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Eribulin for metastatic breast cancer (MBC) treatment: a retrospective, multicenter study based in Campania, south Italy (Eri-001 trial)

Michele Orditura,[1] Adriano Gravina,[2] Ferdinando Riccardi,[3] Anna Diana,[1] Carmela Mocerino,[3] Luigi Leopaldi,[4] Alessio Fabozzi,[5,6] Guido Giordano,[5] Raffaele Nettuno,[7] Pasquale Incoronato,[8] Maria Luisa Barzelloni,[9] Roberta Caputo,[2] Agata Pisano,[10] Giuseppe Grimaldi,[11] Geppino Genua,[12] Vincenzo Montesarchio,[13] Enrico Barbato,[14] Giovanni Iodice,[2] Eva Lieto,[15] Eugenio Procaccini,[16] Roberto Mabilia,[17] Antonio Febbraro,[5] Michelino De Laurentiis,[2] Fortunato Ciardiello[1]

ABSTRACT

Background On the basis of the results of two pivotal phase III clinical trials, eribulin mesylate is currently approved in EU for the treatment of advanced breast cancer (aBC) in patients who have previously received an anthracycline and a taxane in either the adjuvant or the metastatic setting, and at least one chemotherapeutic regimen for metastatic disease.
Methods In our study, we investigated the efficacy and tolerability of eribulin as second or further line chemotherapy in 137 women affected by aBC.
Results Eribulin as monotherapy provided benefit in terms of progression-free survival (PFS), response rate (RR) and disease control rate (DCR) independently of its use as second or late-line therapy. The overall RR and DCR were 17.5% and 64%, respectively. In particular, DCR and overall RR were 50% and 13.6%, 65.4% and 21.1%, 70.4% and 14.8% and 66.7% and 16.7% in second, third, fourth and further lines of treatment, respectively. Median PFS (mPFS) according to the line of therapy was 5.7, 6.3, 4.5 and 4.0 months in patients treated with eribulin in second, third, fourth and over the fourth line, respectively. No significant difference in terms of mPFS was found between the various BC subtypes. Overall, eribulin resulted safe and most adverse events were of grade 1 or 2 and easily manageable. Grades 3–4 toxicities were neutropaenia and neurotoxicity.
Conclusions With the limitations due to the observational nature of our findings, eribulin was shown to be an effective and safe therapeutic option in heavily pretreated patients with aBC.

Key questions

What is already known about this subject?
► Anthracyclines and/or taxanes are the most commonly used drug in the (neo)adjuvant and first-line metastatic (HER2 negative) settings; however, no gold standard of care exists following their failure.
► On the basis of the results of two pivotal phase III clinical trials (studies 301 and 305), eribulin mesylate is currently approved in EU for the treatment of advanced breast cancer (BC) in patients who have previously received an anthracycline and a taxane in either the adjuvant or the metastatic setting, and at least one chemotherapeutic regimen for metastatic disease.

What does this study add?
► In our multicentre retrospective study, eribulin as monotherapy provided benefit in terms of progression-free survival (PFS), response rate and disease control rate independently of its use as second or late-line therapy.
► No significant difference in terms of median PFS was found between the various BC subtypes.
► Overall, eribulin resulted safe and most adverse events were of grade 1 or 2 and easily manageable.

How might this impact on clinical practice?
► Our results confirmed eribulin as an effective and safe therapeutic option in heavily pretreated patient population with advanced BC, supporting its use in daily clinical practice.

For numbered affiliations see end of article.

