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# *In utero* and lactational exposure of DEHP increases the susceptibility of prostate carcinogenesis in male offspring through *PSCA* hypomethylation

Bin Xia[1], Yong Wang[2], XiuWang[1], Jianhui Wu[2], Qi Song[1], Zuyue Sun[2*], Yunhui Zhang[1*]

[1]*Key Laboratory of Public Health Safety, Ministry of Education, School of Public Health, Fudan University, Shanghai 200032, China;*

[2]*WHO Collaborating Center for Research in Human Reproduction, Shanghai Institute of Planned Parenthood Research, Shanghai 200030, China*

** Corresponding author.*

*E-mail address: yhzhang@shmu.edu.cn (Yunhui Zhang); sunzy64@163.com (Zuyue Sun)*

*Address: Department of Environmental Health, School of Public Health, Fudan University, 130 Dongan Road, Shanghai 200032, PR China (Yunhui Zhang); WHO Collaborating Center for Research in Human Reproduction, Shanghai Institute of Planned Parenthood Research, 2140 Xietu Road, Shanghai 200030, PR China (Zuyue Sun)*

## Highlights

- The *in utero* and lactational DEHP exposure rat model was constructed by treating the pregnant rats with corn oil or DEHP at 0.01, 0.1 and 1 mg/kg BW/day from GD7 to PND21.
- *In utero* and lactational exposure to DEHP significantly increased the mRNA expression of *GSTP1*, *PSCA* and *PTGS2* in a dose-dependent manner on PND21.
- Early life mRNA expression of *GSTP1*, *PSCA* and *PTGS2* induced by DEHP might be tightly linked with prostate carcinogenesis in adulthood
- *In utero* and lactational exposures to DEHP induced hypomethylation of *PSCA* gene in early life, and it may be a predisposing factor for prostate carcinogenesis as rat aged.