

#### Backgrounder: "Clear Your View" Campaign

# An initiative to raise awareness of the importance of complete biomarker testing before starting first-line treatment for all advanced cancer patients, with a focus on non-small cell lung cancer (NSCLC) and colorectal cancer (CRC) patients

# Current rates of biomarker testing in advanced NSCLC and CRC fail to meet recommended medical guidelines, causing many patients to receive inappropriate therapy<sup>1-4</sup>

For non-small cell lung cancer patients:

- Medical guidelines recommend all patients with metastatic or advanced NSCLC undergo testing for 10 biomarkers: EGFR, ALK, ROS1, BRAF, NTRK, MET, RET, PD-L1, ERBB2, and KRAS<sup>5</sup>
- Yet more than 80% of advanced NSCLC patients do not receive complete biomarker testing, putting them at risk for inappropriate treatment.<sup>1</sup>
- For patients matched to the right therapy based on their genomic profile, targeted therapies often have higher overall response rates compared to chemotherapy or immunotherapy.<sup>6-10</sup> As an example, immunotherapy isn't right for every newly diagnosed NSCLC patient. Patients with *EGFR*, *ALK*, or *BRAF* alterations have a lower overall response rate to immunotherapy than to targeted therapy<sup>11-17</sup>
- The right therapy matched to the patient's genomic profile can significantly extend median overall survival rate for NSCLC patients compared to chemotherapy alone.<sup>6-10</sup>

For colorectal cancer patients:

- Medical guidelines recommend all patients with metastatic or advanced CRC undergo testing for 6 biomarkers: KRAS, NRAS, BRAF, ERBB2 (HER2), NTRK, and MSI<sup>18</sup>
- Yet 60% of CRC patients do not receive complete biomarker testing, putting them at risk for inappropriate treatment<sup>4</sup>
- As an example, 72% of patients who received anti-EGFR therapy did not have guideline-aligned RAS and BRAF testing to in fact determine eligibility for that treatment<sup>4</sup>
- The right therapy matched to the patient's genomic profile can significantly improve survival for advanced CRC patients<sup>19</sup>

*Why does clinical adoption of complete biomarker testing and precision oncology lag behind medical guidelines?* Various factors include: Physician-reported gaps in the knowledge and skills needed to incorporate into clinical practice, challenges in keeping track of latest recommendations, time associated with getting complete biomarker results, cost of tests when not covered by insurance.<sup>1-4</sup>

## There may be only one opportunity for the right first-line treatment decision. For NSCLC and CRC patients, only one in two make it to second-line therapy.<sup>20, 2</sup>

## "Clear Your View" campaign urges oncologists to "Test for All Biomarkers"

### Physicians are in the driver's seat when it comes to helping their patients get the best treatment

Testing for all guideline-recommended biomarkers is the only way to help ensure the right treatment from the start for patients with advanced NSCLC and CRC. Now, an awareness campaign – "Clear Your View" – offers oncologists a new roadmap for biomarker testing:

STOP For every advanced NSCLC or CRC patient, order all guideline-recommended biomarkers.

WAIT Get complete results to determine the most effective therapy.

**TREAT** Choose the therapy with confidence.

#### Unbranded awareness campaign drives home that the right testing drives the right treatment



#### The key image of the campaign

An oncologist behind the wheel with a severely cracked windshield and with an impaired view that could lead to an accident.



#### The key message to oncologists

For your patients newly diagnosed with advanced NSCLC or CRC, do not proceed without a clear view ahead.

#### The calls to action

- 1. Test completely for all guideline-recommended biomarkers for every newly diagnosed advanced NSCLC or CRC patient.
- 2. Visit ClearYourView.org for additional information.

#### The campaign's main communication channels

- Website (clearyourview.org) and social media, with patient stories and more
- Online advertising and emails

#### The timeframe

The "Clear Your View" campaign runs throughout 2021 and beyond.

The campaign is supported by these lung cancer organizations:



The campaign is supported by these colorectal cancer organizations:





#### References

1. Leighl NB, Page RD, Raymond VM, et al. Clinical Utility of Comprehensive Cell-Free DNA Analysis to Identify Genomic Biomarkers in Patients with Newly Diagnosed Metastatic Non-Small Cell Lung Cancer. *Clin Cancer Res.* 2019;25(15)4691-4700.

2. Carter GC, Landsman-Blumberg PB, Johnson BH, et al. KRAS testing of patients with metastatic colorectal cancer in a community based oncology setting: a retrospective database analysis. J Exp Clin Cancer Res. 2015;34:29.

