



Supplementary Figure 6: Comparison of cases with discrepant WHO grade and RRAS category. In a 6.1 cm mass, greater than 97% of the tumor exhibited well-differentiated morphology (a), but a 0.3 cm focus showed high-risk features (b) (H&E, 100x and 200x magnification). Using RRAS methods, this small focus determines the reported score, no matter its proportion relative to other tumor morphologies. A different, 2.5 cm tumor (c, d) contains prominent nucleoli, acinar formation, significant variation in chromatin density, and slight nuclear contour irregularity (H&E, 200x and 400x magnification). While these cells are cytologically atypical, as described by the WHO, they do not show sufficient nuclear size variation to be classified as pleomorphic when using RRAS methods.