Correspondence to
Michele Orditura; michele.orditura@unicampania.it

INTRODUCTION

In Italy, breast cancer (BC) represents 29% of all female cancers; it is the most frequent tumour in women with approximately 50 000 new cases in the year 2015, with a geographical distribution increasing from south to north. Furthermore, about 10% of new BC cases are diagnosed in stage 4.[1]

Although by the end of the 1990s a reduction of 1.4%/year in mortality was observed due to early diagnosis and improvement of treatment strategies, BC continues to be the

leading cause of neoplastic death in women, regardless of age, and long-term survival of patients with metastatic BC (MBC) remains no longer than 43–50 months for Her2-positive disease and 30–45 months for Her2-negative/hormone receptor-positive disease, respectively.[1]

Anthracyclines and/or taxanes are the most commonly used drug in the (neo)adjuvant and first-line metastatic (HER2 negative) settings; however, no gold standard of care exists following their failure. Single-agent therapy is generally preferred to polychemotherapy, and capecitabine is often chosen for the subsequent treatment, based on evidence from several randomised trials.[2–7] Furthermore, other widely used drugs in this setting are vinorelbine, gemcitabine, ixabepilone (not approved by European Medicines Agency), nab-paclitaxel (where available) and liposomal anthracyclines.[8–12]

Eribulin mesylate is an irreversible, non-taxane, microtubule growth inhibitor with a novel mechanism of action, also capable to overcome taxane resistance.[13 14] On the basis of the results of phase III trials, study 305 (EMBRACE) in which median overall survival (OS) was significantly longer with eribulin compared with the treatment of physician's choice (13.1 vs 10.6 months, p=0.041) and study 301, and the pooled analysis of both aforementioned trials,[7 15 16] eribulin was approved in the USA (November 2010) and in Europe (March 2011) for the treatment of MBC previously treated with at least two lines of chemotherapy, including anthracyclines and taxanes, and with at least one chemotherapy regimen, respectively.

In our multicentre observational trial, we retrospectively collected and analysed data from 159 patients with locally advanced or MBC treated with eribulin monotherapy in different lines of therapy to evaluate its safety profile, activity and efficacy. Because eribulin became commercially available, patients treated at 13 different centres in Campania region (Italy), according to current drug indications, were analysed.

PATIENTS AND METHODS

The purpose of the study was to analyse the toxicity, activity and efficacy of eribulin monotherapy according to the line of treatment.

From December 2011 to June 2015, 159 patients with locally advanced unresectable or MBC received eribulin as second or further line of treatment; of these, 137 patients resulted eligible for our analysis. The inclusion criteria were as follows: cytological or histologically confirmed diagnosis of locally advanced (unresectable) or MBC, age ≥18 years, administration of at least one cycle of eribulin until disease progression, unacceptable toxicity or patient refusal, availability of clinical–pathological, radiological and laboratory parameters before eribulin treatment (baseline), response evaluation and survival data, prior anthracycline and taxane-based chemotherapy in the adjuvant or metastatic setting. Radiation therapy with palliative finality was permitted. Eribulin schedule variations, dose modifications, supportive measures (ie,

use of granulocyte colony-stimulating factor (G-CSF) or eritropoietin) were allowed and implemented according to individual daily practice. Likewise, evaluation of timing and modality of response were independently carried out by each investigator (as general rule, tumour assessment was performed every three cycles). Twenty-six patients who are Her2-positive MBC were treated with eribulin monotherapy without any anti-Her2 drug. Twenty-two patients for whom information regarding the first or further cycles of treatment with eribulin was not available were excluded from the analysis.

All data were collected in a centralised database (after an anonymisation procedure) managed by the Second University of Naples. No patient was lost to follow-up and the study was completed by 30 June 2015. All study patients provided written informed consent. The Institutional Review Board at the Department of Clinical and Experimental Medicine of the Second University of Naples approved the study.

Statistical analysis

Survival distribution was estimated by the Kaplan-Meier method with 95% CI.[17] Progression-free survival (PFS) was defined as the time elapsed between the first eribulin dose to the detection of disease progression or death for any cause. Patients who died of causes other than breast cancer—without experiencing tumour progression—were regarded as censored events at the date of death when computing the PFS rate. Differences in PFS according to clinical parameters or line of treatment were evaluated by the log-rank test and described by the Kaplan-Meier method. For the final analysis, the PFS status of all patients was updated within 1 month before the data cut-off of June 2015. Cox proportional hazards model was applied to multivariate survival analysis, and p values and HRs with 95% CI were obtained. All the significant variables in the univariate model were used to build the multivariate model of survival. SPSS V.20.0 software was used for statistical analysis and integrated using Medcalc software V.9.4.2.0 (Mariakerke, Belgium). Values of p≤0.05 indicated statistically significance.

