Is adjuvant chemotherapy useful in lobular breast cancer patients?

It has been shown by several groups that neoadjuvant chemotherapy in locally advanced breast cancer was poorly effective; a complete pathological response was seldom even if a clinical response allowing a conservative treatment could be observed [1–3]. Since then, a neoadjuvant chemotherapy was rarely proposed in patients with lobular carcinoma. Conversely, the lobular type has not been considered a decision factor for adjuvant chemotherapy and thus, patients with lobular cancer receive chemotherapy according to international recommendations. The best way to answer the question of the effectiveness of adjuvant chemotherapy in lobular cancer would be a randomized study of chemotherapy versus no chemotherapy in lobular cancer. Most of the clinicians are reluctant to launching this randomized trial.

Given these limitations, we selected a population of patients having received adjuvant chemotherapy in our institute and compared relapse-free survival (RFS) and overall survival (OS) between lobular and nonlobular cancer. The study population of this retrospective study consists in 299 patients treated with the same chemotherapy regimen (6 FEC100: epirubicin 100 mg/m², fluorouracil 500 mg/m², cyclophosphamide 500 mg/m²) from November 1999 to October 2002. All the 79 tumors considered pure lobular carcinoma or mixed have been reviewed by the same expert pathologist who carried out in all the cases E-cadherin immunohistochemistry. There are few differences between patients with lobular and nonlobular cancer. The lobular cancer patients were older (P = 0.0004), with less frequent grade 3 (P = 0.02) and larger tumors (P = 0.0001). They were more often treated with mastectomy than conservative treatment (P = 0.0001). After adjustment on these three confounders (age, grade and size of the tumor), there was no difference between lobular and nonlobular tumors on RFS (either local or metastatic), nor on OS (Figure 1). The same

![Figure 1](image-url)
results were obtained when the study was limited to the 45 patients with pure lobular carcinomas.

Within the limits of a retrospective study with a limited number of patients, our results do not suggest that patients with lobular carcinoma should be denied adjuvant chemotherapy if they have poor prognostic factors. In our experience, it is unlikely that tumors have been falsely classified as lobular since E-cadherin immunohistochemistry has been carried out in all the tumors morphologically considered to be lobular. The apparent discrepancy between these results and the results of neoadjuvant studies could be further explained by the fact that, in neoadjuvant studies, the size of the tumor might decrease enough to allow a conservative treatment when mastectomy was mandatory before chemotherapy. Even if a complete pathological response was very rare, this suggests that lobular tumors are not completely chemoresistant. This limited chemosensitivity could be enough to decrease the relapse rate in the adjuvant setting.

X. Liem¹, M. C. Baranzelli², N. Penel³, S. Giard⁴ & J. Bonneterre⁵,*

Departments of ¹Radiotherapy, ²Pathology, ³General Oncology and ⁴Breast Cancer, Centre Oscar Lambret, Lille, ⁵Breast Unit, Université de Lille-Nord de France, Lille, France
(⁎E-mail: j-bonneterre@o-lambret.fr)

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