TRUVEN HEALTH ANALYTICS

COMPENDIA TRANSPARENCY TRACKING FORM

DRUG: Lenalidomide

INDICATION: Myelofibrosis

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, R**
*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)]

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EVIDENCE CONSIDERED:

*to meet requirements 2 and 4

CITATION	STUDY-SPECIFIC COMMENTS	LITERATURE CODE
Jabbour,E., et al: Comparison of thalidomide and lenalidomide as therapy for myelofibrosis. Blood Jul 28, 2011; Vol 118, Issue 4; pp. 899-902.	Study methodology comments: The authors analyzed data on 125 patients who participated in 3 consecutive phase 2 trials that should be interpreted with caution. Although the eligibility criteria were not presented in this paper, that authors stated that it was similar among the trials. Additional weaknesses of the study included 1) absence of a control group that received the standard of care; 2) open-label design without the use of independent reviewers; 3) absence of a power analysis; and 4) possible selection bias since patients were not recruited in a random or consecutive manner. Strengths were 1) defined response; 2) eligibility criteria were similar across studies; 3) compared baseline characteristics of groups; 4) controlled for the effect of confounds; and 5) presented 95% confidence intervals.	S
Tefferi,A., et al: Lenalidomide therapy in myelofibrosis with myeloid metaplasia. Blood Aug 15, 2006; Vol 108, Issue 4; pp. 1158-1164.	Study methodology comments: The authors pooled together data from two phase 2 trials. Some statistical analyses were conducted but these should be interpreted with much caution due to their exploratory nature. Weaknesses of the study included 1) absence of a control group; 2) open-label design without the use of independent reviewers; 3) absence of a power analysis; 4) did not control for the effect of potential confounding variables; and 5) possible selection bias since patients were not recruited in a random or consecutive manner. Strengths were 1) defined response; 2) provided eligibility criteria; and 3) presented results both separately for each study and combined.	2
Quintas-Cardama,A., et al: Lenalidomide Plus Prednisone Results in Durable Clinical, Histopathologic, and Molecular Responses in Patients With Myelofibrosis. Journal of Clinical Oncology Oct 01, 2009; Vol 27, Issue 28; pp. 4760-4766.	Study methodology comments: This was an open-label, single-arm, phase 2 trial. Statistical analyses were conducted but the results should be interpreted with much caution due their exploratory nature. Weaknesses of the study included 1) absence of a control group; 2) open-label design without the use of independent reviewers; 3) absence of 95% confidence intervals; 4) did not examine the effects of potential confounding factors on outcomes; and 5) possible selection bias since patients were not recruited in a random or consecutive manner. Strengths were 1) defined response; 2) discussed eligibility criteria; 3) conducted a power analysis; and 4) defined the primary endpoint.	2
Mesa,R.A., et al: Lenalidomide and prednisone for myelofibrosis: Eastern Cooperative Oncology Group (ECOG) phase 2 trial E4903. Blood Nov 25, 2010; Vol 116, Issue 22; pp. 4436-4438.	Study methodology comments: This was an open-label, single-arm, phase 2 trial that should be interpreted with much caution. Weaknesses of the study included 1) absence of a control group; 2) open-label design without the use of independent reviewers; 3) absence of a power analysis; 4) did not control for the effect of potential confounding variables; and 5) possible selection bias since patients were not recruited in a random or consecutive manner. Strengths were 1) defined response; 2) provided eligibility criteria; and 3) presented 95% confidence intervals.	S

Hernandez,Prats C., et al: Assessing lenalidomide for treating multiple myeloma, myelofibrosis and myelodysplastic syndrome. Farmacia Hospitalaria Sep 2010; Vol 34, Issue 5; pp. 218-223.		3
Holle,N., et al: Thalidomide and lenalidomide in primary myelofibrosis. Netherlands journal of medicine Jul 2010; Vol 68, Issue 7-8; pp. 293-298.		4
Tefferi,A., et al: Lenalidomide therapy in del(5)(q31)-associated myelofibrosis: cytogenetic and JAK2V617F molecular remissions. Leukemia Aug 2007; Vol 21, Issue 8; pp. 1827-1828.		4
Ianotto,J.-C.: Effectiveness of lenalidomide in myelofibrosis. Hematologie Dec 2009; Vol 15, Issue 6; pp. 408-409.		4
bdel-Wahab,O.I. and Levine,R.L.: Primary Myelofibrosis: Update on definition, pathogenesis, and treatment. Annual Review of Medicine 2009; Vol 60, pp. 233-245.		4
Besa,E.C., et al: Reversal of myelofibrosis in a patient with low risk myelodysplastic syndrome on Revlimid therapy. Blood Nov 16, 2005; Vol 106, Issue 11; pp. 307B-307B.		3
Castillo,I., et al: Efficacy of Lenalidomide in Patients with Myelofibrosis: Spanish Compassionate Use Program. Preliminary Analysis. Haematologica-the Hematology Journal Jun 2009; Vol 94, pp. 266-266		3