RESULTS

Eribulin was used in 137 eligible patients as second, third, fourth or further line of treatment in 22 (16.1%), 52 (38%), 27 (19.7%) and 36 (26.2%) patients with MBC, respectively. In the second-line group, early progression following adjuvant anthracyclines and taxanes was detected. The characteristics of the 137 evaluable patients are reported in table 1.

Adverse events

Overall, eribulin was associated with mild toxicity, most toxicity being grade 1 or 2; neutropaenia was the most common grades 3–4 haematological adverse event (12.4%), followed by thrombocytopaenia (2.2%); among the non-haematological grades 3–4 toxicities, neurotoxicity was the most common (4.4%), followed by mucositis, transaminases increase and

Table 1 Characteristics of the series

Characteristic	Total n=137	%
Age (median)	58.1	
Range	28–81	
Age, years		
>70	22	16.1
<70	115	83.9
ECOG PS		
0–1	133	97.1
2	4	2.9
Menopausal status		
Premenopausal	38	27.7
Postmenopausal	99	72.3
Histology		
Invasive lobular carcinoma	27	19.7
Invasive ductal carcinoma	104	75.9
Invasive ductal-lobular carcinoma	6	4.4
Grading*		
Grades 1–2	68	49.6
Grade 3	69	50.4
Hormone receptor status*		
ER and/or PgR negative	26	19
ER and/or PgR positive	111	81
HER2* status		
Negative	111	81
Positive	26	19
Molecular subtypes		
Luminal A	20	14.6
Luminal B Her2 positive	18	13.1
Luminal B Her2 negative	74	54
HERr2-like	7	5.1
Triple negative	18	13.1
Stage at diagnosis		
IA	18	13.1
IIA	44	32.1
IIB	13	9.5
IIIA	28	20.4
IIIB	1	0.7
IIIC	13	9.5
IV	20	14.6
Site of metastases		
Visceral	67	48.9
Visceral + bone	64	46.7
Bone alone	6	4.4
Surgery (primary tumour)		
Yes	126	92

Continued

Table 1 Continued

Characteristic	Total n=137	%
No	11	8
Adjuvant chemotherapy		
Yes	80	58.4
No	57	41.6
Adjuvant trastuzumab	18	13.1
Adjuvant hormonal therapy		
Yes	77	56.2
No	60	43.8
Number of prior chemotherapy for advanced disease		
1	22	16.1
2	52	38
3	27	19.7
≥4	36	26.2
Median (range)	4 (1–7)	–
Previous chemotherapy for MBC		
Anthracyclines	54	35
Taxanes	120	87.5
Capecitabine	89	65
Vinorelbine	88	64.2
Gemcitabine	34	24.8
Previous hormonal therapy for advanced disease	95	66.4
Eribulin cycles administered, median (range)	5 (1–24)	–

*Detected on primary tumour.
ECOG PS, Eastern Cooperative Oncology Group performance status; HER2, human epidermal receptor 2; MBC, metastatic breast cancer; ER, estrogen receptor; PgR, progesterone receptor.

gastrointestinal toxicity. Overall toxicity and specific toxicity for the different lines of treatment are reported in table 2. The patients were exposed to a median of five cycles (range 1–24). No patient needed a lower starting dose or treatment discontinuation because of unacceptable toxicity, although a dose reduction of 20% of the total dose ($0.97 \, mg/m^2$) was required in 11.7% of patients. Dose delays, or day eight omissions, were experienced by 13.1% and 19% of patients, respectively. G-CSF was administered in 5.8% and 27.7% of patients as primary and secondary prophylaxis, respectively, allowing a median relative dose intensity (defined as the ratio of total dose received/duration chemo to planned total dose/planned duration chemo) of 0.88 (range 0.4–1.1). No treatment-related death was registered.

