Impact of CYP1A1, GSTM1, and GSTT1 polymorphisms in overall and specific prostate cancer survival

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Objective: Prognostic biomarkers that distinguish between patients with good or poor outcome can be used to guide decisions of whom to treat and how aggressively. In this sense, several groups have proposed genetic polymorphisms as potential susceptibility and prognostic biomarkers; however, their validity has not been proven. Thus, the main goal of the present work was to investigate the potential role of single and combined CYP1A1, GSTM1, and GSTT1 genotypes as modifiers of cancer survival in Chilean patients with prostate cancer. Methods and materials: A total of 260 histologically confirmed patients were recruited from a voluntary screening, and genomic DNA was obtained from their blood samples for genotyping analyses to detect the CYP1A1*2A polymorphism and GSTM1 and GSTT1 deletions. The progression of illness and mortality were estimated with a median follow-up of 8.82 years. Adjusted estimated genotype risks were evaluated by hazard ratio and 95% CI using the Cox proportional mo