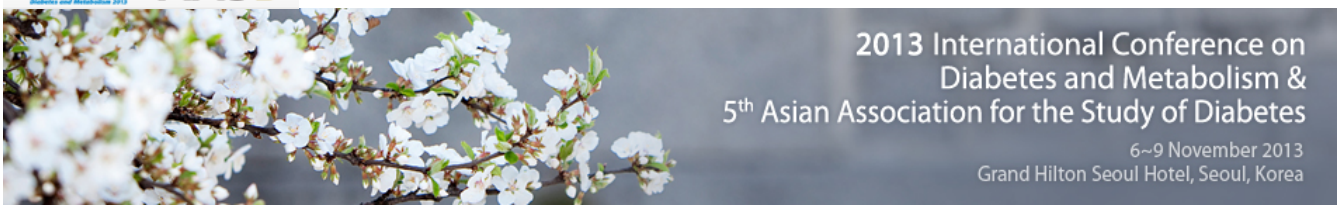

- Welcome message
- Organization
- Program
- Call for abstracts
  - Call for abstracts
  - Online abstract submission
  - Travelgrant
- Registration
- Venue information
- Exhibition
- Hotel accommodation
- Transportation
- Tours
- Secretariat

Home >

Abstract Submission Status	
Presentation No.	Oral presentation
Categories	Metabolic syndrome & prediabetes
Travel Grant (Only foreigner)	If you want to apply for **Travel Grant Award**, please check the box ☑ / Age: 37
Affiliations	1. L5 research center, China Medical University Hospital 2. Department of Public Health, China Medical University 3. Vascular & Medicinal Research, Texas Heart Institute 4. MD FACC Mount Sinai Medical Center, New York

Authors

*** Presenting author information**

Country	Taiwan
Name	Jing-Fang Hsu
Affiliation	L5 research center, China Medical University Hospital
Position	Others : Postdoctoral research fellow
Email	jfh428@gmail.com
Office/Mobile Phone	+886-4-2205-2121 / +886-918-690-237

*** Corresponding author information**

Name	Chu-Huang Chen
Affiliation	L5 research center, China Medical University Hospital Vascular & Medicinal Research, Texas Heart Institute
Position	Professor
Email	cchen@texasheart.org
Office/Mobile Phone	+832-355-90-26 / +886-918-690-237

Co-authors (Total : 4)

	Name	Affiliations
1. Co-author	Tzu-chieh Chou	Department of Public Health, China Medical University
2. Co-author	Jonathan Lu	Vascular & Medicinal Research, Texas Heart Institute
3. Co-author	Shu-hua Chen	Vascular & Medicinal Research, Texas Heart Institute
4. Co-author	Steven Shayani	MD FACC Mount Sinai Medical Center, New York

* The name must be written in full.

A novel total lipoprotein electronegativity index for predicting cardiometabolic risk

Jing-Fang Hsu[1]*, Tzu-chieh Chou[2], Jonathan Lu[3], Shu-hua Chen[3], Steven Shayani[4], Chu-Huang Chen[1,3]

L5 research center, China Medical University Hospital[1], Department of Public Health, China Medical University[2], Vascular & Medicinal Research, Texas Heart Institute[3], MD FACC Mount Sinai Medical Center, New York[4]

Objectives : The most electronegative subfractions of chromatographically resolved low-density lipoprotein (LDL) and very-low-density lipoprotein (VLDL), L5 and V5, are highly atherogenic. High-density lipoprotein (HDL) can similarly be resolved into subfractions; H5 exhibits reduced cholesterol efflux capacity and appears dysfunctional. Therefore, we examined the clinical implications of lipoprotein electronegativity by analyzing plasma H5, L5, and V5 levels in 33 asymptomatic subjects with cardiometabolic risk factors.
Methods : Plasma HDL, LDL, and VLDL of 33 individuals were resolved into subfractions with increasing negative charge (H1-H5 for HDL, L1-L5 for LDL, and V1-V5 for VLDL) by anion-exchange chromatography.
Results : H5, L5, and V5 concentrations were 18.4±10.6, 19.6±18.9, and 10.5±7.6 mg/dL, respectively. The Jonckheere's trend test revealed that the total lipoprotein electronegativity index (H5+L5+V5) increased with the number of metabolic syndrome criteria (P<0.001). When total cholesterol (TC) and age were also included in the analyses, the index was significantly (P<0.05) associated with age (Spearman's rho, 0.41), waist circumference (0.44), systolic blood pressure (0.40), and levels of fasting glucose (0.49), TC (0.52), and triglyceride (0.49). Stepwise regression analysis revealed that fasting glucose (FG) and TC levels contributed to 40% of index variance; thus, we derived the following formula for predicting plasma total lipoprotein electronegativity: ([0.36 × FG] + [0.23 × TC] – 34).
Conclusions : Large-scale clinical trials are warranted to test the reliability of this formula and the clinical importance of the total lipoprotein electronegativity index.

List Modify Delete

Room 1010, Renaissance Tower Bldg 456, Gongdeok-dong,
Mapo-gu, Seoul, 121-706 Korea
Tel. +82-2-714-9064 / Fax. +82-2-714-9084 /
diabetes@kams.or.kr

Privacy Policy