TEPMETKO VISION Trial – Key Thought Leaders' Perspectives on the Largest and Longest *MET*ex14+ mNSCLC Clinical Trial With Long-Term Follow-Up Outcomes

ClinTopics®

TEPMETKO® (tepotinib) 225 mg Tablets

Meet the Experts

Razelle Kurzrock, MD, FACP
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Froedtert Hospital Campus
Milwaukee, Wisconsin

Martin Dietrich, MD, PhD
Oncologist
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View Detailed Information and Commentary From Experts Inside

Featured Topics

1. ***MET*ex14 Skipping and Its Significance in mNSCLC:** Among your patients with NSCLC, 3-4% may harbor *MET*ex14 skipping alterations and face a significantly worse prognosis than those without *MET*ex14 skipping alterations.[1-4]
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2. **VISION Trial – The Largest and Longest *MET*ex14+ Trial:** The VISION trial is the largest and longest clinical trial to date in *MET*ex14+ mNSCLC which included 313 patients identified by tissue and/or liquid biopsy.[5,6]
page 3

3. **TEPMETKO Data – Efficacy, Safety and Dosing:** TEPMETKO achieved robust and lasting responses in both treatment-naïve (57% ORR; 40% still responding at ≥12 months) and previously treated (45% ORR; 36% still responding at ≥12 months) patients. TEPMETKO has an established safety profile and is also the only approved once-daily oral MET inhibitor.[5,6,7]
pages 4-11

MET=mesenchymal-epithelial transition; *MET*ex14=mesenchymal-epithelial transition exon 14; mNSCLC=metastatic non-small cell lung cancer; NSCLC=non-small cell lung cancer; ORR=objective response rate.

INDICATION

TEPMETKO is indicated for the treatment of adult patients with metastatic non-small cell lung cancer (NSCLC) harboring mesenchymal-epithelial transition (*MET*) exon 14 skipping alterations.

SELECT SAFETY INFORMATION

TEPMETKO can cause **interstitial lung disease (ILD)/pneumonitis**, which can be fatal. Monitor patients for new or worsening pulmonary symptoms indicative of ILD/pneumonitis (eg, dyspnea, cough, fever). Immediately withhold TEPMETKO in patients with suspected ILD/pneumonitis and permanently discontinue if no other potential causes of ILD/pneumonitis are identified. ILD/pneumonitis occurred in 2% of patients treated with TEPMETKO, with one patient experiencing a Grade 3 or higher event; this event resulted in death.

Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

Prognosis and Treatment

- Patients with *MET*ex14 skipping NSCLC face a significantly worse prognosis than those without the alterations[1]
- 3% to 4% of your patients with NSCLC may harbor *MET*ex14 skipping alterations[2-4]
- mOS in patients with NSCLC with *MET*ex14 skipping alterations is significantly decreased compared to patients without *MET*ex14 skipping alterations (~1 year vs ~6.25 years, respectively [log-rank *P*=0.0385])[1]
- Targeted treatment may help patients with NSCLC achieve the best possible outcomes[8,9]
  - *MET*ex14 skipping NSCLC responds poorly to standard of care[10,11]
  - In a retrospective analysis of patients with NSCLC harboring *MET*ex14 skipping alterations (n=11/24 with PD-L1 ≥50%), after treatment with single or combination immunotherapy, the ORR was 17% and the mPFS was 1.9 months[12]
  - In real-world studies, patients with *MET*ex14 skipping NSCLC treated with immunotherapy had a mPFS of 2.69 months and a mOS of 12.25 months[13]
- Rapid initiation of targeted treatment is essential for patients with *MET*ex14 skipping NSCLC[10]

"Although I treat patients with *MET*ex14 skipping alterations, it is generally uncommon and occurs in 3-4% of patients with metastatic NSCLC.[2] However, because biomarker-based therapies are now available for the ~80% of patients with NSCLC, including *MET*ex14 skipping, as well as *EGFR*, and *ALK*, it is crucial to perform NGS as soon as a patient is diagnosed with NSCLC.[14,15] By identifying these alterations, we can promptly initiate treatment with an appropriate targeted therapy." ***– Razelle Kurzrock, MD, FACP***

"*MET*ex14 is one of the main oncogenic drivers in NSCLC, meaning it is the driving alteration responsible for the propagation and spread of this cancer subtype.[8] We typically see this alteration in older, male patients who are smokers.[1] I would like to note that patients with *MET*ex14 skipping alterations commonly have elevated PD-L1 levels, so a reasonable treatment approach could include immunotherapy with a PD-1 inhibitor. However, patients with *MET*ex14 skipping alterations would not respond to immunotherapy; therefore, the early identification of *MET*ex14 skipping NSCLC can help guide appropriate upfront targeted therapy.[16]"
– Martin Dietrich, MD, PhD

National Comprehensive Cancer Network® (NCCN®) Recommends

- Clinicians obtain molecular testing results for actionable biomarkers in eligible patients with metastatic NSCLC before administering first-line systemic therapy, if clinically feasible[15]
- Targeted therapies for certain patients with metastatic NSCLC and specific oncogenic drivers independent of PD-L1 levels[15]
- For patients who must immediately start therapy while molecular testing is pending, consider holding immunotherapy for one cycle and use platinum-based chemotherapy regimens[15]
- If a *MET*ex14 skipping mutation is discovered during first-line systemic therapy, interrupt* current therapy and start a *MET* inhibitor[15]

*If there is a good response to current therapy, it is reasonable to continue therapy.[15]

ICI=immune checkpoint inhibitor; *MET*ex14=mesenchymal-epithelial transition exon 14; mOS=median overall survival; mPFS=median progression-free survival; NGS=next-generation sequencing; NCCN=National Comprehensive Cancer Network; NSCLC=non-small cell lung cancer; ORR=objective response rate; PDL-1=programmed death-ligand 1.

