First-Line Maintenance (1L MT) Treatment of Stage IV Non-Small Cell Lung Cancer (NSCLC) in Western Europe (WE): Results of the CancerMPact® Survey 2020

Poster No. POSA244

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*Employed by GSK when research was conducted.

Background

- Lung cancer is one of the most common forms of cancer worldwide, and non-small cell lung cancer (NSCLC) accounts for approximately 85% of all lung cancer cases[1-3]
- Of all cases, 70% of lung cancer patients present with locally advanced or metastatic disease (stage III–IV)[4]
- Pembrolizumab, a programmed cell death protein-1 (PD-1) inhibitor, has significantly impacted the NSCLC treatment landscape as a 1L treatment both for patients with non-squamous (NSQ) or squamous (SQ) NSCLC[5,6]
- Information on real-world clinical practice in Europe, including the proportion of metastatic NSCLC patients receiving standard of care first-line (1L) and 1L maintenance (MT) regimens, is largely unknown[3,7]

Aims

- To describe the results of a physician survey on patterns of contemporary 1L and 1L MT regimens for patients with NSCLC in Western Europe (WE) in 2020

Methods

Survey Development

- The annual CancerMPact® survey of physicians who treat patients with NSCLC in France, Germany, Spain, Italy and the UK
- Survey based on a review of patterns of care reported in international guidelines, such as
  - National Comprehensive Cancer Network,[8]
  - European Society for Medical Oncology[9,10]
  - European Medicines Agency
- Includes a review of pivotal clinical trial data from peer-reviewed publications and major oncology conferences

Survey Questions

- Physician clinical practice experience and characteristics (including years in practice, practice types, practice specialty, patient volume)
- Patient treatment across all stages of disease (including histology, relevant biomarkers in 1L metastatic NSCLC, modality of treatment, systemic therapy regimens, sequencing, and duration of systemic therapy)

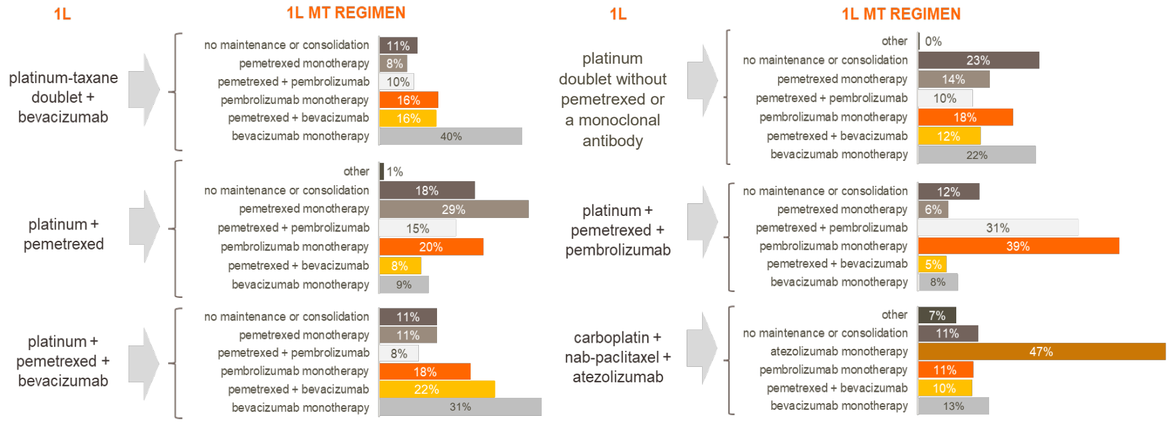
Survey Participants

- Survey of 103 physicians who treat a total of 9,905 patients with NSCLC monthly, conducted in June 2020
- Average time in practice after medical residency: 15.9 years
- Average number of lung cancer patients treated by each physician monthly: 96.2 patients

Results

- The most common regimens for patients with NSQ NSCLC and PD-L1 <1% and 1–49%, were platinum + pemetrexed (26.8%) and platinum + pemetrexed + pembrolizumab (47.8%), respectively
- For patients with SQ NSCLC and PD-L1 <1% or 1–49%, the most common regimens were platinum doublets (76.4% and 47.9%, respectively)
- Physicians reported that approximately half of patients with NSQ or SQ NSCLC with PD-L1 ≥50% received pembrolizumab monotherapy (50.9% and 49.9%, respectively)
- 1L MT regimens in patients with NSQ NSCLC and no known driver mutation are described by the relevant 1L systemic therapy regimen in **Figure 1**
- In all, 14.6% and 83.2% of patients with NSQ or SQ NSCLC without known driver mutations, respectively, did not receive 1L MT
- The most common 1L MT regimens in patients with NSQ NSCLC were pembrolizumab (29.0%), pemetrexed + pembrolizumab (20.5%) and bevacizumab monotherapy (19.8%) (**Figure 2**)
- The majority (88.9%) of treated patients with SQ NSCLC received pembrolizumab monotherapy (**Figure 2**)
- Based on the historic annual physician surveys, use of pemetrexed-containing 1L MT dropped from 74.0% to 26.5% from 2016–2020 and pembrolizumab-containing 1L MT increased from 1.8% to 29.0% from 2018–2020 (**Figure 3**)

