Prostate cancer is the most prevalent form of cancer in American men (Ries et al., 2007). Approximately 95% of all prostate cancers develop in the glandular cells of the prostate ducts and are classified as adenocarcinomas. However, about 4% of prostate cancers are believed to arise from the lining of the prostatic urethra, tumors that arise from neuroendocrine stem cells, and tumors that are believed to be the result of aberrations in cell transformation (Theodorescu & Krupski, 2005).

Facts and Figures

The American Cancer Society (ACS, 2007a) estimated that 218,890 new cases of prostate cancer would be diagnosed in men in the United States in 2007 and that one in six men will be diagnosed with prostate cancer during their lifetimes. Prostate cancer, accounting for approximately 9% of cancer deaths, is exceeded only by lung cancer as the leading cause of cancer deaths in men. ACS (2007a) estimated that 27,050 men would die from prostate cancer in 2007 in the United States. However, improvements in prostate cancer screening, diagnosis, and treatment in the past decade have led to significant reductions in prostate cancer mortality. Data from the National Cancer Institute (NCI) Surveillance Epidemiology and End Results (SEER) program indicated that the prostate cancer mortality rate among men of all races and ages was 27.9 per 100,000 from 2000–2004 (Ries et al., 2007), compared with 32.9 per 100,000 from 1996–2000 (Ries et al., 2003). Similar trends have been observed in survival. The five-year relative survival rate for men of all races and ages was 99% from 1996–2003 (Ries et al., 2007).