

## BACKGROUND

Lipoprotein (a) [Lp(a)] is an atherogenic, genetically determined lipoprotein that is unresponsive lifestyle behaviors.

Lp(a) is associated with increased risk for atherosclerotic cardiovascular disease (ASCVD) with several national guidelines recommending Lp(a) testing at least once during an adult's lifetime

## AIM

To determine the prevalence of Lp(a) testing and its impact on lipid lowering therapy (LLT) prescription across ASCVD risk categories.

## METHODS

**Analysis** → Retrospective analysis data from Allina Health

**Population** → Adults aged 40-79 years, from 2004-2023.

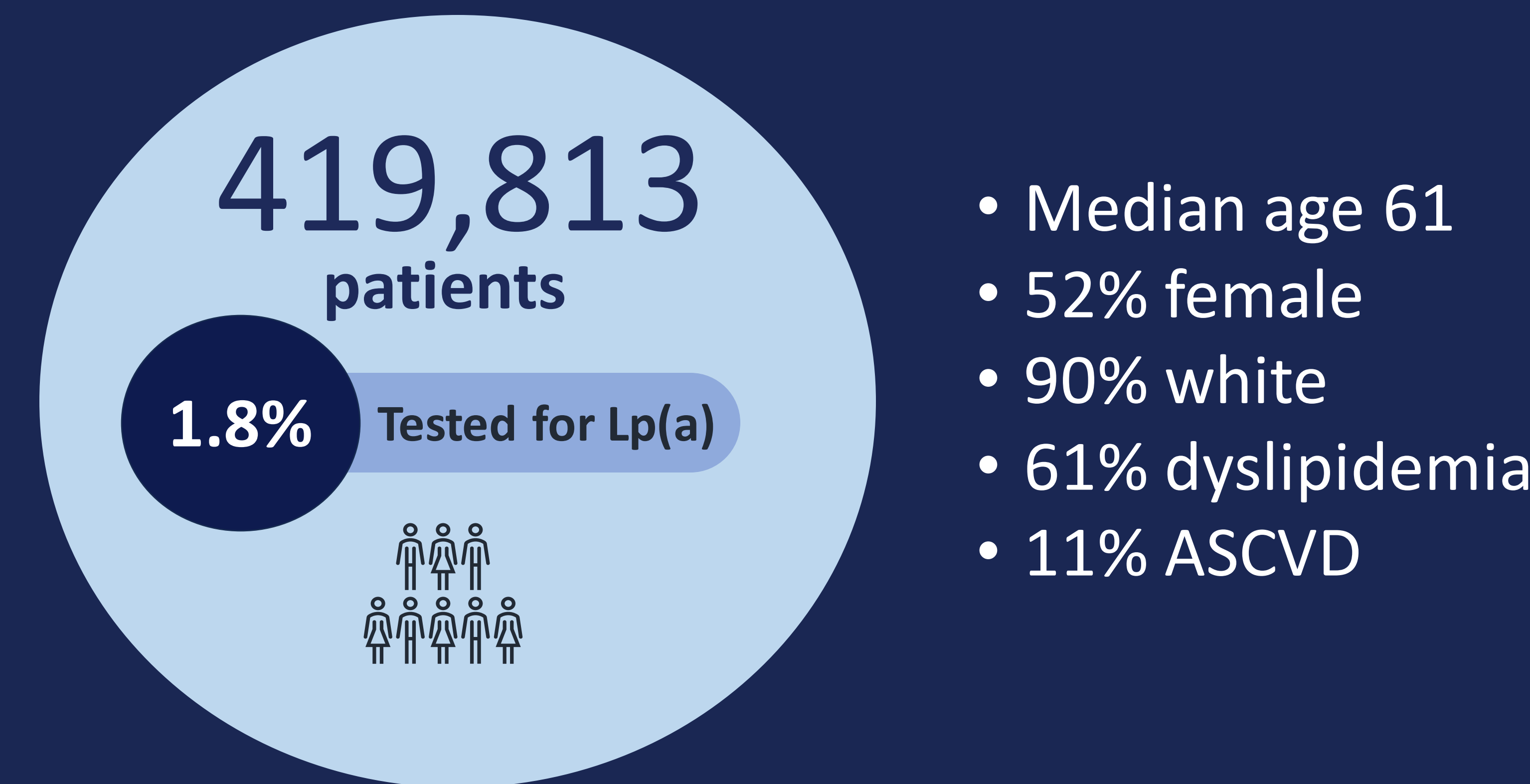
**Variables collected** → ASCVD risk factors, LLT prescriptions, and Lp(a) measurements in both mass and molar units

Elevated Lp(a) was defined as  $\geq 50$  mg/dL or  $\geq 125$  nmol/L.

