Publication details	Abstract	Study type	Study sites	Sub-types; tmt history	Measures	Findings/conclusion
Efficacy and safety of eribulin mesylate in patients with locally advanced or metastatic breast cancer previously treated with anthracycline/taxanes Chen et al. Cancer Medicine 13.10 John Wiley and Sons Inc. (May 2024) https://doi.org/10.1002/cam4.7295	**Background**: This prospective real-world study aimed to assess the efficacy and safety of eribulin in the clinical practice against advanced breast cancer (ABC) in China. **Patients and Methods**: In this study, eligible patients with inoperable locally advanced or metastatic breast cancer who had experienced prior neo−/adjuvant or failed the palliative treatment with anthracycline/taxanes were included. Eribulin (1.4 mg/m2) was infused intravenously on Day 1 and Day 8 every 3 weeks until disease progression or intolerable toxicity occurred. The progression-free survival (PFS), overall response rate (ORR), disease control rate (DCR), and safety of the treatment were assessed. **Results**: One hundred and thirty-four patients were enrolled. The median PFS (mPFS) was 4.3 months (95% CI: 0.3–15.4). The ORR and DCR was 32.1% and 79.1%, respectively. The mPFS of patients who received eribulin as first- or second-line treatment was significantly better than those who received eribulin as ≥3-line treatment (6.9 months [95%	Real world evidence; mono- and combo-therapies	China	TNBC, HER2+, HR+; inoperable locally advanced or metastatic breast cancer who had experienced prior neo−/adjuvant or failed the palliative treatment with anthracycline/taxanes	PFS, ORR, DCR	Efficacy and tolerability consistent with randomised controlled Phase III trials

	CI: 3.2–8.8] vs. 4.0 months [95% CI: 3.4–4.6], p = 0.006). The mPFS of patients with triple-negative, HER2-positive, and HER2(−)/HR(+) was 3.4 (95% CI: 2.7–4.1), 6.2 (95% CI: 2.3–10.1) and 5.0 months (95% CI: 4.1–5.9), respectively. HER2(+) patients had significantly longer PFS than TNBC patients (p = 0.022). Patients received combination therapy had a significantly longer mPFS than those who received eribulin monotherapy (5.0 months [95% CI 3.6–6.3] vs. 4.0 months [95% CI: 3.3–4.7] [p = 0.016]). Multivariate analysis revealed that MBC patients with a molecular typing of non-TNBC receiving eribulin as ≤2-line therapy and combination therapy had a low risk of disease progression. Neutropenia (33.58%), leukopenia (11.94%), and thrombocytopenia (4.48%) were the most common treatment-related adverse events. **Conclusion**: Eribulin demonstrated effective clinical activity and a favorable tolerability profile in Chinese patients with ABC in the real-world. The efficacy and safety profile were consistent with those reported in previous randomized phase 3 trials.					

Clinical value of offering multiple chemotherapy lines to a luminal-like metastatic breast cancer: A case report with eribulin Valsecchi et al. Tumori 109.6: NP1-NP5. SAGE Publications Ltd. (Dec 2023) https://doi.org/10.1177/0300891622114192 9	**Introduction**: The achievement of complete response with chemotherapy after multiple treatment lines in metastatic breast cancer and the chemosensitivity in a luminal-like breast cancer are two important issues as it is often asked whether there is a potential limit to the number of therapeutic lines offered and what clinical value they may have. In this setting, eribulin mesylate is a chemotherapy option available. Several randomized and observational studies demonstrated eribulin's meaningful improvement on prolongation of survival, chronicling the disease and preventing the onset of new metastases, although the rate of complete responses is rather limited. Case description: We report the five-year history of a luminal A breast cancer, stage IV at diagnosis, metastasized to bone and brain. After undergoing four chemotherapy lines and several radiotherapy sessions with partial response as the best response on bone and with a complete response on brain, our patient finally achieved a metabolic complete response also on bone after about a year of fifth-line treatment	Case study	Italy	Luminal A breast cancer, stage IV; 4 prev. lines of tmt	A metabolic complete response also on bone after about a year of fifth-line treatment with eribulin	Eribulin has value as a treatment in heavily pretreated and luminal-like metastatic breast cancer

	with eribulin. Currently the patient is in close clinical and radiological follow-up. **Conclusions**: This case report aims to emphasize the clinical value of a chronic chemotherapy treatment also in heavily pretreated and luminal-like metastatic breast cancer, supporting eribulin as a good choice to consider.					
Trastuzumab and pertuzumab in combination with eribulin mesylate or a taxane as first-line chemotherapeutic treatment for HER2-positive, locally advanced or metastatic breast cancer: Results of a multicenter, randomized, non-inferiority phase 3 trial in Japan (JBCRG-M06/EMERALD) Yamashita et al. Journal of Clinical Oncology, suppl. Supplement 42.16 Lippincott Williams and Wilkins. (Jun 2024)	**Background**: Trastuzumab (H) + pertuzumab (P) + taxane is a current standard first-line therapy for recurrent or metastatic human epidermal growth factor 2-positive (HER2+) breast cancer (BC). However, taxane-induced toxicities, which reduce patient quality of life (QoL), necessitate development of less toxic but at least equally effective taxane alternatives. We investigated the non-inferiority of eribulin to taxane when used in combination with dual HER2 blockade (HP). **Methods**: The multicenter randomized open-label parallel-group phase 3 EMERALD trial (UMIN000027938, NCT03264547) was carried out to test the noninferiority of eribulin + HP (study regimen) against docetaxel/paclitaxel + HP (control regimen) as firstline	Multicenter randomized open-label parallel-group phase 3; Combo with dual HER2 blockade = HP as 1st line tmt	Japan	HER2+	Non-inferiority to taxane; PFS, OS, safety	First study to show non-inferiority of eribulin to taxane when used in combination with dual HER2 blockade. As a less toxic but equally effective alternative to the taxane containing regimen, eribulin combined with HP could be first-line treatment of

	chemotherapeutic treatment in patients with locally advanced or metastatic HER2+ BC. The study design has been published (doi: 10.1186/s13063-020-04341-y). Patients were randomized (1:1) to receive, by intravenous infusion in a 21-day cycle, either (i) eribulin 1.4 mg/m2 on days 1 and 8, or (ii) a taxane (docetaxel 75 mg/m2 on day 1 or paclitaxel 80 mg/m2 on days 1, 8 and 15), each being administered in combination with HP on day 1. The primary endpoint was progression-free survival (PFS). Secondary endpoints included objective response rate, overall survival (OS), QoL and safety. Non-inferiority was tested using the Cox proportional hazards model to estimate hazard ratios (HRs) for PFS events. The upper limit of acceptance of noninferiority HRmargins (1.33 and 1.25) was tested in a stepwise manner. **Results**: Between August 2017 and June 2021, 446 patients (224 and 222 in the study and control groups, respectively) were enrolled: median age was 56.0 (29-70) years, 244 (54.7%) had ER-positive BC, 285 (63.9%) had visceral					locally advanced or metastatic HER2+ BC.

	metastasis. While 247 patients (55.4%) had de novostage 4 disease, 199 (44.6%) underwent radical surgery and 138 (30.9%) received taxanes perioperatively. Both groups' baseline characteristics were well balanced. Median PFS was 14.0 mos in the study group and 12.9 mos in the control group (HR, 0.96; 95% CI, 0.77-1.20), confirming noninferiority of the study regimen. Median OS was 65.3 mos in the control group but has not been reached in the study group. Incidences of adverse drug reactions including grade ≥3 febrile neutropenia, edema and diarrhea were numerically lower in the study group than in the control group (4.9% vs 8.7%, 8.5% vs 42.2% and 36.6% vs 54.1%, respectively). **Conclusions**: This is the first study to show non-inferiority of eribulin to taxane when used in combination with dual HER2 blockade. As a less toxic but equally effective alternative to the taxane containing regimen, eribulin combined with HP could be first-line treatment of locally advanced or metastatic HER2+ BC.					
Quality-of-life outcomes in patients with HER2-	**Background**: The randomized open-label phase 3 JBCRG-M06/EMERALD	Randomized open-label	Japan	HER2+	QoL	Over 69 wks, the E-based

positive, locally advanced or metastatic breast cancer treated with eribulin mesylate in combination with trastuzumab and pertuzumab in the phase III JBCRG-M06/EMERALD study Masuda et al. Annals of Oncology, suppl. Supplement 2 35: S375. Elsevier Ltd. (Sep 2024)	study (NCT03264547) is the first to show non-inferiority of eribulin (E) to taxane (T) when used with trastuzumab (H) + pertuzumab (P) as first-line systemic therapy for locally advanced or metastatic HER2+ breast cancer (BC). Median PFS was 14.0 and 12.9 months (mo) in the study (E) and control (T) groups, respectively (HR, 0.95; 95% CI, 0.76–1.19), confirming non-inferiority (HR margin,1.33) of the study regimen (ASCO2024 abstract 1007). Maintaining quality of life (QoL) is a growing concern and one of the main goals in cancer treatment. Here, we report QoL outcomes in patients (pts) enrolled in JBCRG-M06. **Methods**: Pts were randomized to receive E (1.4 mg/m2 on days 1 and 8) or T (docetaxel 75 mg/m2 on day 1; paclitaxel 80 mg/m2 on days 1, 8 and 15), in both cases with H + P, as first-line therapy (study design, doi: 10.1186/s13063-020-04341-y). To evaluate patient-reported outcomes, pts completed EORTC QLQ-C30 at baseline, wks 9, 18, 27, 36, 45, 57, and 69. A 10-point difference in EORTC QLQ-C30 score was deemed the minimally important difference	phase 3; Combo with dual HER2 blockade = HP as 1st line tmt			Global Health Status (GHS) score; EORTC QLQ-C30 score	regimen delivered stable and clinically meaningful QoL maintenance that tended to last longer than with the T-based regimen.

