

Positive Quality Intervention: Non-Small Cell Lung Cancer Stage III Overview and Patient Eligibility of Durvalumab (Imfinzi®)

Description: The purpose of this PQI is to discuss Stage III Non-small cell lung cancer (NSCLC) and patient eligibility of durvalumab (Imfinzi®).

Background: Within the category of lung cancer, approximately 80-85% of lung cancers are NSCLC.^{1,2} Treatment for stage III NSCLC may include combinations of radiation, chemotherapy, and/or surgery, which requires input from the medically integrated team, including medical and radiation oncologists along with thoracic surgeons. Concurrent chemoradiation therapy (CRT) is often utilized when patients with Stage III NSCLC either decline or are ineligible for surgical options.³ Immunotherapy is possible to be given at this stage with durvalumab being the standard of care in patients who have not progressed after 2 or more cycles of definitive concurrent CRT. Meta-analysis has shown that concurrent CRT confers significant benefit when it comes to long-term survival of patients with for NSCLC (2,3,4, and 5-year survival rates).⁴ NCCN guidelines suggest use of durvalumab as the Category 1 recommendation in unresectable Stage III NSCLC following definitive CRT.⁵ Initiation of durvalumab following CRT may also elicit a synergistic antitumor immune response, given the mechanism of durvalumab as a monoclonal antibody that binds to programmed cell death ligand-1 (PD-L1), thereby blocking the PD-L1/PD-1 immune checkpoint signaling cascade.⁶⁻¹¹ Based on the PACIFIC study criteria approximately 70% of patients with unresectable stage III NSCLC would be eligible to receive durvalumab following CRT.¹² If initiating durvalumab, therapy care teams are instructed to begin therapy within 42 days after CRT completion.¹³

PQI Process:¹³

- Consider durvalumab for NSCLC if ALL of the following are met:
 - Individual is 18 years of age or older
 - Individual has not received previous therapy with a PD-L1/PD-1 unless otherwise specified
 - Used as a single agent
 - Used as consolidation therapy
 - Disease is unresectable stage III without progression after 2 or more cycles of definitive CRT
 - Individual has performance status 0-1 (able to perform all pre-disease activities without restriction or restricted when engaging in physical activity but able to carry out light work)
- If durvalumab is an option, especially with concurrent CRT, plan to initiate within **42 days** of CRT
- Review [PQI Durvalumab \(Imfinzi®\) Therapy Overview](#) for management guidance
- Screen patients for immune-mediated adverse event (imAE) symptoms using [Immune-Mediated Adverse Event \(imAE\) Management Tool](#)
- Schedule regular visits for blood tests (CBC, renal, hepatic, pancreatic, thyroid) and monitoring

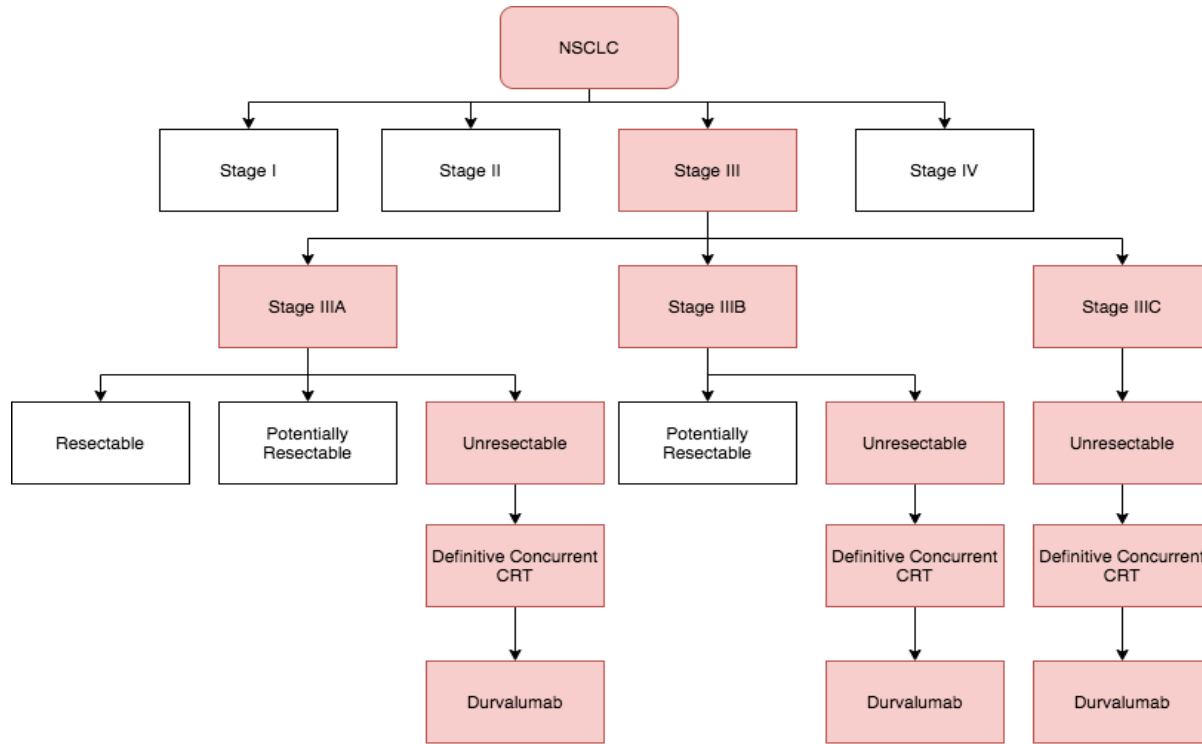
Patient Centered Activities:

