

COMPENDIA TRANSPARENCY TRACKING FORM

DATE: 9/15/2017

PACKET: 1484

DRUG: Nivolumab

USE: Non-small cell lung cancer, metastatic or recurrent, PD-L1 expression, first-line treatment, with no EGFR or ALK tumor aberrations

| 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, S *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)]

EVIDENCE CONSIDERED:

*to meet requirements 2 and 4

| CITATION | STUDY-SPECIFIC COMMENTS | LITERATURE CODE |
|---|---|-----------------|
| Carbone et al. First-Line Nivolumab in Stage IV or Recurrent Non–Small-Cell Lung Cancer. N Engl J Med 2017;376:2415-26. | Comments: This was a randomized, open-label, phase 3 trial. Key bias criteria evaluated were (1) random sequence generation of randomization; (2) lack of allocation concealment, (3) lack of blinding, (4) incomplete accounting of patients and outcome events, and (5) selective outcome reporting bias. The study was at low risk of bias for these key criteria, and no additional biases were identified. | S |
| Remon J, Besse B, Soria JC. Successes and failures: what did we learn from recent first-line treatment immunotherapy trials in non-small cell lung cancer? BMC Med. 2017 Mar 13;15(1):55. | | 4 |
| Ramamurthy C1, Godwin JL1, Borghaei H. Immune Checkpoint Inhibitor Therapy: What Line of Therapy and How to Choose? Curr Treat Options Oncol. 2017 Jun;18(6):33. doi: 10.1007/s11864-017-0476-y. | | 4 |
| Hannah N, et al: Systemic Therapy for Stage IV Non–Small-Cell Lung Cancer: American Society of Clinical Oncology Clinical Practice Guideline Update. DOI: 10.1200/JCO.2017.74.6065 Journal of Clinical Oncology - published online before print August 14, 2017 | | 4 |

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 | | |
| Stacy LaClaire, PharmD | None | | |
| Catherine Sabatos, PharmD | None | | |
| | | John D Roberts | None |
| | | Jeffrey Klein | None |
| | | Richard LoCicero | Incyte Corporation Local PI for REVEAL. Study is a multicenter, non-interventional, non-randomized, prospective, observational study in an adult population for patients who have been diagnosed with clinically overt PV and are being followed in either community or academic medical centers in the US who will be enrolled over a 12-month period and observed for 36 months. |

ASSIGNMENT OF RATINGS:

*to meet requirement 4

| | EFFICACY | STRENGTH OF RECOMMENDATION | COMMENTS | STRENGTH OF EVIDENCE |
|----------------|--------------------------|---------------------------------------|--|----------------------|
| MICROMEDEX | Evidence Favors Efficacy | Class IIb: Recommended, In Some Cases | | B |
| John D Roberts | Evidence Favors Efficacy | Class IIb: Recommended, In Some Cases | In a problematic trial, Nivolumab had similar effectiveness and was better tolerated than standard platinum-based chemotherapy in patients with PD-L1 expression of 5% or greater. Problems included: the trial was designed to demonstrate superiority of nivolumab, not non-inferiority; a minority of enrolled patients were ultimately eligible for randomization; despite randomization, a number of prognostic factors were poorly balanced; the primary endpoint was progression free survival by RECIST 1.1, which does not recognize radiographic pseudo-progression that is frequently seen with nivolumab and similar agents; extensive cross-over following progression of disease; omission of outcomes in patients with tumors of 1% - <5% PD-L1 expression. | N/A |

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|------------------|--------------------------|---------------------------------------|--|-----|
| Jeffrey Klein | Evidence Favors Efficacy | Class IIb: Recommended, In Some Cases | The use of Nivolumab as a first line single agent for NSCLC showed a similar type of efficacy as cisplatin based combination therapy. Less adverse effects with the use of nivolumab was the key factor for favoring its use, though cost and frequency of therapy needs to be considered. | N/A |
| Richard LoCicero | Ineffective | Class III: Not Recommended | Nivolumab was not associated with a longer progression-free survival or overall survival compared with platinum-based chemotherapy. Its use is not established in this setting. | N/A |