TRUVEN HEALTH ANALYTICS

COMPENDIA TRANSPARENCY TRACKING FORM

DATE: **April 2015**

PACKET: **1235**

DRUG: **Peginterferon alfa-2a**

Indication: **Essential thrombocythemia**

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: A, 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)]

TRUVEN HEALTH ANALYTICS

EVIDENCE CONSIDERED:

*to meet requirements 2 and 4

CITATION	STUDY-SPECIFIC COMMENTS	LITERATURE CODE
Quintas-Cardama,A., Levine,R., Manshouri,T., et al: High rates of molecular response after long-term follow-up of patients with advanced essential thrombocythemia (ET) or polycythemia vera (PV) treated with pegylated interferon-alfa-2a (peg-IFN-(alpha)-2a; pegasys). Blood Nov 19, 2010; Vol 116, Issue 21.	This was an open-label, single-arm phase II clinical trial. There was low risk of bias associated with selection of cohorts and assessment of outcomes. Data was gathered prospectively for objective outcomes. All subjects were included in the analyses. The results should be interpreted with caution since the study lacked a control group.	2
Quintas-Cardama,A., Kantarjian,H., Manshouri,T., et al: Pegylated interferon alfa-2a yields high rates of hematologic and molecular response in patients with advanced essential thrombocythemia and polycythemia vera. J Clin Oncol Nov 10, 2009; Vol 27, Issue 32; pp. 5418-5424.	This was an open-label, single-arm phase II clinical trial. There was low risk of bias associated with selection of cohorts and assessment of outcomes. Data was gathered prospectively for objective outcomes. All subjects were included in the analyses. The results should be interpreted with caution since the study lacked a control group.	2
Quintas-Cardama,A., bdel-Wahab,O., Manshouri,T., et al: Molecular analysis of patients with polycythemia vera or essential thrombocythemia receiving pegylated interferon alpha-2a. Blood Aug 08, 2013; Vol 122, Issue 6; pp. 893-901.	This was an open-label, single-arm phase II clinical trial. There was low risk of bias associated with selection of cohorts and assessment of outcomes. Data was gathered prospectively for objective outcomes. All subjects were included in the analyses. The results should be interpreted with caution since the study lacked a control group.	S

Kiladjian,J.J., Cassinat,B., Turlure,P., et al: High molecular response rate of polycythemia vera patients treated with pegylated interferon alpha-2a. Blood Sep 15, 2006; Vol 108, Issue 6; pp. 2037-2040.	This was an open-label, single-arm phase II clinical trial. There was low risk of bias associated with selection of cohorts and assessment of outcomes. Data was gathered prospectively for objective outcomes. All subjects were included in the analyses. The results should be interpreted with caution since the study lacked a control group.	1
Kiladjian,J.J., Cassinat,B., Chevret,S., et al: Pegylated interferon-alfa-2a induces complete hematologic and molecular responses with low toxicity in polycythemia vera. Blood Oct 15, 2008; Vol 112, Issue 8; pp. 3065-3072	This was an open-label, single-arm phase II clinical trial. There was low risk of bias associated with selection of cohorts and assessment of outcomes. Data was gathered prospectively for objective outcomes. All subjects were included in the analyses. The results should be interpreted with caution since the study lacked a control group.	1
Gowin,K., Thapaliya,P., Samuelson,J., et al: Experience with pegylated interferon alpha-2a in advanced myeloproliferative neoplasms in an international cohort of 118 patients. Haematologica. Oct 2012; Vol 97, Issue 10; pp. 1570-1573.	This was a retrospective observational study. There was low risk of bias with the selection of the cohort and assessment of outcome. Raw data and response assessment was adjudicated by each of the sites, and were reviewed and confirmed by the first and senior authors. All subjects were included in the analyses. A major caveat of the study was the absence of a control group or active comparator.	3
Ianotto,J.C., Boyer-Perrard,F., Gyan,E., et al: Efficacy and safety of pegylated-interferon alpha-2a in myelofibrosis: a study by the FIM and GEM French cooperative groups. Br J Haematol. Sep 2013; Vol 162, Issue 6; pp. 783-791.	This was a retrospective observational study. There was low risk of bias with the selection of the cohort and assessment of outcome. Clinical and biological parameters present in patients' files were collected (anonymously) at diagnosis and every 3 months thereafter. Used standard criteria to assess response. All subjects were included in the analyses. A major caveat of the study was the absence of a control group or active comparator.	3

