使用 Oncotype DX 於乳癌不同組織型態預測復發分數之分析

黃一峻[1] 張子明[2] 楊承恩[2] 周建聖[3] 林麗真[4] 蘇正熙[1] 常傳訓[1,2]
振興醫療財團法人振興醫院外科部 [1]一般外科 [2]腫瘤外科
病理檢驗部 [3]解剖病理科
[4]癌症委員會

The effect of different histologic subtypes of breast cancer based on Oncotype DX recurrence score

Jin Whan[1], Tzu-Ming, Chang[2], Cheng-En, Yang[2], Jiann-Sheng, Chou[3], Lay-Chin, Lim[4], Cheng-Hsi, Su[1], Chuan-Hsun, Chang[1,2]
[1]Division of General Surgery, [2]Division of Surgical Oncology, Department of Surgery, [3]Division of Anatomical Pathology, Department of Pathology and Laboratory Medicine, [4]Cancer Committee, Cheng Hsin General Hospital, Taipei, Taiwan.

Purpose: The Oncotype DX recurrence score (RS) provides an assessment risk of recurrence and adjuvant chemotherapy benefit among female with breast cancer. We therefore compared the traditional and TAILORx cutoff points in several subtypes of breast cancer.

Materials and Methods: This study was designed as a retrospective observation study. All demographics and clinical data were recorded in the Cheng Hsin General Hospital database and for analysis. Patients were accepted partial or total mastectomy surgery between Jan 2009 and Aug 2018. Specimen of patients were sent for Oncotype DX 21-gene expression assay to estimate the RS by several cancer-related genes. RSs were divided into three risks group by using traditional and TAILORx cutoff points. These two cutoff points were stratified into low risk (traditional, <18; TAILORx, <11), intermediate risk (traditional, 18-30; TAILORx, 11-25) and high risk (traditional, >30; TAILORx, >25) groups. Uni-variables logistic regression model was used to determine the effect of different subtypes of breast cancer associated with high risk RSs group.

Results: A total of 120 breast cancer patients were included in the study analysis. Among these patients, 50 (42.0%) were accepted breast conserving surgery, 69 (57.9%) were received total mastectomy and one patient without taken operation. Of these, the mean age was 54.5±8.9 years. Nearly 62.5% women were age more than 50 years. The distinct subtypes of tumors were IDC (99 of 120, 82.5%), ILC (7 of 120, 5.8%), mucinous (7 of 120, 5.8%), papillary (2 of 120, 1.7%), cribriform (1 of 120, 0.8%), medullarycis (1 of 120, 0.8%), mixed IDC and mucinous (1 of 120, 0.8%), tubulalobular (1 of 120, 0.8%), tubular (1 of 120, 0.8%). Overall, around 20.8% and 12.5% patients were classified into high risk group by TAILORx and traditional cutoff points. As for intermediate risk patients, accounted 55.8% and 32.5% for TAILORx and traditional cutoff points. However, by using traditional cutoff points, nearly 55.0% patients presented more than TAILORx cutoff points, both differences around 32%. In uni-variable logistic regression model analysis, we found that ILC tumors were more increasing likelihood associated with high risk

(OR=2.65, 95% CI: 0.46-15.08) and (OR=2.79, 95% CI: 0.58-13.43) compared with IDC based on traditional and TAILORx cutoff points, respectively.

Conclusion: Patients with ILC tumor have potential associated in high risk with RSs in both cutoff points. Due to low number of ILC and others carcinoma in our hospital, efforts should be made to include more patients for further statistical comparison.