Cortes,J., et al: Phase II study of lenalidomide (CC-5013, Revlimid (R)) for patients (pts) with myelofibrosis (MF). Blood Nov 16, 2005; Vol 106, Issue 11; pp. 114A-114A.		3
Jabbour,E., et al: Comparison of Thalidomide and Lenalidomide for the Treatment of Patients (pts) with Myelofibrosis (MF). Blood Nov 20, 2009; Vol 114, Issue 22; pp. 1133-1134.		3
Mesa,R.A., et al: Lenalidomide and Prednisone for Primary and Post Polycythemia Vera/Essential Thrombocythemia Myelofibrosis (MF): An Eastern Cooperative Oncology Group (ECOG) Phase II Trial. Blood Nov 16, 2008; Vol 112, Issue 11; pp. 619-619.		3
Quintas-Cardama,A., et al: Combined Therapy with Lenalidomide and Prednisone Renders Durable Clinical, Histopathological, and Molecular Responses in Patients with Myelofibrosis. Blood Nov 16, 2008; Vol 112, Issue 11; pp. 247-247		3
Tefferi,A., et al: Lenalidomide (CC-5013) treatment for anemia associated with myelofibrosis with myeloid metaplasia. Blood Nov 16, 2005; Vol 106, Issue 11; pp. 726A-726A		3

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)

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CONTRIBUTORS:

*to meet requirement 3

PACKET PREPARATION	DISCLOSURES	EXPERT REVIEW	DISCLOSURES
Margi Schiefelbein, PA	None	Jeffrey A. Bubis, D.O.	None
Stacy LaClaire, PharmD	None	James E. Liebmann, M.D.	None
Felicia Gelsey, MS	None	Gerald J. Robbins, MD	None
		Keith A. Thompson, M.D	None
		John M. Valgus, Pharm.D.	None

ASSIGNMENT OF RATINGS:

*to meet requirement 4

	EFFICACY	STRENGTH OF RECOMMENDATION	COMMENTS	STRENGTH OF EVIDENCE
MICROMEDEX	---	---		B
Jeffrey A. Bubis, D.O.	Evidence favors efficacy	Class IIb - Recommended, In Some Cases	Effective agent, but needs to be considered individually and the lack of a large randomized trial vs. BSC limits use. No PFS/OS benefit	N/A
James E. Liebmann, M.D.	Evidence is inconclusive	Class IIb - Recommended, In Some Cases	The two articles available for review provide a fascinating contrast. It appears that if one gets Revlimid in Texas, then there is a high likelihood of a good outcome. However, if a patient receives the drug in a multi-institutional setting, response is less and adverse events are more frequent. A rational conclusion is that the drug has some activity in MF, but in a limited selection of patients.	N/A

Gerald J. Robbins, MD	Evidence favors efficacy	Class IIb - Recommended, In Some Cases	Phase ll trial only, but amid use and efficacy has been noted in case series. Both reports do not offer conclusive evidence, but therapy should be an option in selected cases. Evidence strength is a “C”.	N/A
Keith A. Thompson, M.D	Evidence favors efficacy	Class IIb - Recommended, In Some Cases	None	N/A
John M. Valgus, Pharm.D.	Evidence favors efficacy	Class IIb - Recommended, In Some Cases	Lenalidomide clearly has activity in the treatment of MF. Role in therapy still debated (1st vs. 2nd line). Also if should be combined with steroids still debated. Del 5(q) patients respond better. (I also added 1st page of each publication. No need to cite abstracts since published)	N/A