Peer Review File

Article Information: https://dx.doi.org/10.21037/tcr-22-2516

Comment 1: The authors have successfully created and tested a nomogram for determination of axillary nodal status prior to surgery for MBC.

As has been pointed out there are limitations to the SEER data because of lack of central pathological review. In particular in both the training and validation set there was HER2 positibity in 12% of tumours measured. This contrasts with larger centrally reviewed series: Humphries 2%, Kornegoor 0, Shaaban 0 and Vermeulen 0.1%. This should be discussed by the authors.

Reply 1: Breast cancers in men are more likely to be negative for human epidermal growth factor receptor 2 (HER2) than breast cancers in women.According to the statistics of epidemiology of male breast cancer patients in the United States by Professor sharon H (Giordano SH, Cohen DS, Buzdar AU, Perkins G, Hortobagyi GN. Breast carcinoma in men: a 296 population-based study. Cancer. 2004. 101(1): 51-7.), About 9% of the tumors were HER2-positive by immunohistochemistry. HER2-positive was about 12% in this study, because this study included both her-2 +++ by immunohistochemical and her-2 gene was amplified by Fish- test.

Comment 2: The authors use a term sentinel lymph node (SLN) which is an anatomical structure, when they mean the procedure "sentinel lymph node biopsy" (SNB, or SLNB). I would suggest the authors to correct this.

Reply 2: Has been revised according to the review comments.

Changes in the text: Page 1, Line 13 ;Page 1 ,Line 16 ; Page 10 ,Line 195 ;Page 10,Line 199.

Comment 3: There are multiple errors with missing spaces between the words (for example percentages, number and "%" should be separated by space, "3_%"), and there are multiple double spaces etc. The authors should go through the article completely for these errors. Some (but only some) of these errors are listed in the "minor" section. There are some errors with the language, and as some of the errors seem to change the meaning of the sentences, and some sentences seem to be irrational, I would recommend a language review for this article.

Reply 3: Has been revised according to the review comments.

Comment 4: The male breast cancer usually presents as a mass behind the areola – almost exclusively in the patients I see in our population. In this study, the location of tumour varies substantially. How is the localization of the tumour defined and do the authors consider the method reliable?

Reply 4: The division of breast tumors in male is the same as that in female, as follows:Tumor location was classified as Central portion of breast(central), upper outer quadrant (UOQ), lower

outer quadrant (LOQ), lower inner lower quadrant (LIQ), and upper inner quadrant (UIQ), nipple, Overlapping lesion of breast(Overlapping).The tumor locations in this paper were directly derived from the database.Different from the female breast mass which is mostly located in the outer upper quadrant, the male breast mass is mainly located in the central region and the nipple region.

Has been revised according to the Minor review comments.

Changes in the text: Page 1, Line 35; Page 2, Line 54; Page 2, Line 56; Page 2, Line 56-58; Page 2, Line 67; Page 2, Line 69; Page 11, Line 233-234; Page 14, Line 244; Page 14, Line 245