To assess urologists' proficiency in the interpretation of multiparametric magnetic resonance imaging (mpMRI). When comparing consultants vs. residents, we found no differences in terms of E-fPB (p = 0.9) or in correct identification rates (p = 0.6). Data were analyzed according to urologists' hierarchy (UH; resident vs. consultant) and previous experience in fusion prostate biopsies (E-fPB, defined as =125). Multivariable logistic regression analyses (MVLRA) tested potential predictors of proficiency in mpMRI reading. At MVLRA, only E- fPB reached the status of independent predictor of proficiency in mpMRI reading (OR: 3.4, 95% CI 1.2–9.9, p = 0.02) after adjusting for UH and type of institution. Additionally, we tested for differences between non–proficient vs. proficient mpMRI readers.