

**COMPENDIA TRANSPARENCY TRACKING FORM**

**DRUG:** Sorafenib Tosylate

**INDICATION:** Non-small cell lung cancer, Advanced

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, R, S

\*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>Scagliotti, G., et al: Phase III Study of Carboplatin and Paclitaxel Alone or With Sorafenib in Advanced Non Small-Cell Lung Cancer. Journal of Clinical Oncology Jan 2010; Vol 28, Issue N11; pp. 1835-1842.</p>	<p><u>Study methodology comments:</u>            This was a rigorously designed randomized, open-label, placebo-controlled, phase III trial with many strengths. Additional strengths included: 1) defined primary and secondary outcomes and clinical response; 2) conducted a power analysis; 3) provided 95% confidence intervals; 4) presented both inclusion and exclusion criteria; 5) objective responses were confirmed at 4 weeks; 6) had a control group; 7) compared baseline characteristics of groups; and 8) controlled for the effect of potential confounds on outcomes. Weaknesses included: 1) no explanation of randomization procedure; 2) open-label design without the use of independent reviewers; and 3) possible selection bias since subjects were not recruited in a random or consecutive manner.</p>	<p>S</p>
<p>Lind, J.S., et al: A Multicenter, Phase II study of Erlotinib and Sorafenib in Chemotherapy-naive Patients with Advanced Non-Small Cell Lung Cancer. Clin Cancer Res Apr 15, 2010; p. 1.</p>	<p><u>Study methodology comments:</u>            This was an open-label time-series trial. A major weakness of the study was the absence of a control group which would have controlled for many potential confounds. Additional weaknesses included 1) open-label design without the use of independent reviewers; and 2) possible selection bias since patients were not recruited in a random or consecutive manner. Strengths of the study were 1) the use of a within-subject design to control for confounding effects of patient characteristics; 2) defined primary and secondary outcomes and clinical response; 3) had both inclusion and exclusion criteria; 4) conducted a power analysis; 5) responses were confirmed at 4 weeks; 6) presented 95% confidence intervals; and 7) examined the effect of some potential confounding factors on outcomes</p>	<p>S</p>
<p>Blumenschein, G.R., et al: Phase II, multicenter, uncontrolled trial of singleagent sorafenib in patients with relapsed or refractory, advanced non small- cell lung cancer. J Clin Oncol Sep 10, 2009; Vol 27, Issue 26; pp. 4274-4280.</p>	<p><u>Study methodology comments:</u>            This was an open-label time-series trial. A major weakness of the study was the absence of a control group which would have controlled for many potential confounds. Additional weaknesses included 1) open-label design without the use of independent reviewers; 2) did not present 95% confidence intervals; 3) did not examine the effect of potential confounding factors on outcomes; and 4) possible selection bias since patients were not recruited in a random or consecutive manner. Strengths of the study were 1) the use of a within-subject design to control for confounding effects of patient characteristics; 2) defined primary and secondary outcomes and clinical response; 3) had both inclusion and exclusion criteria; 4) confirmed diagnosis; 5) conducted a power analysis; and 6) responses were confirmed at 4 weeks.</p>	<p>S</p>

<p>Adjei, A.A., et al: Phase I trial of sorafenib in combination with gefitinib in patients with refractory or recurrent non-small cell lung cancer. Clin Cancer Res May 01, 2007; Vol 13, Issue 9; pp. 2684-2691.</p>		<p>3</p>
<p>Okamoto, I., et al: Phase I clinical and pharmacokinetic study of sorafenib in combination with carboplatin and paclitaxel in patients with advanced non-small cell lung cancer. Invest New Drugs Sep 18, 2009; Vol Epub, p. Epub.</p>		<p>3</p>
<p>Schiller, J.H., et al: Sorafenib combined with carboplatin/paclitaxel for advanced non-small cell lung cancer: A phase I subset analysis. Journal of Clinical Oncology Jun 20, 2006; Vol 24, Issue N18,1,S; pp. 412S-412S.</p>		<p>3</p>
<p>Flaherty, K.T.: A Phase I trial of the oral, multikinase inhibitor sorafenib in combination with carboplatin and paclitaxel. Clinical Cancer Research Aug 01, 2008; Vol 14, Issue 15; p. 4836.</p>		<p>3</p>
<p>Blumenschein, George: Sorafenib in lung cancer: clinical developments and future directions. Journal of Thoracic Oncology - Official Publication of the International Association for the Study of Lung Cancer Jun 2008; Vol 3, Issue 6 Suppl 2; pp. S124-S127.</p>		<p>4</p>
<p>Triano, L.R.: Management of patients with advanced non-small cell lung cancer: Current and emerging options. Drugs Feb 19, 2010; Vol 70, Issue 2; pp. 167-179.</p>		<p>4</p>

