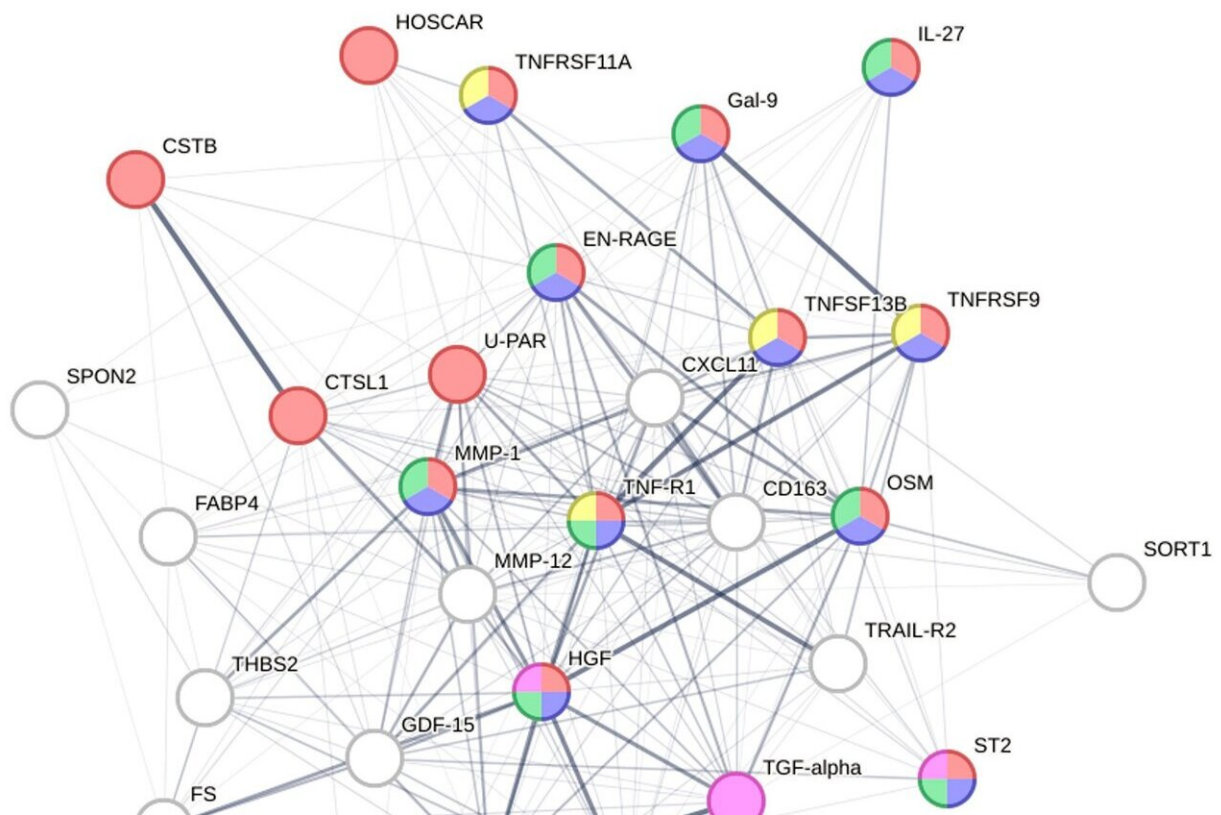


# Potential novel biomarkers of coronary heart disease discovered

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Protein-protein interaction network of validated coronary heart disease-associated proteins among participants without type 2 diabetes at baseline.  
 Credit: *Cardiovascular Diabetology* (2024). DOI: 10.1186/s12933-024-02143-z

Coronary heart disease (CHD) is one of the most common causes of death worldwide—especially in Europe: Here, it is responsible for nearly

half of all deaths. Among middle-aged adults, individuals with type 2 diabetes (T2D) have a two to four times higher risk of developing CHD than people without T2D. The research team investigated the predictive performance of protein biomarkers on incident CHD in individuals with and without T2D.

For their study, the researchers used data from Cooperative Health Research in the Region of Augsburg (KORA). The validation cohort included 888 participants from the KORA-Age1 study with 70 incident cases of CHD (19 vs. 51 cases in the group with T2D and without T2D, respectively) during 6.9 years of follow-up. They tested blood samples of the subjects for 233 [plasma proteins](#) related to cardiovascular disease and inflammation.

The researchers thus identified two proteins associated with incident CHD in individuals with [diabetes](#) and 29 proteins in those without baseline T2D. Six of these proteins are novel candidates for incident CHD.

The results of this study contribute significantly to a better understanding of the pathophysiology of CHD in T2D patients and offer potential new approaches to the prevention and treatment of this serious complication. They underscore the importance of further research in this area and the role of the German Center for Diabetes Research in resolving pressing issues related to diabetes and its complications.

The findings are [published](#) in the journal *Cardiovascular Diabetology*.

**More information:** Hong Luo et al, Association of plasma proteomics with incident coronary heart disease in individuals with and without type 2 diabetes: results from the population-based KORA study,

*Cardiovascular Diabetology* (2024). [DOI: 10.1186/s12933-024-02143-z](https://doi.org/10.1186/s12933-024-02143-z)

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