Even More Cost Savings?

We read with great interest the article by Wagmiller et al¹ describing the potential cost savings for an individualized strategy for dosing gonadotropin-releasing hormone (GnRH) agonists. The study is based on the finding shown by a number of studies, that testosterone suppression continues in many men beyond the scheduled readministration of a GnRH agonist. Thus, delaying readministration of GnRH agonist until testosterone suppression is abated might lead to significant cost savings. A similar proportion of cost savings was suggested previously in a 22-subject clinical trial.² An accurate estimate of the duration of continued testosterone suppression in a general population is therefore key to this analysis. The authors base their 6-month duration of castrate levels of testosterone on a single study of only 32 patients.³ Other studies not referenced by the authors have been done, including one with monthly testosterone values.⁴ This is a prospective study in which 80 patients, all of whom were treated with 6 months of GnRH agonist therapy, had testosterone levels tested monthly. Reassuringly, this trial shows a similar duration of castrate levels of testosterone lasting 6 months following the last 3-month GnRH agonist.

However, the estimate of cost savings may actually be greater than outlined in the article. The extrapolation of the length of testosterone suppression from patients with androgen-sensitive prostate cancer (not previously exposed to chemical castration) to patients with androgen-insensitive prostate

cancer (AIPC; following months to years of androgen deprivation therapy) will likely underestimate the castrate interval in the latter group. The testosterone reserve will likely not be as great in patients treated with a longer duration of androgen deprivation therapy (ADT), and they may have a significantly longer duration of testosterone suppression.^{5,6}

In addition, as patients are being treated with ADT earlier in the disease course, the prevalence of patients with AIPC is increasing, and patients are living longer with AIPC. We agree with the authors that their assumptions about survival are probably conservative. Besides the study they quote, another single-institution study of 80 patients reported a median overall survival from the time of onset of androgen independence, of 63.1 months in men without radiographic disease and 44.2 months in men with metastatic prostate cancer.⁷ Even the recent large phase III trials, which enrolled patients at various points after having developed AIPC, had median overall survivals from starting chemotherapy in the 18-month range.^{8,9} Furthermore, in this patient population composed mostly of elderly men, there are significant competing causes of mortality. Thus the prevalence of AIPC does not equal the annual death rate from prostate cancer (the conservative estimate used), but rather is certain to exceed it.

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In the March 2006 *Journal of Oncology Practice*, the State Affiliate News article incorrectly gave the location of the North Carolina Oncology Association as Columbus, Ohio. The correct location for the North Carolina Oncology Association is in Morrisville, North Carolina.