Efficacy
Treatment with eribulin was shown to be fairly active in all lines of therapy; 24 partial responses (17.5%), 64 cases of disease stabilisation (46.7%) and 49 tumour progressions (35.8%) were recorded. The overall RR (ORR) and the

Table 2 Haematological and non-haematological toxicity of monotherapy with Eribulin in 137 patients with metastatic breast cancer

Haematological toxicities	All patients n (%)	Second line n (%)	Third line n (%)	Fourth line n (%)	>4th line n (%)
Neutropaenia					
Grades 1–2	16 (11.7)	2 (9.1)	6 (11.5)	4 (14.8)	4 (11.1)
Grades 3–4	17 (12.4)	4 (18.2)	4 (7.7)	2 (7.4)	7 (19.4)
Anaemia					
Grades 1–2	17 (12.4)	3 (13.6)	4 (7. 7)	3 (11.1)	7 (19.4)
Grades 3–4	0				
Thrombocytopenia					
Grades 1–2	8 (5.8)	2 (9.1)	4 (7.7)	1 (3.7)	1 (2.7)
Grades 3–4	3 (2.2)	–	2 (3.8)	1 (3.7)	–
Non-haematological toxicities	Total (%)				
Fatigue					
Grades 1–2	66 (48.2)	10 (45.5)	21 (40.4)	15 (55.6)	20 (55.6)
Grades 3–4	0	–	–	–	–
Alopecia					
Grades 1–2	47 (34.3)	8 (36.4)	13 (25)	9 (33.3)	17 (47.2)
Grades 3–4	0	–	–	–	–
Neurotoxicity					
Grades 1–2	36 (26.3)	9 (40.9)	12 (23.1)	5 (18.5)	10 (27.7)
Grades 3–4	6 (4.4)	–	2 (3.8)	2 (7.4)	2 (5.5)
Mucositis					
Grades 1–2	27 (19.7)	3 (13.6)	9 (17.3)	8 (29.6)	7 (19.4)
Grades 3–4	2 (1.5)	1 (4.6)	1 (1.9)	–	–
Gastrointestinal toxicities					
Grades 1–2	22 (16.1)	6 (27.3)	8 (15.4)	2 (7.4)	6 (16.7)
Grades 3–4	2 (1.5)	–	2 (3.8)	–	–
Elevated transaminases					
Grades 1–2	13 (9.5)	2 (9.1)	7 (13.5)	4 (14.8)	–
Grades 3–4	2 (1.5)	2 (9.1)	–	–	–

disease control rate (DCR) were 17.5% (95% CI 11.1 to 23.8) and 64% (95% CI 56.1 to 72.2), respectively. Specifically, DCR and ORR were 50% and 13.6%, 65.4% and 21.1%, 70.4% and 14.8% and 66.7% and 16.7% in second, third, fourth and further lines of treatment, respectively (table 3). However, due to the small sample size, DCR and ORR according to the different tumour subtypes were not analysed.

After a median of five treatment cycles (range 1–24), a median PFS of 5.1 months was observed (95% CI 4.611 to 5.589) (figure 1). Median PFS according to the lines of treatment was 5.7 months (95% CI 5.334 to 6.066), 6.3 months (95% CI 4.934 to 7.666), 4.5 months (95% CI 2.396 to 6.604) and 4.0 months (95% CI 3.126 to 4.874) in patients treated with eribulin in second, third, fourth and beyond the fourth line, respectively (figure 2). The

Table 3 Best tumour response in 137 metastatic breast cancer treated with eribulin

Response	All patients n (%)	Second line n (%)	Third line n (%)	Fourth line n (%)	>4th line n (%)
Complete response	–				
Stable disease	64 (46.7)	8 (36.4)	23 (44.2)	15 (55.5)	18 (50)
Partial response	24 (17.5)	3 (13.6)	11 (21.1)	4 (14.8)	6 (16.7)
Progression disease	49 (35.8)	11 (50)	18 (34.6)	8 (29.6)	12 (33.3)
Disease control rate	88 (64.2)	11 (50)	34 (65.4)	19 (70.4)	24 (66.7)

Figure 1 Median progression-free survival in overall population.

