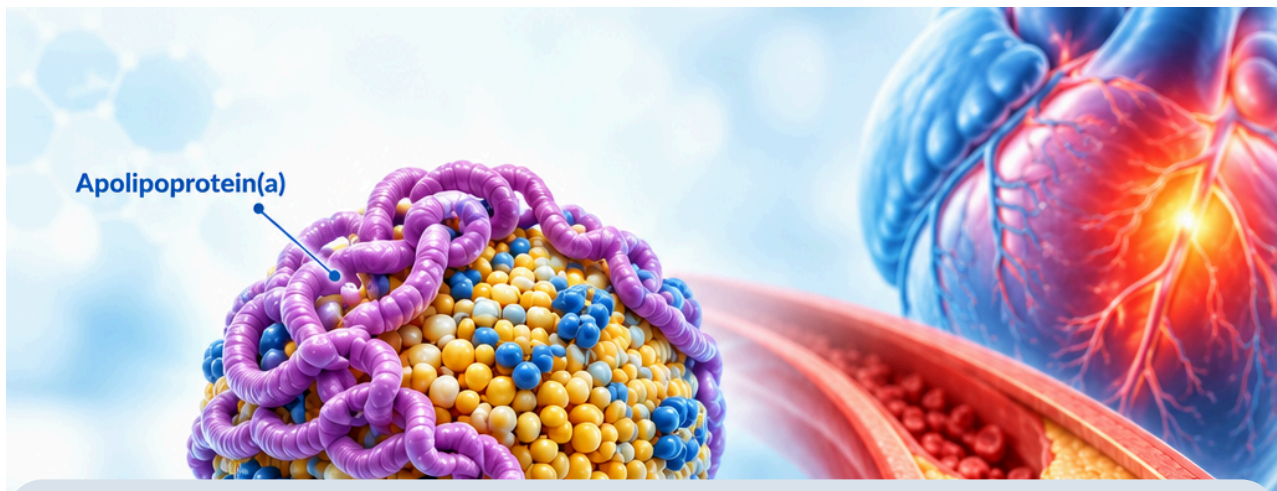


Lipoprotein(a): An Additional Cardiovascular Risk Signal in Type 2 Diabetes Patient



Patients with type 2 diabetes mellitus (T2DM) already carry a substantially increased risk of atherosclerotic cardiovascular disease, with myocardial infarction (MI) remaining a major cause of morbidity and mortality. A recent study published in *Diagnostics* (2026) examined whether lipoprotein(a) — Lp(a) — could add cardiovascular risk information in patients with T2DM who had no previous history of MI. The study included 2,967 such patients, with follow-up extending to the end of 2023.

2.8× higher risk of a first heart attack in women with Lp(a) above 90 mg/dL, compared with women at Lp(a) ≤50 mg/dL.

What did the study find?

Elevated Lp(a) was associated with higher cardiovascular risk. Compared with patients with Lp(a) ≤50 mg/dL:

Cardiovascular mortality — whole cohort

- Lp(a) 51–90 mg/dL: **42% higher risk**
- Lp(a) >90 mg/dL: **38% higher risk**

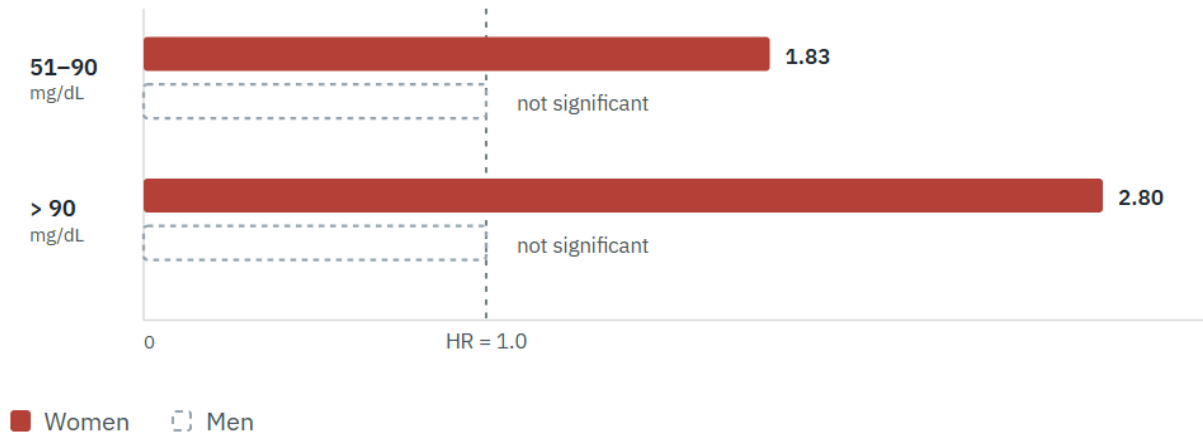
First myocardial infarction — women

- Lp(a) 51–90 mg/dL: **HR 1.83**
- Lp(a) >90 mg/dL: **HR 2.80**

No significant association was found between Lp(a) and all-cause mortality. The study authors concluded that elevated Lp(a) may be a useful marker for cardiovascular risk stratification in patients with T2DM, while noting that the sex-specific findings require confirmation in independent cohorts.

First heart attack risk by Lp(a) level, by sex

Hazard ratio vs. patients with Lp(a) ≤ 50 mg/dL, adjusted for LDL-C, hypertension and kidney function. A ratio above 1.0 means higher risk than the reference group.



The association between Lp(a) and first MI was particularly evident among women; no significant association was observed in men.

Why does Lp(a) deserve attention?

Unlike many conventional cardiovascular risk factors, Lp(a) concentration is largely genetically determined and relatively independent of diet and lifestyle modification. It also carries pro-atherogenic, pro-inflammatory and potentially pro-thrombotic properties.

What this means in practice?

A patient who appears reasonably controlled based on conventional risk parameters may still carry an additional, inherited cardiovascular risk signal that deserves consideration — one a routine lipid profile will not reveal.

In a patient with type 2 diabetes, is the routine lipid profile telling the whole cardiovascular risk story?

Lp(a) can be considered as an additional biomarker when assessing cardiovascular risk, particularly in patients where a more comprehensive risk assessment is appropriate

From routine testing to better risk stratification

At Gnosis, we believe laboratory medicine should go beyond simply providing test results. Our role is to work alongside healthcare professionals by sharing relevant clinical updates, emerging evidence and diagnostic insights that can support informed patient assessment.

Because better information can lead to better risk awareness.

Clinical reference: Cuješ J, Kanič V, Povalej Bržan P, Šuran D. Lipoprotein(a) as a Risk Factor for Myocardial Infarction, Cardiovascular, and All-Cause Mortality in Patients with Type 2 Diabetes Mellitus. *Diagnostics*. 2026;16:1520. DOI: 10.3390/diagnostics16101520.

Provided for clinical education. This was a retrospective, single-centre cohort study; the sex-specific findings are described by the authors as hypothesis-generating and warrant confirmation in independent cohorts.