	(MID) for clinically meaningful change. Kaplan–Meier method was used to assess time to QoL deterioration, and log rank test for intergroup comparisons. **Results**: Of 446 pts randomized, 437 (221 and 216 in the E and T groups, respectively) comprised the full analysis set for QoL evaluation (median age, 56.0 [29–70] years; 54.7% ER+; 65.2% with visceral metastasis). QoL maintenance rate [proportion of pts whose Global Health Status (GHS) score has not deteriorated by ≥10 points] was 62.7% vs 43.8% at 6 mo and 30.3% vs 25.7% at 12 mo in the E and T groups, respectively. Median time to QoL deterioration was 218 days in the E group, and 139 days in the T group (HR, 0.80; 95% CI, 0.66–0.99; p = 0.08). For GHS (and some subscales), changes in adjusted mean QoL score was stable over time for the E group, whereas in T group pts, QOL tended to deteriorate until at least wk 36 (when most were in the chemotherapy period). **Conclusions**: Over 69 wks, the E-based regimen delivered stable and clinically meaningful QoL maintenance that					

	tended to last longer than with the T-based regimen. Clinical trial identification: JBCRG-M06/EMERALD, NCT03264547.					
Efficacy of eribulin mesylate in HER2-low and HER2-0 metastatic breast cancer (MBC): Results from an analysis of two phase 3 studies Twelves et al. Cancer Research, suppl. Supplement 83.5 American Association for Cancer Research Inc. (Mar 2023) https://doi.org/10.1158/1538-7445.SABCS22-P1-03-02	**Background**: Breast cancer (BC) with low-level HER2 expression (HER2-low) is defined by an immunohistochemistry (IHC) score of 1+ or 2+ without HER2 gene amplification or excess HER2 gene copy number, as measured by in situ hybridization (ISH). This represents approximately half of patients with BC overall (estimated as 55% for hormone-receptor positive [HR+] BC and 38% for triple-negative breast cancer [TNBC]; Scott, ASCO, 2021). Some data suggest that patients with HER2-low BC may respond differently to treatment than those whose BC has no HER2 expression (HER2-0). In this post hoc unplanned analysis, we analyzed data from two pivotal phase 3 studies (Studies 305 and 301) comparing eribulin with other chemotherapeutic agents (treatment of physician's choice and capecitabine, respectively [“control”]) in patients with both HER2-low and HER2-0 MBC. **Methods**: Patients with MBC, 2-5 (Study 305) or <2 (Study	Post-hoc analysis, based on HER2 status, of Phase III studies (two groups, one with < 2 prior tmts and other with 2-5 prior tmts); Eribulin vs physician’s choice and capecitabine	USA Argentina Austria Australia Belgium Brazil Canada Croatia Czechia France Hungary Italy Poland Russia Sth Africa Sapin Switzerland	TNBC, HR+ by HER2-low, HER2-0	PFS, OS, ORR	Treatment with eribulin demonstrated trends toward improved OS, PFS, and ORR compared with chemotherapy controls in patients with HER2-low or HER2-0 MBC.

	301) prior lines of chemotherapy for advanced/metastatic disease, and who had received an anthracycline and a taxane, were analyzed. HER2-expression status was determined by IHC and/or ISH assays. Median progression-free survival (PFS) and overall survival (OS) were calculated using the Kaplan- Meier method adjusted by study; comparisons of PFS and OS between treatment groups were performed using stratified (by prior capecitabine use, geographic region, and study) log-rank tests. Hazard ratios were estimated by a stratified Cox model. For each study, median PFS and OS were also calculated for HR+ and TNBC subgroups. **Results**: Baseline characteristics were generally balanced between treatment groups among patients with HER2-low (n=427) and HER2-0 (n=824) BC. Patients with HER2-low or HER2-0 BC showed trends toward benefit with eribulin treatment. In patients with HER2-low and HER2-0 BC, median OS was longer with eribulin vs control (15.1 vs 12.0 months and 15.2 vs 12.5 months, respectively); median PFS by independent imaging review (IIR) was					

	also longer with eribulin vs control (4.0 vs 3.1 months and 3.9 vs 3.1 months, respectively). Objective response rate (ORR) by IIR was also higher with eribulin vs control in patients with HER2-low and HER2-0 BC (13.7% vs 9.2% and 10.2% vs 7.4%, respectively). In a separate analysis, median OS was longer with eribulin vs capecitabine in patients with TNBC and HER2-low and HER2-0 (15.4 vs 10.3 months and 14.4 vs 8.9 months, respectively). **Conclusions**: In this post hoc analysis, treatment with eribulin demonstrated trends toward improved OS, PFS, and ORR compared with chemotherapy controls in patients with HER2-low or HER2-0 MBC.					
Eribulin in metastatic breast cancer: Real world data Fernández-Laguna et al. Breast Disease 42.1: 349-360. IOS Press BV. (Dec 5, 2023) http://dx.doi.org/10.3233/BD-230031	**BACKGROUND**: Metastatic breast cancer (MBC) is incurable. Systemic therapy is the standard treatment; however, an optimal sequence of chemotherapy has not been established. **OBJECTIVE**: Evaluating effectiveness and safety of eribulin in MBC treatment and comparing the results obtained with published literature. **METHODS**: Observational, descriptive and	Real world evidence; Mono- or combo- not stated	Spain	Not stated "MBC"	PFS, OS, Safety (AE)	Median PFS similar to that reported previously, with lower OS. There was a tendency to achieve better results when eribulin

	retrospective study of patients with MBC treated with eribulin from 01/12/2015 to 30/10/2021. Effectiveness was analysed using Kaplan–Meier-survival-curves, for the overall number of patients treated and stratified by treatment line. Safety was measured according to adverse events (AE) based on CTCAE v5.0. Data analysis was performed using R v4.0.1. **RESULTS**: They were included in this study 53 women who received eribulin (median age 58 years). Comparison of median survival from this study versus published data were: progression-free-survival (PFS) 3 (IC95%: 3–4) versus 3.7 months and overall-survival (OS) 8 (IC95%: 3–4) versus 13.2 months for the overall number of patients. For the 1–3 line treatment group, PFS was 6 (IC95%: 3-NA) and OS was 15 (IC95%: 6-NA). There were 322 AEs, the most frequent being blood disorders 16% (52), general disorders 12% (38), and gastrointestinal disorders 12% (38). **CONCLUSIONS**: The median PFS was similar to that reported previously, with lower OS. There was a					was used earlier. Eribulin is a less well-tolerated drug than published literature.

	tendency to achieve better results when eribulin was used earlier. Eribulin is a less well-tolerated drug than published literature.					
Safety and efficacy of eribulin in patients with advanced or metastatic breast cancer previously treated with anthracycline and taxane in real-world clinical practice: Data from post marketing surveillance in Korea Chae et al. 16th Annual Meeting of the Korean Society of Medical Oncology &2023 International Conference (KSMO 2023) http://dx.doi.org/10.1016/j.esmoop.2023.102127	**Background**: Breast cancer is the most common malignancy in Korean women, and its incidence continues to increase. Eribulin was approved in Korea in 2012 for patients with metastatic breast cancer (MBC) who previously received at least two chemotherapeutic regimens, including anthracycline and taxane. The post-marketing surveillance (PMS) study was conducted to assess the safety and efficacy of eribulin in Korean patients with MBC within the approved conditions. **Methods**: The safety and efficacy profile of eribulin have been assessed through PMS in real-world clinical practice. This nationwide, multicenter, prospective, and non-interventional study was conducted between Aug 2012 and Aug 2018 across 64 centers. The main objective of this study was to confirm the safety and tolerability of eribulin in a larger population and additional analysis was conducted for the three BC	Real world evidence; At least 2 prev. tmts, incldg anthracycline and taxane; efficacy and safety profile	Korea	HR positive, HER2 positive, and TNBC	TTF, AE	Eribulin demonstrated clinical effectiveness and a favorable safety profile in patients with MBC under the approved indication in real-world clinical practice. No new safety concerns or signals have been identified compared to the pivotal studies of eribulin.

	subtypes; HR positive, HER2 positive, and TNBC. **Results**: A total of 1,079 patients (1,004 patients for safety assessment and 367 patients for efficacy assessment) were enrolled. The mean age was 52.86 years, and 92.01% were classified as stage IV at the time of enrolment. Among the patients, 81.97% underwent breast cancer surgery, 20.88% received neoadjuvant chemotherapy, 62.74% received adjuvant chemotherapy, and 59.44% received prior hormone therapy. The median line of chemotherapy prior to eribulin in advanced setting was 4; 87.0% of patients had previously received taxane, and 56.5% received anthracycline in the advanced setting. Time-to-treatment failure (TTF) was 113.5, 89.0, and 64.0 days in HR-positive, HER2-positive, and TNBC groups, respectively. Eribulin was administered for more than six months in about 22% of patients. The mean dose of eribulin was 1.34 mg/m2, and 21.68% of the patients required dose reduction at least once during therapy. Of the total, 23.2 % of patients received G-CSF. Adverse events (AEs) and serious AEs were					

	reported for 66.5 and 24.1% of patients, respectively. The most common AE reported was neutropenia (33.47% of patients). The frequent non-hematological AEs included fever (4.98%), liver function tests abnormality (3.49%), and nausea (3.39%). Neuropathy occurred in 5.39%, with no grade 3/4 severity. Grade 3/4 SAEs leading to discontinuation occurred in 3.99% of patients. **Conclusions**: Eribulin demonstrated clinical effectiveness and a favorable safety profile in patients with MBC under the approved indication in real-world clinical practice. No new safety concerns or signals have been identified compared to the pivotal studies of eribulin.					
Eribulin versus S-1 as first or second-line chemotherapy to assess health-related quality of life and overall survival in HER2-negative metastatic breast cancer (RESQ study): a non-inferiority, randomised, controlled, open-label, phase 3 trial	**Background**: Eribulin prolongs overall survival (OS) of patients with human epidermal growth factor receptor 2 (HER2)-negative metastatic breast cancer (MBC), particularly in later chemotherapy (ChT) treatment. However, the health-related quality of life (HRQoL) and efficacy of first or second-line therapy in eribulin-treated patients remain unknown. Using eribulin in the first- or second-	Randomised, controlled, open-label, phase III trial; QoL; monotherapy	Japan	HER2-	EORTC- QLQ-C30; OS	The time of the first clinical deterioration was similar between the two groups and OS significantly increased in eribulin-

