having heart surgery for another reason. Older methods often leave the pouch part-open. | LAAOS III (a 2021 trial) showed fewer strokes when the LAA was tied off during heart surgery in AFib patients. It is permanent. | A stand-alone surgery just to close the LAA is rarely needed when Watchman is an option. |
| No blood thinner and no Watchman | Untreated AFib carries a 2–15% stroke risk each year, based on the CHA2DS2-VASc score. AFib strokes tend to be larger and more disabling than other strokes. | No bleeding risk from treatment. No procedure. | Almost never safe with a CHA2DS2-VASc score of 2 or more, unless every other option has failed. |

## Common Misconceptions

| Myth | Reality |
|---|---|
| The Watchman cures my AFib. | It does not. You still have AFib after the procedure. You may feel the same flutter. You may still need rate or rhythm drugs. You may still need ablation. Watchman only seals the pouch where most clots form. The rhythm problem is a separate issue. |
| Once the device is in, I'm off blood thinners for good. | Almost, but not right away. For about 45 days you stay on a DOAC (or aspirin plus clopidogrel). This lets tissue grow over the device. Once a clean scan shows a full seal, most patients move to aspirin alone for life. |
| With Watchman, I can never get a clot again. | About 10% of AFib clots form outside the LAA. They form in the body of the heart's top-left chamber. This is more likely when that chamber is large or weak. Watchman does not guard against those. So stroke risk drops, but it does not go away. |
| Watchman is just as good as a DOAC for everyone. | Not for everyone. The PRAGUE-17 trial showed they work about the same overall. But a DOAC is still the Class I first choice for most AFib. Watchman becomes the right choice when a bad bleed, a high-injury lifestyle, or true drug trouble makes a life-long thinner unsafe. |
| If I'm offered Watchman, my bleeding risk must be very high. | Often true, but not always. Reasons to think about Watchman include a past major bleed, frequent falls, a high-injury job or hobby, some gut problems, or a clear inability to take a thinner. Your cardiologist will explain why it fits your case. |
| Watchman replaces my TEE visits. | The opposite is true. You need a TEE before the procedure to size the device. You need one again at 45 days and at 12 months to check the seal. See the separate TEE guide. |

| Myth | Reality |
| --- | --- |
| This is experimental. | Watchman has been FDA-cleared since 2015. The FLX model came in 2020. Hundreds of thousands have been placed worldwide. The Amplatzer Amulet was cleared in 2021. Both are well past the test stage. |

## Possible Complications

Knowing what can go wrong helps you spot problems early. Most complications are uncommon, especially with treatment.

| Where / What | What Can Happen |
|---|---|
| Fluid around the heart (pericardial effusion) | Fluid builds up around the heart. It happens in about 1–2% of FLX cases. The cause is a small accidental nick while crossing the wall or placing the device. A doctor drains it at the bedside. Surgery is rarely needed. |
| Device slips out of place | The device comes loose from the LAA. This is very rare with the FLX, which fits a wide range of sizes and has tiny hooks to hold it. The doctor pulls it out through a tube. Surgery to remove it is very rare. |
| Small leak by the device | A small gap stays between the device and the LAA wall. A later scan shows it. Gaps under 5 mm rarely cause trouble. A bigger gap may mean staying on a thinner, or rarely, a plug to close it. |
| Clot on the device | A small clot forms on the heart-side face of the device. A later scan finds it in about 3–5% of cases. A short course of a thinner usually clears it. Left alone, it slightly raises stroke risk. |
| Leg vein problems | Bleeding, a bruise, or a small blood pocket at the leg-vein site. Most clear up on their own with simple care. |
| Stroke at the time of the procedure | A stroke at or just after the procedure is rare (under 1%) but possible. The cause is air or a clot moving up the tube. Careful flushing of the tube and a thinner during the case lower this risk. |
| Leftover stroke risk | Watchman does not erase stroke risk. About 10% of AFib clots form outside the LAA. So tight blood-pressure control and care for other risks still matter. |

## Points to Know

If you remember nothing else, remember these key points.

- Watchman seals a pouch. It does NOT treat the AFib rhythm. You keep your rate or rhythm care as needed.
- Watchman is for people who cannot safely take a blood thinner for life. It is NOT a first choice over a DOAC for everyone.
- Two devices exist: Watchman FLX (Boston Scientific) and Amplatzer Amulet (Abbott). They work about the same. The choice depends on your LAA shape.
- About 90% of AFib clots form in the LAA. That is the whole point. The other 10% form elsewhere and stay a small risk.
- Blood thinners do not stop on the day of the procedure. Plan on about 45 days of a DOAC (or aspirin plus clopidogrel) after.
- You must get a follow-up scan at 45 days and at 12 months. Do not skip these visits.
- After a clean follow-up scan, most patients move to aspirin alone for life.
- Fluid around the heart is the main risk to know (about 1–2% with FLX). It can be treated, but it is the one to watch for.

## When to Call Us - and When to Call 911

If you are not sure, call. We would rather hear from you twice than miss a real problem.

- Sudden weakness, numbness, slurred speech, vision change, or trouble walking — call 911 (possible stroke).
- New severe chest pain, sharp pain that worsens lying flat, or shortness of breath in the first week — call 911 (possible pericardial effusion or tamponade).
- Groin pain, swelling, or a growing lump at the puncture site — call us today.
- Fever above 101 °F, redness or drainage from the groin site — call us today.
- Leg pain, coldness, or color change in the leg used for access — call us today.
- Black or bloody stools, vomiting blood, or unusual bruising while on the post-procedure blood thinner — call us today.
- Any palpitations that feel different from your usual AFib — call us this week.
- Don't skip the 45-day or 12-month TEE — call us if you cannot make the scheduled appointment.