Figure 3 Median PFS according to the molecular subtypes of 137 MBC treated with eribulin. MBC, metastatic breast cancer; PFS, progression-free survival.
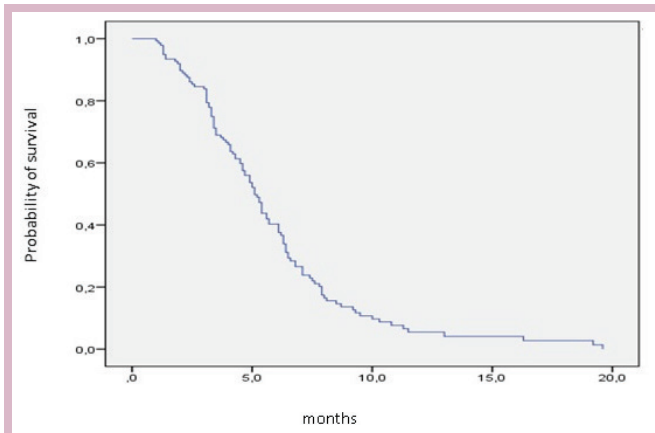
difference between the different subgroups was not statistically significant (p=0.290).

Furthermore, when analysing the median PFS according to the molecular subtypes of primary tumours (classification system proposed by St Gallen International Expert Consensus 2013), no significant differences were found (luminal A subgroup: 7.1 months (95% CI 4.465 to 9.735), luminal B HER2 negative: 5 months (95% CI 4.056 to 5.944), luminal B HER2 positive: 4.6 months (95% CI 3.353 to 5.847), HER2 like: 3.1 months (95% CI 2.202 to 3.998) and triple negative: 5.3 months (95% CI 3.235 to 6.565) (p=0.258). A trend to a lower mPFS was observed in HER2 positive patients with respect to HER2 negative MBC patients(4.2 vs 5.4 months; p=0.064) (figure 3). Finally, PFS was not related, at univariate analysis, to the number of metastatic sites (HR=0.742 95% CI 0.514 to 1.070).

On multivariate analysis, postmenopausal status (HR=1.583, 95% CI 1.04 to 2.39, p=0.029), high grade of tumour differentiation (HR=0.488, 95% CI 0.33 to 0.72, p<0.005) and early use of eribulin (HR=0.654, 95% CI 0.45 to 0.95, p=0.026) were shown to be independent prognostic factors related to a lower progression rate.
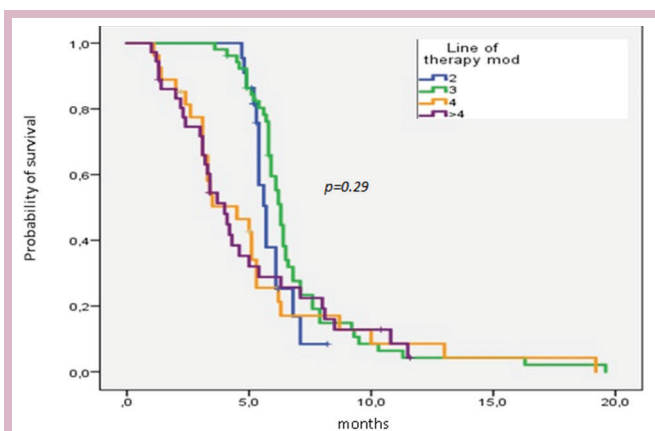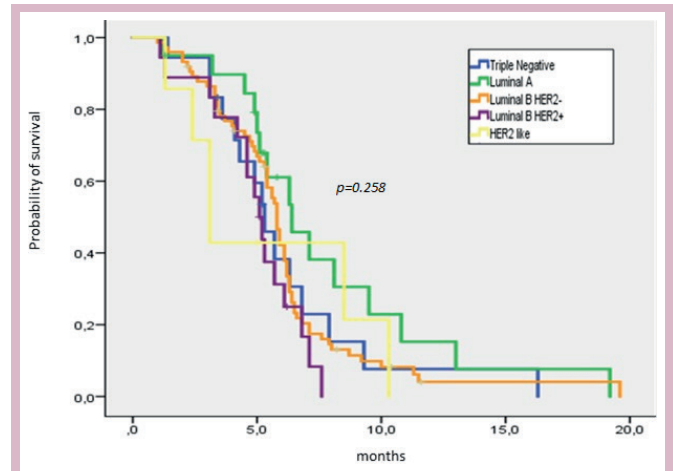
Finally, we analysed a subgroup of 22 elderly patients (≥70 years) (average age 74.5 years, range 70–81 years); all of them had a 0 ECOG performance status. 77.3% and 63.6% of these patients had an infiltrative ductal carcinoma and a G1–G2 grade of tumour differentiation, respectively. Fourteen were luminal B HER2 negative and only in two cases an advanced stage was diagnosed.