IMPORTANT SAFETY INFORMATION

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VISION Trial – The Largest and Longest *MET*ex14+ Trial

The VISION Trial is the largest and longest clinical trial in *MET*ex14+ mNSCLC.[5,6]

"In my opinion, the VISION trial was a well-designed study that included over 300 patients. To me, the number of patients adds to the clinical rigor of the study, given how rare *MET*ex14 skipping alterations are in patients with advanced NSCLC."
– Razelle Kurzrock, MD, FACP

"The VISION trial is the largest and longest clinical trial that evaluated the efficacy of TEPMETKO in patients with NSCLC who have *MET*ex14 skipping alterations.[6] Since real-world data demonstrate that chemotherapy alone is insufficient for this patient population, I think that the single-arm, multi-cohort design was appropriate to evaluate the efficacy of TEPMETKO in treatment-naïve and previously-treated patients with *MET*ex14 skipping alterations.[6,17]" ***– Martin Dietrich, MD, PhD***

Trial Design & Baseline Characteristics

- The VISION trial was a single-arm, open-label, multicenter, non-randomized, multicohort study in 313 patients with advanced or metastatic NSCLC harboring *MET*ex14 skipping alterations, EGFR wild-type and ALK negative status, 1 measurable lesion as defined by RECIST v1.1, and ECOG PS 0-1[2,5,6]
- Patients with symptomatic CNS metastases, clinically significant uncontrolled cardiac disease, or who received treatment with any MET or HGF inhibitor were not eligible for the study[2,5,6]
- The primary endpoint was objective response by a BIRC according to RECIST v1.1. Secondary endpoints included DOR, DCR, and safety[5,6]
- Of the 313 patients enrolled in VISION Trial, 94% has metastatic disease, 81% had adenocarcinoma histology, and 13% had CNS metastases[5]
    - The efficacy population included 164 treatment naïve patients and 149 previously treated patients
    - Amongst previously treated patients, 84% received prior platinum-based chemotherapy

ALK=anaplastic lymphoma kinase; BIRC=blinded, independent review committee; CNS=central nervous system; DCR=disease control rate; DOR=duration of response; ECOG PS=Eastern Cooperative Oncology Group performance status; EGFR=epidermal growth factor receptor; HGF=hepatocyte growth factor; MET=mesenchymal-epithelial transition; mNCSLC=metastatic non-small cell lung cancer; RECIST=Response Evaluation Criteria in Solid Tumors.

IMPORTANT SAFETY INFORMATION (continued)

TEPMETKO can cause **hepatotoxicity**, which can be fatal. Monitor liver function tests (including alanine aminotransferase [ALT], aspartate aminotransferase [AST], and total bilirubin) prior to the start of TEPMETKO, every 2 weeks during the first 3 months of treatment, then once a month or as clinically indicated, with more frequent testing in patients who develop increased transaminases or total bilirubin. Based on the severity of the adverse reaction, withhold, dose reduce, or permanently discontinue TEPMETKO. Increased ALT/increased AST occurred in 18% of patients treated with TEPMETKO. Grade 3 or 4 increased ALT/AST occurred in 4.7% of patients. A fatal adverse reaction of hepatic failure occurred in one patient (0.2%). The median time-to-onset of Grade 3 or higher increased ALT/AST was 47 days (range 1 to 262).

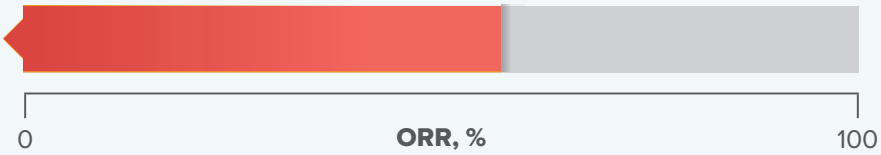
Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

Primary and Secondary Efficacy Data

- TEPMETKO provided robust and lasting responses in treatment-naïve patients[2,5,6]

Figure 1: ORR in Treatment-Naïve Patients[6a]

57% ORR
(95% CI: 49, 65)
(n=164)

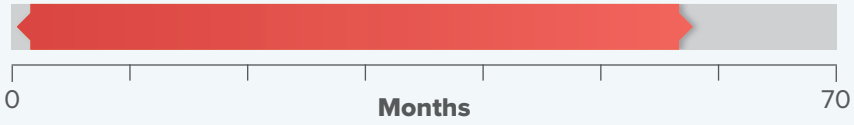


[a]ORR according to RECIST v1.1 as evaluated by a BIRC.

Figure 2: DOR in Treatment-Naïve Patients[5]

1.3 months

56.6 months



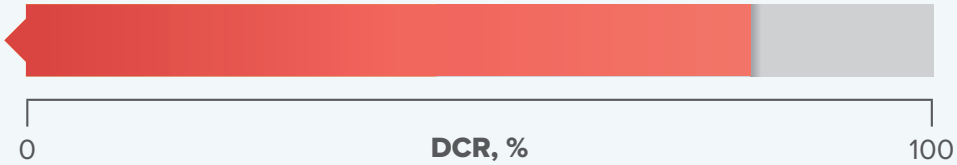
66% of patients were still responding at ≥6 months

40% of patients were still responding at ≥12 months

Long-Term Follow-Up* Data

Figure 3: DCR in Treatment-Naïve Patients[6]

78.7% DCR
(95% CI: 71.6, 84.7)
(n=164)



Limitations: DCR (defined as confirmed CR + PR + SD lasting at least 12 weeks as the best overall response by IRC assessments) from first administration of study treatment to the first observation of PD. In a single-arm trial, it is not possible to determine if SD is a result of natural disease progression or treatment. DCR was analyzed in a descriptive manner.

