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MOMENT disease registry: Patient characteristics and treatment patterns from interim enrollment analysis of patients (pts) with advanced non-small cell lung cancer (NSCLC) harboring *MET* exon 14 (*METex*14) skipping treated with systemic therapy

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CONCLUSIONS

- **Analysis of the first 30% of patients to enroll in the MOMENT registry has shown that:**
  - **Patient and disease characteristics are reflective of routine clinical care**
  - **MET inhibitors are being adopted into routine clinical care in countries where the MOMENT registry is enrolling patients, including Germany, France, Italy, the UK, and the US**
- **Further data from the MOMENT registry will enable future research and studies to inform the optimal care for the rare population of patients with advanced NSCLC with *MET*ex14 skipping**
  - **Current data are based on an interim data cut from an ongoing registry, and therefore are subject to change or may be incomplete**

INTRODUCTION

- *MET*ex14 skipping occurs in approximately 3–4% of NSCLC cases and is sensitive to MET inhibition[1–3]
- Since broad MET biomarker testing was only recently introduced in many countries, there is a lack of real-world data for patients with *MET*ex14 skipping NSCLC receiving conventional therapies
- MOMENT is a multinational, non-interventional disease registry (NCT05376891) that aims to prospectively collect uniform, comprehensive, high-quality data from patients with advanced NSCLC with *MET*ex14 skipping treated in routine clinical practice, which can support clinical and regulatory decision-making
- The design of this registry has been described by Thomas et al. (*J Comp Eff Res*. 2025;14(2):e240127)
- **Here we provide an update on the progress of the registry, describing characteristics and treatment patterns of the first 30% of patients enrolled**

METHODS

- Starting in October 2022 and over the following 4 years, MOMENT aims to enroll approximately 700 patients with advanced-stage (Stages IIIB–IV) NSCLC and confirmed *MET*ex14 skipping who receive systemic treatment (**Box 1**)
- Data collection includes:
  - Demographics
  - Clinical characteristics over time
  - Treatment details
  - Biomarker testing results (results not presented)
  - Effectiveness and safety information (results not presented)
- The registry is currently enrolling at more than 60 sites in 14 countries
- To enable adequate follow-up, the registry will operate for a minimum of 5 years, and patient enrollment is planned to continue until 6 months prior to the end of data collection
- For enrolled patients, sites are expected to collect data routinely and continuously from enrollment into the registry until death, loss to follow-up (drop-out), withdrawal of consent, or the end of the data collection period
- The current analysis was conducted using an ongoing data flow; at the point of analysis, some enrolled patients did not have all data related to stage and treatment initiation entered into the eCRF (and data were also subject to change)

Box 1. Eligibility criteria

Key inclusion criteria
- Advanced stage (IIIB–IV) NSCLC (all histologies)*
- Confirmed *MET*ex14 skipping by TBx and/or LBx[†]
- Initiated/currently treated with systemic anticancer therapy

Exclusion criteria
- Patients enrolled in a clinical trial[‡]

Systemic therapies in the MOMENT population[§]
- Immune checkpoint inhibitors[||]
- Chemotherapy[||]
- MET inhibitors[||]
- Other anticancer therapies[||]

*Note, interim data are presented which may be subject to change; patients with non-advanced NSCLC have been included due to incomplete electronic data capture entries. [†]Prior to the initiation of a trial site, local *MET*ex14 skipping detection methods will be assessed. [‡]Patients with previous participation in any clinical trial can be included, provided they receive at least one subsequent therapy line in a routine clinical setting. If a patient enters a clinical trial after enrollment into the registry, treatment will be blinded for data entry in the eCRF during the time the patient receives any investigational drug. [§]All available anticancer therapies, including those approved, conditionally approved, or available through early access. [||]Given as monotherapy or in combination with other systemic therapies.

RESULTS

Patient enrollment

- Patient enrollment into MOMENT was initiated in October 2022
- At 30% enrollment (data cut-off: July 2024), a total of 222 patients have been enrolled

Baseline demographic characteristics

- Enrolled patients were mostly aged 75–84 years (43.7%) or 65–74 (32.9%), 54.5% were female, 51.4% were white, and 47.3% were patients who previously smoked (**Table 1**)

Table 1. Baseline demographics

		(N=222)
Age, years, median (range)	At enrollment	75.0 (44–95)
	At diagnosis of advanced NSCLC	73.0 (44–94)
Sex, n (%)	Male	101 (45.5)
	Female	121 (54.5)
Race, n (%)*	White	114 (51.4)
	Asian	4 (1.8)
	Black or African American	3 (1.4)
Tobacco smoking history, n (%)[†]	Former smoker	105 (47.3)
	Never smoker	87 (39.2)
	Current smoker	18 (8.1)
	Regular user	2 (0.9)
	Occasional user	1 (0.5)

*Race was missing/not reported for 98 patients (44.1%); other patients included Caucasian, mixed, prefer not to say (n=1 each; 0.5%). [†]Smoking history was not documented/not known in nine patients (4.1%).

