



**COMPENDIA TRANSPARENCY TRACKING FORM**

**DATE:** April 2015  
**PACKET:** 1031  
**DRUG:** Peginterferon alfa-2a  
**INDICATION:** Polycythemia vera

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 <b>advance</b> over current therapies
C	<b>Cancer</b> or cancer-related condition
E	Quantity and robustness of <b>evidence</b> for use support consideration
L	<b>Limited</b> alternative therapies exist for condition of interest
P	<b>Pediatric</b> condition
R	<b>Rare</b> disease
S	<b>Serious</b> , 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
<p>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.</p>		2
<p>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.</p>	<p>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.</p>	2
<p>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.</p>	<p>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.</p>	S

<p>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.</p>	<p>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.</p>	<p>2</p>
<p>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</p>	<p>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.</p>	<p>S</p>
<p>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.</p>	<p>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.</p>	<p>3</p>
<p>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.</p>	<p>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.</p>	<p>3</p>

<p>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.</p>		<p>4</p>
<p>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.</p>		<p>4</p>
<p>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.</p>		<p>4</p>
<p>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.</p>		<p>1</p>

<p>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.</p>		<p>1</p>
<p>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.</p>		<p>1</p>

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
<b>MICROMEDEX</b>	---	---		B
Edward Balaban, DO	Evidence Favors Efficacy	Class IIa: Recommended, In Most Cases	Achieving a considerable rate of clinical and clonal response is very intriguing. Some adverse effects. Would like to see more longitudinal data.	N/A

James E. Liebmann, MD	Evidence Favors Efficacy	Class IIb: Recommended, In Some Cases	The two studies reviewed, though small, have consistent and plausible findings. Interferon has been an effective, if poorly tolerated, treatment of P. Vera for decades. Peginterferon was quite effective in these small trials and was well tolerated, with discontinuation rates less than would be expected from non-pegylated Interferon. The real issue is: which patients should receive any form of interferon? Most patients will be well controlled with aspirin and phlebotomy. Others will do well with hydroxyurea. It still seems that Interferon, pegylated or not, should be reserved for the minority of patients who do not tolerate hydroxyurea or whose blood counts cannot be controlled by phlebotomy or hydroxyurea.	N/A
Jeffrey Patton, MD	Effective	Class IIa: Recommended, In Most Cases	Extremely high response rates.	N/A
Jeffrey A. Bubis, DO	Evidence Favors Efficacy	Class IIb: Recommended, In Some Cases	Studies weren't randomized, but there are not an abundance of options and IFN is a reasonable choice for selected patients.	N/A
Keith Thompson, MD	Evidence Favors Efficacy	Class IIb: Recommended, In Some Cases	None	N/A