Ianotto,J.C., Kiladjian,J.J., Demory,J.L., et al: PEG-IFN-alpha-2a therapy in patients with myelofibrosis: a study of the French Groupe d'Etudes des Myelofibroses (GEM) and France Intergroupe des syndromes Myeloproliferatifs (FIM). Br J Haematol. Jul 2009; Vol 146, Issue 2; pp. 223-225.		4
Ianotto,J.-C.: Pegylated interferon (alpha)-2a induces a high rate of hematologic and molecular remission among patients with polycythemia vera and essential thrombocythemia at high risk. Hematologie 2010; Vol 16, Issue 1; pp. 14-February.		4
Mainali,N.R., Bhatt,V.R., Kedia,S., et al: Reversible bone marrow aplasia induced by pegylated interferon-(alpha)-2a therapy in a patient with primary myelofibrosis. Journal of Oncology Pharmacy Practice 2014; Vol 20, Issue 5; pp. 386-392.		4
Alvarado,Y., Cortes,J., Verstovsek,S., et al: Pilot study of pegylated interferon-alpha 2b in patients with essential thrombocythemia. Cancer Chemother Pharmacol Jan 2003; Vol 51, Issue 1; pp. 81-86.		1

Jabbour,E., Kantarjian,H., Cortes,J., et al: PEG-IFN-(alpha)-2b therapy in BCR-ABL-negative myeloproliferative disorders: Final result of a phase 2 study. Cancer Nov 01, 2007; Vol 110, Issue 9; pp. 2012-2018.		1
Samuelsson,J., Hasselbalch,H., Bruserud,O., et al: A phase II trial of pegylated interferon alpha-2b therapy for polycythemia vera and essential thrombocythemia: feasibility, clinical 2Band biologic effects, and impact on quality of life. Cancer Jun 01, 2006; Vol 106, Issue 11; pp. 2397-2405.		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
Margi Schiefelbein, PA	None	Edward Balaban, DO	None
Stacy LaClaire, PharmD	None	James E. Liebmann, MD	None
Felicia Gelsey, MS	None	Jeffrey Patton, MD	None
		Jeffrey A. Bubis, DO	Other payments: Dendreon
		Keith Thompson, MD	None

ASSIGNMENT OF RATINGS:

*to meet requirement 4

	EFFICACY	STRENGTH OF RECOMMENDATION	COMMENTS	STRENGTH OF EVIDENCE
MICROMEDEX	---	---		B
Edward Balaban, DO	Evidence Favors Efficacy	Class IIa: Recommended, In Most Cases	Has a high rate of favorable clinical activity; able to positively influence genetic change and with a fairly favorable toxicity profile. All quite good. (would) Like to see this experience corroborated.	N/A

James E. Liebmann, MD	Evidence Favors Efficacy	Class IIb: Recommended, In Some Cases	The study submitted for review shows a high rate of clinical and molecular response of essential thrombocytosis (ET) to peginterferon. Interferon has been used for years in the treatment of ET. Because of side effects, however, use of interferon is usually restricted to patients refractory to, or unable to tolerate, hydroxyurea or anagrelide. Peginterferon was quite effective in this small trial and was well tolerated. The real issue is: which patients should receive any form of interferon? Most patients will be well controlled with aspirin and, if necessary, hydroxyurea or anagrelide. It still seems that interferon, pegylated or not, should be reserved for the minority of patients who do not tolerate hydroxyurea or anagrelide or whose blood counts are not controlled by these drugs.	N/A
Jeffrey Patton, MD	Evidence Favors Efficacy	Class IIa: Recommended, In Most Cases	None	N/A
Jeffrey A. Bubis, DO	Evidence Favors Efficacy	Class IIb: Recommended, In Some Cases	Published data is limited, but the evidence is compelling and in patients that have failed conventional therapies with more support (Hydrea, Anagrelide) this is a reasonable approach.	N/A
Keith Thompson, MD	Evidence Favors Efficacy	Class IIb: Recommended, In Some Cases	None	N/A