Takahashi et al. eClinicalMedicine 74 Elsevier Ltd. (Aug 2024) http://dx.doi.org/10.1016/j.eclinm.2024.102715	line may demonstrate the noninferiority of HRQoL compared to S-1, an oral 5-fluorouracil derivative, while maintaining OS. **Methods**: This randomised, controlled, open-label, phase III trial was conducted at 50 hospitals in Japan. Patients were enrolled from June 2016 and October 2019. Patients with HER2-negative MBC once under or no previous ChT were randomly assigned (1:1) to receive eribulin or S-1. HRQoL was assessed using the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire-Core 30 (QLQ-C30) every six weeks until week 24 and every nine weeks until week 42. The primary endpoint was the deterioration defined as more than 10 points worsening of the general health score of QLQ-C30 or death within one year after randomisation. The secondary endpoints included OS. (Trial ID: UMIN000021398). **Findings**: Three hundred and two patients were enrolled, with 152 and 148 assigned to the eribulin and S-1 groups, respectively. The questionnaire compliance rate was 85.6%. Risk					treated patients.

	difference of global health status deterioration through one year was −0.66% (95% CI: −12.47–11.16; non-inferiority P = 0.077) for eribulin compared to S-1 groups. Median time to first deterioration for global health status score was 5.64 (95% CI: 3.51–8.00) and 5.28 months (95% CI: 3.28–7.80) in the eribulin and S-1 groups, respectively. The median OS was 34.7 and 27.8 months, (HR: 0.72, 95% CI: 0.54–0.96; P = 0.026); the median progression-free survival was 7.57 and 6.75 months in the eribulin and S-1 groups, (HR: 0.88, 95% CI: 0.67–1.16; P = 0.35), respectively. No new adverse events occurred. **Interpretation**: The time of the first clinical deterioration was similar between the two groups and OS significantly increased in eribulin-treated patients.					
Clinical outcomes of patients with metastatic breast cancer treated with eribulin: A realworld evidence study from China Yan et al.	**Background**: Eribulin is a novel synthetic analog of halichondrin B that acts as a microtubule inhibitor and inhibits the G2-M growth phase. Eribulin was approved for metastatic breast cancer (MBC) based on the landmark phase 3 EMBRACE trial (Cortes et al, Lancet 2011; NCT00388726); however, only a small	Real world evidence; Mono- and combo-therapy; 1st-5th line;	China	HER2+, TNBC, HR+	PFS; tumour response; ORR	Eribulin was effective in Chinese patients with MBC with a range of prior lines of chemotherapy, supporting

Journal of Clinical Oncology, suppl. Supplement 41.16: e13126. Lippincott Williams and Wilkins. (Jun 2023) https://doi.org/10.1200/JCO.2023.41.16_suppl.e13126	number of Asian patients were included in that trial. Therefore, in this real-world study, we retrospectively assessed the clinical outcomes of Chinese patients with MBC who received eribulin. **Methods**: Adult patients with MBC who received eribulin as several lines of therapy were retrospectively analyzed. Socio-demographic, clinical, pathology, imaging, and therapy records were reviewed. Progression-free survival (PFS) and tumor response were evaluated. **Results**: A total of 85 patients were included. The median age was 45 years (range, 21-63). Eribulin was used as a first, second, third, and fourth or more chemotherapy agent in 13 (15.3%), 16 (18.8%), 11 (12.9%) and 45 (52.9%) of patients with MBC, respectively. Eribulin was monotherapy in 32.9% of patients; eribulin plus anti- HER2 targeted therapy was used in 9.4% of patients; eribulin plus immunotherapy was used in 5.9% of patients; eribulin plus other chemotherapy was used in 36.5% of patients, and eribulin plus antiangiogenic therapy was used in 9.4% of patients. The objective response rate (ORR) was 28.2%					the use of eribulin in the treatment of Chinese patients with MBC.

	overall. By number of lines of therapy, the first-line ORR was 38.5% and the second-line ORR was 37.5%. On subgroup analysis, ORR of patients with liver metastasis and lung metastasis was 43.9% and 38.6 %, respectively. By molecular classification, the ORR of patients with HR+/HER22 disease was 66.7%; among patients with HER2+ disease, 32.6%; and among patients with triple-negative BC, 13.3%. The 6-month PFS rate was 33.6% overall. By number of lines of therapy, the 6-month PFS rate among patients who received eribulin as first-line treatment was 67.7% and among patients who received eribulin as second-line treatment, 38.3%. Among patients who received eribulin monotherapy, the 6- month PFS rate was 21.4%and among patients who received eribulin combination therapy, 41.2%. No adverse reactions related to neutrophils were reported. **Conclusions**: This realworld retrospective study suggests that eribulin was effective in Chinese patients with MBC with a range of prior lines of chemotherapy, supporting the use of eribulin in the					

	treatment of Chinese patients with MBC.					
Effectiveness, safety, and impact on quality of life of eribulin-based therapy in heavily pretreated patients with metastatic breast cancer: A real-world analysis Gui et al. Cancer Medicine 12.16: 16793-16804. John Wiley and Sons Inc. (Aug 2023) https://doi.org/10.1002/cam4.6301	**Introduction**: Eribulin is currently recommended for the treatment of patients with metastatic breast cancer (MBC) pre-treated with taxanes and anthracyclines. The aim of the present study was to evaluate the effectiveness and safety of eribulin and its impact on health-related quality of life in heavily pre-treated patients with MBC. **Methods**: Data from MBC patients who had received eribulin-based therapy at Beijing Cancer Hospital between January 2020 and July 2022 were analyzed retrospectively. Progression-free survival (PFS), overall survival (OS), objective response rate (ORR), disease control rate (DCR), adverse effects (AEs) and health-related quality of life (HRQoL) were assessed. **Results**: Data from 118 patients who had received eribulin to treat MBC were included. Median PFS was 4.2 months and median OS had not been reached. The ORR was 13.6% (16/118) and DCR was 75.4% (89/118). The median PFS in patients who received eribulin in second-line (26/118), third-line (29/118), or fourth-line or later	Real world evidence; Effectiveness and safety of eribulin and its impact on health-related quality of life in heavily pre-treated patients with MBC.	China	Not stated; "MBC"	PFS, OS, ORR, DCR, AE, HRQoL	Eribulin-based therapy is an effective treatment option and well tolerated for heavily pre-treated patients with MBC. Eribulin combination therapy might improve PFS and HRQoL compared with eribulin monotherapy.

	(63/118) was 4.5, 4.2, and 3.9 months, respectively. The median OS in patients who received eribulin in third- or later line (n = 92) was 14.1 months. Patients who received eribulin combination therapy had a significantly longer median PFS compared with those who received eribulin monotherapy (4.5 vs. 3.4 months, p = 0.007) and there was a trend towards a longer median OS (not reached vs. 12.1 months). The most common grade 3–4 adverse events were neutropenia (22.9%), leukocytopenia (13.6%) and asthenia/fatigue (8.5%), without significant differences in safety between eribulin monotherapy and combination therapy. Quality of life was similar in patients who received eribulin monotherapy and combination therapy, except for cognitive function and nausea and vomiting symptoms, which were better with combination therapy. **Conclusions**: The present study suggests that eribulin-based therapy is an effective treatment option and well tolerated for heavily pre-treated patients with MBC. Eribulin combination therapy might improve					

	PFS and HRQoL compared with eribulin monotherapy.					
Retrospective analysis on therapeutic efficacy and predictive indicators of eribulin plus anti angiogenic drugs for metastatic breast cancer Zhang et al. Cancer Research, suppl. Supplement 84.9 American Association for Cancer Research Inc. (May 2024) https://doi.org/10.1158/1538-7445.SABCS23-PO2-05-12	**Background**: Eribulin has been widely used for the treatment of metastatic breast cancer (MBC). It has been found that eribulin can work in synergy with Bevacizumab or Anlotinib to achieve antiangiogenic effects and possible synergistic enhancement. To optimize the efficacy of eribulin usage in late-line MBC patients, it is essential to delve deeper into the effects of combined treatments and gather more real-world clinical outcomes. Therefore, we evaluated the efficacy and safety of eribulin plus the anti-angiogenic drugs in late-line MBC patients. Objective: This study aims to retrospectively analyze the therapeutic efficacy and safety of eribulin plus antiangiogenic drugs in treating metastatic breast cancer and explore predictive indicators of the therapeutic efficacy of eribulin in treating MBC. **Methods**: A retrospective review study was performed. 40 Patients diagnosed with MBC and treated with eribulin in Xi'an international medical center hospital from May 2020 to May 2021	Real world evidence; safety and efficacy of eribulin plus anti-angiogenic drugs in late-line MBC cf. mono- therapy.	China	Not stated; various subtypes	PFS	Eribulin plus antiangiogenic drugs may act as a potential therapy for late-line MBC patients with clinically beneficial therapeutic effects.