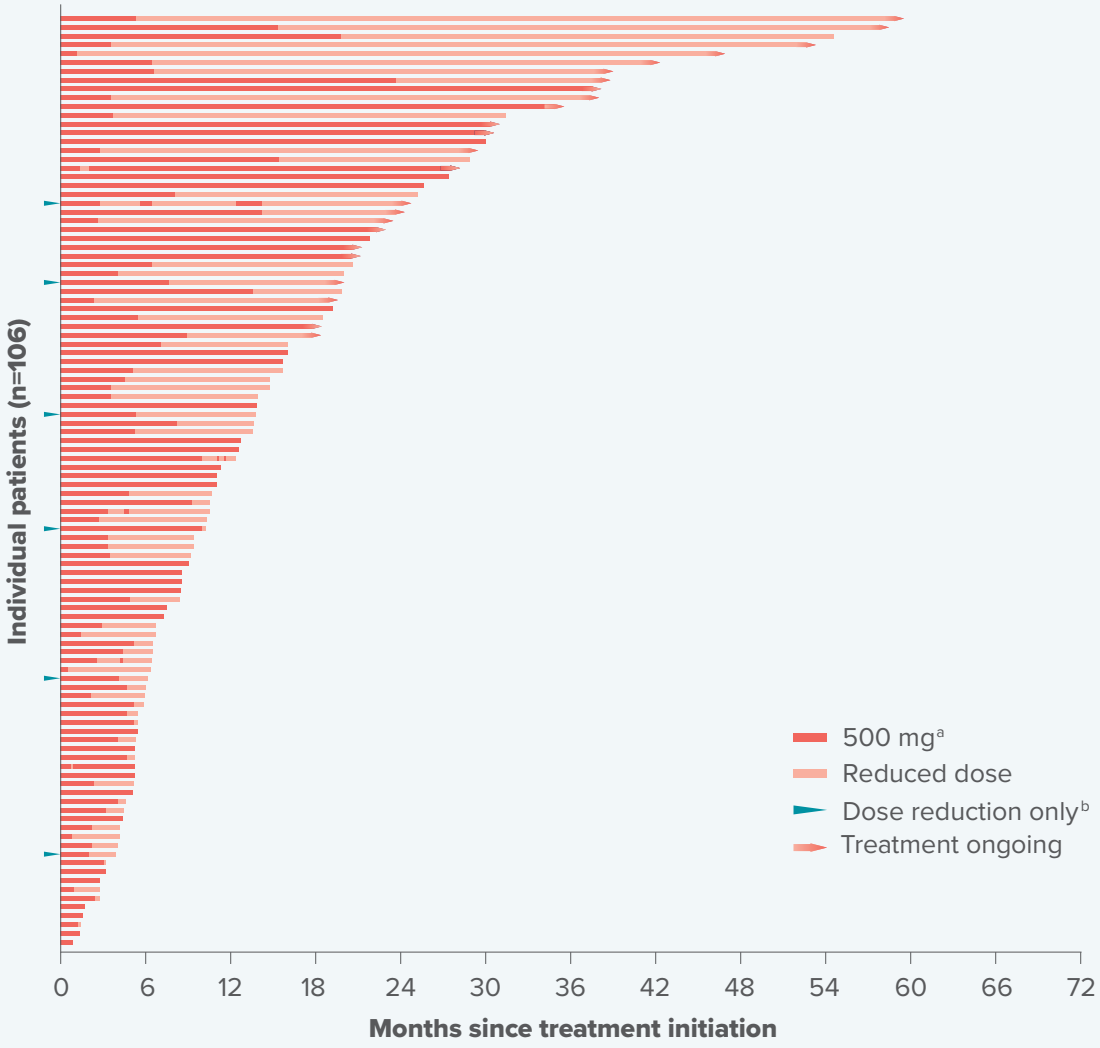
- Across all treatment-naïve and previously treated patients (n=313), 51% achieved a response with TEPMETKO (n=161)[2,18]:
  - 68% responded within 6 weeks
  - 84% responded within 12 weeks

"In the setting of oncology, an ORR of 57% is considered a very high response rate, as treatments with a 30% ORR are generally approved for use.[6,19] Additionally, I was impressed by the duration of response in patients who received TEPMETKO." ***– Razelle Kurzrock, MD, FACP***

"The overall response rate in treatment-naïve patients taking TEPMETKO in the VISION trial was 57%.[6] Furthermore, I find it reassuring that these responses were durable, with 66% of patients responding to treatment at ≥6 months and 40% at ≥12 months.[5] Another outcome that I find clinically important is disease control rate. Many of my patients with stable disease or a reduced disease burden (based on a reduction in tumor size and/or improvement in clinical symptoms) report a clinically meaningful improvement with TEPMETKO treatment.[6,20]" ***– Martin Dietrich, MD, PhD***

Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

Figure 4: Duration of Treatment with Dose Reductions and/or Interruptions in Treatment-Naïve Paients[18,21]



[a]450 mg active moiety.
[b]All other patients had ≥1 treatment interruptions.

- Of total patients, 69 patients (42.07%) had at least one dose reduction, and 100 patients (61%) had at least one dose interruption/delay[18,21]
- Median duration of treatment (n=164) was 8.1 months (range: 0.03-59.37) while median duration of treatment with at least one dose reduction or interruption (n=106) was 11.1 months (range: 0.7-59.4)[18]

*Long-term follow-up of up to 6 years (range: 0.3-71.9 months).

CR=complete response; IRC=independent review committee; PD=progressive disease; PR=partial response; SD=stable disease.