- Review with patient potential options for stage III NSCLC
- Provide written and verbal education on durvalumab if selected as treatment option
 - Counsel patient on imAE symptoms and when to report symptoms to oncologist
 - Consider early initiation of steroids as necessary

Important Notice: NCODA has developed this Positive Quality Intervention platform. This platform represents a brief summary of medication uses and therapy options derived from information provided by the drug manufacturer and other resources. This platform is intended as an educational aid and does not provide individual medical advice and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication discussed in the platform and is not intended as a substitute for the advice of a qualified healthcare professional. The materials contained in this platform are for informational purposes only and do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA, which assumes no liability for and does not ensure the accuracy of the information presented. NCODA does not make any representations with respect to the medications whatsoever, and any and all decisions, with respect to such medications, are at the sole risk of the individual consuming the medication. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional. *Updated*

Supplemental Information:

Diagram of durvalumab’s current place in therapy for NSCLC²



References:

1. American Cancer Society. <https://www.cancer.org/cancer/lung-cancer/about/what-is.html>. Accessed March 2021
2. Chiramel J., Tay R., Califano R. Durvalumab after chemo-radiotherapy in stage III non-small cell lung cancer. *J Thorac Dis.* 2018;10(Suppl 9):S991–S994.
3. American Cancer Society. <https://www.cancer.org/cancer/lung-cancer/treating-non-small-cell-by-stage.html>. Accessed March 2021
4. Xiao W, Hong M. Concurrent vs sequential chemoradiotherapy for patients with advanced non-small-cell lung cancer: A meta-analysis of randomized controlled trials. *Medicine (Baltimore).* 2021 Mar 19;100(11):e21455.
5. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Non-Small Cell Lung Cancer.
6. Reits EA, Hodge JW, Herberts CA, et al. Radiation modulates the peptide repertoire, enhances MHC class I expression, and induces successful antitumor immunotherapy. *J Exp Med.* 2006;203(5):1259-1271.
7. Dovedi SJ, Adlard AL, Lipowska-Bhalla G, et al. Acquired resistance to fractionated radiotherapy can be overcome by concurrent PD-L1 blockade. *Cancer Res.* 2014;74(19):5458-5468.
8. Deng L, Liang H, Burnette B, et al. Irradiation and anti-PD-L1 treatment synergistically promote antitumor immunity in mice. *J Clin Invest.* 2014;124(2):687-695.
9. Stewart R, Morrow M, Hammond SA, et al. Identification and characterization of MEDI4736, an antagonistic anti-PD-L1 monoclonal antibody. *Cancer Immunol Res.* 2015;3(9):1052-1062.
10. Hato SV, Khong A, de Vries IJ, Lesterhuis WJ. Molecular pathways: the immunogenic effects of platinum-based chemotherapeutics. *Clin Cancer Res.* 2014;20(11):2831-2837.
11. Ibrahim R, Stewart R, Shalabi A. PD-L1 blockade for cancer treatment: MEDI4736. *Semin Oncol.* 2015;42(3):474-483.
12. Sakaguchi T, et al. Patients with unresectable stage III non-small cell lung cancer eligible to receive consolidation therapy with durvalumab in clinical practice based on PACIFIC study criteria. *Respir Investig.* 2019 Sep;57(5):466-471.
13. [Imfinzi® \(durvalumab\) \[prescribing information\]](#).

Important Notice: NCODA has developed this Positive Quality Intervention platform. This platform represents a brief summary of medication uses and therapy options derived from information provided by the drug manufacturer and other resources. This platform is intended as an educational aid and does not provide individual medical advice and does not substitute for the advice of a qualified healthcare professional. This platform does not cover all existing information related to the possible uses, directions, doses, precautions, warning, interactions, adverse effects, or risks associated with the medication discussed in the platform and is not intended as a substitute for the advice of a qualified healthcare professional. The materials contained in this platform are for informational purposes only and do not constitute or imply endorsement, recommendation, or favoring of this medication by NCODA, which assumes no liability for and does not ensure the accuracy of the information presented. NCODA does not make any representations with respect to the medications whatsoever, and any and all decisions, with respect to such medications, are at the sole risk of the individual consuming the medication. All decisions related to taking this medication should be made with the guidance and under the direction of a qualified healthcare professional. *Updated*