IBM Watson Health

COMPENDIA TRANSPARENCY TRACKING FORM

DATE: 6/28/2019

PACKET: 1904

DRUG: Eribulin Mesylate

USE: Metastatic breast cancer; HER2-negative, first- or second-line chemotherapy for metastatic disease

COMPENDIA TRANSPARENCY REQUIREMENTS	
1	Provide criteria used to evaluate/prioritize the request (therapy)
2	Disclose evidentiary materials reviewed or considered
3	Provide names of individuals who have substantively participated in the review or disposition of the request and disclose their potential direct or indirect conflicts of interest
4	Provide meeting minutes and records of votes for disposition of the request (therapy)

EVALUATION/PRIORITIZATION CRITERIA: C, S *to meet requirement 1

CODE	EVALUATION/PRIORITIZATION CRITERIA
A	Treatment represents an established standard of care or significant **advance** over current therapies
C	**Cancer** or cancer-related condition
E	Quantity and robustness of **evidence** for use support consideration
L	**Limited** alternative therapies exist for condition of interest
P	**Pediatric** condition
R	**Rare** disease
S	**Serious**, life-threatening condition

Note: a combination of codes may be applied to fully reflect points of consideration [eg, therapy may represent an advance in the treatment of a life-threatening condition with limited treatment alternatives (ASL)]

EVIDENCE CONSIDERED:

*to meet requirements 2 and 4

CITATION	STUDY-SPECIFIC COMMENTS	LITERATURE CODE
Park,Y.H., Im,S.A., Kim,S.B., et al: Phase II, multicentre, randomised trial of eribulin plus gemcitabine versus paclitaxel plus gemcitabine as first-line chemotherapy in patients with HER2-negative metastatic breast cancer. Eur J Cancer Nov 2017; Vol 86, pp. 385-393.		1
McIntyre,K., O'Shaughnessy,J., Schwartzberg,L., et al: Phase 2 study of eribulin mesylate as first-line therapy for locally recurrent or metastatic human epidermal growth factor receptor 2-negative breast cancer. Breast Cancer Res Treat Jul 2014; Vol 146, Issue 2; pp. 321-328.	This was a multicenter, open-label, single-arm phase II trial that investigated first-line eribulin therapy in patients with HER2-negative metastatic breast cancer in the United States. There was low risk of bias associated with selection of cohorts and assessment of outcomes. All subjects who received at least 1 dose of eribulin were included in the analyses, and primary efficacy was based on tumor response. One caveat of the study is that it lacked a control or comparator group.	S
Ortega,V., Anton,A., Garau,I., et al: Phase II, multicenter, single-arm trial of eribulin as first-line therapy for patients with aggressive taxane-pretreated HER2-negative metastatic breast cancer: The MERIBEL study. Clin Breast Cancer Apr 2019; Vol 19, Issue 2; pp. 105-112.	This was a multicenter, open-label, single-arm phase II trial that investigated first-line eribulin therapy in patients with HER2-negative metastatic breast cancer in Spain and Portugal. There was low risk of bias associated with selection of cohorts and assessment of outcomes. All subjects who received at least 1 dose of eribulin were included in the analyses, and primary efficacy was time-to-progression based on tumor response. One caveat of the study is that it lacked a control or comparator group.	S

Wilks,S., Puhalla,S., O'Shaughnessy,J., et al: Phase 2, multicenter, single-arm study of eribulin mesylate with trastuzumab as first-line therapy for locally recurrent or metastatic HER2-positive breast cancer. Clin Breast Cancer Dec 2014; Vol 14, Issue 6; pp. 405-412.		1
Maeda,S., Saimura,M., Minami,S., et al: Efficacy and safety of eribulin as first- to third-line treatment in patients with advanced or metastatic breast cancer previously treated with anthracyclines and taxanes. Breast Apr 2017; Vol 32, pp. 66-72.	This was a multicenter, open-label, single-arm phase II trial that investigated first- thru thrid-line eribulin therapy in patients with HER2-negative metastatic breast cancer in Japan. There was low risk of bias associated with selection of cohorts and assessment of outcomes. All subjects who received at least 1 dose of eribulin were included in the analyses, and outcomes were independently reviewed. One caveat of the study is that it lacked a control or comparator group.	S
Kimura,K., Iwamoto,M., Tanaka,S., et al: A phase II, multicenter, single-arm trial of eribulin as first- or second-line chemotherapy for HER2-negative advanced or metastatic breast cancer: evaluation of efficacy, safety, and patient-reported outcomes. Cancer Chemother Pharmacol May 2018; Vol 81, Issue 5; pp. 923-933.	This was a multicenter, open-label, single-arm phase II trial that investigated first-or second-line eribulin therapy in patients with HER2-negative metastatic breast cancer in Japan. There was low risk of bias associated with selection of cohorts and assessment of outcomes. All subjects who received at least 1 dose of eribulin were included in the analyses, and primary efficacy was based on tumor response. One caveat of the study is that it lacked a control or comparator group.	S
Takashima,T., Tokunaga,S., Tei,S., et al: A phase II, multicenter, single-arm trial of eribulin as first-line chemotherapy for HER2-negative locally advanced or metastatic breast cancer. Springerplus 2016; Vol 5, p. 164.	This was a multicenter, open-label, single-arm phase II trial that investigated first-line eribulin therapy in patients with HER2-negative metastatic breast cancer in Japan. There was low risk of bias associated with selection of cohorts and assessment of outcomes. All subjects who received at least 1 dose of eribulin were included in the analyses, and primary efficacy was based on tumor response. One caveat of the study is that it lacked a control or comparator group.	S