IMPORTANT SAFETY INFORMATION (continued)

TEPMETKO can cause **pancreatic toxicity** in the form of elevations in amylase and lipase levels. Increased amylase and/or lipase occurred in 13% of patients, with Grade 3 and 4 increases occurring in 5% and 1.2% of patients, respectively. Monitor amylase and lipase levels at baseline and regularly during treatment with TEPMETKO and temporarily withhold, dose reduce, or permanently discontinue based on severity of the adverse event.

TEPMETKO can cause **embryo-fetal toxicity**. Based on findings in animal studies and its mechanism of action, TEPMETKO can cause fetal harm when administered to a pregnant woman. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential or males with female partners of reproductive potential to use effective contraception during treatment with TEPMETKO and for one week after the last dose.

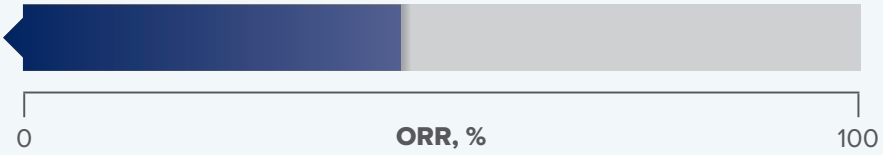
Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

Primary and Secondary Efficacy Data

- TEPMETKO provided robust and lasting responses in previously treated patients[2,5,6]

Figure 5: ORR in Previously Treated Patients[6a]

45% ORR
(95% CI: 37, 53)
(n=149)

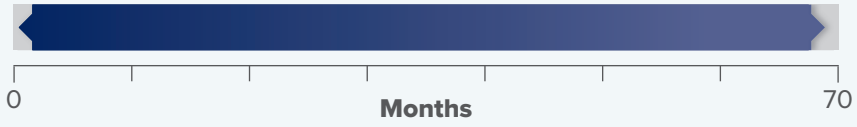


[a]ORR according to RECIST v1.1 as evaluated by a BIRC.

Figure 6: DOR in Previously Treated Patients[5]

1.4 months

67.6 months



66% of patients were still responding at ≥6 months

36% of patients were still responding at ≥12 months

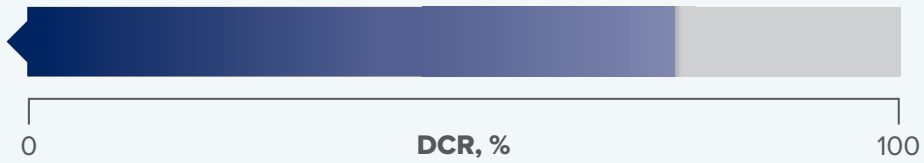
"The ORR in patients who were previously treated was 45%.[6] While this rate is numerically lower than the response rate observed in treatment-naive patients, I am not surprised by these findings. It is widely recognized that previously treated patients often become resistant after earlier therapies. Nevertheless, these findings are still impressive in the context of advanced NSCLC, and I would confidently consider TEPMETKO for patients who have received prior treatment." ***– Razelle Kurzrock, MD, FACP***

"In my clinical practice, I prioritize oncogenic drivers and use them to guide therapy once identified. Therefore, I may either switch therapies or wait until the following line of therapy to initiate TEPMETKO. However, I am realistic that the response rate with subsequent lines of therapy will be less than that of first-line therapy.[6] Possible reasons could include patients acquiring more resistance alterations with prior treatment exposure, or a decline in their performance status." ***– Martin Dietrich, MD, PhD***

Long-Term Follow-Up* Data

Figure 7: DCR in Previously Treated Patients[6]

73.8% DCR
(95% CI: 66.0, 80.7)
(n=149)



Limitations: DCR (defined as confirmed CR + PR + SD lasting at least 12 weeks as the best overall response by IRC assessments) from first administration of study treatment to the first observation of PD. In a single-arm trial, it is not possible to determine if SD is a result of natural disease progression or treatment. DCR was analyzed in a descriptive manner.