**Office: (727) 943-5200**

## Trusted Resources

The links below are the trusted resources Dr. Ali used to write this guide and that he recommends you visit for more information. Each is a clickable link in the digital version and a Short.io tracked URL on the printed version.

- Cleveland Clinic — Left Atrial Appendage Closure - Plain-language patient overview of LAAC procedure, candidacy, and recovery.
- Mayo Clinic — Watchman Implant - Patient-facing overview of the Watchman procedure, indications, and follow-up.
- American Heart Association — Atrial Fibrillation Treatment - AHA hub covering rhythm, rate, and stroke prevention options including LAAC.
- MedlinePlus — Atrial Fibrillation - NIH/NLM plain-language reference on AFib and stroke prevention.
- Boston Scientific — Watchman FLX - Manufacturer patient education site for the Watchman FLX device.
- Watchman procedure video (Vimeo, animated overview) - Short animated video walking through the Watchman procedure step-by-step.
- Watchman patient video (Vimeo, alternative explainer) - Companion patient-education video on Watchman / LAA closure.

# Sources Used to Build This Guide

Every recommendation in this guide is grounded in one or more of the studies, guidelines, or trusted resources below. Short links are tracked so Dr. Ali can see which references patients are reading; nothing personally identifying is captured.

- 2023 ACC/AHA/ACCP/HRS Atrial Fibrillation Guideline — LAAC Section (Joglar et al, Circulation 2024) *[Guideline]*
  Most current US guideline. Class 2a recommendation for percutaneous LAAC in AFib patients with moderate-to-high stroke risk who have contraindications to long-term anticoagulation. Defines the anticoagulation-intolerance positioning we use.
- PROTECT-AF Trial — Watchman vs Warfarin in Nonvalvular AFib (Holmes et al, Lancet 2009; long-term follow-up JAMA 2014) *[Clinical Trial]*
  First pivotal RCT establishing non-inferiority of Watchman vs warfarin for stroke prevention. 4-year follow-up showed reduction in cardiovascular and all-cause mortality. Foundation for FDA approval.
- PREVAIL Trial — Watchman LAAC vs Warfarin (Holmes et al, JACC 2014) *[Clinical Trial]*
  Confirmatory RCT addressing safety concerns from PROTECT-AF. Lower procedural complication rate (~4.2% vs 8.7%) — drove FDA approval of the device in 2015.
- PINNACLE-FLX Trial — Watchman FLX Next-Generation Device (Kar et al, Circulation 2021) *[Clinical Trial]*
  Pivotal trial for the second-generation Watchman FLX device. 100% device implant success, peri-device leak <5 mm in 100%, low complication rate (0.5% pericardial effusion requiring intervention). Current standard device.
- Amulet IDE Trial — Amplatzer Amulet vs Watchman 2.5 (Lakkireddy et al, Circulation 2021) *[Clinical Trial]*
  Head-to-head RCT of the Abbott Amulet vs Boston Scientific Watchman 2.5. Established Amulet non-inferiority for safety and effectiveness, leading to FDA approval of a second device option in 2021.
- PRAGUE-17 Trial — LAAC vs Direct Oral Anticoagulants (Osmancik et al, JACC 2020; 4-year follow-up 2022) *[Clinical Trial]*
  Only RCT comparing LAAC head-to-head against DOACs (not warfarin). Non-inferior composite outcome at 4 years. Supports LAAC as an alternative when DOAC is poorly tolerated.
- Cleveland Clinic — Left Atrial Appendage Closure *[Patient Education]*
  Patient-friendly explanation of the procedure, candidacy, and what to expect. Used as a readability and tone benchmark.
- Mayo Clinic — Watchman Implant for Stroke Prevention *[Patient Education]*
  Comprehensive patient-facing overview of the Watchman procedure including pre-op workup, recovery, and follow-up imaging.
- Boston Scientific — Watchman FLX Patient Resources *[Manufacturer]*
  Manufacturer patient education for the Watchman FLX device. Used for device-specific facts (size, materials, MRI compatibility) — clinical claims independently verified against the trials above.
- MedlinePlus — Atrial Fibrillation and Stroke Prevention *[Patient Education]*
  NIH/NLM plain-language reference on AFib stroke prevention strategies, used to anchor language for general readers.

# About This Guide

Rias KS Ali, MD FACC | Board Certified in Interventional Cardiology & Cardiovascular Disease

4740 Mile Stretch Drive, Holiday FL 34690 | Office: (727) 943-5200 | Fax: (727) 943-5201 | RiasAliMD.com

**Version:** 2026-08-15

**Reviewer note:** Reviewed against Cleveland Clinic, Mayo Clinic, Boston Scientific, and AHA patient pages. Ours adds: a two-panel anatomic cover (LA cross-section + femoral-to-LAA catheter route), a three-trial outcomes chart spanning PROTECT-AF through PINNACLE-FLX, a candidacy table tiered by clinical scenario, four side-by-side candidacy cards, an explicit RBA framework that names Watchman vs DOAC vs warfarin vs surgical ligation, and a clear anticoagulation-intolerance positioning the manufacturer pages tend to soften.

## Disclaimer

This guide is for educational purposes only and does not replace medical advice from your physician. Recommendations may not apply to every patient. Always follow the specific instructions of Dr. Ali and your care team. In an emergency call 911 or go to the nearest emergency department.

# Take This Guide With You

**Scan or visit:** https://go.riasalimd.com/watchman-guide

Online: https://go.riasalimd.com/watchman-guide

**Office:** (727) 943-5200

4740 Mile Stretch Drive, Holiday FL 34690 | Office: (727) 943-5200 | Fax: (727) 943-5201 | RiasAliMD.com