SYNOPSIS

TITLE OF THE STUDY	A non-interventional study for evaluation of the clinical treatment and patient values and preferences of patients suffering from advanced non-small cell lung cancer (NSCLC) undergoing chemotherapy. With special focus on patients who are in transition from first line to second line treatment. Protocol No. NIS-ODE-DUM-2008/1
OBJECTIVES	*Overall objectives* • Identification, description, and segmentation of NSCLC patients based on their value appraisal of treatment outcomes and all intermediate states of health • To obtain patient preferences in direct correlation with clinical data from patients suffering from NSCLC (stage IIIB / IV) who are in transition from first to second line treatment • To gain utility scores by health state derived from patients' perceived value and taken from their perspective *Clinical survey* • To collect information on current medical practice (“snapshot” of the current treatment) • To document the current treatment pattern and preferred treatment options when using a targeted therapy in a “real world” setting as well as objectives and reasons for targeted therapy in the individual case • To obtain information about the clinical and performance status of patients suffering from NSCLC and undergoing chemotherapy • To obtain insight into treatment objectives and treatment modalities of patients suffering from NSCLC and undergoing chemotherapy • To obtain information about treatment decisions and switch patterns when patients change from first to second line therapy • To obtain information about side effects and the influence of side effect on the decision making process for second line therapy *Patient survey* • To obtain information about the socioeconomic status and demographics of the patients • To obtain information about the patients' perception of their health status and treatment • To obtain information about patient values and patient preferences • To capture information about the patients' influence on the decision making process regarding treatment options • To identify value segments

STUDY DESIGN	This was a non-interventional, multi-centre, prospective, observational study, conducted in Germany. 4-6 weeks after switch from first line to second line chemotherapy patients completed at one time a self administered questionnaire during a regular control visit at the study site (Patient Questionnaire). In parallel the physician completed a clinical questionnaire (Case Report Form). Key data of each study site were assessed once (Institution Questionnaire).
PATIENT POPULATION	*Inclusion criteria* • Patients suffering from NSCLC with clinical stage IIIB and IV tumours • Patients with one chemotherapy regimen (first line treatment) (adjuvant chemotherapy following surgery is also regarded as first line treatment) • Patients who are in transition from first to second line treatment • Patients who signed an informed consent • Patients above the age of 18 years *Exclusion criteria* • Chemotherapy naïve patients • Patients ever enrolled in clinical studies treating NSCLC with chemotherapy (during first and second line chemotherapy) • Patients who ever had chemotherapy for an indication other than NSCLC
STUDY PERIOD	July 16, 2008 (positive opinion from ethics committee) to April 1st, 2010 (stop of recruitment)
STATISTICAL METHODS	*Clinical survey* All clinical variables in the clinical survey were planned to be analyzed by means of explorative descriptive statistics. Due to low patient recruitment analysis was limited to means (age, time between diagnosis and switch to second line treatment) and frequencies (all other variables) without statistical comparisons. *Patient survey* The patient survey was designed applying conjoint analysis: choice-based conjoint analysis (prior to protocol amendment 01), full-profile conjoint analysis (as per protocol amendment 01). Due to low patient recruitment the sample was too small to perform a conjoint analysis and so results are presented as frequencies.
RESULTS	3 of the 9 study centres were actively recruiting and enrolled a total of 8 patients who completed the patient questionnaire. However, the data of one patient was collected using the questionnaire prior to the study amendment. Hence, these data could not be included and the final study population size was n=7. Mean age was 62 years old. The majority of patients were male (n=6, 85%). Of the 7 patients, 1 reported they had never smoked, 2 were currently smokers, and 4 were ex-smokers. The mean difference in time from

	diagnosis to second line treatment initiation was 16 months (1.9 to 59.3 months). *Clinical survey* *Previous treatment*: The majority of patients in the study did not have a previous lung surgery (n=6, 85%). Almost half of the population had received radiation therapy (n=3, 42%). Four patients in the population exhibited co-morbidities at the time of switch from first to second line treatment. These included cardiovascular disease (n=1), lung disease (n=3), metabolic disease (n=1), and rheumatoid disorders (n=1). *Patient performance status*: All patients (n=7) in the study demonstrated an ECOG performance status of "Ambulatory, but restricted in strenuous activity" at the time of switch from first to second line treatment. Most patients in the study demonstrated minor, modest, or extreme limitations in carrying out strenuous activities, usual activities around the home, self-care activities, and activities typically done for fun. *First line treatment*: The majority of patients (n=6, 85%) received a combination therapy as a first line treatment (2 received cisplatin + gemcitabine, 3 received cisplatin + vinorelbine, and 1 received carboplatin + vinorelbin), while one patient received monotherapy treatment (gemcitabine). Of the 6 patients receiving combination therapy, no changes from cisplatin to carboplatin regimens were reported. *Second line treatment*: All patients (n=7) received monotherapy second line treatment (3 received docetaxel, 2 received pemetrexed, and 2 received erlotinib) *Physician treatment decision-making*: Physicians rated overall survival and symptom control as the most important treatment objectives (means of 82.9 and 80, respectively). The most common reason reported for a treatment change was tumour progression (n=6, 85%). Performance status (frequency = 5) and histology (frequency = 4) were the main drivers of treatment selection for the second line treatment. *Health status within first 4-6 weeks following switch from first to second line treatment:* Following the switch from first to second line treatment, the overall health status improved for 3 patients and remained unchanged for 3 patients. One patient's health status deteriorated due to disease progression. The most common side effects observed within the first 4-6 weeks following treatment switch were dyspnoe (n=3), fatigue (n=2), and treatment was not stopped or changed for any patients due to side-effects. All patients (n=7) were described as compliant (having taken at least 90% of prescribed medications). *Patient survey* The majority of patients (n=6, 85%) did not have children. One patient had one child, aged 16. Most patients were either retired (n=3) or on sick leave (n=2). Six patients report that they are married or in long-term partnerships. Patients represent various levels of education (2 having studied at university of applied science, 2 having qualified for study at university for applied science, 2 went to school for 10 years, and 2 went to school for 9-10 years). Most patients had mandatory health care insurance (n=6), while one patient had private insurance. *Understanding and impact on treatment decisions*: Patients report that their physicians spend "A lot" (n=4) or "Quite a lot" (n=3) of time explaining the disease and describing symptoms. When probed on whether their doctor had discussed different treatment options, patients provided responses

	ranging from “Not at all” to “Quite a lot.” Most patients report that they either played no role (n=2) or “A little” role (n=3) in the decision-making regarding their individual treatment. *Side effects*: Most patients reported that their physician has discussed the fact that different drugs have different side-effects, with only one patient reporting that they had not discussed this topic at all. Patients reported that their most worrisome side effects were infection and fatigue (receiving mean scores of 3 and 2.7, respectively, on a scale of 1-5, with 5 being most worrisome). *Symptoms:* Four patients reported experiencing “A little” pain, while 3 reported experiencing “None at all.” Five patients reported that pain interferes “A little” in day-to-day activities. All patients reported some level of shortness of breath, and experiencing shortness of breath while walking and climbing stairs; only two patients reported that they did not experience shortness of breath while resting. While some patients reported coughing “Quite a bit” (n=3), some reported coughing “Not at all” (n=3). *Performance status:* Most patients report moderate limitations in carrying out strenuous activities (n=4) and moderate (n=2) or extreme (n=3) limitations in carrying out usual activities around the home. Four patients report that self-care activities (such as feeding, washing, or dressing), are unaffected by their lung cancer. The majority of patients report minor limitations associated with activities that they usually do for fun (n=5).
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