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BACKGROUND. 5-α

In contrast to α-blocker therapy, chronic treatment with 5-AR inhibitors reduces the prostate size [9]. 5-AR inhibitors inhibit conversion of testosterone (T) to dihy-

graphically, together with the regions which match this program's definition of a ''CpG island'' (a CG dinucleotide rich area). An area is consi"sCapG
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genes and initiation and progression of cancers [14]. However, the role of gene silencing and promoter methylation is poorly understood in normal adult human tissues and development of benign urologic entities like BPH. We found that the promoter region of the 5-AR 2 gene contains a heavily populated CpG dinucleotide that can potentially be methylated (Fig. 3A and Fig. S1 of Supporting Information). To evaluate whether the promoter region of 5-AR 2 can be methylated, we designed primers for this region and evaluated our samples by methyl-specific PCR assays

Many pathological processes such as age-related dis-