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Assessing the performance of trans rectal ultrasound to measure prostate weight and its association with other diagnostic factors IRENE B. HELENOWSKI, BORKO D. JOVANOVIC, ROBIN G. LEIKIN, MICHAEL J. GURLEY, CHRISTOPHER K. MITCHELL, TIMOTHY M. KUZEL, Northwestern University — Trans rectal ultrasound is fast becoming an important tool used in the prognosis of prostate cancer. But how does it compare to other measures, such as the actual weight of the prostate obtained after radical prostatectomy. Here, we assess the association of prostate weight obtained via trans rectal ultrasound and actual specimen weight obtained after radical prostatectomy with body mass index (BMI) using linear regression models adjusted for Gleason score, pre-operative PSA, and age applied to subsets of Euro-Americans (n = 242) and African Americans (n = 34). The roles of both prostate weight and BMI are themselves part of ongoing research focused on prostate cancer prognosis. Our preliminary results show a marginal relationship between BMI and specimen weight obtained after surgery in Euro-Americans but no relationship between BMI and ultrasound measured weight in either race subset. Therefore, further work pertaining to the performance of trans rectal ultrasound may be warranted. This work is supported by the Northwestern University SPORE in Prostate Cancer (NIH/NCI P50 CA 90386).

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