	were enrolled in this study. Patients were evaluable for this study and divided into two groups based on whether they received eribulin monotherapy or combined therapy. 22 patients were treated with eribulin monotherapy, and 18 were treated with eribulin and anti-angiogenic drugs (Bevacizumab and Anlotinib). Patients' treatment parameters and characteristics were recorded. The Kaplan-Meier method was used to calculate the median PFS and corresponding 95% confidence interval (CI), and the Cox regression model was used for multivariate analysis of predictive indicators. The Fisher exact probability test was used to compare the difference in adverse reactions between the two groups, with a level of significance set at p-value <0.05. **Results**: All study patients have an average of 5 treatment lines and a median progression-free survival (mPFS) of 4.2 months. The eribulin plus anti-angiogenic drug treatment group had a significantly prolonged mPFS compared to the group without anti-angiogenic drug treatment (7.0 months vs 2.0 months, p <0.001, log-					

	rank). Multivariate analysis identified that the combination of anti-angiogenic therapy (HR = 0.043, p = 0.004) and the occurrence of grade 3-4 neutropenia after treatment were two predictive factors for longer PFS (HR = 0.322, p = 0.009). In contrast, prior resistance to taxanes was predictive of shorter PFS (HR = 4.583, p = 0.019). Other factors, including age, Eastern Cooperative Oncology Group (ECOG) performance status, hormone receptor (HR) type, expression status, human epidermal growth factor receptor-2 (HER-2) expression status, Ki-67 level, number of metastatic lesions, and number of prior lines of Eribulin therapy, were not significantly associated with PFS. The results of Fisher's exact test show that there was no significant increase in treatment-related adverse events (all grades) after combination with anti-angiogenic drugs. **Conclusion**: A combination of eribulin and anti-angiogenic therapy has significantly prolonged mPFS in the treatment of MBC patients. Other factors such as prior non-taxane resistance, grade 3-4 neutropenia occurrence					

	after treatment, and combined antiangiogenic therapy can be used as biomarkers for predicting treatment efficacy. The adverse events are manageable and the safety of combined therapy can be guaranteed. Therefore, the eribulin plus antiangiogenic combination may act as a potential therapy for late-line MBC patients with clinically beneficial therapeutic effects.					
Eribulin Treatment for Patients with Metastatic Breast Cancer: The UK Experience - A Multicenter Retrospective Study Jafri et al. Oncology (Switzerland) 100.12: 666-673. S. Karger AG. (Dec 1, 2022) https://doi.org/10.1159/000526140	**Introduction**: This study examined real-world data from patients who received eribulin for metastatic breast cancer (MBC) collected from 14 hospitals across the UK. **Methods**: Anonymized data were collected retrospectively from patients with MBC who had received eribulin. The data included the hormonereceptor status, histological diagnosis, age, prior chemotherapy, response to eribulin, progression-free survival (PFS), and overall survival (OS). **Results**: Among 577 patients analyzed, the median age was 56 years, and most patients (73%) were estrogen-receptor positive. The median OS was 288 days (95% confidence interval	Real world evidence;	UK	All subtypes	PFS, OS	Eribulin can be successfully used in older patients with MBC. Eribulin treatment was more effective in earlier-line settings, which, while predictable, supports consideration of eribulin as a second-line treatment option.

	[CI]: 261-315), and the PFS was 117 days (95% CI: 105-129). The median OS was higher among older patients (≥65 vs. <65 years: 325 days [95% CI: 264-385] vs. 285 days [95% CI: 252-317]; p = 0.028). The median OS was also higher in patients who received eribulin after fewer prior lines of chemotherapy (≤2 vs. >2 prior: 328 days [95% CI: 264-385] vs. 264 days [95% CI: 229-298]; p = 0.042). **Discussion/Conclusion**: These retrospective data suggest that eribulin can be successfully used in older patients with MBC. Eribulin treatment was more effective in earlier-line settings, which, while predictable, supports consideration of eribulin as a second-line treatment option.					
Clinical outcomes of patients with HR-positive advanced breast cancer treated with eribulin: A retrospective multicenter study from China Li et al. Journal of Clinical Oncology, suppl. Supplement 42.16	**Background**: Approximately 75% of patients with metastatic breast cancer are hormone receptor positive (HR+)/ human epidermal growth factor receptor 2 negative (HER2-) and are treated with endocrine therapy based on subtype. However, the high rate of resistance to endocrine therapy requires switching to new approaches, including chemotherapy. Eribulin is a novel synthetic analog of	Real world evidence; Mono- and combo-therapy; 2nd – 5th line tmts;	China	HR+/HER2-	ORR, DCR, PFS	This retrospective study suggests that eribulin was effective in HR+ Chinese patients with ABC. The front-line and combined

Lippincott Williams and Wilkins. (Jun 2024)	halichondrin B that acts as a non-taxane microtubule dynamics inhibitor and inhibits the G2-M growth phase. In this study, we retrospectively assessed the clinical outcomes of Chinese patients with HR+ advanced breast cancer (ABC) who received eribulin. **Methods**: The study included 62 patients with HR+/HER2- ABC in three Chinese institutions between August 2019 and August 2023. Socio-demographic, clinical, pathology, imaging, and therapy records were reviewed. Progression-free survival (PFS) and tumor response were evaluated. **Results**: A total of 62 patients were included. The median age was 50.0 years. Eribulin was used as a second, third, fourth and fifth or more therapy agent in 4 (6.5%), 23 (37.1%), 15 (24.2%) and 20 (32.3%) of ABC patients, respectively. 54.8% of the patients had previously used CDK4/6 inhibitors. Eribulin monotherapy and eribulin-based combination therapy were 59.7% and 40.3% of patients. The objective response rate (ORR) and disease control rate (DCR) were 21.0% (13/62) and 88.7% (55/62) overall. By number of lines of therapy,					therapy of eribulin in HR+ ABC need further exploration.

	the less than or equal third line ORR was 33.3% and the greater than third line ORR was 11.4% (p = 0.0577). The median progression-free survival (mPFS) of total population was 5.2 months (95% CI: 4.1-5.8). The mPFS was 6.1 and 4.1 months in the eribulin-based combination therapy group and eribulin monotherapy group (p = 0.0219), respectively. By number of lines of therapy, the mPFS was 5.8 and 4.1 months in the less than or equal third line and greater than third line treatment (p = 0.05), respectively. Whether CDK4/6i had been used in these ABC patients had no effect on PFS, which was 5.0 and 5.5 months, respectively. **Conclusions**: This retrospective study suggests that eribulin was effective in HR+ Chinese patients with ABC. The front-line and combined therapy of eribulin in HR+ ABC need further exploration.					
Eribulin plus carboplatin combination for HER2-negative metastatic breast cancer: a multicenter, real world cohort study Ni et al.	**Background**: Pre-clinical data suggests a potential synergistic effect of eribulin and platinum. However, clinical data on the combination for metastatic breast cancer (mBC) is lacking. We evaluated the	Real world evidence; Combo-therapy with carboplatin;	China	TNBC, HR+/HER2-	ORR, OS, DCR, PFS, AE	Eribulin plus carboplatin demonstrated favorable efficacy and tolerability in patients with heavily pre-

BMC Cancer 24.1 BioMed Central Ltd. (Dec 2024) http://dx.doi.org/10.1186/s12885-024-12953-9	efficacy and safety of eribulin plus carboplatin (ErCb) in patients with mBC. **Patients and methods:** This multicenter, real-world cohort study included patients with pre-treated metastatic triple negative breast cancer (TNBC) or endocrine-refractory hormone receptor (HR) positive, HER2-negative mBC who received ErCb. Eribulin (1.4 mg/m2) and carboplatin (target AUC = 2) were administered intravenously on day 1 and 8 of 21- day cycle. Objective response rate (ORR), disease control rate (DCR), progression-free survival (PFS), overall survival (OS), and adverse events (AEs) were evaluated. **Results**: From March 2022 to December 2023, a cohort of 37 patients were recruited to the study. Among them, 22 patients have TNBC and 15 have HR + HER2 − mBC. Of the 22 patients with TNBC, 8 had an initial diagnosis of the HR + HER2 − subtype. The median treatment was 6 cycles (range, 2 − 8 cycles). In the full cohort, TNBC, and HR + HER2 − subgroup, the ORR were 51.4%, 54.5% and 46.7%, the DCR were 81.1%, 81.8% and 80%, and the median PFS were 5 months, 5 months, and 5.2 months, respectively.					treated mBC, especially TNBC.

	The median OS was 12.7 months in the entire cohort and 12.8 months in TNBC subgroup. The most common grade 3/4 hematological AEs were neutropenia (37.8%), leukopenia (35.1%), febrile neutropenia (10.8%), thrombocytopenia (5.4%), and anemia (2.7%). No grade 3/4 non-hematological AEs were observed. **Conclusion**: ErCb demonstrated favorable efficacy and tolerability in patients with heavily pre-treated mBC, especially TNBC. The findings of the current study warrant further investigation of the application of this combination in earlier lines of mBC treatment.					
Early Real-World Treatment Patterns and Clinical Outcomes in Patients with Metastatic Breast Cancer Treated with Eribulin After Prior Immuno-Oncology or Antibody–Drug Conjugate Therapy Goyal et al.	**Introduction**: Eribulin was approved by the FDA in 2010 for the treatment of metastatic breast cancer (MBC) in the United States (US). More recently, several immuno-oncology (IO) and antibody–drug conjugate (ADC) regimens have been approved for MBC. We assessed the treatment patterns and clinical outcomes in MBC patients treated with eribulin following treatment with an IO or ADC in US clinical practice. **Materials and Methods**: In a retrospective patient	Real world evidence; eribulin following IO or ADC	USA	TNBC and others	PFS, OS	These real-world data provide evidence for the clinical effectiveness outcomes of eribulin treatment among MBC patients previously

Breast Cancer: Targets and Therapy 15 : 855-865. Dove Medical Press Ltd. (2023) http://dx.doi.org/10.2147/BCTT.S422025	medical chart review study, patients with MBC, aged ≥18 years, who initiated eribulin therapy between March 1, 2019, and September 30, 2020, treated with either prior IO or ADC in the metastatic setting were included. Patient demographics, treatment characteristics, and clinical outcomes were analyzed descriptively. Real-world progression-free survival (rwPFS) and overall survival (OS) were estimated using Kaplan–Meier analyses. **Results**: In the study population (N=143), median age at eribulin initiation was 62 years; 64% were Caucasian, and 67% had triple-negative MBC (TNBC). Eribulin therapy was used in the second to fifth line of therapy in the metastatic setting; median treatment duration was 7.2 months. The overall response rate for eribulin was 59.4%. Median rwPFS and OS from eribulin initiation were 21.4 months (95% CI, 12.9-not estimable [NE]) and 24.2 months (95% CI, 17.5-NE), respectively. In patients with TNBC, median rwPFS and OS from eribulin initiation were 12.0 months (95% CI, 8.8-NE) and 18.3 months (95% CI, 14.9-NE),					treated with an IO or ADC.

