



International Conference on

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## Female-to-Male differences in CAD, imaging microvascular dysfunction with 13N-Ammonia PET/CT

Evidence gained during the last decades indicates that the full spectrum of CAD in women extends beyond atherosclerotic stenoses in the epicardial coronary arteries and may include dysfunction of the coronary microvasculature and endothelium. These concepts create a diagnostic challenge since the coronary microvasculature cannot be imaged. Additional investigations beyond standard stress tests are necessary to define the etiology of symptoms in women. This is relevant since it has been demonstrated that microvascular dysfunction in the smaller coronary arterioles may cause chronic ischemia, acute myocardial infarction and stress-induced cardiomyopathy. The 2014 American Heart Association Consensus Statement

on non-invasive diagnostic testing in women with suspected Ischemic Heart Disease highlighted the development of novel diagnostic tools that have an expanded role in the evaluation of symptomatic female patients to detect not only epicardial coronary stenosis, but also identification of ischemia resulting from microvascular dysfunction. In this presentation we will give an overview of recent functional and physiologic assessments of endothelial and microvascular function and demonstrate the results of <sup>13</sup>N-ammonia PET/CT studies in 32 patients without significant epicardial CAD who were suspected of micro vascular coronary dysfunction.

## **Biography**

Fred Verzijlbergen is Professor and Head of the Department of Nuclear Medicine at Radboud Medical Centre, Netherlands. He has made over 140 publications in reputed journals. He is Advisor of the Board of EANM (European Association of Nuclear Medicine) and also a past president (2013-2014) for the EANM.

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