

Note: This is Online Appendix 2 of Trapp CD, Miller K, Walters P, Hall A. Outcomes at a metabolic health clinic: A medical audit. *J. metab. health.* 2026;9(1), a139. <https://doi.org/10.4102/jmh.v9i1.139>

## **Validation of Laboratory Values Included**

Elevated TGs (>150 mg/dL) are a risk factor for cardiovascular disease (CVD) independent of HDL-c levels<sup>(5)</sup>. Data provides evidence that elevated fasting triglycerides are associated with increased risk of pancreatitis and CVD<sup>(6,7)</sup>.

HDL-c is included in the lipid panel with TGs and is considered an independent risk factor for coronary heart disease. A meta-analysis concluded that HDL-c is inversely associated with CVD mortality<sup>(8)</sup>.

C-reactive protein (CRP) is often used to assess for acute inflammation; however, it may represent a marker of chronic inflammation. High-sensitivity CRP (hsCRP) is a more sensitive test that can detect lower levels of serum CRP. High-sensitivity CRP is used as an assessment for CVD risk, with increased levels indicating greater risk of cardiovascular events and mortality<sup>(9,10)</sup>.

Reductions in HbA1c are one of the main priorities in diabetic care in the clinical setting. Prediabetes can predict future risk of not only diabetes, but also vascular complications, including cardiovascular events, retinopathy, neuropathy, and nephropathy<sup>(11)</sup>.

The homeostatic model assessment of insulin resistance (HOMA-IR) is calculated as the ratio of total fasting insulin to fasting glucose. HOMA-IR scores are correlated with results from a euglycemic clamp test, which is the gold standard for assessing insulin resistance<sup>(12)</sup>.

Therefore, HOMA-IR may be valuable to predict resistance before clinical disease appears

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