

Worden et al. (39) provide a detailed schema of their clinical trial. In a study of cancer of the larynx, Pointreau et al. (40) treated all patients with docetaxel, cisplatin, and 5-fluorouracil, followed by assessing response. Responders were treated with radiation (no surgery), and non-responders were treated with surgery. The term response refers to objective response (size and number of tumors) as measured by a set of standard criteria, such as the RECIST criteria.

e. Better ability of patient to tolerate chemotherapy

Still another advantage of neoadjuvant therapy over adjuvant therapy is that the patient may have a greater tolerance to the toxic effects of chemotherapy (41). In contrast, in the case of gastric cancer, for example, chemotherapy taking place immediately after surgery may result in an increase in surgery-related adverse effects (42).

III. ADVANTAGES OF ADJUVANT THERAPY

The following outlines the advantages of adjuvant therapy over neoadjuvant therapy.

a. Immediate surgery and reduced risk of metastasis

An advantage of adjuvant therapy is that there is no delay until surgery (43). Immediate surgery for bladder cancer, for example, will minimize the risk of metastasis during the time from diagnosis to surgery (44). Black and So (45) and D'Auria et al. (46) point out that if ineffective chemotherapy is delivered, there is a delay in providing surgery. In other words, attempts at providing chemotherapy that proves ineffective can potentially reduce survival.

³⁹ Worden FP, Kumar B, Lee JS, et al. Chemosélection as a strategy for organ preservation in advanced oropharynx cancer: response and survival positively associated with HPV16 copy number. *J Clin Oncol.* 2008;26:3138–3146.

⁴⁰ Pointreau Y, Garaud P, Chapet S, et al. Randomized trial of induction chemotherapy with cisplatin and 5-fluorouracil with or without docetaxel for larynx preservation. *J Natl Cancer Inst.* 2009;101:498–506.

⁴¹ D'Auria G, Ciprotti M, Conte D, et al. Neo-adjuvant and adjuvant chemotherapy in bladder cancer. *Ann Oncol.* 2007;18(suppl 6):vi162–163.

⁴² De Vita F, Giuliani F, Galizia G, et al. Neo-adjuvant and adjuvant chemotherapy of gastric cancer. *Ann Oncol.* 2007;18(suppl 6):vi120–123.

⁴³ D'Auria G, Ciprotti M, Conte D, et al. Neo-adjuvant and adjuvant chemotherapy in bladder cancer. *Ann Oncol.* 2007;18(suppl 6):vi162–163.

⁴⁴ So A. Perioperative chemotherapy: the case for adjuvant chemotherapy for muscle-invasive bladder cancer. *Can Urol Assoc J.* 2008;2:225–227.

⁴⁵ Black P, So A. Perioperative chemotherapy for muscle-invasive bladder cancer. *Can Urol Assoc J.* 2009;3(6 suppl 4):S223–S227.

⁴⁶ D'Auria G, Ciprotti M, Conte D, et al. Neo-adjuvant and adjuvant chemotherapy in bladder cancer. *Ann Oncol.* 2007;18(suppl 6):vi162–163.