	respectively. **Conclusion**: These real-world data provide evidence for the clinical effectiveness outcomes of eribulin treatment among MBC patients previously treated with an IO or ADC.					
Real-world treatment patterns and clinical outcomes in patients treated with eribulin after prior phosphoinositide 3-Kinase inhibitor treatment for metastatic breast cancer Goyal et al. Breast Cancer Research and Treatment 205.1: 201-210. Springer. (May 2024) http://dx.doi.org/10.1007/s10549-023-07080-1	**Purpose**: In 2010, the US Food and Drug Administration approved eribulin for the treatment of metastatic breast cancer (MBC). Since then, the treatment landscape has evolved with many new therapy classes, a more recent one being the small molecule inhibitors of phosphoinositide 3 kinase (PI3K). We sought to characterize the treatment patterns and clinical outcomes of patients with MBC who received eribulin following prior treatment with a PI3K inhibitor. **Methods**: A retrospective cohort study based on medical record review included MBC patients who initiated eribulin between March 2019 and September 2020 following prior treatment with a PI3K inhibitor was conducted. Patient demographics, treatment characteristics, and clinical outcomes were analyzed descriptively. Real-world progression-free survival (rwPFS) and overall survival (OS) were estimated from the	Real world evidence; eribulin after PI3K inhibitor tmt	USA	HR+/HER2- and others	PFS, OS	Our real-world study suggests that eribulin may be a potential treatment option for MBC patients who fail a prior PI3K inhibitor.

	initiation of eribulin therapy using Kaplan-Meier analyses. **Results**: 82 eligible patients were included. Patients' median age at eribulin initiation was 62 years; 86.5% had hormone receptor–positive, human epidermal growth factor receptor 2–negative tumors. Eribulin was most often administered in the second or third line (82.9%) in the metastatic setting. Best overall response on eribulin was reported as complete or partial response in 72% of the patients. The median rwPFS was 18.9 months (95% confidence interval [CI], 12.4-not estimable); median OS was not reached. The estimated rwPFS and OS rates at 12 months were 63.3% (95% CI, 50.5–73.7) and 82.6% (95% CI, 72.4–89.3), respectively. **Conclusion**: Our real-world study suggests that eribulin may be a potential treatment option for MBC patients who fail a prior PI3K inhibitor.					
Survival and safety analysis of eribulin in Indian patients with metastatic breast cancer: A real world clinical experience	**Background**: Eribulin is a synthetic non-taxane anti-microtubule agent approved in India for the second line of treatment of locally advanced or metastatic breast cancer. Eribulin has shown to improve overall survival (OS)	Real world evidence; clinical outcomes of eribulin in	India	Various subtypes	PFS, OS, tumour response, safety	This study confirms that Eribulin is effective and has

Goyal et al. Journal of Clinical Oncology, suppl. Supplement 42.16 Lippincott Williams and Wilkins. (Jun 2024)	in various subgroups of patients with metastatic breast cancer (MBC) who were pretreated with an anthracycline and taxane. However, efficacy and safety data for eribulin in Indian patients with MBC is limited. Therefore, this real world study assessed the clinical outcomes of eribulin in heavily pre-treated MBC Indian females. **Methods**: Histologically confirmed adult MBC patients who received eribulin over several lines of therapy were retrospectively analysed. Socio-demographic, clinical, pathology, imaging, and therapy records were reviewed. The progression-free survival (PFS), overall survival (OS), tumor response and safety were evaluated. **Results**: A total of 189 patients were included and out of these patients 145 patients were analysed. The median age of patients was 52 years (range: 28-71). Eribulin was used as a 2nd, 3rd, 4th and ≥ 5th line chemotherapy agent in 17 (11.72%), 27 (18.62%), 44 (30.34%) and 57(39.31%) of MBC patients, respectively. In the overall population, the objective response rate (ORR) was 7.58%, while the clinical benefit rate	heavily pre-treated MBC Indian females.				manageable toxicity in patients with MBC. It should be considered as the strategy of several chemotherap y lines in MBC.

	(CBR) was 15.48%. The median PFS and OS were 3.86 (95% CI: 3.18-4.54) and 11.56 (95% CI: 8.72-14.40) months respectively. There was positive correlation between the number of eribulin cycles and the outcomes of survival, with patients getting more than 3 cycles having significantly superior OS and PFS. On subgroup analysis, there was no significant difference in the outcomes of survival on the basis of hormone receptor and her-2 status, however the patients who had more than 3 metastatic sites had significantly lower survival outcomes. The anthracycline and taxane refractory (progression within 6 months after their last anthracycline/taxane dose) patients had significantly ($p<0.001$) lower median PFS as compared to anthracycline and taxane sensitive patients (2.96 months vs 5.23 months) and (2.86 months vs 4.46 months) respectively. Among the grade ≥3 toxicities, neutropenia was 26.21%, anemia was 13.10%, thrombocytopenia was 6.21% and mucositis was 8.97%. The grade ≥2 peripheral neuropathy was seen in					

	28.97% patients and 21.38% patients had gastrointestinal symptoms. **Conclusions**: This study confirms that Eribulin is effective and has manageable toxicity in patients with MBC. It should be considered as the strategy of several chemotherapy lines in MBC.					
Does the Timing of Eribulin Treatment for Advanced or Metastatic Breast Cancer Matter? Evidence from a Real-World Setting Chen et al. Chemotherapy 68.1: 23-34. S. Karger AG. (Jan 1, 2023) https://doi.org/10.1159/000526490	**Background**: This study aimed to examine the effectiveness and safety of eribulin used as an early-line (EL, i.e., first-/second-line) versus late-line (LL, i.e., third-line and beyond) chemotherapy for recurrent advanced or metastatic breast cancer (A/MBC) patients. **Methods**: This study conducted a retrospective observation of A/MBC patients initiating eribulin between January 1, 2015, and June 30, 2019, using medical database at a university-affiliated teaching hospital in Taiwan. Patients were assigned into either the EL or LL group based on the timing of respective eribulin treatments and were observed for at least 6 months up to December 2019 for progression-free survival (PFS), time to treatment failure (TTF), overall	Real world evidence; 1st/2nd-line vs later line eribulin tmt	China	Not stated; MBC	PFS, TTF,	Early line eribulin was effective for MBC patients with known toxicities, while later line eribulin results were consistent with previous reports.

	survival (OS), disease response, and occurrence of adverse events. The Kaplan-Meier and Cox proportional hazard regression survival analyses were performed. **Results**: Of 127 patients, 23.6% (n = 30) and 76.4% (n = 97) were assigned to the EL and LL groups, respectively, between which no difference in patient characteristics was noted. Median PFS and TTF were 6.5 months and 5.0 months for the EL and 4.2 months and 3.4 months for the LL, respectively. Median OS could not be estimated in the EL group and was 20.5 months in the LL group. Eribulin as an EL treatment was the only factor associated with longer TTF and OS, whereas the number of metastatic sites was additionally associated with PFS in the multivariate analysis. No complete response was reported in either group, but a partial response was obtained in 6.7% in the EL group and 3.1% in the LL group. The common adverse events between two groups were similar, including leukopenia (80.0%), neutropenia (76.7%), and anemia (60.0%). **Conclusions**: The eribulin used as an					

	EL of chemotherapy was effective for A/MBC patients with known toxicities in this study, while eribulin as the LL chemotherapy showed consistent results with previous reports.					
Efficacy and safety of eribulin plus gemcitabine in second-line or beyond for patients with HER2-negative metastatic breast cancer (MBC): A multicenter, open-label, single-arm, phase II study Peng et al. Journal of Clinical Oncology, suppl. Supplement 42.16 Lippincott Williams and Wilkins. (Jun 2024)	**Background**: The combination of eribulin and gemcitabine has demonstrated a similar progression-free survival (PFS) benefit as paclitaxel plus gemcitabine, with less neurotoxicity, for patients with MBC who have not received prior cytotoxic chemotherapy. However, the effect of eribulin plus gemcitabine on PFS in second line or beyond remains unclear. **Methods**: This open-label, single-arm, phase II study (NCT05263882) was conducted at 14 institutions in China. Eligible patients had histologically confirmed HER2-negative MBC and had received at least one prior taxane-containing chemotherapy regimen for advanced disease, and anthracycline-containing regimens in the adjuvant setting. Patients received intravenous infusions of eribulin (1.4 mg/m2) and gemcitabine (1.0 g/m2) on days 1 and 8 of a 21-day cycle. Efficacy outcomes, including PFS, objective response rate (ORR), and disease	Open-label, single-arm, phase II study; eribulin plus gemcitabine on PFS in second line	China	HER2- MBC	PFS, ORR, DCR, AE	Eribulin plus gemcitabine was effective in heavily pretreated patients with HER2- MBC, while maintaining a predictable and manageable safety profile.

