

# Accepted Manuscript

Estradiol up-regulates L-type  $\text{Ca}^{2+}$  channels via membrane-bound estrogen receptor / Phosphoinositide-3kinase / Akt / cAMP response element-binding protein signaling pathway

Xiaoyan Yang, MD, Ph.D, Xiaofang Mao, PhD, Gao Xu, MS, Shasha Xing, PhD, Ansuman Chattopadhyay, Ph.D., Si Jin, MD. PhD., Guy Salama, Ph.D, FHRS

PII: S1547-5271(18)30019-5

DOI: [10.1016/j.hrthm.2018.01.019](https://doi.org/10.1016/j.hrthm.2018.01.019)

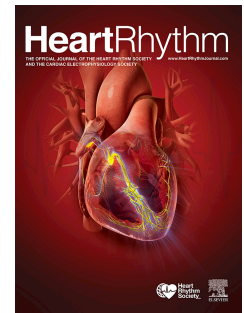
Reference: HRTM 7457

To appear in: *Heart Rhythm*

Received Date: 20 November 2017

Please cite this article as: Yang X, Mao X, Xu G, Xing S, Chattopadhyay A, Jin S, Salama G, Estradiol up-regulates L-type  $\text{Ca}^{2+}$  channels via membrane-bound estrogen receptor / Phosphoinositide-3kinase / Akt / cAMP response element-binding protein signaling pathway, *Heart Rhythm* (2018), doi: 10.1016/j.hrthm.2018.01.019.

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.



**Estradiol up-regulates L-type  $\text{Ca}^{2+}$  channels via membrane-bound estrogen receptor / Phosphoinositide-3kinase / Akt / cAMP response element-binding protein signaling pathway**

Xiaoyan Yang, MD, Ph.D.<sup>1</sup> Xiaofang Mao, PhD<sup>1</sup> Gao Xu, MS<sup>1</sup> Shasha Xing, PhD<sup>1</sup>

Ansuman Chattopadhyay, Ph.D.<sup>2</sup> Si Jin, MD. PhD.<sup>3#</sup> and Guy Salama, Ph.D, FHRS<sup>4\*</sup>

<sup>1</sup> Hubei Key Laboratory of Drug Target Research and Pharmacodynamic Evaluation, Department of Pharmacology, School of Basic Medicine, Tongji Medical College, Huazhong University of Science and Technology 430030, Wuhan, Hubei, China;

<sup>2</sup>Falk Library of Health Sciences, University of Pittsburgh, PA, 15261. USA,

<sup>3</sup>Department of Endocrinology, Institute of Geriatric Medicine, Liyuan Hospital, Tongji Medical College, Huazhong University of Science and Technology, 430077, Wuhan, Hubei, China, <sup>4</sup>Department of Medicine, Heart and Vascular Institute, University of Pittsburgh, PA, 15261. USA

XY and XM contributed equally to this work.

**Running Title: Estrogen upregulates L-type  $\text{Ca}^{2+}$  channels by pCREB signaling**

Conflicts of Interests: The authors have no conflicts to declare.

<sup>#</sup>Co-Corresponding Author:

Si Jin, M.D, Ph.D. Professor  
Department of endocrinology,  
Huazhong University of Science and Technology.  
Wuhan, Hubei, China, 430077.  
E-mail: Jinsi@mail.hust.edu.cn

\* To whom correspondence should be addressed:

Guy Salama Ph.D.  
University of Pittsburgh,  
3550 Terrace Street  
S628 Scaife Hall  
Pittsburgh, PA15261  
Phone: (412) 648-9354; Fax: (412) 648-5991  
E-mail: [gsalama@pitt.edu](mailto:gsalama@pitt.edu)

Download English Version:

<https://daneshyari.com/en/article/8660208>

Download Persian Version:

<https://daneshyari.com/article/8660208>

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