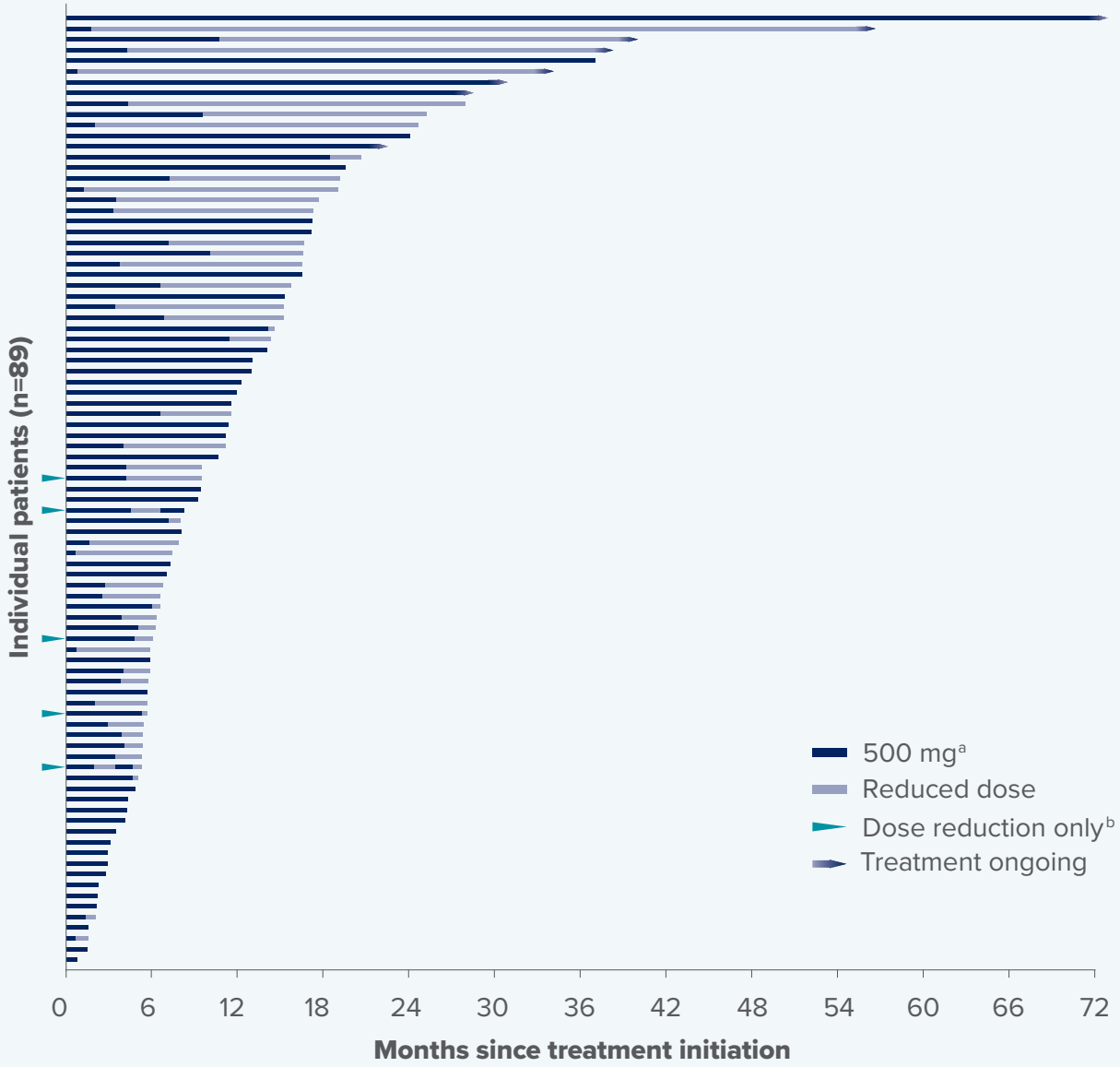
- Across all treatment-naïve and previously treated patients (n=313), 51% achieved a response with TEPMETKO (n=161)[2,18]:
  - 68% responded within 6 weeks
  - 84% responded within 12 weeks

IMPORTANT SAFETY INFORMATION (continued)

Avoid concomitant use of TEPMETKO with certain **P-gp substrates** where minimal concentration changes may lead to serious or life-threatening toxicities. If concomitant use is unavoidable, reduce the P-gp substrate dosage if recommended in its approved product labeling.

Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

Figure 8: Duration of Treatment With Dose Reductions and/or Interruptions in Previously Treated Patients[18,21]



[a]450 mg active moiety.
[b]All other patients had ≥1 treatment interruptions.

- Of total patients, 47 patients (31.5%) had at least one dose reduction, and 84 patients (56%) had at least one dose interruption/delay[18,21]
- Median duration of treatment (n=149) was 7.0 months (range: 0.03-71.85) while median duration of treatment with at least one dose reduction or interruption (n=86) was 9.4 months (range: 0.7-71.9)[18]

*Long-term follow-up of up to 6 years (range: 0.3-71.9 months).

IMPORTANT SAFETY INFORMATION (continued)

Fatal adverse reactions occurred in one patient (0.3%) due to pneumonitis, one patient (0.3%) due to hepatic failure, one patient (0.3%) due to dyspnea from fluid overload, one patient (0.3%) due to pneumonia, one patient (0.3%) due to sepsis, and one patient (0.3%) from unknown cause.

Serious adverse reactions occurred in 51% of patients who received TEPMETKO. Serious adverse reactions in >2% of patients included pleural effusion (6%), pneumonia (6%), edema (5%), general health deterioration (3.8%), dyspnea (3.5%), musculoskeletal pain (2.9%), and pulmonary embolism (2.2%).

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Safety Profile

- The safety and tolerability of TEPMETKO were established in 313 patients[5,6]
- Most ARs observed in the VISION Trial were mild to moderate (Grade 1 or 2)[5]

Table 1: ARs in ≥10% of Patients With mNSCLC Harboring *MET*ex14+[5a]

	All grades (%)	Grades 3-4 (%)
Edema[b]	81	16
Fatigue[c]	30	1.9
Nausea	31	1.3
Diarrhea	29	0.6
Abdominal pain[d]	19	0.6
Constipation	19	0.3
Vomiting[e]	15	1
Musculoskeletal pain[f]	30	3.2
Dyspnea[g]	24	2.6
Cough[h]	18	0.3
Pleural effusion	14	4.2
Decreased appetite	21	1.9
Rash[i]	21	1.3
Pneumonia[j]	12	3.8

[a]Severity as defined by NCI CTCAE version 4.03.[5]
[b]Edema includes eye edema, face edema, generalized edema, localized edema, edema, genital edema, peripheral edema, peripheral swelling, periorbital edema, and scrotal edema.[5]
[c]Fatigue includes asthenia and fatigue.[5]
[d]Abdominal pain includes abdominal discomfort, abdominal pain, abdominal pain lower, abdominal pain upper, gastrointestinal pain, and hepatic pain.[5]
[e]Vomiting includes retching and vomiting.[5]
[f]Musculoskeletal pain includes arthralgia, arthritis, back pain, bone pain, musculoskeletal chest pain, musculoskeletal pain, myalgia, non-cardiac chest pain, pain in extremity, and spinal pain.[5]
[g]Dyspnea includes dyspnea, dyspnea at rest, and dyspnea exertional.[5]
[h]Cough includes cough, and productive cough.[5]
[i]Rash includes rash, palmar-plantar erythrodysesthesia syndrome, rash maculo-papular, eczema, exfoliative rash, rash erythematous, rash pustular, skin exfoliation, dermatitis acneiform, drug eruption, dermatitis, rash pruritic, dermatitis bullous, toxic skin eruption.[5]
[j]Pneumonia includes pneumonia, pneumonia aspiration, and pneumonia bacterial.[5]

IMPORTANT SAFETY INFORMATION (continued)

The most common adverse reactions (≥20%) in patients who received TEPMETKO were edema (81%), nausea (31%), fatigue (30%), musculoskeletal pain (30%), diarrhea (29%), dyspnea (24%), rash (21%), and decreased appetite (21%).

