



**Dr Bianca Fuhrman** from The Lipid Research Laboratory, Technion Faculty of Medicine and Rambam Health Care Campus, Haifa, Israel will highlight the **Recent Advances & Perspectives of**  
**Hepatic Paraoxonase-1 (PON1) Regulation**  
during Targeting Liver Diseases World Congress 2014.

Serum paraoxonase 1 (PON1) is a member of the paraoxonases family (PON1, PON2, PON3). PON1 is synthesized and secreted by the liver and in circulation it is associated with HDL. PON1 has anti-oxidative properties, which are associated with the enzyme's capability to decrease oxidative stress in atherosclerotic lesions and to attenuate atherosclerosis development.

Epidemiological evidence demonstrates that low PON1 activity is associated with increased risk of cardiovascular events and cardiovascular disease, and is an independent risk factor for coronary artery disease. Therefore, pharmacological modulation of PON1 activity or PON1 gene expression could constitute a useful approach for preventing atherosclerosis. N. Martinelli, D. Girelli, O. Olivieri, P. Guarini, A. Bassi, E. Trabetti, S. Friso, F. Pizzolo, C. Bozzini, I. Tenuti, L. Annarumma, R. Schiavon, P. Franco Pignatti and R. Corrocher, Novel serum paraoxonase activity assays are associated with coronary artery disease, Clin. Chem. Lab. Med.

A primary determinant of serum PON1 levels is the availability of the enzyme for release by the liver, the principal site of PON1 production. Together with the enzyme secretion rate, enzymatic turnover and protein stability, the level of PON1 gene expression is a major determinant of PON1 status.

**This presentation will summarize recent progress in understanding the regulation of PON1 expression in hepatocytes.**

For more information: [www.targeting-liver.com](http://www.targeting-liver.com)