

## Accepted Manuscript

Title: Male Urinary Biomarkers of Antimicrobial Exposure and Bi-directional Associations with Semen Quality Parameters

Authors: Melissa M. Smarr, Masato Honda, Kurunthachalam Kannan, Zhen Chen, Sungduk Kim, Germaine M. Buck Louis



PII: S0890-6238(17)30595-6  
DOI: <https://doi.org/10.1016/j.reprotox.2018.02.008>  
Reference: RTX 7636

To appear in: *Reproductive Toxicology*

Received date: 29-8-2017  
Revised date: 5-2-2018  
Accepted date: 15-2-2018

Please cite this article as: Smarr Melissa M, Honda Masato, Kannan Kurunthachalam, Chen Zhen, Kim Sungduk, Louis Germaine M.Buck.Male Urinary Biomarkers of Antimicrobial Exposure and Bi-directional Associations with Semen Quality Parameters.*Reproductive Toxicology* <https://doi.org/10.1016/j.reprotox.2018.02.008>

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.

**Title:** Male Urinary Biomarkers of Antimicrobial Exposure and Bi-directional Associations with Semen Quality Parameters

Melissa M. Smarr,<sup>a,b</sup> Masato Honda,<sup>c</sup> Kurunthachalam Kannan,<sup>c</sup> Zhen Chen,<sup>d</sup> Sungduk Kim<sup>d,e</sup> and Germaine M. Buck Louis<sup>a,f</sup>

<sup>a</sup>Office of the Director

Division of Intramural Population Health Research

*Eunice Kennedy Shriver* National Institute of Child Health and Human Development

National Institutes of Health

6710B Rockledge Drive

Bethesda, MD 20829, USA

<sup>b</sup>Department of Environmental Health

Rollins School of Public Health of Emory University

1518 Clifton Rd

Atlanta, GA 30322, USA

**Corresponding Author:** M. Smarr

(404) 727-3809

melissa.smarr@emory.edu

<sup>c</sup>Wadsworth Center

New York State Department of Health

and Department of Environmental Health Sciences

School of Public Health, State University of New York at Albany

Empire State Plaza

P.O. Box 509

Albany, NY 12201, USA

Masato.Honda@health.ny.gov

kurunthachalam.kannan@health.ny.gov

<sup>d</sup>Biostatistic and Bioinformatics Branch

Division of Intramural Population Health Research

*Eunice Kennedy Shriver* National Institute of Child Health and Human Development,

National Institutes of Health

6710B Rockledge Drive

Bethesda, MD 20829, USA

Download English Version:

<https://daneshyari.com/en/article/8552347>

Download Persian Version:

<https://daneshyari.com/article/8552347>

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