

MyCardioAdvocate™

Aortic Stenosis & Lp(a)

Birthdays don't cause aortic stenosis — decades of lipoprotein exposure do

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Why This Matters

Aortic stenosis was long attributed to aging and calcification—a inevitable consequence of 'wear and tear.' We now know the truth: **aortic stenosis is driven by lipoprotein metabolism and oxidative stress.** The landmark trials SALTIRE, SEAS, and ASTRONOMER demonstrated that statins do not slow AS progression—but not because statins fail. Rather, statins lower LDL-C but not Lp(a), and **Lp(a) is causal** for AS through oxidized phospholipid (OxPL) accumulation. Elevated Lp(a) is the primary risk factor for early AS. The good news: TAVR (transcatheter aortic valve replacement) has expanded, and new Lp(a)-lowering therapies are emerging. Understanding your Lp(a) is now essential—and prevention may be possible.

Why Aortic Stenosis & Lp(a) Fly Under the Radar

- **Lp(a) rarely measured:** Most patients with AS have never had their Lp(a) checked. It's a genetic lipoprotein, not modified by statins, and often overlooked.
- **Statin misconception:** Statins don't slow AS because they don't lower Lp(a). This is misinterpreted as 'there is no treatment.' There are emerging therapies.
- **AS progression unpredictable:** Some patients progress slowly; others rapidly. Lp(a) and OxPL explain the difference.
- **TAVR timing unclear:** Expansion of TAVR indications (EARLY TAVR, PARTNER 3, NOTION-2) creates new shared decision-making zones. Patients are unaware of options.

What Changed in 2026

TAVR indications have expanded significantly:

- **EARLY TAVR:** Earlier intervention in asymptomatic severe AS may improve outcomes.
- **PARTNER 3 & NOTION-2:** Results confirm TAVR efficacy and durability in lower-risk patients.

These trials shift the paradigm: AS is no longer a 'wait until symptoms' disease. Early or proactive valve intervention may become standard, especially in high-risk (high Lp(a)) patients.

Lp(a)-lowering therapies are advancing: Antisense oligonucleotides (ASOs) targeting Lp(a) are in late trials. If proven to prevent or slow AS, these could be game-changing for high-Lp(a) patients.

MyCardioAdvocate™ Checklist: Aortic Stenosis & Lp(a)

1. Know Your Lp(a) Level

Request an Lp(a) measurement. This is a genetic lipoprotein; levels >50 mg/dL (or >125 nmol/L) are considered elevated. Document your value. Lp(a) does not change with statins or diet—it's genetically determined.

2. Understand Your Aortic Valve Status

If you have been told you have aortic stenosis (AS), mild-to-moderate AS, or a bicuspid aortic valve, ask for your most recent echocardiogram data: aortic valve area, mean gradient, and Doppler peak velocity. Track progression over time.

3. Discuss AS Progression Risk with Your Cardiologist

High Lp(a) predicts faster AS progression. If your Lp(a) is elevated and you have AS, discuss closer monitoring with echo every 1-2 years rather than every 3 years.

4. Consider TAVR Eligibility and Timing

If you have asymptomatic severe AS or severe AS with any symptoms, discuss TAVR timing with your cardiologist. Emerging data suggest earlier intervention may improve outcomes. This is a shared decision.

On the Horizon

Lp(a)-Lowering Therapies for AS Prevention

Antisense oligonucleotides (ASOs) such as peripodastat, and small interfering RNAs (siRNAs) are being studied for Lp(a) reduction. Early results are promising. If proven effective in preventing or slowing AS, these could revolutionize prevention for high-Lp(a) patients. Clinical trials are ongoing; discuss with your cardiologist if you might be eligible.

Key Takeaways

- Aortic stenosis is driven by lipoprotein metabolism and oxidized phospholipid accumulation, not just aging.
- Lp(a) is causal for AS; elevated Lp(a) predicts faster progression and earlier symptom onset.
- Statins do not slow AS progression because they do not lower Lp(a); TAVR and Lp(a)-lowering therapies are emerging solutions.
- TAVR indications have expanded; early intervention may be beneficial in high-risk patients.

Next Steps & Related Content

- Request your Lp(a) measurement and aortic valve echocardiogram data.
- Discuss AS progression risk and TAVR timing with your cardiologist.
- Ask if you are eligible for Lp(a)-lowering therapy clinical trials.
- Review related briefs: **Lp(a): The Genetic Wild Card, TAVR & Valve Disease.**

Disclaimer: This brief is educational and does not replace professional medical advice. Always consult your healthcare provider regarding aortic valve status, Lp(a) measurement, and management of aortic stenosis.