In this subgroup of patients with MBC, eribulin was used as a second line, third line and fourth or further line treatment in 22.7%, 31.8%, 22.7%, and 22.7% of patients, respectively.

The median PFS was 6.4 months (95% CI 5.44 to 7.359); 40.9% and 31.8% of patients obtained disease stabilisation and a partial response, respectively. In this subgroup too, drug toxicity was mild and mainly represented by G3–G4 haematological (neutropaenia and thrombocytopaenia in 8.2% and 4.5% of patients, respectively). Grades 3–4 neurotoxicity and mucositis were recorded in 4.5% of patients.

DISCUSSION

Eribulin is currently approved in the EU for the treatment of advanced breast cancer in patients previously administered an anthracycline and a taxane in either the adjuvant the or metastatic setting, and at least one chemotherapeutic regimen for metastatic disease, according to evidence gained from two pivotal phase III trials, study 305 (EMBRACE) and study 301.[7 15]

In the EMBRACE trial,[7] 762 patients with MBC previously treated with two to five lines of chemotherapy (including anthracycline and taxanes) for advanced disease were randomly assigned 2:1 to eribulin or treatment of physician's choice (TPC). With OS as primary endpoint, eribulin therapy was demonstrated to increase median OS with respect to TPC (13.1 vs 10.6 months, p=0.041). This statistically significant OS improvement in the eribulin arm was confirmed in an updated analysis

Figure 2 Median progression-free survival according to the line of treatment with eribulin.

requested by regulatory authorities (13.2 vs 10.5 months, respectively).

Overall incidence of adverse events (AEs) and serious AEs were similar in both treatment groups, the most common toxicities being asthenia/fatigue, alopecia and neutropaenia. Peripheral neuropathy occurred in 35% of patients treated with eribulin and represented the most frequent side effect resulting in discontinuation of the study drug.

In the Study 301, 1102 patients with advanced or MBC previously treated with anthracycline and taxane-based regimens were randomly assigned 1:1 to receive eribulin or capecitabine as first, second or third-line therapy.[15] Not only did this trial fail to demonstrate superiority of eribulin versus capecitabine for either pre-established coprimary endpoints (OS and PFS) but was also associated with a nearly identical survival benefit in the two arms (OS: 15.9 vs 14.5; PFS: 4.1 vs 4.2, respectively). Moreover, consistent with EMBRACE results,[7] eribulin was shown to have an acceptable toxicity profile and no new safety concerns were recorded. Leucopenia, neutropaenia, alopecia and neuropathy were the most common reported AEs.[15]

Recently, the data derived from these two trials (Studies 301 and 305) were pooled together to evaluate the efficacy of eribulin in different subgroups of patients with breast cancer. In this pooled analysis of 1644 patients (946 patients in the eribulin arm and 698 patients in the control arm), eribulin was shown to be associated with improved OS in the overall patient population when compared with the control arm (15.0 vs 12.6 months, HR 0.85; 95% CI 0.76 to 0.94; p<0.01). Furthermore, patients with HER2-negative or triple-negative disease seemed to obtain a discrete benefit from eribulin, regardless of treatment line.[18]

In our multicentre retrospective trial, we investigated the efficacy and tolerability of eribulin as second or further-line chemotherapy in 137 women affected by locally advanced unresectable or MBC. Monotherapy with eribulin appeared to provide benefit in terms of PFS and DCR, regardless of its use as front-line or late-line therapy. DCR was 50%, 65.4%, 70.4% and 66.7% when eribulin was administered in second, third, fourth or further lines, respectively. Paradoxically, the lowest DCR was detected in the second-line subgroup, probably owing to a worse prognosis resulting from a rapidly progressing disease already treated with anthracyclines and taxanes.