Clinically relevant adverse reactions in <10% of patients who received TEPMETKO included ILD/pneumonitis, fever, dizziness, pruritus, and headache.

Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

Laboratory Abnormalities*†

- **Selected laboratory abnormalities (≥20%)** from baseline in patients receiving TEPMETKO® (tepotinib) in descending order were: decreased albumin (81%), increased creatinine (60%), decreased lymphocytes (57%), increased ALP (52%), increased ALT (50%), increased AST (40%), decreased sodium (36%), decreased hemoglobin (31%), increased GGT (29%), increased potassium (26%), increased amylase (25%), decreased leukocytes (25%), decreased platelets (24%), and increased lipase (21%)[5]
- **The most common Grades 3-4 laboratory abnormalities (≥2%)** in descending order were: decreased lymphocytes (15%), decreased albumin (9%), decreased sodium (9%), increased GGT (6%), increased amylase (5%), increased lipase (5%), increased ALT (4.9%), increased AST (3.6%), and decreased hemoglobin (3.6%)[5]

Discontinuation, Dose Interruptions, and Dose Reductions

- Due to an AR in Patients Who Received TEPMETKO[5]
  - **Permanent discontinuation (25%)** The most frequent adverse reactions (>1%) leading to permanent discontinuations of TEPMETKO were edema (8%), pleural effusion (1.6%), and general health deterioration (1.6%)
  - **Dosage interruptions (53%)** ARs which required dosage interruption in >2% of patients who received TEPMETKO included edema (28%), increased blood creatinine (6%), pleural effusion (3.5%), nausea (3.2%), increased ALT (2.9%), pneumonia (2.6%), decreased appetite (2.2%), and dyspnea (2.2%)
  - **Dose reductions (36%)** ARs which required dose reductions in >2% of patients who received TEPMETKO included edema (22%), increased blood creatinine (2.9%), fatigue (2.2%), and pleural effusion (2.2%)

Fatal and Serious Adverse Reactions

- Fatal adverse reactions occurred in 1.9% of patients who received TEPMETKO, including pneumonitis (0.3%), hepatic failure (0.3%), dyspnea from fluid overload (0.3%), pneumonia (0.3%), sepsis (0.3%), and death of unknown cause (0.3%)[5]
- Serious adverse reactions occurred in 51% of patients who received TEPMETKO. Serious adverse reactions in >2% of patients included pleural effusion (6%), pneumonia (6%), edema (5%), general health deterioration (3.8%), dyspnea (3.5%), musculoskeletal pain (2.9%), and pulmonary embolism (2.2%)[5]

Peripheral Edema

- Peripheral edema was observed in the VISION Trial and can be managed[6,7]
- Edema was managed with dose reduction, temporary interruption, or discontinuation[2,5]
  - TRAEs due to peripheral edema occurred in 67.1% of patients, with 11.2% experiencing Grade 3 or higher instances[6,7]
  - Proactive monitoring for peripheral edema is recommended[2]
  - TEPMETKO can be dose reduced in one step from two 225 mg tablets (450 mg total) to one 225 mg tablet
  - Compensatory management of peripheral edema included[2]:
    - Limb elevation
    - Compression stockings
    - Dietary salt reduction
    - Diuretics

"When managing my patients who experience peripheral edema, I reduce the TEPMETKO dosage. Based on my experience, my patients typically respond well when the dose is decreased from 450 mg to 225 mg daily.[2]" ***– Razelle Kurzrock, MD, FACP***

"The most common side effect reported in the VISION trial was edema, which occurred in 81% of patients who received TEPMETKO.[5] Based on the biology of the MET receptor, I understand that this on-target effect is almost unavoidable, considering the similarities between mutated and unmutated MET receptors.[6] Therefore, I counsel my patients to use compression stockings, elevate their legs, and restrict their salt and fluid intake. With these modifications, as well as dose reductions, most of my patients with persistent edema can continue treatment with TEPMETKO.[2]" ***– Martin Dietrich, MD, PhD***

*Severity as defined by NCI CTCAE version 4.03.[5]

†The denominator used to calculate the rate varied from 268 to 309 based on the number of patients with a baseline value and at least one post-treatment value.[5]

ALT=alternative lengthening of telomeres; ALP=alkaline phosphatase; AST=aspartate aminotransferase; AR=adverse reaction; CTCAE=Common Terminology Criteria for Adverse Events; GGT=gamma-glutamyl transferase; NCI=National Cancer Institute; TRAE=treatment-related adverse event.

Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

"The once-daily dosing of TEPMETKO may benefit some patients, particularly those who are already managing multiple medications. Additionally, the availability of TEPMETKO as a 225-mg tablet is convenient for patients who need a dose reduction, as they can take 1 tablet a day instead of 2.[5]" **– Razelle Kurzrock, MD, FACP**

"For patients who cannot take TEPMETKO orally, I find it convenient that it can be dissolved and administered through a nasogastric or percutaneous endoscopic gastrostomy tube. Based on data from the VISION trial, patients can expect to maintain efficacy with a dose reduction to 225 mg.[5] I emphasize to my patients that I believe it is more important to consistently tolerate treatment and continue taking TEPMETKO at a lower dose instead of experiencing a high symptom burden while striving for dose intensity. So, while I do not recommend starting treatment at the 225 mg dose, I am comfortable reducing the dose to 225 mg in patients who cannot tolerate the total 450 mg dose.[5]" ***– Martin Dietrich, MD, PhD***

- TEPMETKO is the ONLY approved once-daily oral MET inhibitor[5]
- Provide your patients with mNSCLC with a convenient dosing regimen[5]
  - **One dose. Once a day**
  - **Recommended starting dosage: 450 mg (two 225 mg tablets)**
- Advise patients to:
  - Take their dose at approximately the same time every day until disease progression or unacceptable toxicity
  - Swallow tablets whole. Do not chew, crush, or split tablets
  - Never make up a missed dose within 8 hours of the next scheduled dose. If vomiting occurs after taking a dose, take the next dose at the scheduled time
- Can be dissolved for patients who have difficulty swallowing and/or have a naso-gastric tube[5]
- One-step dose reduction[5]
  - Remove one tablet to reduce dose to 225 mg once daily
- Permanently discontinue in patients who are unable to tolerate the 225 mg once-daily dose
- Management of some ARs may require temporary interruption or permanent discontinuation. See the full Prescribing Information for recommended dose modifications of TEPMETKO
- Patient selection[5]
  - Select patients for treatment with TEPMETKO based on the presence of *MET*ex14+ in plasma or tumor specimens. Testing for the presence of *MET*ex14+ in plasma specimens is recommended only in patients for whom a tumor biopsy cannot be obtained. If an alteration is not detected in a plasma specimen, reevaluate the feasibility of biopsy for tumor tissue testing. An FDA-approved test for detection of *MET*ex14+ in mNSCLC for selecting patients for treatment with TEPMETKO is not available

The only MET inhibitor that offers a convenient one-step dose reduction.

FDA=United States Food and Drug Administration.

IMPORTANT SAFETY INFORMATION (continued)

Selected laboratory abnormalities (≥20%) from baseline in patients receiving TEPMETKO in descending order were: decreased albumin (81%), increased creatinine (60%), decreased lymphocytes (57%), increased alkaline phosphatase (ALP) (52%), increased ALT (50%), increased AST (40%), decreased sodium (36%), decreased hemoglobin (31%), increased gamma-glutamyltransferase (GGT) (29%), increased potassium (26%), increased amylase (25%), decreased leukocytes (25%), decreased platelets (24%), and increased lipase (21%).

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Razelle Kurzrock, MD, FACP
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Clinical Cancer Center,
Froedtert Hospital Campus
Milwaukee, Wisconsin

Dr Kurzrock is a world-renowned leader in precision oncology and rare cancers research. She is the Associate Director of Clinical Research for the Medical College of Wisconsin Cancer Center, Associate Director of Precision Oncology at the Linda T. and John A. Mellowes Center for Genomic Sciences and Precision Medicine and the founding director of the Michels Rare Cancers Research Laboratories at the MCW Cancer Center. She is recognized as one of the world's most important voices in precision medicine and one of the most highly cited scientists globally. She has authored over 1000 peer-reviewed scientific and medical publications. Dr Kurzrock is the Chair for the Early Therapeutics and Rare Cancers Committee (SWOG NCI) — one of the largest clinical trials cooperative groups in the country — and has been the principal investigator for more than 100 early-phase clinical trials that were the foundation leading to eight life-saving drugs receiving FDA approval. In 2022, Dr Kurzrock and the DART rare cancer study team received the National Cancer Institute Director's Award of Merit for outstanding work.

Martin Dietrich, MD, PhD
Oncologist
Cancer Care Centers of Brevard
Rockledge, Florida

Dr Martin Dietrich is a physician-scientist with the US Oncology Network at the Cancer Care Centers of Brevard in Orlando, FL. He has a busy clinical practice with a special focus on thoracic malignancies. He is actively involved in drug development as principal investigator for the Sarah Cannon Research Institute network in early and late phase development. He also holds a faculty appointment in the Department of Internal Medicine at the University of Central Florida in Orlando. A molecular geneticist by doctoral training, he actively investigates and treats the various genetic subtypes of non-small cell lung cancer.