Baseline clinical characteristics

- Most common cancer stage at diagnosis of advanced NSCLC was Stage IV (77.0%), and adenocarcinoma was the most common histology (78.8%; **Table 2**)

Table 2. Baseline clinical characteristics

		(N=222)
Stage at diagnosis of advanced NSCLC, n (%)	Stage III (not specified)	4 (1.8)
	Stage IIIB	17 (7.7)
	Stage IIIC	4 (1.8)
	Stage IV	171 (77.0)
	Other	3 (1.4)
	Missing or unknown/undocumented	23 (10.4)
Disease histology at diagnosis of advanced NSCLC, n (%)	Adenocarcinoma	175 (78.8)
	Squamous	14 (6.3)
	Adenosquamous	5 (2.3)
	Sarcomatoid	4 (1.8)
	NSCLC NOS	3 (1.4)
	Sarcomatoid and adenocarcinoma	1 (0.5)
	Bronchioloalveolar carcinoma	1 (0.5)
	Missing	19 (8.6)
Weighted index of comorbid conditions at diagnosis of advanced NSCLC, median (range)*		4.0 (0–13.0)
Comorbid conditions without history of malignancy, at diagnosis of advanced NSCLC (in ≥5% patients), n (%)	Diabetes	21 (9.5)
	COPD	13 (5.9)
	Renal disease	11 (5.0)
Distant metastases, n (%)		**147 (66.2)**
Sites of distant metastasis (>10% of patients), n (%)	Bone	69 (46.9)
	Brain	36 (24.5)
	Distant lymph nodes	24 (16.3)
	Contralateral lung	19 (12.9)
	Adrenal gland	19 (12.9)
	Liver	17 (11.6)

*Scoring system that weights comorbid conditions based on their impact on patient outcomes; for this analysis, comorbidities at advanced NSCLC diagnosis included: metastatic solid tumor other than advanced NSCLC, diabetes, COPD, renal disease, myocardial infarction, connective tissue disease, cerebrovascular accident, ulcer disease, cirrhosis or other serious liver disease, and congestive heart failure.

Treatment history

- The majority of patients with advanced NSCLC received systemic treatment (95.2%; **Table 3**)
- MET/HGF inhibitors were the most common therapy type in patients with advanced disease (71.7%), followed by IO plus platinum-based chemotherapy (34.6%), IO monotherapy (27.7%), and platinum-based chemotherapy (23.9%)
- The most commonly used MET inhibitors in 1L were capmatinib (42.1%) and tepotinib (36.8%); in 2L, 57.1% of patients received tepotinib and 31.4% received capmatinib (**Table 4**)

Table 3. Treatment history of advanced and non-advanced NSCLC with *MET*ex14 skipping across all lines of therapy*

		Patients who received any treatment for[†‡]:		
		Non-advanced or advanced NSCLC (N=175)	Advanced NSCLC (N=167)	Non-advanced NSCLC (N=27)
Treatment history, n (%)	Systemic treatment	162 (92.6)	159 (95.2)	9 (33.3)
	Radiation therapy	89 (50.9)	82 (49.1)	11 (40.7)
	Surgery	32 (18.3)	13 (7.8)	19 (70.4)
	Supportive care medications	21 (12.0)	21 (12.6)	0
Therapy type across all lines of therapy, n (%)	**Patients who received systemic therapy**	**N=162**	**N=159**	**N=27**
	MET/HGF Inhibitor	114 (70.4)	114 (71.7)	0
	IO in combination with platinum-based chemotherapy	56 (34.6)	55 (34.6)	1 (11.1)
	IO as monotherapy	47 (29.0)	44 (27.7)	3 (33.3)
	Platinum-based chemotherapy alone	45 (27.8)	38 (23.9)	7 (77.8)
	Chemotherapy (non–platinum-based) only	16 (9.9)	16 (10.1)	0
	IO in combination with chemotherapy	6 (3.7)	6 (3.8)	0
	Others	5 (3.1)	5 (3.1)	0

