

## Background

- Lung cancer is one of the most common cancer types with a poor prognosis and is associated with an increased number of deaths per year<sup>1</sup>.
- Timeliness of lung cancer care is considered a key quality indicator and clinical practice guidelines recommend reducing the time between diagnosis and treatment, though the impact of delays in treatment remain largely uncertain<sup>2-3</sup>.

## Objectives

- The objective of this study was to compare profiles of non-small cell lung cancer (NSCLC) patients, stratified by time to treatment from diagnosis, in Western Europe (France, Germany, Italy, Spain, UK).

## Methods: Data source

- Data from the Global Oncology Monitor (Ipsos) were used for this study. The Global Oncology Monitor is an ongoing, retrospective medical chart review conducted in over 20 countries, with data in some countries extending back over 20 years.
- Physicians were recruited from Ipsos panels and asked to select charts of the most recently seen patients who were receiving an anti-cancer regimen.
  - Participating physicians selected between 7 and 40 charts per month of participation (but were not required to participate every month).
  - Limits were imposed as to the number of physicians per site to ensure representativeness within each country.
- The present study included data from Western Europe (France, Germany, Italy, Spain, UK) that were collected online between April 2017 and March 2018. Only patients with stage IIIB/IV NSCLC in the sample were analyzed (n=8,413).
- Patients were stratified based on time from diagnosis to first treatment: immediate treatment ( $\leq 1$  month from diagnosis), n=4,460 and delayed treatment ( $> 3$  months from diagnosis), n=534. Comparisons were made using inferential statistics.

## Methods: Measures

- Patient Demographics.** Age, gender, ethnicity.
- Physician Demographics.** Specialty, Hospital Type.
- Health History.** Sites of metastases, concomitant disorders.
- Disease History.** ECOG status, EGFR and ALK testing outcomes, time in months between diagnosis and first treatment.
- Treatment use.** First line treatment therapies.
- Perceptual.** Patient involvement (Based on a 1-10 scale, "Extremely involved" = ratings 8-10, "Moderately involved" = ratings 4-7, and "Minimal/No involvement" = ratings 1-3), Physician reason for treatment selection.

## Results

### Physician Characteristics

- Physicians of immediately treated patients are medical oncologists (61%), hematologist-oncologists (21%) and pulmonologists (17%) and they practice in the academic hospital setting (69%) and community hospital setting (31%).
- Physicians of patients with delayed treatment are medical oncologists (56%), hematologist-oncologists (23%) and pulmonologists (20%) and they practice in the academic hospital setting (74%) and community hospital setting (26%).
- There are no significant differences in specialty or hospital type between physicians of immediately treated patients and those of delayed treatment patients.

### Patient Characteristics

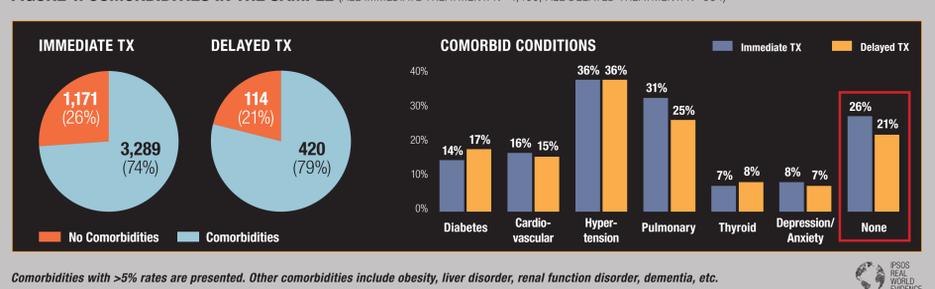
- Immediately treated patients and delayed treatment patients were comparable in age, gender & ethnicity.
- Immediately treated patients were more likely to be wild type for both EGFR and ALK (74% vs 70%;  $p<0.05$ ), have an ECOG score of 0/1 (81% vs 70%;  $p<0.01$ ), and to have  $\geq 2$  sites of metastases (76% vs 50%;  $p<0.01$ ), compared to delayed treatment patients, respectively.
- Higher proportion of immediately treated patients had a concomitant pulmonary disorder (31% vs 25%;  $p<0.01$ ) compared to delayed treatment patients.

Table 1. Characteristics of the patient sample (All immediate treatment: n=4,460; All delayed treatment: n=534)

Patient characteristics	Immediate (n=4,460)	Delayed (n=534)
<b>Patient</b>		
Male	2,842 (64%)	350 (66%)
<b>Ethnicity</b>		
Caucasian	4,072 (92%)	503 (94%)
Asian	116 (2%)	12 (2%)
Black African	97 (2%)	10 (2%)
Hispanic/Latino American	55 (1%)	4 (1%)
Other	97 (2%)	4 (1%)
Mean age (SD)	65.4 (8.7)	65.4 (9.0)
<b>Smoking status</b>		
Current/former smoker	3,566 (80%)	419 (79%)
EGFR & ALK Wild type/Negativity rate	3,310 (74%)*	373 (70%)
<b>ECOG status</b>		
0-1	3,586 (81%)*	375 (70%)
2+	874 (20%)	155 (29%)
Sites of Metastases ( $\geq 2$ )	3,389 (76%)*	175 (50%)

\* Significantly greater (95% C.I.) percent based on Z-score testing

FIGURE 1. COMORBIDITIES IN THE SAMPLE (ALL IMMEDIATE TREATMENT: N=4,460; ALL DELAYED TREATMENT: N=534)

