

Accepted Manuscript

Changes in serum metabolites with the stage of chronic kidney disease:
Comparison of diabetes and non-diabetes

Jueun Lee, Ji-Young Choi, Yong-Kook Kwon, Doohee Lee, Hee-Yeon
Jung, Hye-Myung Ryu, Jang-Hee Cho, Do Hyun Ryu, Yong-Lim Kim,
Geum-Sook Hwang

PII: S0009-8981(16)30222-4
DOI: doi: [10.1016/j.cca.2016.05.018](https://doi.org/10.1016/j.cca.2016.05.018)
Reference: CCA 14375

To appear in: *Clinica Chimica Acta*

Received date: 4 March 2016
Revised date: 2 May 2016
Accepted date: 20 May 2016

Please cite this article as: Lee Jueun, Choi Ji-Young, Kwon Yong-Kook, Lee Doohee, Jung Hee-Yeon, Ryu Hye-Myung, Cho Jang-Hee, Ryu Do Hyun, Kim Yong-Lim, Hwang Geum-Sook, Changes in serum metabolites with the stage of chronic kidney disease: Comparison of diabetes and non-diabetes, *Clinica Chimica Acta* (2016), doi: [10.1016/j.cca.2016.05.018](https://doi.org/10.1016/j.cca.2016.05.018)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Changes in Serum Metabolites with the Stage of Chronic Kidney Disease: Comparison of Diabetes and Non-diabetes

Jueun Lee^{1,2¶}, Ji-Young Choi^{3¶}, Yong-Kook Kwon¹, Doohae Lee,^{1,4} Hee-Yeon Jung³, Hye-Myung Ryu³, Jang-Hee Cho³, Do Hyun Ryu^{2,*}, Yong-Lim Kim^{3,*}, and Geum-Sook Hwang^{1,4,5*}

¹Integrated Metabolomics Research Group, Western Seoul Center, Korea Basic Science Institute, Seoul 30759, Republic of Korea.

²Department of Chemistry, Sungkyunkwan University, Suwon 16419, Republic of Korea.

³Division of Nephrology, Department of Internal Medicine, Kyungpook National University School of Medicine, 130, Dongduk-ro, Jung-gu, Daegu 41944, Republic of Korea.

⁴Graduate School of Analytical Science and Technology, Chungnam National University, Daejeon, Republic of Korea

⁵Department of Chemistry and Nano Science, Ewha Womans University, Seoul, Republic of Korea

¶These authors contributed equally to this study.

* **Correspondence:** Geum-Sook Hwang: Korea Basic Science Institute, Seoul 30759, Republic of Korea. Phone: +82 2 6908 6200; Fax: +82 2 6908 6239; gshwang@kbsi.re.kr.

Yong-Lim Kim: Division of Nephrology, Department of Internal Medicine, Kyungpook National University School of Medicine, 130, Dongduk-ro, Jung-gu, Daegu 41944, Korea. Phone: +82-53-420-5553; Fax: +82-53-423-7583; ylkim@knu.ac.kr

Do Hyun Ryu: Sungkyunkwan University, Suwon 16419, Republic of Korea. Phone: +82 31 290 5931; Fax: +82 31 290 7075; dhryu@skku.edu.

Abstract

Download English Version:

<https://daneshyari.com/en/article/8310039>

Download Persian Version:

<https://daneshyari.com/article/8310039>

[Daneshyari.com](https://daneshyari.com)