Hayashida,T., Jinno,H., Mori,K., et al: Phase II trial of eribulin mesylate as a first- or second-line treatment for locally advanced or metastatic breast cancer: a multicenter, single-arm trial. BMC Cancer Jun 28, 2018; Vol 18, Issue 1; p. 701.	This was a multicenter, open-label, single-arm phase II trial that investigated first- or second-line eribulin therapy in patients with HER2-negative metastatic breast cancer in Japan. There was low risk of bias associated with selection of cohorts and high risk for assessment of outcomes. All subjects who received at least 1 dose of eribulin were included in the analyses, and primary efficacy was based on tumor response. One caveat of the study is that it lacked a control or comparator group.	S
Sakaguchi,K., Nakatsukasa,K., Koyama,H., et al: Phase II clinical trial of first-line eribulin plus trastuzumab for advanced or recurrent HER2-positive breast cancer. Anticancer Res Jul 2018; Vol 38, Issue 7; pp. 4073-4081.		1
Inoue,K., Ninomiya,J., Saito,T., et al: Eribulin, trastuzumab, and pertuzumab as first-line therapy for patients with HER2-positive metastatic breast cancer: a phase II, multicenter, collaborative, open-label, single-arm clinical trial. Invest New Drugs Mar 08, 2019; Vol Epub, p. Epub.		1

Literature evaluation codes: S = Literature selected; 1 = Literature rejected = Topic not suitable for scope of content; 2 = Literature rejected = Does not add clinically significant new information; 3 = Literature rejected = Methodology flawed/Methodology limited and unacceptable; 4 = Other (review article, letter, commentary, or editorial)

CONTRIBUTORS:

*to meet requirement 3

PACKET PREPARATION	DISCLOSURES	EXPERT REVIEW	DISCLOSURES
Megan Smith	None		
Stacy LaClaire, PharmD	None		
Margi Schiefelbein, PA	None		
		John D Roberts	None
		Jeffrey Klein	None

		Richard LoCicero	Incyte Corporation Local PI for REVEAL. Study is a multicenter, non-interventional, non-randomized, prospective, observational study in an adult population for patients who have been diagnosed with clinically overt PV and are being followed in either community or academic medical centers in the US who will be enrolled over a 12-month period and observed for 36 months.

ASSIGNMENT OF RATINGS:

*to meet requirement 4

	EFFICACY	STRENGTH OF RECOMMENDATION	COMMENTS	STRENGTH OF EVIDENCE
IBM MICROMEDEX	Evidence Favors Efficacy	Class IIa: Recommended, in Most Cases		B
Jeffrey Klein	Evidence Favors Efficacy	Class IIa: Recommended, in Most Cases	The use of Eribulin for HER2-negative metastatic breast cancer patients (1st or 2nd line) showed to be quite effective in the PFS category. It doesn't appear it needs to be used with a taxane agent. The degree of neuropathy and neutropenia adverse effects needs to be considered before and during treatment.	
Richard LoCicero	Effective	Class IIa: Recommended, in Most Cases	Multiple phase II trials have demonstrated efficacy of eribulin for the first- or second- line treatment of metastatic breast cancer. No unexpected toxicities were observed. The lack of phase III or comparator trials limits further conclusions relative to other first- or second- line treatment options.	
John Roberts	Evidence is Inconclusive	Class III: Not Recommended	In several single arm studies eribulin produced response rates ranging from ~ 20% to ~ 50%. Response rates were lower in patients with prior exposure to chemotherapy. Toxicity was mild to moderate, but with peripheral neuropathy in ~ 50% of patients in one study. None of these studies contained comparator arms. Thus, it is unknown whether eribulin is better or worse than other chemotherapeutic agents as first or second line chemotherapy for HER-2 negative metastatic breast cancer.	