Annals of Oncology

IRCCS, Meldola, Italy

Real-world treatment patterns for metastatic non-small cell lung cancer at IRST Italy

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Background: This study sought to describe treatment patterns in terms of real world first-line (1L) and second-line (2L) treatment of metastatic non-small cell lung cancer (NSCLC) prior to the availability of Immunotherapies (IOs) in Italy.

Methods: Metastatic NSCLC pts who initiated anti-cancer systemic treatment at IRST from Jan 2014 to Jun 2017 were included in this retrospective analysis based on electronic health records database, including information on demographics, clinical, tumor, molecular characteristics and treatment(s) administered.

Results: In total, 440 pts for 1L and 152 for 2L were analyzed. Median age was 69.5 and 65.9 yrs for the 1L and 2L, respectively.



Table: 176P		
Pts characteristics	1L N = 440 n(%)	2L1 N = 152 n(%)
Demographics		
Age \leq 65 yrs $>$ 65 yrs	156 (35.5) 284 (64.5)	68 (44.7) 84 (55.3)
Gender F M	166 (37.7) 274 (62.3)	56 (36.8) 96 (63.2)
Smoking status Never Former Current Unk	38 (8.6) 200 (45.5) 119 (27.0) 83 (18.9)	15 (9.9) 80 (52.6) 43 (28.3) 14 (9.2)
Clinical		
ECOG 0-1 >2 Unknown	345 (78.4) 71 (16.1) 24 (5.5)	133 (87.5) 13 (8.6) 6 (3.9)
Stage at primary diagnosis IA-IIIB IV Unk	104 (23.7) 335 (76.1) 1 (0.2)	39 (25.7) 112 (73.7) 1 (0.7)
Histology Squamous Non Squamous Other Unk	69 (15.7) 338 (76.8) 26 (5.9) 7 (1.6)	20 (13.2) 124 (81.6) 8 (5.3) -
Molecular		
EGFR2 Wild-type Translocated Unk	279 (76.6) 51 (14.0) 34 (9.3)	113 (85.6) 15 (11.4) 4 (3.0)
ALK2 Wild-type Translocated Unk	232 (63.7) 21 (5.8) 111 (30.5)	107 (81.1) 11 (8.3) 14 (10.6)
Treatment		
Double Agent Combination Pemetrexed + Platinum ³	251 (57.0) 132 (30.0) 108 (24.6)	27 (17.8) 19 (12.5) 6 (3.9) 1 (0.7) 1 (0.7)
Gemcitabine + Platinum ³ Paclitaxel+ Carboplatin ³ Other doublets	9 (2.0) 2 (0.4) 106 (24.1) 58 (54.7)	44 (28.9) 8 (18.2) 17 (38.6) 19 (43.2)
Single Agent Chemotherapy Gemcitabine Vinorelbine Docetaxel Targeted therapy Immunotherapy Clinical trials	44 (41.5) 4 (3.8) 43 (9.8) 1 (0.2) 39 (8.9)	41 (27.0) 9 (5.9) 31 (20.4)

¹Pts in the 2L group were also included in 1L group.

Conclusions: In this real world population prior IOs approval in Italy, treatments were largely in line with NSCLC treatment guidelines. As expected, the most frequent type of regimen in 1L setting was platinum doublet and in 2L was single agent chemo.

Legal entity responsible for the study: Merck & Co., Inc.

Funding: Merck & Co., Inc.

 $\label{eq:Disclosure:} Disclosure: F. Ejzykowicz, S. Chandwani: Employee, shareholder: Merck \& Co, Inc. All other authors have declared no conflicts of interest.$

 $^{^{2}}$ EGFR and ALK status are reported for pts with non-squamous and other histology (N = 364 for 1L, N = 132 for 2L)

³Platinum = cisplatin or carboplatin