

## **Improved chromatographic technique for routine analysis of lipoproteins**

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An automated system for size-exclusion chromatography (SEC) of lipoproteins based on commercially available components will be presented. The strategy to create a purely quantitative method and the routines to ensure quality-control are reviewed. The method uses small microliter volumes of serum/plasma samples. Cholesterol or triglyceride content in the different lipoprotein classes is determined on-line on the separated lipoproteins with high reproducibility and using commercially available colorimetric/enzymatic kits. The correlation of this method with the ultracentrifugation/precipitation technique resulted in R-coefficients ranging between 0.99 - 0.90 for cholesterol and 0.99 - 0.67 for triglycerides.

The system should be of value in studies where detailed lipoprotein analysis is needed and in particular when only small volumes of sample are available and a high throughput is required.