The longer median PFS was recorded in patients treated with eribulin in third line (6.3 months), although both the mPFS recorded in the fourth (4.5 months) and subsequent lines (4.0 months) appeared to be clinically relevant as well.

The possible use of eribulin in elderly patients was also supported by the data from a subgroup analysis of 22 patients (≥70 years) who displayed an mPFS of 6.4 months and experienced only mild drug toxicity.

Consistent with other studies, the subgroup of HER2 negative patients appeared to particularly benefit from

treatment with eribulin, whereas HER2-positive breast cancer patients displayed a shorter mPFS (4.2 vs 5.4 months, respectively). Furthermore, a longer mPFS (5.1 months) was recorded in our series compared with those reported by studies 305 and 301 (3.7 and 4.1, respectively). The explanation for this discrepancy may lie in the retrospective nature of our study.

With regard to toxicity, no patient discontinued eribulin due to adverse events; neutropaenia was the most common grades 3–4 haematological AE (12.4%), followed by thrombocytopaenia (2.2%). The incidence of non-haematological G3–4 adverse events was very low and G3–4 neurotoxicity was observed in 4.4% of the whole population. Fatigue was experimented by about half of the patients but no grades 3–4 were registered.

Since the 2011 approval, several retrospective trials have been carried out to assess the role of eribulin in daily clinical practice, providing clinicians with valuable additional data to guide treatment decisions.

To our knowledge, three large observational multicentre studies have strengthened the role of eribulin in heavily pretreated patients with MBC.[19–21]

Gamucci et al[19] reported a favourable efficacy/safety ratio for eribulin in a multicentre observational Italian study involving 133 patients with MBC previously treated with at least two chemotherapy lines. Compared with our experience, the rates of overall response and stable disease were nearly identical (partial response 21.1% vs 17.5%, stable disease 42.8% vs 46.7%, respectively). Furthermore, still in accordance with our finding, low-grade fatigue was the most frequently reported adverse event (63.9%), whereas peripheral neurological toxicity and grade 3 neutropaenia were observed in 35.3% and 14.3% of patients, respectively.

The ERIBEX trial, including 258 patients with MBC previously exposed to a median of four chemotherapy lines, is the largest international retrospective trial testing eribulin in the real-world setting.[20] In this trial, ORR and clinic benefit rate (CBR) for eribulin were 25.2% and 36.1%, respectively. The most common grades 3–4 toxicities were neutropaenia (20.9%) and neurotoxicity (3.9%), whereas asthenia of any grade was observed in approximately 60% of patients.

The addition of trastuzumab to eribulin in HER2-positive disease was also investigated. In contrast with the results of previous randomised trials, HER2 positivity appeared to be a predictive factor of better response (CBR: 57.7% and 33.9% for HER2-positive and HER2-negative disease, respectively). Of note, in the pivotal studies, no patients received trastuzumab concomitantly with eribulin. In our study, a trend to a lower mPFS was observed in the subgroup of HER2-positive patients, probably due to the fact that the administration of anti-HER2 agents was not allowed.

