

Renal Denervation

BACKGROUND INFORMATION

RENAL DENERVATION QUICK FACTS

- Renal denervation is a **minimally invasive, catheter-based therapy** which uses **radiofrequency** energy to disrupt the renal sympathetic nerves whose hyperactivity leads to uncontrolled high blood pressure.
- Renal denervation has been shown in published **clinical studies** to reduce blood pressure.
- Renal denervation is a **cost-effective treatment option** for drug-resistant hypertension, due to the significant reduction in costly events such as stroke, myocardial infarction, heart failure, and end stage renal disease.

European Society of Hypertension and the Joint UK Societies recommend renal denervation for select resistant patients^{1,2}

- Severe resistant hypertension is defined as systolic blood pressure above 160 mm Hg, or 150 mm Hg for patients with type 2 diabetes, despite treatment with at least three antihypertensive drugs
- Resistance must be confirmed by ruling out pseudo resistance, lifestyle causes and non-adherence to drugs
- Although there has been controversy over whether spironolactone failure should be a prerequisite for renal denervation treatment, ESH does not consider spironolactone failure to be a requirement for renal denervation¹
- Exclusion criteria includes:
 - Previous renal artery intervention
 - Renal artery atherosclerosis
 - Presence of multiple main renal arteries or main renal arteries less than 4 mm in diameter or less than 20 mm in length
 - Glomerular filtration rate > 45 ml/min per 1.73 m²
 - Patients with recent myocardial infarction, unstable angina pectoris or cerebrovascular accident

Media contacts

Simonetta Balbi
+39 338 79 36 422 (mobile)
Media Relations and Corporate
Communications EMEA
Boston Scientific Corporation
balbis@bsci.com

Sandra Wagner
+49 151 61 33 64 11 (mobile)
Weber Shandwick
swagner@webershandwick.com

References

¹ Schmieder RE, Redon J, Grassi G, Kjeldsen SE, *et al.* ESH position paper: renal denervation - an interventional therapy of resistant hypertension. *J Hypertens.* 2012;30(5):837-41.

² Caulfield M, de Belder M, Cleveland T, Collier D *et al.* The Joint UK Societies' Consensus Statement on Renal Denervation for Resistant Hypertension.