INTRODUCTION

- Metastatic breast cancer (MBC) is a heterogeneous disease with different subtypes.
- Chemotherapy is recommended for patients (pts) with hormone receptor positive (HR+) and human epidermal growth factor receptor 2 (HER2)− disease after hormone therapy and for pts with disease in HR- and HER2− triple-negative (TN) pts.

- nab-Paclitaxel demonstrated significant improvement in ORR (17.0% vs 12.8%) in pts with MBC in a phase III trial.[1] It is indicated for treatment of MBC in adult pts who have failed first-line (1L) treatment for metastatic disease, and for whom standard, anthracycline containing therapy is not indicated[2]. In the US, nab-paclitaxel is approved for the treatment of locally recurrent and/or metastatic breast cancer.[3] (Unlikely controlled) or relapse within 6 months of advanced chemotherapy.[4]

- Limited data exist of nab-paclitaxel vs paclitaxel for pts with MBC, including HR+HER2− and TN MBC, in a real-world setting.

OBJECTIVES

- To evaluate the real-world effectiveness of second-line (2L) nab-paclitaxel vs paclitaxel in pts with MBC, including pts with HR+HER2− or TN MBC.
- To evaluate safety and use of supportive care.
- To assess all-cause mortality and/or relapse within 6 months of adjuvant chemotherapy.

METHODS

- Data Source:
  - Retrospective, non-interventional, real-world study of nab-paclitaxel vs paclitaxel in all patients and subgroups.
  - Medical records platform called Navigating Cancer (NC).
  - International database with 1300 providers and 2.5 million oncology pts.

- Study Design:
  - TTD: Time from start of treatment to treatment discontinuation (TD).
  - TTN: Time until next treatment (TNT).

- Study Population:
  - Eligible pts: Patients treated with nab-paclitaxel or paclitaxel who had at least 3 doses of nab-paclitaxel or paclitaxel.
  - Inclusion criteria: Patients treated with nab-paclitaxel or paclitaxel who had at least 3 doses of nab-paclitaxel or paclitaxel.

- Statistical Analysis:
  - Kaplan-Meier method was used to calculate median duration of time to treatment discontinuation (TTD). Multivariate analyses of TTD were conducted using the Cox proportional hazards model.
  - Statistical significance was evaluated using the log-rank test.

RESULTS

- Baseline Characteristics:
  - Pts were censored if last date of administration was ≤ 30 days from data cutoff (April 6, 2015).
  - Endpoints are described in Table 1.

- Statistical Analysis:
  - nab-Paclitaxel/Paclitaxel used after diagnosis and at 1L and 2L therapy (n = 1036).
  - No consideration with other chemotherapy (n = 1326).
  - nab-Paclitaxel/Paclitaxel used as q or q and not used sequentially in 1L and 2L (n = 958).

- TTD:
  - TTD was significantly longer with nab-paclitaxel vs paclitaxel in all pts and subgroups.
  - TTD was numerically longer with nab-paclitaxel vs paclitaxel in pts with HR+HER2− vs paclitaxel (Figure 3).

- TNT:
  - TNT was significantly longer with nab-paclitaxel vs paclitaxel in all pts and subgroups.
  - TNT was numerically longer with nab-paclitaxel vs paclitaxel in pts with HR+HER2− vs paclitaxel (Figure 4).

- Safety and Use of Supportive Care:
  - Pts receiving nab-paclitaxel had similar supportive care use vs patients receiving paclitaxel.
  - Pts receiving nab-paclitaxel had similar supportive care use vs patients receiving paclitaxel.

- Conclusions:
  - This analysis demonstrated significantly longer time to treatment discontinuation and numerically longer time to next treatment with second-line nab-paclitaxel vs paclitaxel treatment in patients with metastatic breast cancer.
  - Time to treatment discontinuation was longer with nab-paclitaxel vs paclitaxel in patients with MBC.
  - The incidence of neuropathy, fatigue, and anemia was lower with nab-paclitaxel vs paclitaxel in all patients.
  - Patients treated with nab-paclitaxel received fewer antihypertensive and less treatment for hypertension and allergic reaction, but more GCSC use and treatment for bone loss vs patients receiving paclitaxel.
  - Limitations:
    - This was a non-randomized study. Minor differences in some baseline characteristics were adjusted for multivariate analysis or logistic regression analysis.
    - Adverse events were captured by ICD-9 codes and laboratory values only; however, subjective adverse events, such as neuropathy, may be under-reported.
    - Additional adverse events, such as nausea, may be under-reported.

- Conclusion:
  - These results provide a real-world comparison of nab-paclitaxel vs paclitaxel for second-line metastatic breast cancer treatment overall, as well as in HR+HER2− or TN MBC.

Abstract 1891

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Real-World Comparative Effectiveness Analysis of Second-Line nab-Paclitaxel vs Paclitaxel in Patients With Metastatic Breast Cancer

Conferences

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REFERENCE

3. MEI Pharma, Merrimack, Millennium, Molecular Health, Novartis, Pfizer, Pharmacyclics, Plexxikon.
4. Bayer, BMS, Caris Life Sciences, Celgene Corporation, Eli Lilly, Genomic Health, Gilead, Heron Therapeutics, Incyte, Insys, Molecular Health, Pfizer; this poster.

Figure 1. TTD in All Patients

Figure 2. TNT in All Patients

Figure 3. TTN in All Patients

Figure 4. All-Grade Adverse Events in All Patients