<p>Gridelli, C., et al: A randomized phase II study of sorafenib/gemcitabine or sorafenib/erlotinib for advanced nonsmall-cell lung cancer in elderly patients or patients with a performance status of 2: treatment rationale and protocol dynamics. Clinical Lung Cancer May 2007; Vol 8, Issue 6; pp. 396-398.</p>		<p>4</p>
<p>Smit, E.F., et al: Sorafenib in patients with advanced non-small cell lung cancer that harbor K-ras mutations: a brief report. J Thorac Oncol May 2010; Vol 5, Issue 5; pp. 719-720.</p>		<p>4</p>
<p>Gridelli, C., et al: Sorafenib and sunitinib in the treatment of advanced non-small cell lung cancer. Oncologist Feb 2007; Vol 12, Issue 2; pp. 191-200.</p>		<p>4</p>
<p>Blumenschein, G.R., et al: A phase II multicenter uncontrolled trial of single agent sorafenib (BAY 43-9006) in patients with relapsed or refractory advanced non-small-cell lung carcinoma. Clinical Cancer Research Dec 15, 2005; Vol 11, Issue N24,2,S; pp. 9120S-9120S.</p>		<p>3</p>
<p>Pena, C., et al: Plasma biomarkers in a phase II trial of sorafenib in advanced non-small cell lung cancer. Molecular Cancer Therapeutics Dec 2007; Vol 6, Issue N12,2; pp. 3438S-3439S.</p>		<p>3</p>

<p>Spigel, D.R., et al: A randomized double-blind placebo-controlled phase II trial of sorafenib and erlotinib or erlotinib alone in previously treated advanced non-small-cell lung cancer. Journal of Thoracic Oncology Sep 2009; Vol 4, Issue N9,1; pp. S355-S355.</p>		<p>3</p>
<p>Schiller, J., et al: A randomized discontinuation phase II study of sorafenib vs placebo in patients with non-small cell lung cancer (NSCLC) who failed at least two prior chemotherapy regimens: E2501. Journal of Thoracic Oncology Sep 2009; Vol 4, Issue N9,1; pp. S355-S356.</p>		<p>3</p>
<p>Lind, J.S., et al: A phase II study of erlotinib and sorafenib in chemotherapy-naive patients with locally advanced/metastatic non-small cell lung cancer (NSCLC). Journal of Thoracic Oncology Sep 2009; Vol 4, Issue N9,1; pp. S412-S413.</p>		<p>3</p>
<p>Gatzemeier, U., et al: Phase II trial of single-agent sorafenib in patients with advanced non-small cell lung carcinoma. Journal of Clinical Oncology Jun 20, 2006; Vol 24, Issue N18,1,S; pp. 364S-364S.</p>		<p>3</p>
<p>Gutierrez, M., et al: A phase II study of multikinase inhibitor sorafenib in patients with relapsed non-small cell lung cancer (NSCLC). Annals of Oncology 2008; Vol 19, Issue 3; pp. 36-36.</p>		<p>3</p>

<p>Adjei, A.A., et al: A phase I study of BAY 43-9006 and gefitinib in patients with refractory or recurrent non-smallcell lung cancer (NSCLC). Journal of Clinical Oncology Jun 01, 2005; Vol 23, Issue N16,1,S; pp. 208S-208S.</p>		<p>3</p>
<p>Adjei, A.A., et al: A front-line window of opportunity phase II study of sorafenib in patients with advanced non-small cell lung cancer: A North Central Cancer Treatment Group study. 2007 ASCO abstract.</p>		<p>3</p>
<p>Liu, B. et al. A phase II study of BAY 43-9006 (Sorafenib) in patients with relapsed non-small cell lung cancer (NSCLC). 2006 ASCO abstract.</p>		<p>3</p>
<p>Lowry, F.: Sorafenib delays progression after failed chemotherapy. Oncology Report Sep 01, 2008; Vol -, Issue FALL; p. 86.</p>		<p>3</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
Amy Hemstreet, PharmD	None	Jeffrey F. Patton, MD	None
Stacy LaClaire, PharmD	None	Susan Goodin, PharmD	None
Felicia Gelsey, MS	None	Gerald J. Robbins, MD	None
		Keith A. Thompson, MD	None
		John M. Valgus, PharmD	None

**ASSIGNMENT OF RATINGS:**

\*to meet requirement 4

	EFFICACY	STRENGTH OF RECOMMENDATION	COMMENTS	STRENGTH OF EVIDENCE
<b>MICROMEDEX</b>	---	---		B
Jeffrey F. Patton, MD	Ineffective	Class III: Not Recommended	None	N/A
Susan Goodin, PharmD	Evidence is Inconclusive	Class IIb: Recommended, In Some Cases	No activity when combined with chemotherapy. Limited activity (stable disease) in second line therapy (Blumenschein et al) and third line (Schiller) as monotherapy. Some activity when combined with erlotinib in EGFR mutant (-) disease.	N/A
Gerald J. Robbins, MD	Ineffective	Class III: Not Recommended	Only study showing a “positive” effect was disease stabilization of 74% at 6 wks in phase 2 study. No “responses” noted in single agent studies and no significant benefit in Phase III study.	N/A
Keith A. Thompson, MD	Ineffective	Class III: Not Recommended	None	N/A
John M. Valgus, PharmD	Evidence is Inconclusive	Class IIb: Recommended, In Some Cases	Weight of evidence suggests limited activity of Sorafenib although did demonstrate disease stabilization in refractory setting.	N/A

