Supplementary Methods

The prostate cancer patients were 1,527 men of European descent (by self report) who underwent radical prostatectomy for treatment of prostate cancer at The Johns Hopkins Hospital (JHH) from January 1, 1999, through December 31, 2006. Because the prostate gland was removed entirely for each patient, each tumor was accurately and systematically graded using the Gleason scoring system and staged using the TMN (tumor–node–metastasis) system. We defined more aggressive and less aggressive disease based on pathologic tumor stage and Gleason score. Tumors with pathologic Gleason Scores of 7 or higher, or pathologic stage T3 or higher, or N+ or M+ (i.e., either high-grade or non-organ-confined disease) were defined as more aggressive disease. Tumors with pathologic Gleason score of 6 or lower and pathologic stage T2/N0/M0 (i.e., cancer confined to the prostate) were defined as less aggressive disease. Normal seminal vesicle tissue that was obtained and frozen at the time of surgery was used to isolate DNA for genotyping of case patients. As a reference group, men undergoing screening for prostate cancer at The Johns Hopkins Hospital and The Johns Hopkins University Applied Physics Lab (Columbia, MD) during the same time period were asked to participate as control subjects. Serum prostate-specific antigen (PSA) levels, digital rectal examination (DRE) results, and demographic information were available for these subjects. A total of 482 men of European descent (by self report) met our inclusion criteria as control subjects for this study: normal DRE, PSA levels less than 4.0 ng/mL, and age older than 55 years.