R. Fogari et al., J Nephrol Therapeut 2012, 2:5
http://dx.doi.org/10.4172/2161-0959.S1-003

OMICS Group Conferences
Accelerating Scientific Discovery

International Conference and Exhibition on
Nephrology & Therapeutics

August 20-22, 2012 Hilton Chicago/Northbrook, USA

Antiproteinuric effect of aliskiren in arterial hypertension associated with type 2 diabetes and microalbuminuria

R. Fogari, A. Mugellini, P. Preti, A. Zoppi, P. Lazzari and G. Derosa[1]
[1]Department of Internal Medicine and Therapeutics, University of Pavia, Italy

Aim of this study was to evaluate the antiproteinuric and antihypertensive effect of aliskiren vs ramipril in type 2 diabetic hypertensive patients with microalbuminuria. After 2 week wash-out placebo period, 101 mild to moderate hypertensive patients with well controlled type 2 diabetes (HbA1c < 7.0%) and in the highest range of microalbuminuria (> 200 < 300 mg/24h) were randomized to aliskiren 300 mg or to ramipril 10 mg for 12 weeks; after the first 2 weeks, if clinic blood pressure (BP) was > 130/80 mmHg, amlodipine was added. At the end of the wash-out placebo period, of the treatment period, and after 2 weeks of treatment suspension, a 24h ABPM was performed and 24h proteinuria was assessed. 24h ABP was significantly reduced by both aliskiren (-22.3/-17.0 mmHg, p< 0.001) and ramipril (-21.3/-16.4 mmHg, p< 0.001) without any difference between the two treatments. Microalbuminuria also was reduced by both treatments, (-103.8 mg/24h with alisliren, p< 0.001; -36.8 mg/24h with ramipril, p< 0.01), but the reduction was significantly greater with aliskiren than with ramipril (p< 0.01 between the 2 treatments). After 2 week of treatment suspension the antiproteinuric effect was well evident with aliskiren (-52.9 mg/24h, p< 0.01), while it was no more significant with ramipril (-11 mg/24h, NS). In type 2 diabetic microalbuminuric hypertensive patients both aliskiren and ramipril induce a significant and clinical relevant 24 BP lowering. However, despite the same BP reduction, aliskiren induces a microalbuminuria reduction significantly greater than ramipril and the persistence of such a reduction after treatment suspension keeps longer than with ramipril. It suggests that the antiproteinuric effect of aliskiren is mediated not only by BP reduction, but also by some other yet unknown mechanism.

Biography

Roberto Fogari is full Professor of Internal Medicine at University of Pavia. He has published more than 400 papers in reputed journals.

r.fogari@unipv.it