3. Charlton ME, Kahl AR, Greenbaum AA, et al. KRAS Testing, Tumor Location, and Survival in Patients With Stage IV Colorectal Cancer: SEER 2010–2013. J Natl Compr Canc Netw. 2017.

4. Gutierrez ME, Price KS, Lanman RB, et al. Genomic Profiling for KRAS, NRAS, BRAF, Microsatellite Instability (MSI) and Mismatch Repair Deficiency (dMMR) among Patients with Metastatic Colon Cancer. *JCO Precision Oncol*. December 2019.

5. National Comprehensive Cancer Network. Guidelines for Patients: Lung Cancer: 2019.

https://www.nccn.org/patients/guidelines/content/PDF/lung-metastatic-patient.pdf. Accessed online February 17, 2021.

6. Shaw AT, Riely GJ, Bang Y-J, et al. Crizotinib in ROS1-rearranged advanced non-small-cell lung cancer (NSCLC): updated results, including overall survival, from PROFILE 1001. Annals of Oncology 2019; 30(7):1121-1126.

7. Ramalingam SS, Gray JE, Ohe Y, et al. Osimertinib vs comparator EGFR-TKI as first-line treatment for EGFRm advanced NSCLC (FLAURA): Final overall survival analysis. *Annals of Oncology* 2019; 30 (5): v851-v934.

8. Garon EB, Hellmann MD, Costa EC, et al. Five-year long-term overall survival for patients with advanced NSCLC treated with pembrolizumab: Results from KEYNOTE-001. J Clin Oncol. 2019 37:18\_suppl, LBA9015-LBA9015.

9. Camidge DR, Dziadziuszko R, Peters S et al. Updated Efficacy and Safety Data and Impact of the EML4-ALK Fusion Variant on the Efficacy of Alectinib in Untreated ALK-Positive Advanced Non–Small Cell Lung Cancer in the Global Phase III ALEX Study. *J Thorac Oncol*. 2019;14(7):1233-1243.

10. https://www.hcp.novartis.com/products/tafinlar-mekinist/metastatic-nsclc/efficacy/ Accessed online Jan. 10, 2020.

11. Gettinger S, Rizvi NA, Chow LQ, et al. Novolumab monotherapy for first-line treatment of advanced non-smallcell lung cancer. J Clin Oncol. 2016;34(25):2980-2987.

 Peters S, Gettinger S, Johnson ML, et al. Phase II trial of atezolizumab as first-line or subsequent therapy for patients with programmed detah-ligand 1-selected advanced non-small-cell lung cancer (BIRCH). *J Clin Oncol.* 2017;35(24):2781-2789.
Gainor JF, Shaw AT, Sequist LV, et al. EGFR mutations and ALK rearrangements are associated with low response rates to PD-1

13. Gainor JF, Shaw AT, Sequist LV, et al. EGFR mutations and ALK rearrangements are associated with low response rates to PD-1 pathway blockade in non-small cell lung cancer: a retrospective analysis. *Clin Cancer Res.* 2016;15(22):4585-4593.

14. Geva S, Rozenblum AB, Grinberg R, et al. The clinical impact of comprehensive cfDNA genomic testing in lung cancer. *J Thoracic Onc.* 2018;13(4S):S1-S139.

15. Keytruda® (pembrolizumab) for injection, for intravenous use [package insert].

16. Ettinger DS, Wood DE, Aisner DL, et al. Non-small cell lung cancer, version 5.2017, NCCN. Clinical Practice Guidelines in Oncology. J Natl Compr Canc Netw. 2017;15(4):504-535.

17. Dudnik, E, Peled N, Wollner M, et al. MA 02.06 BRAF Mutant NSCLC: Correlation with PD-L1 Expression, TMB, MSI and Response to ICPi and Anti-BRAF Therapy. *J Thoracic Onc.* 2017;12(11S):S1804-S1805.

18. National Comprehensive Cancer Network. Guidelines for Patients: Colon Cancer 2018.

https://www.nccn.org/patients/guidelines/content/PDF/colon-patient.pdf. Accessed online February 17, 2021.

19. Kopetz S, Grothey A, Yaeger R, Cutsem E, et al. Encorafenib, Binimetinib, and Cetuximab in BRAF V600E–Mutated Colorectal Cancer. *New England Journal of Medicine*. 2019; 381:1632-1643.

20. Schwartzberg L, Korytowsky B, Penrod JR, et al. Real-World Clinical Impact of Immune Checkpoint Inhibitors in Patients With Advanced/Metastatic Non-Small Cell Lung Cancer After Platinum Chemotherapy. *Clin Lung Cancer*. 2019 Published online 2019.