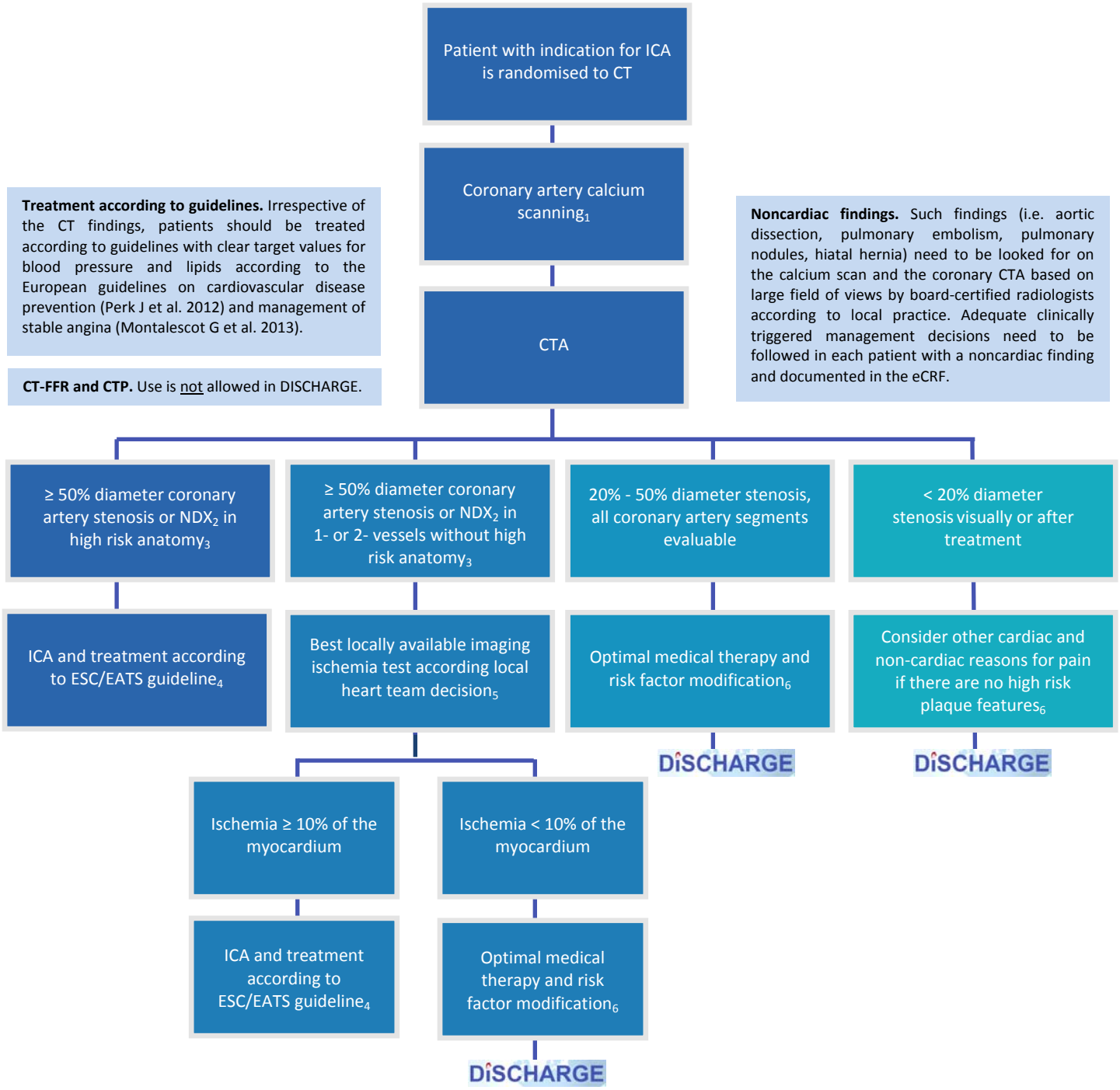
CT-BASED MANAGEMENT FOR PATIENTS IN DISCHARGE



1. The coronary artery anatomic information from calcium scanning can be used to reduce the z-axis coverage of subsequent CTA by trimming the start and end according to individual patient anatomy to reduce exposure (Leschka S et al., AJR 2010; Zimmermann E et al., RoFo 2011). Calcium score calculation (Agatston AS et al., JACC 1990) should only be done after performing CTA in order to not obstruct the workflow. Even in high calcium scores CTA will always be done.
2. NDX (nondiagnostic segment) defined as: In a vessel with a reference diameter of ≥ 2 mm a relevant artifact (that could hide a ≥50% stenosis) is present.
3. High-risk anatomy defined as: LM stenosis ≥50% diameter reduction or proximal LAD stenosis ≥ 50% or 3-vessel disease (Windecker S et al., Eur Heart J 2014).
4. European Society of Cardiology (ESC) and European Association for Cardio-Thoracic Surgery (EACTS) guideline (Windecker S et al., Eur Heart J 2014), see summarizing tables in "Revascularization in DISCHARGE".
5. Proceed to the best locally available imaging ischemia test (Shaw LJ et al., Circulation 2008), if not already done, to make a well informed decision about whether or not ischemia ≥10% of the myocardium corresponding to coronary stenosis seen on CTA is present (Hachamovitch R et al., Eur Heart J 2011).
6. The local heart team will determine risk factor modification (Montalescot J et al., Eur Heart J 2013; Perk J et al., Eur Heart J 2012). Risk factor modification and secondary prevention therapy should be considered if one of the following CT findings is seen: Agatston coronary artery calcium score of over 400 (Budoff MJ et al., JACC 2009; Greenland P et al., Circulation 2007) or high-risk plaque features such as low-attenuation noncalcified plaques (≤50 HU, this threshold might change with intraluminal enhancement, see plaque characterization document for details), a positive remodeling index ≥1.1 (calculated as the vessel cross-sectional area at the site of maximal stenosis divided by the average of proximal and distal reference segments' cross-sectional areas, Motoyama S et al., JACC 2009; Otsuka K et al., JACC Cardiovasc Imaging 2013) or the presence of a napkin-ring sign (non-calcified plaque with a central area of low CT attenuation that is apparently in contact with the lumen; and a ring-like higher attenuation plaque tissue surrounding this central area, Maurovich-Horvat P, et al. Nat Rev Cardiol 2014; Otsuka K et al. JACC Img 2013). For intensified risk factor modification please use the summary by Perk et al. "What is CVD prevention".