Figure 1. 1L MT regimens by 1L systemic therapy regimen in patients with stage IV NSQ NSCLC without known driver mutations[11]



Source: Survey of 103 physicians who treat a total of 9,905 NSCLC patients monthly, conducted in June 2020; 36 physicians completed data for bevacizumab + platinum-taxane doublet, 56 physicians completed data for pemetrexed + platinum, 34 physicians completed data for bevacizumab + pemetrexed + platinum, 45 physicians completed data for platinum doublet w/out pemetrexed and without a monoclonal antibody, 71 physicians completed data for pembrolizumab + platinum + pemetrexed and 21 physicians completed data for atezolizumab + nab-paclitaxel + carboplatin.

Figure 2. Treatment regimen for 1L MT among patients with stage IV NSQ or SQ NSCLC without known driver mutations[11]

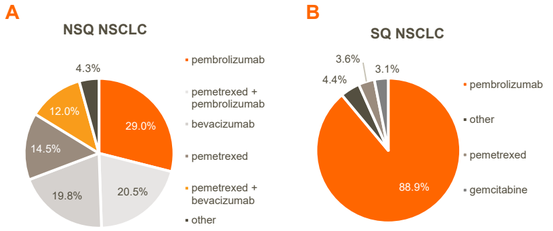
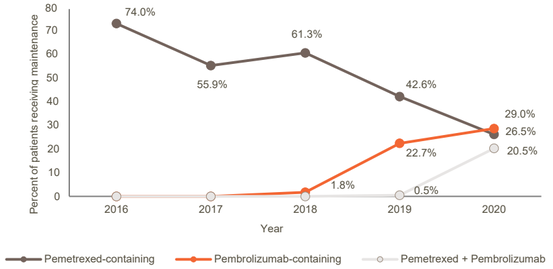


Figure 3. Evolution of 1L MT with pemetrexed- and pembrolizumab-containing regimens in patients with stage IV NSQ NSCLC without known driver mutations[11]



Limitations

- For a survey like this, data rely on the recall of treating physicians
- Physicians are limited in their responses to their own patient pool, so there is a possibility that their patients may not be representative of the larger NSCLC patient population across WE

Discussion

- Pembrolizumab was the most common 1L MT in patients with stage IV NSQ and SQ NSCLC; however, variability in treatment practices remain, suggesting that there is no clear standard of care for these patients
- Treatment choices for patients with stage IV NSCLC without driver mutations are increasingly complex and are dependent upon tumour histology and PD-L1 expression, treatment-related toxicity and patient performance status for 1L and 1L MT
- For additional analysis on this topic, please refer to poster number POSA236[12]

Conclusions

- Physicians reported that platinum + pemetrexed + pembrolizumab and pembrolizumab monotherapy were among the most common 1L systemic treatments in patients with stage IV NSQ NSCLC depending on PD-L1 expression status
- Pembrolizumab and platinum doublets were among the most common 1L treatments in patients with stage IV SQ NSCLC depending on PD-L1 expression status
- While still used in the 1L MT setting, overall use of pemetrexed declined from 2016 to 2020

Acknowledgment & Disclosures

- This study (OneCDP#215054) was sponsored by GlaxoSmithKline.
- Medical writing, funded by GlaxoSmithKline (Waltham, MA, USA), was provided by Alex Gavin, PhD, of Core Medica, London, UK.
- The authors would like to acknowledge Xinmei Zhu of GlaxoSmithKline for her contribution to this work.
- **OC**, **GK**, **LD**, **KN** and **KK** are employees of Cerner Enviza, a global consultancy company that acts in the healthcare market, and have as clients: pharmaceutical companies, health insurance companies and hospitals, including GSK; **LK** is an employee of GSK with stock options; **TJG** and **CH** were employees of GSK at the time of study; **JC**, **AA** and **AS** are employees of GSK.

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Presented at the Virtual ISPOR Europe, Copenhagen, Denmark, 30 November–03 December 2021

Poster: https://bit.ly/2YmW1WC Audio recording: https://bit.ly/3kr2QX6