OBJECTIVES: The Trans-Atlantic Inter-Society Document on Management of Peripheral Arterial Disease (TASC) gives treatment recommendations depending on the classification of aorto-iliacal or femoro-popliteal vascular pathologies. Therefore, the best treatment could only be offered if the right TASC classification was obtained. The purpose of this study was to assess the interobserver agreement of the evaluation of the TASC II classification for peripheral arterial occlusive disease (PAOD) in magnetic resonance angiography (MRA).

PATIENTS AND METHODS: Three hundred arterial segments of 149 patients with a magnetic MRA for PAOD were evaluated according to the TASC II classification. A resident and a consultant for radiology and vascular surgery both performed independent grading. A comparative assessment of the consensus agreement was quantified by the marginal probabilities calculated by generalised estimation equation models, as well as by using the weighted kappa coefficient (kappa), classified according to Altman.

RESULTS: In relation to the consensus, the overall agreement was good to excellent for the consultants of radiology and vascular surgery. The consultants obtained a statistically significant higher agreement than did the residents (Odds ratio (OR): 2.86, 95% confidence interval (CI): 2.21-3.69, p<0.001). A significantly
higher consensus agreement probability was observed for the surgeons compared with the radiologists (OR: 1.43, 95% CI: 1.11-1.84, p=0.006) and for the femoro-popliteal regions compared with the aorto-iliacal regions (OR: 1.64, 95% CI: 1.12-2.14, p=0.012). CONCLUSION: Although good results can be achieved in the assessment of vascular lesions according to the TASC II document, a simplification of this classification could increase its practicability in a daily clinical routine.