	control rate (DCR), were assessed using RECIST v1.1. Adverse events (AEs) were graded according to NCI-CTC version 5.0. **Results**: A total of 70 patients were enrolled from November 2021 to October 2023; 47 (71.4%) had HR+HER2- and 18 (28.6%) had triple-negative MBC. The median patient age was 50 years (range: 31-68), and the sites of metastasis were the bone (68.6%), liver (52.9%), lymph nodes (48.6%), lung (44.3%) and brain (10.0%). Patients had received a median of 3 prior lines of systemic treatment, 2 lines of chemotherapy, and 1 line of endocrine treatment. Among all patients, the ORR was 48.6%, the DCR was 92.9% and the median PFS was 7.2 months. For the HR-positive subgroup, the median PFS was 8.4 months, while for the triple-negative subgroup, it was 6.3 months. Among HR+ patients who had received prior CDK4/6 inhibitor treatment, the median PFS was 7.2 months. In the subgroup of HR+ patients who had not received CDK4/6 inhibitor treatment, the median PFS had not been reached. For the HR+ HER2-low subgroup, the median PFS was 8.4					

	months. The most common grade 3-4 AEs were hematological, including neutropenia (38.6%), leukopenia (31.4%), anemia (24.3%), and thrombocytopenia (15.7%). Grade ≥3 perceived AEs were relatively low. **Conclusions**: Eribulin plus gemcitabine was effective in heavily pretreated patients with HER2- MBC, while maintaining a predictable and manageable safety profile.					
Real-world treatment patterns and outcomes in patients with HR+/HER2− metastatic breast cancer treated with chemotherapy in the United States Tolaney et al. ESMO Open 9.9 Elsevier B.V. (Sep 2024) http://dx.doi.org/10.1016/j.esmoop.2024.103691	**Background**: Until recently, treatment options for patients with hormone receptor positive/ human epidermal growth factor 2-negative (HR+/HER2−) metastatic breast cancer (mBC) and resistance to endocrine therapy were limited to chemotherapy. This real-world study describes treatment patterns and outcomes in patients treated with chemotherapy in the United States before approval of antibody–drug conjugates. **Patients and methods**: This retrospective, observational study included adults with HR+/HER2− mBC from the ConcertAI Patient360™ Breast Cancer dataset who initiated their first chemotherapy in the metastatic	Real world evidence before ADCs approved;	USA	HR+/HER2-	OS, PFS	Within the index period, capecitabine was used the most as the first chemotherapy agent and decreased in later treatments, while the use of eribulin increased between first and fourth chemotherapies. This real-world

	setting between January 2011 and June 2021. Treatment patterns were described; real-world overall survival, time to next treatment or death, and real-world progression-free survival were evaluated for all eligible patients and patients treated with subsequent chemotherapy. Index dates were the start date of each chemotherapy treatment. **Results**: Among 1545 eligible patients, 76% were white, 12% had Eastern Cooperative Oncology Group performance status ≥2, 38% had de novo mBC, and median age was 61 years (range, 52-69 years). Within the index period, capecitabine was used the most as the first chemotherapy agent and decreased in later treatments, while the use of eribulin increased between first and fourth chemotherapies. Median (95% confidence interval) real-world overall survival was 23.3 months (21.3-25.4 months) from start of first chemotherapy, time to next treatment or death was 6.5 months (5.9-7.1 months), and real-world progression-free survival was 6.9 months (6.4-7.6 months); median times from second, third, and fourth chemotherapies decreased with each additional					study demonstrates that for patients with HR+/HER2− mBC, chemotherapy provides relatively limited survival benefit which decreases with each additional chemotherapy line, and highlights the need for improved treatment options.

	chemotherapy treatment. **Conclusions**: This real-world study demonstrates that for patients with HR+/HER2− mBC, chemotherapy provides relatively limited survival benefit which decreases with each additional chemotherapy line, and highlights the need for improved treatment options.					
Overall survival of eribulin, trastuzumab, and pertuzumab as first-line therapy for patients with HER2-positive metastatic breast cancer: A phase II, single-arm clinical trial Inoue et al. Annals of Oncology, suppl. Supplement 4 34 : S1492. Elsevier Ltd. (Nov 2023)	**Background**: The efficacy and safety of the three-drug combination of eribulin (E), trastuzumab (T), and pertuzumab (P) in patients with HER2-positive metastatic breast cancer (MBC) as first-line treatment was reported. The overall response rate (complete response [CR] + partial response [PR]) was 80.0% (95% confidence interval [CI], 59.3–93.2%), and the clinical benefit rate (CR + PR + stable disease ≥24 weeks; CBR) was 84.0% (95% CI, 63.9–95.5%). Median time to treatment failure with E was 9.1 months (95% CI, 4.3–13.9 months), and median progression-free survival was 23.1 months (95% CI, 14.4–31.8 months). The most common treatment-emergent adverse events (TEAEs) were alopecia (92.0%), fatigue (68.0%), and sensory peripheral	Phase 2; efficacy and safety of the three-drug combination of eribulin (E), trastuzumab (T), and pertuzumab (P) in patients with HER2-positive metastatic breast cancer (MBC) as first-line treatment	Japan	HER2+	ORR, PFS, TTF, TEAEs	ETP therapy showed acceptable efficacy and overall survival as first-line therapy for patients with HER2-positive Japanese MBC.

	neuropathy (60.0%). Grade 3/4 TEAEs occurred in 11 patients (44.0%). The only grade 4 TEAE was neutrophil count decreased (16.0%). Neither grade 4 peripheral neuropathy nor febrile neutropenia occurred (Inoue K et al Investigational New Drugs 2019; 180:135–46). We report the overall survival results and the efficacy of post-ETP treatments at 5.5 years after the last enrollment. **Methods**: E 1.4 mg/m2 (days 1 and 8), T 8 mg/kg over 90 min and 6 mg/kg over 30 min, and P 840 mg/body over 60 min and 420 mg/body over 30 min were administered intravenously in 21-day cycles. **Results**: From April 2016 to November 2017, 25 women received ETP therapy and 12 of the 25 survived with a median OS of 78.4 months, 95% CI 26.4-NA months. Subset analysis by log-rank test showed a significant difference (P=0.0114) and hazard ratio; 3.063 95% CI 1.002-9.361 in hemoglobulin (≥12 vs. ≤12 mg/dl), but not in estrogen receptor status and neutrophil/lymphocyte ratio (≥2 vs. <2). T-emtansine, capecitabine + TP, T-deruxtecan, and epirubicin + cyclophosphamide were					

	administered after ETP with CBR of 72.2% (13/18 patients), 80.0% (4/5 patients), 66.7% (2/3 patients) and 33.3% (1/3 patients), respectively. **Conclusions**: ETP therapy showed acceptable efficacy and overall survival as first-line therapy for patients with HER2-positive Japanese MBC.					
Eribulin for the treatment of advanced breast cancer: A prospective observational registry study Kenny et al. European Journal of Cancer Care 31.6 Hindawi Limited. (Nov 2022) https://doi.org/10.1111/ecc.13747	**Objective** Eribulin treatment improved overall survival with predictable toxicities in phase 3 trials of patients with previously treated, locally advanced/metastatic breast cancer. This study (NCT02443428) prospectively observed eribulin treated patients in real-world clinical practice. **Methods** This observational multicentre registry study enrolled 76 patients with locally advanced/metastatic breast cancer who had ≤2 prior chemotherapeutic regimens for advanced disease. Eribulin was administered at a 1.23 mg/m2 dose (days 1 and 8 of every 21-day cycle). Adverse events (AEs) were monitored and effectiveness was assessed per local practice.	Real world evidence; safety of later line eribulin	UK	Not stated, various	AEs	Eribulin was well tolerated in real-world clinical practice, comparable to safety and effectiveness reported in other clinical trials.

	Results AEs occurred in 98.7% of patients; 88.2% had eribulin-related AEs. The most common AEs were fatigue (64.5%), alopecia (36.8%), nausea (35.5%) and constipation (30.3%). Serious AEs occurred in 42.1% of patients. The most common grade 3/4 AEs were neutropenia (9.2%), febrile neutropenia (9.2%), dyspnoea (5.3%) and pleural effusion (5.3%). No fatal AEs occurred. Dose reductions occurred in 31.6% of patients, 42.1% experienced dose delays and 9.2% discontinued due to worsening condition. There were complete responses in 2.6% and partial responses in 15.8% of patients. Median time to progression and overall survival were 4.0 and 8.3 months, respectively. **Conclusion** Eribulin was well tolerated in real-world clinical practice, comparable to safety and effectiveness reported in other clinical trials.					
Real-world (rw) outcomes in patients (pts) with hormone receptor-positive and human	Abstract (English): **Background**: Endocrine therapy (ET) combined with CDK4/6 inhibitors (CDK4/6i) is the	Real world evidence; analysis of outcomes after	France/ Germany	HR+/HER2-	OS	HR+/HER2- mBC pts initiating CT in France

epidermal growth factor receptor-2-negative (HR+/HER2-) metastatic breast cancer (mBC) treated with chemotherapy (CT) in France Campone et al. ESMO Open, suppl. Supplement 4 9 Elsevier B.V. (May 2024) http://dx.doi.org/10.1016/j.esmoop.2024.103279	standard of care for HR+/HER2- mBC pts. However, efficacy is limited due to acquired ET resistance, after which treatment options are limited to CT and, more recently, antibody-drug conjugates. This rw study describes patient characteristics, treatment patterns and survival outcomes in HR+/HER2- mBC pts initiating at least first (1st)CT in France and Germany. **Methods**: This is an interim analysis of adults with HR+/HER2- mBC initiating CT (Jan 2016 - Feb 2023) for mBC at the Institut de Cancérologie de l'Ouest in France. Germany data will be assessed in the final analyses. Demographics, clinical characteristics, and treatments were described using descriptive statistics. Kaplan-Meier method was used to describe rw overall survival (OS) for 1st to 4th CT line, separately, from each line start. **Results**: 339 pts were analysed: 99% were female, 28% had de novo mBC, with median age of 62 years at 1st CT. Prior to 1st CT start, 43% received CDK4/6i and 52% ET for mBC. 61%, 39% and 24% had records of subsequent second, 3rd and 4th CT line, respectively. Most pts received	first CT (taxanes, eribulin or anthrocyclines) for MBC, after endocrine therapy and/or CDK4/6i				showed poor survival, decreasing with each subsequent CT line. There is still a high unmet need for improved treatment options in this population.