To date, few data regarding the safety and efficacy of eribulin in combination with trastuzumab (E/T) in pretreated HER2-positive MBC are available, and the use of anti-HER2 combination beyond standard chemotherapies remains not well established. However, a single-arm phase II trial focused on the efficacy and

the safety of E/T as first-line treatment in patients with HER2+ MBC showed encouraging results.[21]

Likewise, in the recently published TROTTER trial by Garrone et al[22], including 113 patients from 10 Italian hospitals, eribulin was demonstrated to be a well-tolerated chemotherapy option in MBC, with a 24% of ORR and 35.4% of CBR. In this study, no significant difference in terms of efficacy was observed between any biological subtype. In contrast with previous reports, namely, the EMBRACE trial, liver toxicity (aminotransferase elevations) and thrombocytosis were recorded. Increases in aminotransferase levels were also recorded in our (G3–4 elevated transaminases in 9.5% of patients) and other trials, particularly in 'real-life' settings, while, to the best of our knowledge, thrombocytosis had never been reported before.

Recently published are the results of the Belgian expanded access programme of eribulin in the treatment of 154 heavily pretreated MBC (patients received a median of four lines of chemotherapy for advanced disease). In line with our data, safety profile was predictable and the most reported AEs resulted fatigue, neurotoxicity, alopecia and neutropaenia. In particular, the incidence of grades 3–4 neutropaenia was lower (36.9%) respect to the pivotal studies (45% and 45.7% in study 305 and 301, respectively) due to the prophylactic use of G-CSF for patients who had experienced febrile neutropaenia on previous chemotherapies, dose reduction, dose delays or day 8 omission. Furthermore, the ORR in the evaluable population (140 patients) was higher than in the EMBRACE trial (24% vs 12%), and the explanation may lie in the wide use of G-CSF in this series (38%), whereas in the EMBRACE study, administration of G-CSF as prophylaxis was not permitted and only 18% of patients has received G-CSF support.[23]

Finally, in an unselected cohort of 78 patients with MBC previously treated with two or more chemotherapy lines, eribulin was shown to achieve good disease control rates both in visceral and non-visceral metastases, whereas patients with brain metastases reported a clinical benefit of 47%. The toxicity profile was favourable and, as expected, neutropaenia and neurotoxicity were the most common adverse events.[24]

In conclusion, with the limitations due to the observational nature of our findings, eribulin once again was shown to be an effective and safe therapeutic option for second and further lines of treatment in patients with advanced BC.

Author affiliations
[1]Dipartimento di Internistica Clinica e Sperimentale Flaviano Magrassi, Università degli Studi della Campania"Luigi Vanvitelli", Naples, Italy
[2]Department of Breast Oncology, National Cancer Institute 'Fondazione Pascale', Naples, Italy
[3]Oncology Unit, Cardarelli Hospital, Naples, Italy
[4]U.O. Oncologia Medica ASL NA1, Ospedale San Gennaro, Naples, Italy
[5]U.O. Oncologia Ospedale Sacro Cuore di Gesú, Fatebenefratelli, Benevento, Italy
[6]SSD oncologia del melanoma e dell'esofago, ISTITUTO ONCOLOGICO VENETO IRCCS, Padova, Italy
[7]U.O.S. di Oncologia ASL Caserta—PO AGP, di Piedimonte Matese (CE), Italy
[8]Servizio di Oncologia San Giuliano ASL NA2 NORD, Giugliano (NA), Italy
[9]U.O. Oncologia AORN San Giuseppe Moscati, Avellino, Italy
[10]U.O.C. Oncoematologia Ospedale Santa Maria Delle Grazie, Pozzuoli (NA), Italy
[11]U.O. Medicina—Oncoematologia Ospedale Umberto I, Nocera Inferiore (SA), Italy
[12]U.O. Oncologia Ospedale Civile ASL AV/1, Ariano Irpino (AV), Italy
[13]U.O.C. Oncologia AORN dei Colli, Ospedale 'V Monaldi', Naples, Italy
[14]U.O.S.D. Oncologia Medica Ospedale 'Moscati', Aversa (CE), Italy
[15]IX Divisione di Chirurgia Generale Dipartimento di Scienze Cardiotoraciche e Respiratorie Seconda, Università degli Studi di Napoli, Naples, Italy
[16]Breast Unit Second University of Naples School of Medicine, Naples, Italy
[17]U.O. Oncologia Ospedale Anna Rizzoli, Ischia (NA), Italy

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