Anthracycline-based Systemic Chemotherapy on Long-Term Prognosis of Metaplastic Breast Cancer: A Real World Study with 637 cases in Multi-centers

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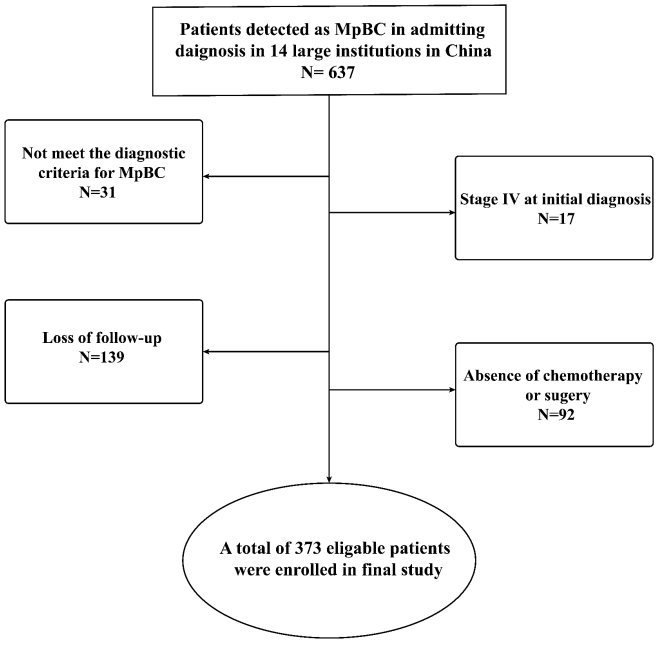
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Background

- The standard chemotherapy treatment regimen for metaplastic breast cancer (MpBC) remained uncertain. This study aimed to assess the survival disparities between anthracycline-based and non-anthracycline-based regimens and investigate appropriate chemo-regimen for MpBC patients in real world.

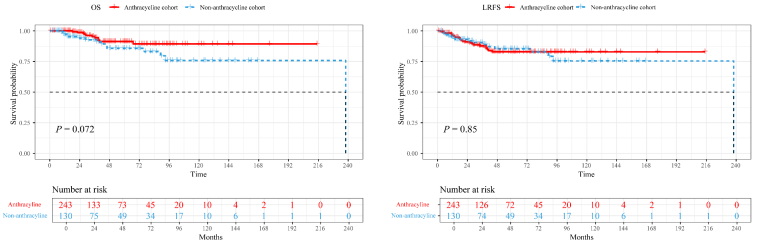
Method

- A total of 637 cases with MpBC in admitting diagnosis between 2002 and 2025 were collected from 14 large hospitals in China.
- Kaplan- Meier analysis, univariate and multivariate Cox proportion hazard models, and cumulative incidence follow were performed to estimate survival effect and identify prognostic factors comprehensively during the median follow-up time of 30 months.

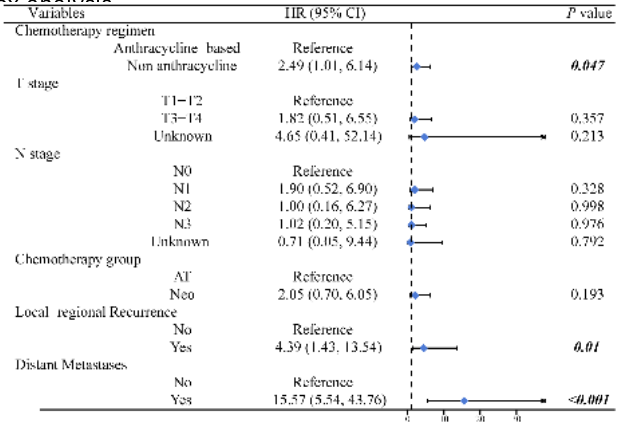


Result

- Among the 373 patients enrolled in final study, totally 243 (65.1%) patients received anthracycline-based regimen (anthracycline cohort), whereas 130 (34.9%) patients with non-anthracycline-based regimen (non-anthracycline cohort).
- Subjects in anthracycline cohort had an absolute improvement of 13.6% (89.4% vs. 75.8%) and 7.5% (82.9% vs. 75.9%) in 10-year overall survival (OS) and 10-year local-regional recurrence free survival (LRFS), respectively, in comparison with those in non-anthracycline cohort.



- Anthracycline-based regimen was found to be an independently favorable factor of OS through multivariate Cox analysis.



- T stage played the considerable role in long-term survival of metaplastic breast cancer patients.
- The local-regional recurrence occurred in 6.2% (23/373) of patients, while 13.1% (49/373) of MpBC patients developed distant metastases. The most common distant metastases site was lung (44.9%), followed by bone metastases (34.7%).

Conclusion

This multi-center study identified the association between administration of anthracycline and improved OS, anthracycline-based regimen had higher likelihood to be the preferred protocol for MpBC.

Reference

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Supplement Information

Competing Interests Statement: The author(s) declare no competing interests.

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