	CT as monotherapy: paclitaxel and capecitabine were the most used agents followed by eribulin and cyclophosphamide. Median rwOS was 19.9, 12.3, 8.1 and 7.2 months (mo) from 1st, 2nd, 3rd and 4th CT line, respectively (Table). [Formula presented] **Conclusions**: HR+/HER2- mBC pts initiating CT in France showed poor survival, decreasing with each subsequent CT line. There is still a high unmet need for improved treatment options in this population.					
Post progression treatments after endocrine therapy (ET) plus palbociclib in patients with HR+/HER2- metastatic breast cancer (MBC): A prospective, real-world study Palumbo et al. Annals of Oncology, suppl. Supplement 2 34 : S372. Elsevier Ltd. (Oct 2023)	**Background**: The association of ET and CDK 4/6 inhibitors (CDK 4/6i) is the gold standard of treatment in women with HR+/HER2- MBC. The optimal therapeutic strategy after CDK 4/6i progression is still a matter of debate. The present study aimed to evaluate the benefit of the different treatments adopted in a real-world context. **Methods**: In this prospective study we included women with HR+/HER2- MBC progressing to ET plus palbociclib (P). Either ET or chemotherapy (CT) were prescribed taking into account:1) site and burden of disease (visceral/plurimetastatic vs bone only/oligometastatic); 2) median PFS1 (<4 months vs ≥4 months); 3)	Real world evidence; various CT tmts incldg eribulin, after failure on CDK4/6i	Italy	HR+/HER2-	PFS, clinical benefit rate, deteminants of physician's choice	Treatments beyond ET plus P failure provided limited but comparable clinical benefit. The physician's choice was clearly driven by visceral burden of disease,

	tolerability profile; 4) patient's preferences. Primary objective was median progression-free survival 2 (PFS2). Secondary aims: analysis of the determinants of physician's choice, clinical benefit rate (CBR), impact of neutrophil-to lymphocyte ratio (NLR), monocyte-to lymphocyte ratio (MLR), platelet-to lymphocyte ratio (PLR) and body mass index (BMI) on PFS2. **Results**: From May 2017 to October 2021, 78 pre- and postmenopausal patients were enrolled and 56 were evaluable for the final analysis: 18 had received ET plus P as 1st line, 38 in ≥2nd line; 22 patients were excluded because they were still on therapy at the time of the last follow-up. At progression 15 patients (26.7%) received ET (everolimus+exemestane 8, fulvestrant 7) and 41 (73.2%) were treated with CT (eribulin, capecitabine, nab-paclitaxel, vinorelbine). In the whole population mPFS1 was 17.5 months; mPFS2 was 5 months in the overall cohort (95% CI = 4-48 months) with a significant difference between ET and CT (10 months vs 5 months, p=0.035); CBR					

	was 50% and 55.2%, in ET and CT, respectively. At multivariate analysis CT prescription was associated to a higher visceral burden and a shorter mPFS1. Elevated NLR and PLR were correlated with worse PFS2 in both treatment groups, while no impact of MLR and BMI was observed. **Conclusions**: In this real life experience, treatments beyond ET plus P failure provided limited but comparable clinical benefit. The physician's choice was clearly driven by visceral burden of disease; the inflammatory status seems to have a detrimental effect on PFS2.					
Trastuzumab duocarmazine versus physician's choice therapy in pre-treated HER2-positive metastatic breast cancer: Final results of the phase III TULIP trial Aftimos et al. Annals of Oncology, suppl. Supplement 2 34 :	**Background**: Trastuzumab duocarmazine (T-Duo, SYD985) is a HER2-targeting antibodydrug conjugate comprised of trastuzumab bound to the DNA alkylating agent duocarmazine with a drugantibody ratio of 2.4 to 2.8. TULIP is a randomized, international, multicenter, phase 3 study in patients with pretreated HER2-positive metastatic breast cancer (MBC). The initial analysis of the primary endpoint progression	TULIP is a randomized, international, multicenter, phase 3 study in patients with pretreated HER2-positive metastatic breast cancer; Eribulin included in	USA, Brussels, Canada, Denmark, France, Italy, Netherlands, Singapore,	HER2+	PFS	T-Duo showed a meaningful and statistically significant improvement in PFS in patients with pre-treated HER2-positive MBC. The final OS

S340-S341. Elsevier Ltd. (Oct 2023)	free survival (PFS) showed a clinically meaningful and statistically significant difference in favor of T-Duo versus physician's choice (PC) (Saura et al., ESMO 2021). At that time, preliminary overall survival (OS) data were reported. Final OS and updated secondary outcomes are reported here. **Methods**: The TULIP trial randomly assigned patients with HER2-positive locally advanced or MBC with ≥2 previous HER2-targeting MBC regimens or pretreated with T-DM1, in a 2:1 ratio between T-Duo (1.2 mg/kg q3w) and PC. PC could be either trastuzumab combined with capecitabine or vinorelbine or eribulin or lapatinib plus capecitabine. The primary endpoint was PFS by blinded, independent, central review. Key secondary endpoints are PFS by investigator, OS, overall response rate, QoL, duration of response and safety. **Results**: A total of 291 patients were randomized to the T-Duo group and 146 to the PC group. At the data cut off, the median follow-up of the T-Duo and PC groups were 35.6 months and 32.0 months, respectively. Median OS was 21.0 months in the T-Duo group	comparison arm	Spain, Sweden, UK			results confirm a trend towards a numerically prolonged OS (statistically non-significant) in the T-Duo group compared with PC group.

	and 19.5 months in the PC group. The hazard ratio was 0.87 (95% CI 0.68, 1.12) p=0.236. The 1-year survival estimate was 70% in the T-Duo group and 68% in the PC group. The primary endpoint PFS (7.0 vs 4.9 months, HR 0.63, p=0.002) and other secondary efficacy outcomes did not change in this analysis compared to the initial analysis. No new safety findings were observed with longer follow-up. **Conclusions**: T-Duo showed a meaningful and statistically significant improvement in PFS in patients with pre-treated HER2-positive MBC. The final OS results confirm a trend towards a numerically prolonged OS (statistically non-significant) in the T-Duo group compared with PC group. Safety was aligned with the primary analysis, with no new signals identified. Clinical trial identification: NCT03262935					
Feasibility and tolerability of eribulin-based chemotherapy versus other chemotherapy regimens for patients with metastatic triple-negative	**Background**: Patients with Triple-negative breast cancer (TNBC) face a poor prognosis and limited therapeutic options. Current data on eribulin usage to treat TNBC is scarce. Therefore, we sought to compare the feasibility and tolerability of eribulin-	Real world evidence; eribulin vs other CTs	China	TNBC	PFS, OS, ORR, DCR	For the salvage treatment of advanced TNBC, treatment with eribulin

breast cancer: a single-centre retrospective study Huang et al. Frontiers in Cell and Developmental Biology 12 Frontiers Media SA. (2024) https://doi.org/10.3389/fcell.2024.1313610	based regimens with other chemotherapy regimens in patients with TNBC. **Method**: This retrospective study was conducted at Fujian Medical University Cancer Hospital and included 159 patients with TNBC enrolled between October 2011 and January 2023. Patients underwent treatment with eribulin-based and other chemotherapy regimens. The study's primary endpoints were progression-free survival (PFS) and overall survival (OS), while its secondary endpoint was objective response rate (ORR), disease control rate (DCR), and safety. Tumour response was assessed using RECIST V.1.1 criteria. **Results**: Of the 159 participants in the study, 42 individuals (26.4%) received treatment with eribulin, whereas 117 participants (73.6%) were administered alternative chemotherapy regimens, which included nabpaclitaxel-based therapy (n = 45) and platinum-based therapy (n = 51). The follow-up period for all patients					produced longer median PFS and OS than other chemotherapy regimens, with a well tolerated safety profile. Therefore, further investigation of eribulin-based treatment in larger randomized trials for patients with advanced TNBC is warranted.

	ended on 31 December 2022, and the median follow-up time was 18.3 months (range:0.7–27.5). Following propensity score matching (PSM), eribulin-based treatment resulted in longer median progression-free survival compared to platinum-based (hazard ratio (HR) = 0.41, p = 0.006), nab-paclitaxel-based (hazard ratio = 0.36, p = 0.001) and other chemotherapy (HR = 0.39, p <0.001). Also, eribulin induced a remarkable prolongation of the median overall survival duration in all three comparative groups. The group receiving eribulin treatment showed significantly reduced incidences of any grade of anaemia, peripheral neuropathy, nausea and vomiting, and hairloss compared to other chemotherapy groups. **Conclusion**: For the salvage treatment of advanced TNBC, treatment with eribulin produced longer median PFS and OS than other chemotherapy regimens, with a well tolerated safety profile. Therefore, further investigation of eribulin-based treatment in larger randomized trials for patients with advanced TNBC is warranted.					

Eribulin in breast cancer: Current insights and therapeutic perspectives Oey et al. World journal of experimental medicine 14.2: 92558. (Jun 20, 2024) http://dx.doi.org/10.5493/wjem.v14.i2.92558	Eribulin is a non-taxane synthetic analogue approved in many countries as third-line treatment for the treatment of patients with metastatic breast cancer. In addition to its mitotic property, eribulin has non-mitotic properties including but not limited to, its ability to induce phenotypic reversal of epithelial to mesenchymal transition, vascular remodelling, reduction in immunosuppressive tumour microenvironment. Since approval, there has been a surge in studies investigating the application of eribulin as an earlier-line treatment and also in combination with other agents such as immunotherapy and targeted therapy across all breast cancer sub-types, including hormone receptor positive, HER2 positive and triple negative breast cancer, many demonstrating promising activity. This review will focus on the application of eribulin in the treatment of metastatic breast cancer across all subtypes including its role as an earlier-line agent, its toxicity profile, and potential future directions.	Review				

Health outcomes of treatment sequences with eribulin or other single agents' chemotherapy for treating relapsed metastatic HER2-negative breast cancer Rivolo et al. Annals of Oncology, suppl. Supplement 2 34 : S375-S376. Elsevier Ltd. (Oct 2023)	**Background**: Treatment of HER2-metastatic breast cancer (MBC) is driven by biomarker status (HR+ vs. triple negative [TNBC]). Single agent chemotherapy (ChT) is recommended for patients relapsing on targeted therapies including endocrine therapy or immunotherapies, with ChTs optimal sequence not yet established. The study objective was to compare the health outcomes (life years [LYs], quality adjusted LYs [QALYs]) in sequences starting ChT with eribulin (ERI), capecitabine (CAP) or treatment of physician choice (TPC), in second-line (2L) to fourth-line (4L) settings. **Methods**: A stochastic microsimulation was developed tracking a MBC cohort through 2L-4L, with patients starting the next line of therapy due to progression or serious adverse events (SAEs) discontinuation. After each line, patients could receive another active therapy or best supportive care. Treatment sequences across three treatment pathways, capturing ChT initiation in 2L, 3L or 4L (the table), were based on clinical guidelines,	ESMO presentation; Real world evidence; eribulin vs capecitabine vs physician's choice in 2nd – 4th line HER2-MBC	Italy, USA, Germany, UAE, UK	HR+/HER2-, TNBC	LYs, QALYs	Earlier use of eribulin resulted in greater Lys and QALYs. Starting single agent ChT with ERI vs. CAP or TPC is associated with improved health outcomes for 2L-4L HER2-MBC management.

