Pre-Congress Symposium 2
Cardiovascular + Physics Committee
Monday, October 4, 14:00-17:00

Session Title
Signal Quantification in Cardiac SPECT - Dream or Reality?

Chairperson
Mark Lubberink (Uppsala, Sweden)

Programme
14:00 - 14:30 Hein Verberne (Amsterdam, Netherlands): Clinical Needs for Quantification in Cardiac SPECT
14:30 - 15:00 Ian Armstrong (Manchester, United Kingdom): Myocardial Blood Flow
15:00 - 15:30 Kevin Prigent (Caen, France): MIBG for Cardiac Innervation
15:30 - 15:45 Break
15:45 - 16:15 Maria Burniston (London, United Kingdom): Bone Tracers in Amyloidosis
16:15 - 16:45 Laetitia Imbert (Nancy, France): Is Whole-Body CZT the Future?
16:45 - 17:00 Summary by Chairperson
17:00 - 17:15 Live Discussion & Q&A’s

Educational Objectives
1. To understand the clinical need for quantification in SPECT
2. To appreciate the principles of myocardial blood flow quantification and the challenges associated with myocardial blood flow quantification with SPECT
3. To understand the challenges and possibilities of quantitative SPECT in amyloidosis and innervation

Summary
This pre-congress symposium will discuss quantitative imaging of blood flow, amyloidosis and innervation with SPECT. First, the clinical needs for quantification in SPECT will be discussed. Then, the opportunities and challenges associated with myocardial blood flow quantification using SPECT will be addressed, both from a technical perspective and considering the properties of available $^{99m}$Tc-labelled perfusion tracers. The next two lectures will deal with quantification of myocardial innervation with $^{123}$I-MIBG and the possible role of quantification with bone tracers in amyloidosis. Finally, the role of whole-body CZT-SPECT in quantitative imaging will be examined.

Key Words
SPECT, quantification, myocardial blood flow, myocardial innervation, amyloidosis, CZT