

Endothelin-1 has two major direct actions in renal function, these are the regulation of renal hemodynamics and glomerular filtration rate, and the modulation of sodium and water excretion.(12) Endothelin receptors are widely distributed within the human kidney, with the ETARs subtype localized to vascular smooth muscle, notably in the glomeruli, vasa recta and arcuate arteries, whereas ETBRs are more numerous (ETB to ETA ratio 2:1) and more widespread, with a high concentration in the collecting system.(8) The resistance of afferent and efferent arterioles is influenced by a host of intra- and extra-renal factors and mechanisms including sympathetic nerve activity, Ang II, prostaglandins, NO nitric oxide, ATP, adenosine as well as ET-1 and TNF- α .(13,4)