NIVOLUMAB OUTCOMES IN OCTOGENARIAN PATIENTS WITH ADVANCED NON-SMALL CELL LUNG CANCER IN A FRENCH REAL-WORLD SETTING

J.-B. Assié,1 F.-E. Cotté,2 M. Gaj Levra,2 C. Calvet,3 R. Jolivel,3 B. Jouaneton,4 A.-F. Gaudin,2 V. Grumberg,1 C. Choquai,1 R. Corre6
1GRC OncoThéParisEst, CHI Créteil, UPEC, Créteil, France, 2Bristol-Myers Squibb France, Rueil-Malmaison, France, 3Centre Hospitalier Universitaire Grenoble Alpes (CHUGA), Grenoble, France, 4HEVA, Lyon, France, 5Grenoble Alpes University, Grenoble, France, CHU, Hôpital Ponchaillou, Rennes, France

Introduction

• The introduction of immune checkpoint inhibitors represents a major advance in the treatment of lung cancer, allowing sustained recovery in a significant proportion of patients [1, 2].

• Nivolumab is a monoclonal anti-PD-1 antibody licensed for the treatment of locally advanced or metastatic non-small-cell lung cancer (NSCLC) after prior chemotherapy in adults.

• Two large randomised studies in patients with advanced squamous and non-squamous NSCLC demonstrated that nivolumab was superior to docetaxel at extending overall survival (OS) [3, 4].

• However, in these clinical studies, very few patients aged >75 years were enrolled and experience with nivolumab in the elderly is still limited.

• Around 10% of patients newly diagnosed with NSCLC in France are octogenarian [5].

• The French Early Access Programme (EAP) provides a valuable source of information to examine use and outcomes of nivolumab in elderly patients aged ≥80 years.

• The objectives of the present study were as follows:

  – To describe the demographic and clinical characteristics of patients aged ≥80 years with advanced NSCLC treated with nivolumab in the French EAP.

  – To estimate time to nivolumab treatment discontinuation in these patients.

  – To estimate OS in these patients.

Methods

Patients and data source

• All participants in the French EAP were eligible.

• All patients with advanced NSCLC initiating nivolumab in 2015-2016 in second or later line setting were enrolled and followed until December 2017 with a minimum of 12 months follow-up.

• Data were extracted from the French national hospital discharge database (PMSI) [6].

• Patients with advanced NSCLC were identified from the ICD codes (C34*) in the hospitalisation discharge summary.

Data extraction

• All inpatient and outpatient hospitalisations between 1st January 2011 and 31st December 2017 were extracted from the database.

• Demographic variables were documented at the time of the first nivolumab administration.

• Lung cancer history durations defined as the interval between first hospitalisation with lung cancer and first nivolumab administration.

• Comorbidities were identified from the ICD codes in the hospitalisation discharge summary for any hospital stay in the seven-year extraction period.

• Patients with non-squamous cell NSCLC were identified through the proxy measure of treatment with bevacizumab or pembrolizumab, as previously described [7].

• The treatment duration of nivolumab was defined as the interval between the index hospital visit and discontinuation, defined as no new treatment for at least six weeks after the previous treatment (i.e., three missed treatments) or death, if the patient died. The date of discontinuation was defined as the last treatment date plus 14 days, or the date of death.

• Patients who died in hospital were identified and overall survival defined as the interval between the index hospitalisation and the date of death.

Statistical analysis

• Data presentation is principally descriptive.

• Patient characteristics were compared between patients aged ≤80 years and those aged >80 years using the χ² test for categorical variables or Student’s t-test for continuous variables.

• Treatment discontinuation rates and overall survival rates were determined from Kaplan-Meier actuarial survival curves.

Results

Study population

• Of 10,452 patients with advanced NSCLC initiating nivolumab in the EAP.

• Of these, 514 (4.9%) were aged ≥80 years (median age: 82.5 ± 2.4 years).

• Patient characteristics at baseline are compared between the two age groups in Table 1.

• Compared to younger patients, patients aged ≥80 years were more frequently men (p<0.001) and had comorbid hypertension and diabetes (p<0.001). They less frequently presented with non-squamous cell disease, cerebral metastasis, renal failure, chronic obstructive pulmonary disease (COPD), pulmonary insufficiency, malnutrition and other chronic pulmonary diseases (p<0.001).

Conclusions

• Less than five percent of patients with advanced NSCLC treated with nivolumab were aged ≥80 years or over. This proportion is less than the 10% of patients diagnosed with advanced NSCLC in this age group expected from the literature [5].

• The rate of comorbidities in these patients treated with nivolumab is relatively low for a population of this age. This may suggest that clinicians have been cautious in their choice of elderly patients for treatment.

• The treatment duration in this elderly population is identical to that observed in younger patients, suggesting that no specific tolerability issue arose in this age group.

• Similarly, survival outcome is very comparable, suggesting that the effectiveness of nivolumab is maintained in elderly patients over eighty years of age.

• A limitation of the use of the PMSI database is that no data on treatment safety is available.

References


Acknowledgments

• Bristol-Myers Squibb (Princeton, NJ) and OMD Pharmaceutical Company Ltd. (Tokyo, Japan).

• This study was supported by Bristol-Myers Squibb.

• All authors contributed to and approved the presentation; writing and editorial input were provided by Adonis Dalle, PhD of SRA Healthcare, funded by Bristol-Myers Squibb.

Presented at the IASLC World Conference on Lung Cancer, September 7–10, 2019, Barcelona, Spain

Copy of this poster is available through QR Code as are for personal use only and may not be reproduced without permission from the authors of this poster.