The percentage of variance was tested for patients with repeat Lp(a) measurements

## RESULTS

Figure 1. Prevalence of Lp(a) testing and baseline demographics in adults 40-79 years from 2004-2023.



Lp(a) was tested in 1.8% of the total sample, including 1.4% of those without prior ASCVD and 4.9% of patients with ASCVD (Figure 1).

Median Lp(a) in patients without ASCVD were 20 mg/dL and 47 nmol/L; and 27 mg/dL and 59 nmol/L for those with ASCVD.

Figure 3. Use of LLT in 7,618 patients who underwent Lp(a) testing according to Lp(a) elevation and ASCVD risk status.

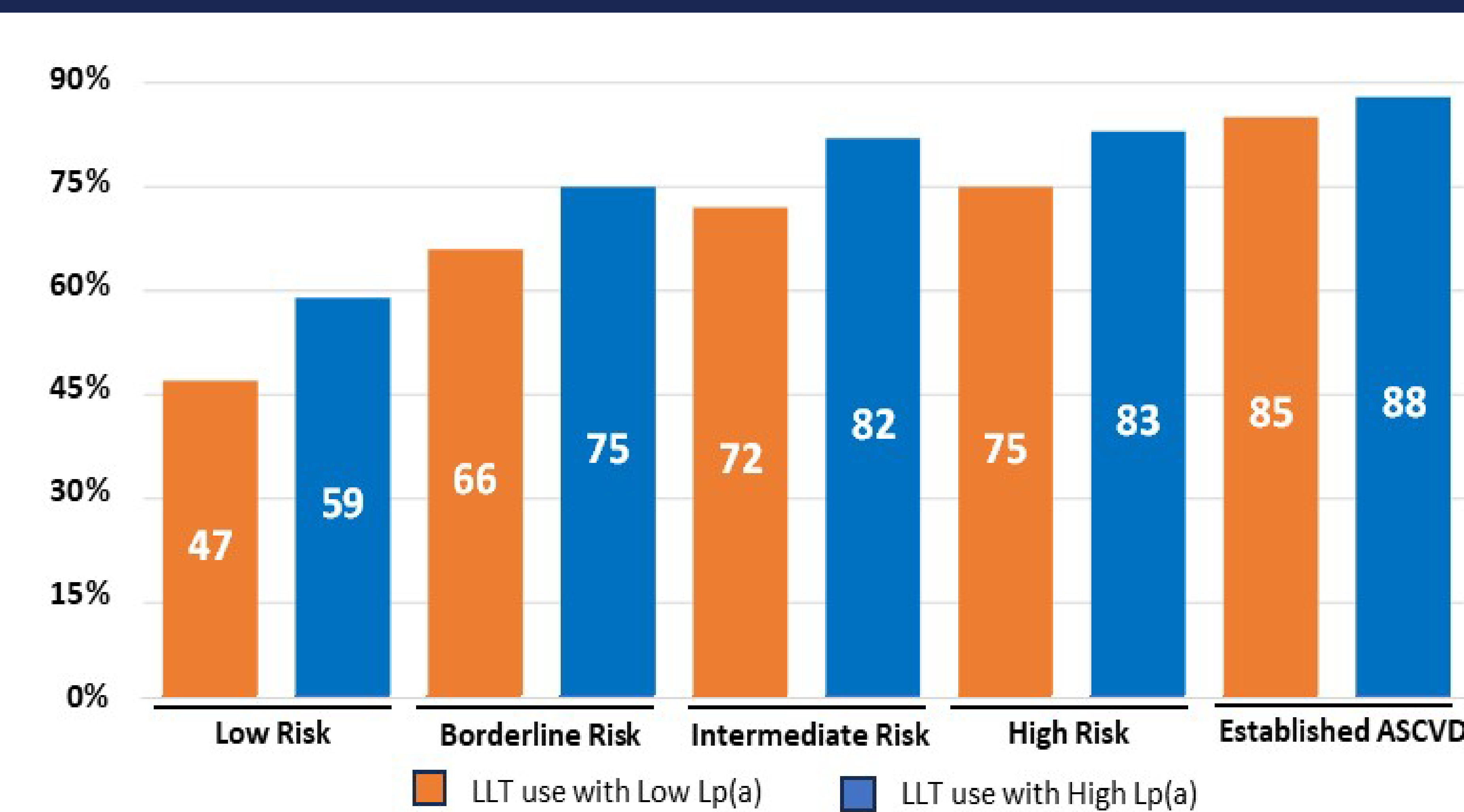
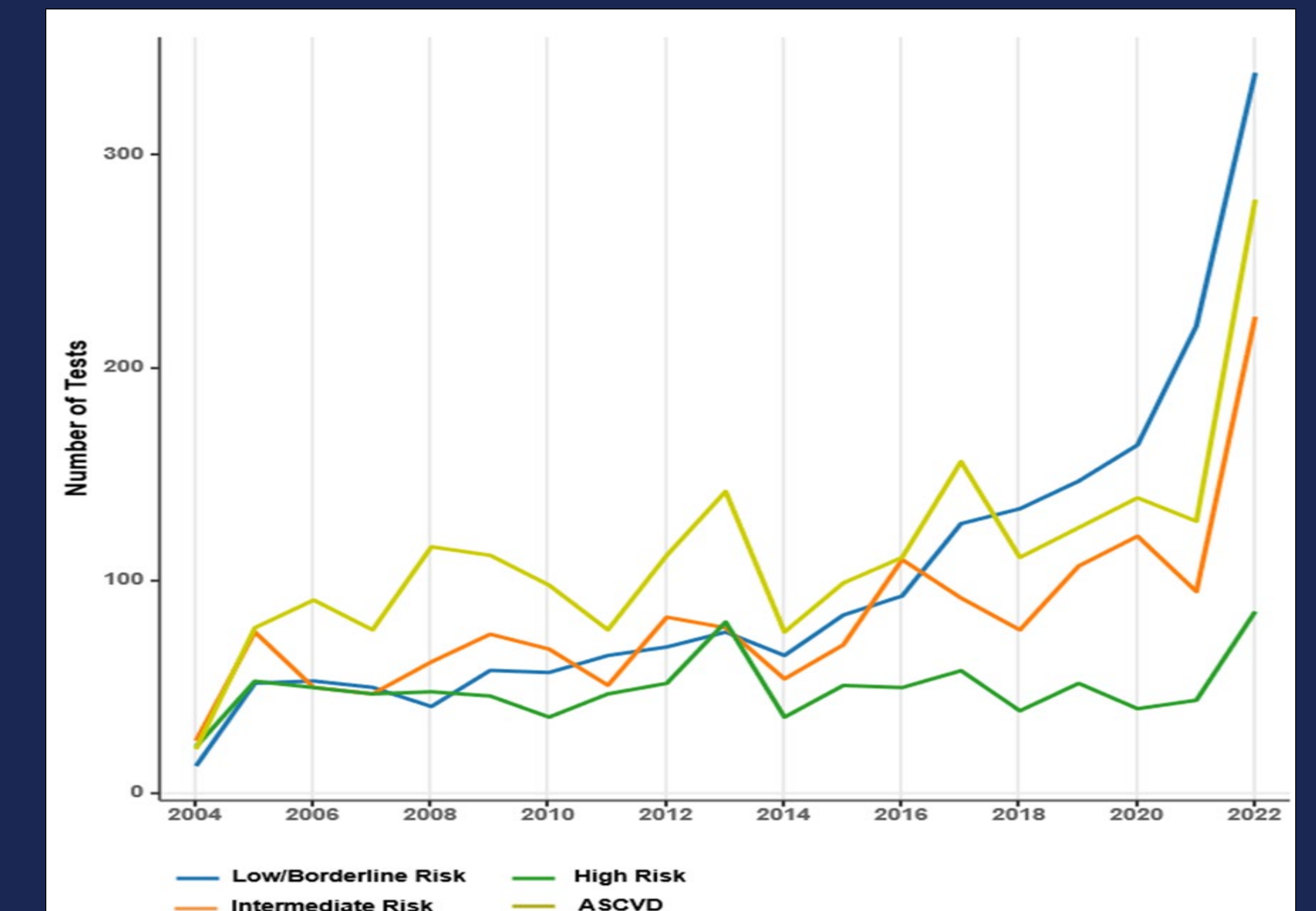


Figure 2. Prevalence of Lp(a) testing according to ASCVD risk status from 2004-2023 in a large Midwest healthcare system.



While the prevalence of Lp(a) testing was low, there has been a recent increase in Lp(a) testing (Figure 2).

Elevated Lp(a) was associated with a modest increase in LLT across all ASCVD risk categories (Figure 3).

Among patients with repeat Lp(a) remeasurement, 59% had a variance of > 20% from consecutive measurements.

## CONCLUSIONS

- In a large midwestern cohort of patients with and without ASCVD, Lp(a) testing was infrequent but has recently increased.
- An elevated Lp(a) was associated with a modest increase in use of LLT.
- Further efforts to raise awareness of the importance of Lp(a) testing are needed