**Nivolumab in Non Small Cell Lung Cancer (NSLCC):** French evaluation of use, current practices and medico economic approach

**Introduction**

In 2016, Nivolumab/Opdivo® could be prescribed according to French registration in stage IIIb/IV NSCLC after disease progression after prior platinum-based chemotherapy and TKI therapy for patients with EGFR mutation. Patients had to be in good general state (ECOG PS 0-1). OMEEDIT has evaluated its use, current practices and medico economic approach in Bretagne and Pays de la Loire areas.

**Methods**

Adult patients with stage IIIb/IV NSCLC initiated nivolumab (3 mg/kg every 2 weeks) in 2016 according or not to French Registration (ECOG PS). Minimum follow-up was 12 months (point date: December 31, 2017).

Collected data : Sex, age, mutuation profile, toxicities, Clinic Benefit (CB : pts with complete/partial response/stable disease as the best response), Progression Free Survival (PFS) and Overall Survival (OS)

**Population description**

- 781 patients (pts) included in 28 centers
- Sex ratio : 70.2% Men / 29.8% Women
- Mean age : 64 years for Men / 62 years for Women (11.5% ≥ 75 years old)
- NSCLC: 28.4% squamous, 54.7% non-squamous and 16.9% undifferentiated
- 20.6 % PS2 2 ⇒ not according to French Registration

**Treatment efficacy**

- Better PFS and OS when nivo treatment has been stopped for grade III/IV toxicity
- Better PFS and OS when patients have presented grade III/IV toxicity (respectively p<0.0001 and p=0.0028, data not shown)

**Performans Status (ECOG)**

- mPFS PS0-1 = 7.0 m
- mPFS PS3-4 = 2.0 m
- mOS PS0-1 = 14.6 m
- mOS PS3-4 = 4.4 m

**Conclusion**

Differences in patient survival have been found according to the care centers which could be explained by difference in practices (PS2 proportion, ...).

It is important to remember the recommendations NCCN for the medical care of NSCLC (2017) : supportive care only for PS 3/4 patient. Moreover, strong decrease of survival has been shown here for PS2 patients too. Feedback will be done by care center.