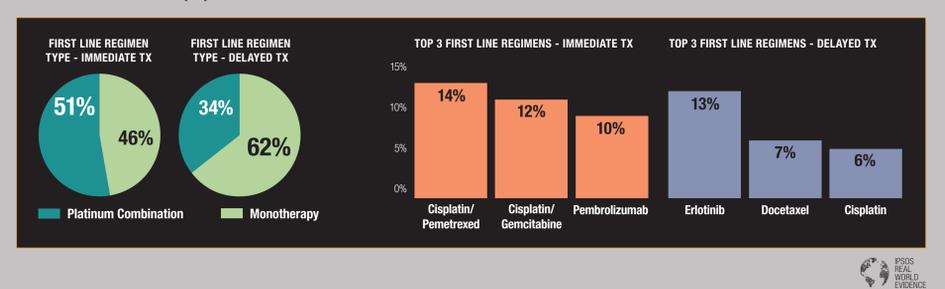


Comorbidities with  $>5\%$  rates are presented. Other comorbidities include obesity, liver disorder, renal function disorder, dementia, etc.

## Results cont...

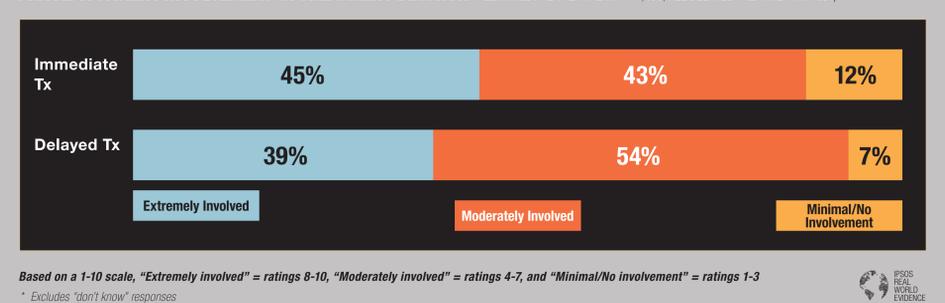
- Higher proportion of immediately treated patients received platinum doublet (51% vs 34%;  $p<0.01$ ) as their first line regimen, whereas delayed treatment patients tended to receive a monotherapy (62% vs 46%;  $p<0.01$ ).
- The top 3 first line regimens for immediate treatment patients were cisplatin/pemetrexed (14%), cisplatin/gemcitabine (12%), and pembrolizumab (10%).
- The top 3 first line regimens for delayed treatment patients were erlotinib (13%), docetaxel (7%), and cisplatin (6%) monotherapy.

FIGURE 2. FIRST LINE (1L) REGIMEN TYPE AND TOP 3 1L REGIMENS (1L IMMEDIATE TREATMENT: N=2,494; 1L DELAYED TREATMENT: N=260)



- Immediately treated patients were more likely to be 'extremely involved' in their treatment decision (45%) compared to delayed treatment patients (39%;  $p<0.01$ ).

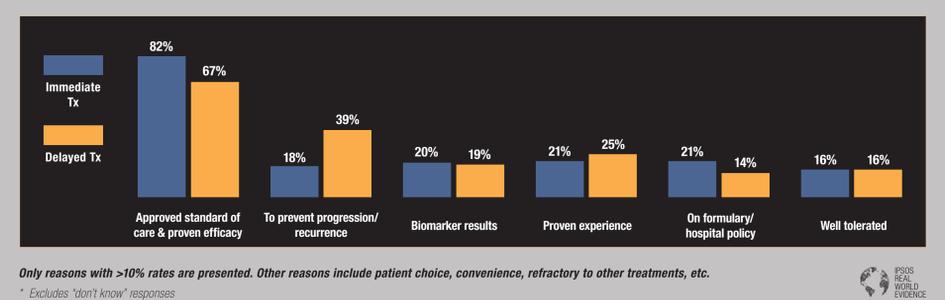
FIGURE 3. PATIENT INVOLVEMENT IN TREATMENT DECISION (ALL IMMEDIATE TREATMENT: N=4,455; ALL DELAYED TREATMENT: N=531)\*



\* Based on a 1-10 scale, "Extremely involved" = ratings 8-10, "Moderately involved" = ratings 4-7, and "Minimal/No involvement" = ratings 1-3  
\* Excludes "don't know" responses

- Physician reason for selecting initial treatment in immediately treated patients was based more on approved standard of care and efficacy (82%) relative to delayed treatment patients (67%,  $p<0.01$ ).
- Physician reason for selecting initial treatment in delayed treatment patients was based more on prevention of progression and recurrence (39%) than for immediately treated patients (18%;  $p<0.01$ ).

FIGURE 4. PHYSICIAN REASONS FOR PRESCRIBING FIRST LINE TREATMENT (1L IMMEDIATE TREATMENT: N=2,491; 1L DELAYED TREATMENT: N=258)\*



\* Only reasons with  $>10\%$  rates are presented. Other reasons include patient choice, convenience, refractory to other treatments, etc.  
\* Excludes "don't know" responses

## Limitations

The study was limited to the data collected. There may be other relevant patient factors and physician variables which could contribute to the profiles of immediate treatment and delayed treatment NSCLC patients.

## CONCLUSION

- In this study, although immediately treated patients had a more serious lung condition, these patients had a higher involvement in their treatment decision and exhibited better overall health while being treated with a more aggressive treatment.
- This study provides an important baseline assessment of NSCLC patient profiles by time from diagnosis to treatment in Western Europe and an opportunity for future longitudinal studies.

## References

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## Disclosures

All authors are current employees of Ipsos, LLC.



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