中文題目：代謝症候群病人血中GAS6蛋白質與GAS6基因變異的關係

英文題目：Plasma Growth Arrest-Specific 6 (GAS6) Protein and Genetic Variations in the *GAS6* Gene in Patients With Metabolic Syndrome

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Background: Growth arrest-specific 6 (Gas6) is a vitamin K-dependent protein secreted by immune cells, endothelial cells, vascular smooth muscle cells, and adipocytes. Recent studies indicate that Gas6 and its receptors of the TAM (Tyro-3, Axl, Mer) family may be involved in the pathogenesis of obesity, systemic inflammation and insulin resistance. Our aim was to investigate the association of plasma Gas6 protein and the c.843+7G>A *Gas6* polymorphism in metabolic syndrome (MetS).

Methods: In total, 205 adults (88 men and 117 women) were recruited in this study. Plasma Gas6 concentration, general and biochemical data were measured. All subjects were genotyped for c.843+7G>A *Gas6* polymorphism.

Results: Plasma Gas6 concentrations were declined parallel with various MetS components in all group (P=0.017 for trend). Gas6 (2^{nd} quartile) and Gas6 (3^{rd} quartile) levels had higher HDL-C level than that of Gas6 (1^{st} quartile) in all and female groups. Plasma Gas6 values were significantly positively correlated with HDL-C level and negatively with fasting glucose level in female group. Furthermore, we examined SNP c.843+7G>A of *Gas6* gene, in which the A Allele and genotype AA were less frequent in subjects with MetS compared with non-MetS population.

Conclusion: Our results first demonstrate positive correlation between Gas6 proteins values and HDL-C and reinforce the association with fasting glucose. Besides, the presence of c.843+7G>A *Gas6* polymorphisms, especially the AA genotype, plays a protective role against MetS. The potential role of the Gas6/TAM system in the involvement of MetS deserves further investigation.