CT Imaging of the Thoracic Aorta:
Size assessment and follow-up after surgical and endovascular intervention

1. Although diameter measurements on CT images are an essential parameter for aortic pathology management and their standardization is fundamental, there is still no consensus on the best methodology to measure them. (this thesis)

2. Automatic software for the assessment of aortic diameters are accurate and fast tools that can aid in clinical practice. (this thesis)

3. The annulus of patients with a bicuspid aortic valve defined with a specific methodology undergoes significant morphological changes during the cardiac cycle. (this thesis)

4. Physiological changes after surgery of the ascending aorta present CT characteristics that have to (and often can) be differentiated from complications. (this thesis)

5. Deep knowledge of interventions performed and exogenous material implanted is essential for the correct assessment of CT exams after aortic interventions. (this thesis)

6. Imaging procedures will provide more and more output, not only images but also clinical data, numbers, indices, the core of the so-called quantitative imaging. Digital images are intrinsically data. In certain cases, data can be more important than images. Sardanelli, Eur Radiol Exp 2017;1:1-1

7. The radiologist’s role is not to produce reports as quickly as possible, but to work collaboratively, where appropriate, to make a difference for the patient. Gunderman, Radiology 2016;281:6-9

8. Due to the consideration of additional costs and potential undesired downstream implications, there is apprehension with regard to expanding the horizon for newer modalities. Adding any new cardiovascular imaging test in our clinical practice faces a much more stringent task than its predecessors, amidst demands of demonstrating value specifically in the form of improved outcomes. Nasir, JACC Cardiovasc Imaging 2015 Aug;8(8):957-9

9. At the outset, investigators should consider the importance of the information they seek to produce. […] Is there anyone who would do something differently because of the results of the research? Krumholz HM, Circ Cardiovasc Qual Outcomes 2013;6:371–2

10. “It has long been an axiom of mine that the little things are infinitely the most important.” Sir Arthur Conan Doyle, The Memoirs of Sherlock Holmes