

## Retrospective Study to Assess the Effect of Telmisartan on Urine Albumin to Creatinine Ratio in Indian Hypertensive Patients

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**Objectives:** To assess the impact of telmisartan on urine albumin to creatinine ratio (UACR) and blood pressure (BP) among Indian hypertensive patients on telmisartan monotherapy.

**Material and methods:** This was a retrospective cohort study. Hypertensive patients prescribed with Telmisartan monotherapy with UACR records of at least two analysable visits were enrolled in the study. The study was approved by an independent ethics committee. The data of enrolled patients was analysed retrospectively to assess the change in UACR and BP from visit one to visit two.

**Results:** Data of 1,095 patients was available for analysis. The average age was  $54.0 \pm 11.7$  years. There was a significant reduction in UACR from  $113.58 \pm 443.74$  mg/g at visit one to  $77.29 \pm 326.76$  mg/g at visit two

( $p=0.0012$ ) with telmisartan monotherapy in overall population (mean duration 278 days). Overall 48% patients reverted to normoalbuminuria (UACR<30 mg/g). Reductions in systolic BP and diastolic BP were  $-8.5$  mmHg and  $-3.8$  mmHg, respectively (both  $p<0.001$ , mean duration of 99.6 days between visits one and two). The UACR reduced from  $83.3 \pm 312.4$  mg/g at visit one to  $58.27 \pm 231.47$  mg/g at visit two in hypertensive patients with diabetes ( $n=945$ , mean duration 292 days). Significant reductions in systolic BP ( $-8.7$  mmHg) and diastolic BP ( $-3.8$  mmHg) were also found in diabetic hypertensive patients (mean duration 101.5 days).

**Conclusion:** The present study demonstrated that telmisartan monotherapy prevents the progression of microalbuminuria along with causing significant reductions in BP. □