*Data presented are for all treatments provided over all lines of therapy; therefore, therapy types are not mutually exclusive, and patients may receive multiple therapy types. [†]Data presented are for all patients who receive any treatment, either for non-advanced NSCLC or advanced NSCLC; patients may be counted in both categories owing to timing of treatment received. [‡]Patient number discrepancies occurred as the current analysis was conducted using an ongoing data flow; at the point of analysis, some enrolled patients did not have all data related to stage and treatment. initiation entered into the eCRF (and data were also subject to change).

Table 4. Systemic therapy among patients treated for advanced NSCLC with *MET*ex14 skipping

		Patients who received any treatment for advanced NSCLC
First line of therapy		**N=159**
Treatment regimen including MET/HGF inhibitors, n (%)	**Any MET/HGF inhibitor**	**57 (35.8)**
	Capmatinib	24 (42.1)
	Tepotinib	21 (36.8)
	Crizotinib*	5 (8.8)
	Pembrolizumab/Tepotinib	3 (5.3)
	Carboplatin/Tepotinib	2 (3.5)
	Capmatinib/Pembrolizumab	1 (1.8)
	Osimertinib/Tepotinib	1 (1.8)
No MET/HGF inhibitors, n (%)		102 (64.2)
Second line of therapy		**N=68**
Treatment regimen including MET/HGF inhibitors, n (%)	**Any MET/HGF inhibitor**	**35 (51.5)**
	Tepotinib	20 (57.1)
	Capmatinib	11 (31.4)
	Crizotinib*	2 (5.7)
	Capmatinib/Tepotinib	1 (2.9)
	Tepotinib/Vinorelbine	1 (2.9)
No MET/HGF inhibitors, n (%)		33 (48.5)

*Crizotinib is not approved for *MET*ex14 skipping NSCLC.

Treatment lines 1–4

- Overall, 159 patients (71.6%) received systemic treatment at first line for advanced NSCLC; 35.8% received a MET/HGF inhibitor and 64.2% received a non-MET/HGF inhibitor
  - 2L: 68 patients; 51.5% received a MET/HGF and 48.5% received a non-MET/HGF inhibitor
  - 3L: 30 patients; 53.3% received a MET/HGF and 46.7% received a non-MET/HGF inhibitor
  - 4L: 12 patients; 25.0% received a MET/HGF and 75.0% received a non-MET/HGF inhibitor

Comorbidities from diagnosis

- Approximately a third of patients had reported comorbidities since diagnosis of advanced NSCLC (36.5%; **Table 5**), with most patients reporting 1–3 comorbidities (31.1%)

Table 5. Comorbidities from diagnosis of advanced NSCLC with *MET*ex14 skipping

Baseline characteristics		(N=222)
Comorbidities since diagnosis of advanced NSCLC, n (%)	Yes	81 (36.5)
	No	141 (63.5)
Number of comorbidities developed since diagnosis of advanced NSCLC, n (%)	1–3 comorbidities	69 (31.1)
	4–6 comorbidities	9 (4.1)
	≥7 comorbidities	3 (1.4)
Comorbidities developed since diagnosis of advanced NSCLC, n (%)	Peripheral vascular disease	10 (4.5)
	Renal disease	9 (4.1)
	Myocardial infarction	7 (3.2)
	Other dementia	2 (0.9)
	Metastatic solid tumor other than advanced NSCLC	2 (0.9)
	Diabetes	2 (0.9)
	COPD	2 (0.9)
	COVID-19	1 (0.5)
	Congestive heart failure	1 (0.5)
	Cirrhosis or other serious liver disease	1 (0.5)
	Other	128 (57.7)
Comorbidity ongoing at the last visit, n (%)	Yes	66 (81.5)
	No	28 (34.6)
	Unknown	71 (87.7)

Abbreviations: 1L, first line; 2L, second line; 3L, third line; 4L, fourth line; COPD, chronic obstructive pulmonary disease; eCRF, electronic case report form; HGF, hepatocyte growth factor; IO, immunotherapy; LBx, liquid biopsy; MET, mesenchymal–epithelial transition factor; *MET*ex14, *MET* exon 14; NOS: not otherwise specified; NSCLC, non-small cell lung cancer; TBx, tissue biopsy.

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