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

ID: #1868

Observatory of Cancer BPL (OMEDIT)
- Created in 2003 by Regional Representatives of French ministry of health
- Collects data from both private and public hospitals
- Provides a reflexion on drug management to optimize health care

Introduction
In 2016, Nivolumab/Opdivo could be prescribed according to French registration in stage III/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). OMEDIT has evaluated its use, current practices and medico economic approach in Bretagne and Pays de la Loire areas.

Methods
Adult patients with stage III/IV NSCLC initiated nivolumab (3 mg/kg every 2 weeks) in 2016 according to not French Registration (ECOG PS).

Collected data: Sex, age, mutation 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)
- NSLCC: 28.4% squamous, 54.7% non-squamous and 16.9% undifferentiated
- 20.6 % PS 2 ⇒ not according to French Registration

Treatment efficacy
- Objective response: 20.7%
- Stability disease: 42.9%
- Not assessable (early toxicity): 2.4%
- Progression disease: 50.6%

Global PFS and OS
- Median PFS = 3.5 months
- Median OS = 10.6 months

Safety
- Grade III/IV toxicities
- No statistical difference at the risk level of 5 % on survival according to tumor histology (squamous, non-squamous, undifferentiated), to treatment line number (2 vs 3 vs 4-6), to previous treatment (ttt) (data not shown).

Performans Status (ECOG)

Medico economic
- Mean hospitalization cost = 389 € (public center= 403 € / private = 309 €) and mean sanitary transport cost= 31 €
- Mean hospital and transport cost = 417 €
- Cost of nivolumab cure (3mg/kg) = 3 000 €
- 781 patients received 8 932 cures of treatment (in 2016 and 2017). Among them, 7 408 cures for patients who presented clinical benefit (CB)
- Total cost = 30.5 millions € (3417*8932)
- CB cost = 25.3 millions € (3417*7408)
- 83% of costs were dedicated to patients who experienced CB

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.