	real-world data and clinical interviews. Clinical inputs were stratified by biomarker and treatment line, with QALYs driven by progression status, response rates and SAEs. The analysis time horizon was 20 years, with outcomes discounted at 3.5%. **Results**: In the HR+ subgroup, sequences with ERI used earlier than CAP/TPC led to higher LYs (1.62 - 2.24 vs. 1.57 - 2.22) and QALYs (0.75 -1.28 vs. 0.69 – 1.27), across the three pathways, driven by improved ERI efficacy and safety profile vs. CAP/TPC. Similarly, in the TNBC subgroup, earlier use of ERI vs. CAP/TPC led to higher LYs (1.19 - 1.64 vs. 1.16 - 1.63) and QALYs (0.55 - 0.86 vs. 0.49 - 0.85) when used in 2L or 4L, while 3L ERI vs. 3L TPC led to higher QALYs (0.70 vs. 0.67 - 0.68), but comparable LYs (1.40). The results were consistent across the sensitivity analyses conducted. **Conclusions**: Starting single agent ChT with ERI vs. CAP or TPC is associated with improved health outcomes for 2L-4L HER2- MBC management					

A clinical systematic literature review of treatments among patients with advanced and/or metastatic human epidermal growth factor receptor 2 positive breast cancer Ndirangu et al. Journal of Comparative Effectiveness Research 13.6 Becaris Publishing Ltd. (2024) https://doi.org/10.57264/cer-2023-0153	**Aim**: This systematic literature review aims to summarize the efficacy/effectiveness of treatments, including eribulin (ERI)-based and anti-human epidermal growth factor receptor 2 (HER2) treatments in advanced/metastatic HER2+ breast cancer. **Methods**: Three databases from 2016 to September 2021 were searched for clinical trials and observational studies in patients receiving first-line (1L) standard of care (SOC), second-line (2L) SOC or third-line or subsequent lines (3L+). **Results**: 2692 citations were screened, and 38 studies were included. Eleven studies were randomized-controlled trials (RCTs; 5 in 1L, 6 in 3L+), 6 were single-arm trials (5 in 1L, 1 in 3L+) and 21 were observational studies (13 in 1L, 6 in 2L, 4 in 3L+ [note that studies with subgroups for 1L, 2L, 3L+ are double-counted]). Longer overall survival (OS) was associated with 1L and 2L treatment, and for 3L+ studies that included ERI, ERI or trastuzumab (Tmab) + ERI led to longer OS than treatments of physician's choice (median OS of 11, 10 and 8.9 months, respectively).	Review; efficacy of tmts, incldg eribulin in HER2+ MBC		HER2+		Longer overall survival (OS) was associated with 1L and 2L treatment, and for 3L+ studies that included ERI, ERI or trastuzumab (Tmab) + ERI led to longer OS than treatments of physician's choice (median OS of 11, 10 and 8.9 months, respectively). Progression-free survival was 9 months in Tmab + pertuzumab (Pmab) + ERI, 4 months in Tmab + ERI and 3.3

	Progression-free survival was 9 months in Tmab + pertuzumab (Pmab) + ERI, 4 months in Tmab + ERI and 3.3 months in ERI. **Conclusion**: Available treatments provide a wide range of efficacy. However, later lines lack standardization and conclusions on comparative effectiveness are limited by differing trial designs. Thus, the chance of prolonged survival with new agents warrants further research.					months in ERI.
Multiple Bayesian network meta-analyses to establish therapeutic algorithms for metastatic triple negative breast cancer Schettini et al. Cancer Treatment Reviews 111 W.B. Saunders Ltd. (Dec 2022) http://dx.doi.org/10.1016/j.ctrv.2022.102468	Metastatic triple-negative breast cancer (mTNBC) is a poor prognostic disease with limited treatments and uncertain therapeutic algorithms. We performed a systematic review and multiple Bayesian network meta-analyses according to treatment line to establish an optimal therapeutic sequencing strategy for this lethal disease. We included 125 first-line trials (37,812 patients) and 33 s/further-lines trials (11,321 patients). The primary endpoint was progression-free survival (PFS). Secondary endpoints included overall response rates (ORR), overall survival (OS) and safety, for first and further lines, separately. We also estimated	Review; Bayesian network meta-analysis		TNBC	PFS, OS, ORR	The most effective alternatives or candidates for subsequent lines were represented by nab-paclitaxel (in ORR), capecitabine (in PFS) and eribulin (in PFS and OS).

	separate treatment rankings for the first and subsequent lines according to each endpoint, based on (surface under the cumulative ranking curve) SUCRA values. No first-line treatment was associated with superior PFS and OS than paclitaxel ± bevacizumab. Platinum-based polychemotherapies were generally superior in terms of ORR, at the cost of higher toxicity. PARP-inhibitors in germline-BRCA1/2-mutant patients, and immunotherapy + chemotherapy in PD-L1-positive mTNBC, performed similar to paclitaxel ± bevacizumab. In PD-L1-positive mTNBC, pembrolizumab + chemotherapy was better than atezolizumab + nab-paclitaxel in terms of OS according to SUCRA values. In second/further-lines, sacituzumab govitecan outperformed all other treatments on all endpoints, followed by PARP-inhibitors in germline-BRCA1/2-mutant tumors. Trastuzumab deruxtecan in HER2-low mTNBC performed similarly and was the best advanced-line treatment in terms of PFS and OS after					

	sacituzumab govitecan, according to SUCRA values. Moreover, comparisons with sacituzumab govitecan, talazoparib and olaparib were not statistically significant. The most effective alternatives or candidates for subsequent lines were represented by nab-paclitaxel (in ORR), capecitabine (in PFS) and eribulin (in PFS and OS).					
Treatment strategies for advanced triple negative breast cancer patients as per routine clinical practice: analysis from the observational study GEICAM/2014-03 (RegistEM) Novoa et al. Cancer Research, suppl. Supplement 83.5 American Association for Cancer Research Inc. (Mar 2023) https://doi.org/10.1158/1538-7445.SABCS22-P4-07-45	**Background**: Triple negative breast cancer (TNBC) is well known for its more aggressive course and poorer prognosis compared to other BC subtypes. RegistEM study provides real world data to understand the distribution of BC subtypes in the advanced setting, being its primary objective. Biological samples collection is part of its procedures. This is a non-interventional cohort study and 1,907 patients (pts) have been enrolled up to now (females and males) with advanced BC (ABC), diagnosed from Jan-2016 to Dec- 2019, either after recurrence or as first BC diagnosis, in 38 Spanish sites. These pts will be followed for at least 5 years.	Real world evidence; TNBC characteristics, treatment patterns and outcomes;	Spain	TNBC		Eribulin is used as 1st- and later line tmt in Spain for advanced TNBC

	Methods: In the current analysis (cut-off date 08/April/2022, database ongoing), we describe characteristics, treatment patterns and outcomes, including comparison between recurrent and de novo disease, of 157 pts with advanced TNBC included in the RegistEM study. Those pts represent the 10% of pts available in the database at the cut-off date and with ABC diagnosis up to December 2018 (n=1559). The BC clinical subtypes were histologically confirmed on the most recent tumor lesion (metastatic [M] or primary BC) before starting with the 1st-line therapy. **Results**: At first ABC diagnosis, 73% pts had recurrent early BC (EBC), 26% de novo MBC and 1% unresectable locally ABC (ULABC). Median age was 57 years (range 30-88), all pts were women, 98% Caucasian and 65% postmenopausal. Family history of BC and/or ovarian cancer was reported in 37% pts, and a hereditary-risk genetic test was performed in 59 of 147 pts. Germline BRCA1/2 and TP53 were the most frequently mutated genes, 21% (6/28) and 47% (8/17) pts, respectively. Visceral involvement was present in					

	69% pts (similar between recurrent EBC and de novo ABC, although brain metastases were only present in the recurrent EBC group), and ≤ 2 metastatic locations in 59%. In 61% (70/115) pts with recurrent EBC, the subtype was assessed in metastatic lesions, and 39 pts of them also had TN subtype in primary BC. In terms of the most frequent therapies by line: 1) 1st-line: chemotherapy (CT) (60%) and CT/biological therapy (BT) (39%). Of the 87 pts with CT alone, monotherapy was the preferred option in 57% pts (capecitabine 25%, taxanes 16%, and eribulin or vinorelbine, 5% each). Bevacizumab was the most frequent BT (79%) combined with CT (single agent in 56% pts, mostly taxanes and capecitabine). Progressive disease (PD) was reported in 85% pts (similar in pts with both recurrent and de novo MBC or ULABC); 2) 2ndline: CT (79%) (monotherapy capecitabine, eribulin, taxanes) and CT/BT (17%) (CT-containing bevacizumab 82%). Progression was reported in 92% pts; 3) 3rd-line: CT (90%) (eribulin 33%, platinum-based 25%) and					

	CT/BT (9%) (CT-containing bevacizumab 67%). Progression was reported in 88% pts. At database cut-off date, death was reported in 133 (85%) pts, mainly because of PD. Overall survival (OS) was similar between both groups, recurrent and de novo MBC. **Conclusion**: In this population of Spanish TNBC pts with ABC, three quarters had recurrent disease. De novo ABC pts had a higher proportion of non-visceral metastases, with absence of brain involvement at the first diagnosis. Single-agent CT and CT plus bevacizumab were the most frequent therapies, and OS was similar between recurrent and de novo MBC pts, although numerically higher in the later group.					