The reproducibility of measurements of GLS was evaluated in 15 randomly selected examinations, and expressed by the intraclass correlation and Bland-Altman (mean and 95%CI) methods. The level of agreement between both centers participating in this study was high as indicated by the intraclass correlations and mean differences: ICC=0.97, p<0.001 and 0.37 (-0.30; 1.03). Intra- and interobserver variablity of GLS were: in Wroclaw center - ICC=0.99, p<0.001 and -0.02 (-0.33; 0.29) and ICC=0.98, p<0.001 and 0.55 (-0.02; 1.12), and in Poznan center - ICC=0.99, p<0.001 and 0.01 (-0.38; 0.41) and ICC=0.97, p<0.001 and 0.46 (-0.18; 1.11), respectively.