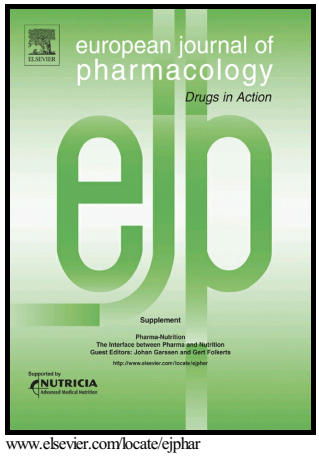

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Role of Wnt4/β-catenin, Ang II/TGFβ, ACE2, NF-κB, and IL-18 in attenuating renal Ischemia/Reperfusion-induced injury in rats treated with Vit D and Pioglitazone

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Abstract

Renal ischemia-reperfusion injury (I/RI) remains a critical clinical situation. Several evidence revealed the potential reno-protective effects of Vitamin D and/or pioglitazone, on renal I/RI. This study addresses the possible involvement of the Wnt4/β-catenin signaling, *p*-S536NF-κBp65, PPARγ, Ang II/TGF-β, and ACE2 as potential effectors to vitamin D and pioglitazone-mediated renoprotective effects . Two sets of Sprague-Dawley rats (n=30 rat each), were randomized into sham, I/R, Vit D "alfacalcidol" (5 ng/kg/day), pioglitazone (5 mg/kg/day), and Vit D + pioglitazone groups. In all groups renal biochemical parameters, as well as inflammatory and structural profiles were assessed, besides the expression/contents of Wnt4/β-catenin and *p*S536-NF-κBp65. All