Response to Letter Regarding Article, “Ambulatory Blood Pressure Changes After Renal Sympathetic Denervation in Patients With Resistant Hypertension”

We received a letter by Jin et al on our article published recently in Circulation.1 The following points should be clarified:

It was argued that we did not measure, but extrapolated, cardiovascular risk. We neither extrapolated nor measured risk in the article. We only reported blood pressure data. Jin et al argue that the proportions of patients at 3, 6 and 12 months are different. This is due to different follow-up periods, as stated in the article as a potential limitation.1 We neither extrapolated nor measured risk in the article. We reported that no major differences existed in medications before and after renal denervation but did not provide doses and drug classes. The study was not aimed to provide an in-depth analysis of drug classes or doses. Jin et al claim that we provided different classifications in the abstract and Methods section. Classification of patients was done in classic way.1 Jin et al also claim that there are contradictions in the summary statistics. They mention that Table 3 provides only the odds that office blood pressure declined by >10 mm Hg. This was a defined criterion of response and was evaluated as described in the article. They argue that there is a disproportion between the responses in office and ambulatory blood pressures. These were the data, which correspond to most of the drug trials in hypertension.

The assertion that our center would have performed >600 renal denervations is incorrect; it was ≈200 at that time of Der Spiegel publication.2 Health insurances would cover renal denervation in some countries. Most of the procedures were not reimbursed because patients were treated in trials or investigative protocols. Today, there is indeed a reimbursement, which does not cover the costs of the procedure and the materials. Many centers, at least in Germany, pay the cost of this procedure from their own scientific budgets.

In conclusion, our study aimed to investigate the effects of renal denervation on 24-hour blood pressure. Therefore, the involved centers pooled their data and shared their experiences.3,4 The goal is to facilitate and improve the design of randomized and controlled trials, being well aware that these investigations cannot substitute them. The authors of the letter acknowledge concerns already raised by the authors themselves.4,5

Disclosures

Drs Mahfoud, Ukena, and Böhm are supported by the Ministry of Science and Economy of the Saarland and Deutsche Forschungsgemeinschaft (KFO 196). Dr Mahfoud is supported by the Deutsche Hochdruckliga and Deutsche Gesellschaft für Kardiologie. Dr Schlaich is supported by a National Health and Medical Research Council Senior Research Fellowship. Dr Sobotka was an employee of Medtronic Ardian Inc. All authors received scientific support and speaker honorarium from Medtronic Ardian Inc.

Felix Mahfoud, MD
Christian Ukena, MD
Universitätsklinikum des Saarlandes
Klinik für Innere Medizin III
Kardiologie, Angiologie und Internistische Intensivmedizin
Homburg/Saar, Germany

Roland E. Schmieder, MD
Universität Erlangen-Nürnberg
Medizinische Klinik 4
Nürnberg, Germany

Bodo Cremers, MD
Universitätsklinikum des Saarlandes
Klinik für Innere Medizin III
Kardiologie, Angiologie und Internistische Intensivmedizin
Homburg/Saar, Germany

Lars C. Rump, MD
Universitätsklinikum Klinik für Nephrologie
Düsseldorf, Germany

Oliver Vondel, MD
Universitätsklinikum Klinik für Nephrologie
Düsseldorf, Germany

Joachim Weil, MD
Medizinische Klinik II
Universität Schleswig-Holstein
Campus Lübeck
Lübeck, Germany

Martin Schmidt, MD
Städtisches Klinikum München GmbH
München, Germany

Uta C. Hoppe, MD
Klinik III für Innere Medizin
Universität zu Köln
Köln, Germany

Thomas Zeller, MD
Herz-Zentrum Bad Krotzingen
Bad Krotzingen, Germany

Axel Bauer, MD
Universitätsklinikum Tübingen Medizinische UNI-Klinik und Poliklinik Abt. Innere Medizin III
Tübingen, Germany

Christian Ott, MD
Medizinische Klinik 4
Nephrologie und Hypertensiologie
Universitätsklinikum Erlangen
Erlangen, Germany

Erwin Blessing, MD
Uni-Klinikum Heidelberg
Medizinische Klinik Innere Medizin III
Kardiologie, Angiologie und Pneumologie
Heidelberg, Germany

Paul A. Sobotka, MD
Ohio State University
Columbus, OH

Henry Krum, MBBS, PhD
Monash University/Alfred Hospital
Melbourne, Victoria, Australia

Markus Schlaich, MD
Murray Esler, MBBS, PhD, FRACP
Baker IDI Heart and Diabetes Institute
Victoria, Australia

Michael Böhm, MD
Universitätsklinikum des Saarlandes
Klinik für Innere Medizin III
Kardiologie, Angiologie und Internistische Intensivmedizin
Homburg/Saar, Germany
References