References

1. Tong JH, Yeung SF, Chan AWH, et al. MET amplification and exon 14 splice site mutation define unique molecular subgroups of non-small cell lung carcinoma with poor prognosis. *Clin Cancer Res*. 2016;22(12):3048-3056. **2.** Paik PK, Felip E, Veillon R, et al. Tepotinib in non–small-cell lung cancer with MET exon 14 skipping mutations. *N Engl J Med*. 2020;383(10):931-943. **3.** Drilon A, Cappuzzo F, Ou SHI, Camidge DR. Targeting MET in lung cancer: will expectations finally be MET? *J Thorac Oncol*. 2017;12(1):15-26. **4.** Salgia R. MET in lung cancer: biomarker selection based on scientific rationale. *Mol Cancer Ther*. 2017;16(4):555-565. **5.** TEPMETKO® (tepotinib) [prescribing information]. EMD Serono, Inc., Boston MA. **6.** Mazieres J, Paik PK, Garassino MC, et al. Tepotinib treatment in patients with MET exon 14–skipping non–small cell lung cancer: long-term follow-up of the VISION phase 2 nonrandomized clinical trial. *JAMA Oncol*. 2023;9(9):1260-1266. **7.** Mazieres J, Paik PK, Garassino MC, et al. Tepotinib treatment in patients with MET exon 14–skipping non–small cell lung cancer: long-term follow-up of the VISION phase 2 nonrandomized clinical trial. *JAMA Oncol*. 2023;9(9)(suppl 2):1-15. **8.** Yoda S, Dagogo-Jack I, Hata AN. Targeting oncogenic drivers in lung cancer: recent progress, current challenges and future opportunities. *Pharmacol Ther*. 2019;193:20-30. **9.** Pakkala S, Ramalingam SS. Personalized therapy for lung cancer: striking a moving target. *JCI Insight*. 2018;3(15):e120858. **10.** Awad MM, Leonardi GC, Kravets S, et al. Impact of MET inhibitors on survival among patients with non-small cell lung cancer harboring MET exon 14 mutations: a retrospective analysis. *Lung Cancer*. 2019;133:96-102. **11.** Kraus S. Dramatic response to tepotinib in a highly symptomatic patient with metastatic MET exon 14 skipping non-small cell lung cancer and poor performance status: a case report. *Curr Probl Cancer Case Rep*. 2023;10:100230. **12.** Sabari JK, Leonardi GC, Shu CA, et al. PD-L1 expression, tumor mutational burden, and response to immunotherapy in patients with MET exon 14 altered lung cancers. *Ann Oncol*. 2018;29(10):2085-2091. **13.** Negrao MV, Skoulidis F, Montesion M, et al. Oncogene-specific differences in tumor mutational burden, PD-L1 expression, and outcomes from immunotherapy in non-small cell lung cancer. *J Immunother Cancer*. 2021;9(8):e002891. **14.** Odintsov I, Sholl LM. Prognostic and predictive biomarkers in non-small cell lung carcinoma. Pathology. 2024;56(2):192-204. **15.** Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Non-Small Cell Lung Cancer V.3.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. Accessed January 29, 2025. To view the most recent and complete version of the guidelines, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way. **16.** Marks JA, Gandhi N, Halmos B, et al. Molecular profiling METex14+ non-small cell lung cancer (NSCLC): Impact of histology. *Lung Cancer*. 2024;196:107935. **17.** Mazieres J, Vioix H, Pfeiffer BM, et al. MET Exon 14 Skipping in NSCLC: A Systematic Literature Review of Epidemiology, Clinical Characteristics, and Outcomes. *Clin Lung Cancer.* 2023;24(6):483-497. **18.** Data on file, 2024. **19.** Oxnard GR, Wilcox KH, Gonen M, Polotsky M, Hirsch BR, Schwartz LH. Response Rate as a Regulatory End Point in Single-Arm Studies of Advanced Solid Tumors. *JAMA Oncol*. 2016;2(6):772-779. **20.** Mazieres J, Paik PK, Garassino MC, et al. Tepotinib treatment in patients with MET exon 14–skipping non–small cell lung cancer: long-term follow-up of the VISION phase 2 nonrandomized clinical trial. *JAMA Oncol*. 2023;9(9)(suppl 1) **21.** Paik PK, Garassino MC, Le X, et al. Long-term outcomes of tepotinib in patients with MET exon 14 skipping NSCLC from the VISION study. Abstract presented at the American Society of Clinical Oncology (ASCO) Annual Meeting; June 2-6, 2023; Chicago, Illinois. Abstract 9060.

Please see Selected Safety Information throughout the following newsletter and accompanying full Prescribing Information.

VISION Trial – Key Takeaways

"I strongly recommend NGS for all patients with advanced NSCLC at the time the pathological specimen is obtained, so that if the patient has a targetable alteration, the oncologist can start targeted therapy in the first-line setting. Additionally, for patients identified with *MET*ex14 skipping alterations, I consider TEPMETKO an appropriate treatment option based on the response rates observed in the VISION trial, regardless of whether they are treatment-naive or have been previously treated." ***– Razelle Kurzrock, MD, FACP***

"Identifying *MET*ex14 alterations in patients with NSCLC allows for a more targeted approach to treatment. Furthermore, based on the response rates and durability of response demonstrated in both cohorts from the VISION trial, I can confidently use TEPMETKO in either the first-line setting or subsequent lines of therapy if we identify the *MET*ex14 alteration later.[5,6] My patients also appreciate the convenience of once-daily oral administration.[5]" ***– Martin Dietrich, MD, PhD***

- TEPMETKO achieved robust and lasting responses in both treatment-naïve and previously treated patients[2,5-7]
  - Largest and longest clinical trial in *MET*ex14+ mNSCLC to date
  - Evaluated in patients diagnosed by tissue and/or liquid biopsy
  - Established safety profile
  - The **ONLY** approved once-daily oral *MET* inhibitor

Learn More About TEPMETKO

NCCN Preferred

Tepotinib is an NCCN Category 2A preferred regimen for first-line/subsequent line* setting for patients with *MET*ex14+ mNSCLC[15†‡§]

For all eligible patients with *MET*ex14+, start with TEPMETKO

*If MET inhibitors have not previously been given.
†Based upon lower-level evidence, there is uniform NCCN consensus (≥85% support of the Panel) that the intervention is appropriate.
‡See the NCCN Guidelines for detailed recommendations, including other preferred options.
§The NCCN Guidelines for NSCLC provide recommendations for individual biomarkers that should be tested and recommend testing techniques but do not endorse any specific commercially available biomarker assays or commercial laboratories.[15]

IMPORTANT SAFETY INFORMATION (continued)

The most common Grade 3-4 laboratory abnormalities (≥2%) in descending order were: decreased lymphocytes (15%), decreased albumin (9%), decreased sodium (9%), increased GGT (6%), increased amylase (5%), increased lipase (5%), increased ALT (4.9%), increased AST (3.6%), and decreased hemoglobin (3.6%).

Please see Important Safety Information throughout and accompanying full Prescribing Information.

This program was developed in conjunction with and sponsored by EMD Serono, Inc. based on interviews with Razelle Kurzrock, MD, FACP and Martin Dietrich, MD, PhD.

Dr Kurzrock and Dr Dietrich each received an honorarium for participation in this program.

US-TEP-00887 05/25

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