

### COMPENDIA TRANSPARENCY TRACKING FORM

**DATE:** 2/2/16

**PACKET:** 1215

**DRUG:** Modafinil

**USE:** Cancer-related fatigue

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, L \*to meet requirement 1

CODE	EVALUATION/PRIORITIZATION CRITERIA
Α	Treatment represents an established standard of care or significant advance over current therapies
С	Cancer or cancer-related condition
E	Quantity and robustness of evidence for use support consideration
L	Limited alternative therapies exist for condition of interest
Р	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
Mucke,M., et al: Pharmacological treatments for fatigue associated with palliative care. Cochrane Database of Systematic Reviews 2015; Vol 5, p. CD006788.	Comments: This was a Cochrane systematic review that included two double-blind, placebo-controlled, randomized trials of 704 patients with cancer. The risk of bias tool was used to assess the quality of the included trials. Overall, the studies were of high quality.	S
Jean-Pierre,P., et al: A phase 3 randomized, placebo-controlled, double-blind, clinical trial of the effect of modafinil on cancer-related fatigue among 631 patients receiving chemotherapy: A University of Rochester Cancer Center Community Clinical Oncology Program research base study. Cancer Jul 15, 2010; Vol 116, Issue 14; pp. 3513-3520.		S
Spathis, A., Fife, K., Blackhall, F., et al: Modafinil for the treatment of fatigue in lung cancer: results of a placebo-controlled, double-blind, randomized trial. J Clin Oncol Jun 20, 2014; Vol 32, Issue 18; pp. 1882-1888.		S
Hovey,E., et al: Phase III, randomized, double-blind, placebo-controlled study of modafinil for fatigue in patients treated with docetaxel-based chemotherapy. Supportive Care in Cancer May 2014; Vol 22, Issue 5; pp. 1233-1242.		1



Boele,F.W., et al: The effect of modafinil on fatigue, cognitive functioning, and mood in primary brain tumor patients: a multicenter randomized controlled trial. Neuro Oncol Oct 2013; Vol 15, Issue 10; pp. 1420-1428.	2
Cooper,M.R., Bird,H.M., and Steinberg,M.: Efficacy and safety of modafinil in the treatment of cancer- related fatigue. Annals of Pharmacotherapy Apr 2009; Vol 43, Issue 4; pp. 721-725.	4
Neefjes,E.C., et al: Aiming for a better understanding and management of cancer-related fatigue. Oncologist 2013; Vol 18, Issue 10; pp. 1135-1143.	4
Lundorff, L.E., Jonsson, B.H., and Sjogren, P.: Modafinil for attentional and psychomotor dysfunction in advanced cancer: a double-blind, randomised, cross-over trial. Palliat Med Dec 2009; Vol 23, Issue 8; pp. 731-738.	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
Felicia Gelsey, MS	None	Richard LoCicero	None
Stacy LaClaire, PharmD	None	John D Roberts	None
Catherine Sabatos, PharmD	None	Mark Levin	None

## **ASSIGNMENT OF RATINGS:**

\*to meet requirement 4

to moot requirement 4	EFFICACY	STRENGTH OF RECOMMENDATION	COMMENTS	STRENGTH OF EVIDENCE
MICROMEDEX	Ineffective	Class III: Not Recommended		В
Richard LoCicero	Ineffective	Class III: Not Recommended	Insufficient clinical trial data exists to support the use of Modafinil for treatment of cancer-related fatigue. While a single RCT demonstrated benefit in patients with "severe" fatigue, this analysis was not a predetermined subset analysis or endpoint.	N/A
John D Roberts	Ineffective	Class III: Not Recommended	Neither of two studies show a positive drug-related effect. One study (Spathis) shows a positive placebo effect A subset analysis of another study (Jean-Pierre) is interpreted by the authors as a positive effect in patients with severe fatigue. As the study does not claim that this analysis was a prospectively planned, we presume that it was a post-hoc analysis. There is no mention of how many such analyses were done. The p values for the subset analysis are marginal, and there is no discussion of adjustment for multiple comparisons. We disagree with the authors. We think the data at best only suggest that the drug may have a positive effect in severe fatigue, which might be a possible basis for future studies.	N/A
Mark Levin	Evidence is Inconclusive	Class III: Not Recommended	Numerous non-randomized studies suggested that modafinil can reduce cancer fatigue; however, the only albeit small but randomized study did not confirm this effect. An editorial in J. Clin. Oncol. and ASCO guideline recommend that other options be used.	N/A