COST-EFFECTIVENESS OF MOHS’ MICROGRAPHIC SURGERY VERSUS SURGICAL EXCISION FOR THE TREATMENT OF FACIAL BASAL CELL CARCINOMAS: RESULTS OF A RANDOMISED CLINICAL TRIAL
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OBJECTIVES: The department of Dermatology of the University hospital Maastricht performed a randomised trial to compare the cost-effectiveness of surgical excision (SE) and Mohs Micrographic surgery (MMS) in a group of patients with primary and recurrent facial Basal Cell Carcinoma (BCC). METHODS: Hospital costs, recurrence rates and quality of life data (NHP and STAI) were collected during a time period of 18 months. The Incremental Cost Effectiveness Ratio’s were calculated based on incremental costs per recurrence avoided, both for primary and recurrent BCC. The reliability of the ICER was estimated by means of bootstrap simulations. RESULTS: In total 408 primary BCC and 204 recurrent BCC were randomised to either SE or MMS. The ICER for primary BCC amounted to €25.200. Seventy-four percent of all ratio’s were within the quadrant where MMS is more effective but also more costly. Twenty-four percent of all ratio’s were in the quadrant where SE dominates. The ICER for recurrent BCC amounted to €7.733. All ratios were within the quadrant where MMS is more effective but also more costly. For both primary and recurrent BCC group, quality of life was not statistically significant different between SE and MMS. CONCLUSION: Based on costs and the recurrence rates, it is not cost-effective to introduce MMS for primary BCC on a large scale. However, other aspects like the patient perspective have not been examined in this study. It is possible that patients have a specific preference for either one of the two treatment modalities. For the recurrent BCC both ICER and bootstrap results should be used with caution since only fifty percent of the patients with recurrent BCC have completed their 18-month follow-up. Possible changes in the recurrence rate may have a considerable effect on the final cost-effectiveness ratio of this group.

COST-IMPlications OF Oral TREATMENT OF COLORECTAL CANCer in GERMANY
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OBJECTIVES: To evaluate cost implications of oral chemotherapy with capecitabine vs. standard fluoropyrimidine-therapies (Mayo Clinic and AIO/Ardalan-regimen), in different treatment settings in Germany. METHODS: Costs of fluoropyrimidine-therapies were evaluated for the office-based setting. Physician’s fees (89 quarterly fee-listings, 26 patients, 6 office-based oncologists), drug and pharmacy costs and costs for venous port systems and single-use pumps were included. Capecitabine treatment costs were assumed to be identical to the cost of the Mayo Clinic-regimen, except drug administration and acquisition. Based on the frequency of administration of active drugs by office-based oncologists costs were modelled for 4 scenarios in the hospital sector, i.e. in- and outpatient treatment in university- and municipal hospitals. A third-party payer perspective was adopted. Market research data on frequency and setting of use of the evaluated regimens were used to estimate potential overall cost implications. RESULTS: Treatment costs for a 6-months course in the office-based setting was most expensive with the AIO/Ardalan regimen (€20,358) and cheapest with capecitabine (€7776). In contrast, the AIO/Ardalan-protocol was cheaper than the Mayo Clinic-protocol in all hospital settings (AIO/Ardalan €2588–13,434; Mayo Clinic 4072–21,138). Direct yearly savings by switching patients from Mayo-Clinic- or AIO/Ardalan-regimen to oral capecitabine were estimated at €78–84 Mio. CONCLUSION: The most expensive treatment options were the AIO/Ardalan-protocol in the office-based setting and the Mayo Clinic protocol in the hospital setting. Interestingly, remuneration for hospitals is unlikely to be cost covering for some treatment situations, in particular with the AIO/Ardalan-regimen. Capecitabine emerged as the cheapest option in the office-based setting (NA for hospital due to oral administration). Transferring patients to oral capecitabine is likely to result in substantial cost savings, estimated at €78–84 Mio annually. Savings are likely to be substantially higher if combination therapies with irinotecan or oxaliplatin are considered.

COST ANALYSIS OF TREATMENT FOR ADVANCED OR RECURRENT GASTRIC CANCer IN JAPAN: ECONOMIC COMPARISON BETWEEN THE ORAL FLUOROPYRIMIDINE TS-I AND CONVENTIONAL INTRAVENOUS CHEMOTHERAPY
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OBJECTIVE: Gastric cancer is the most frequent cancer in Japan and is an important cause of growing national Health care costs. However, few studies focusing on the costs of treating gastric cancer in Japan have been conducted. We previously reported the costs of chemotherapy for advanced or recurrent gastric cancer. Our results have shown that the costs of hospitalization and sup-
portive care were cost-drivers in total medical costs during chemotherapy. In this study, we comprehensively investigated medical costs from diagnosis through terminal care in patients with advanced or recurrent gastric cancer. METHODS: Patients with advanced or recurrent gastric cancer who received the newly developed oral fluoropyrimidine TS-1 or conventional intravenous chemotherapy were identified on the basis of ordering system data at Showa University Hospital from January 1998 through July 2001. The costs during diagnosis, chemotherapy, and terminal care were evaluated according to Japanese National Health Insurance fee schedule.

RESULTS: Costs were evaluated in 13 patients receiving TS-1 and in 10 patients receiving conventional intravenous chemotherapy. Monthly costs during diagnosis, chemotherapy, and terminal care in the TS-1 group were 597,057 +/- 105,148 (mean +/- SE) Yen, 327,640 +/- 47,647 Yen, and 687,595 +/- 96,276 Yen. The corresponding costs for conventional intravenous chemotherapy were 615,150 +/- 95,299 Yen, 852,874 +/- 62,412 Yen, and 619,721 +/- 86,745 Yen. Monthly costs during chemotherapy were significantly lower in the TS-1 group than in the conventional intravenous chemotherapy group, whereas costs during diagnosis and terminal care were similar in the groups. CONCLUSIONS: Medical costs from diagnosis through terminal care are high in patients with advanced or recurrent gastric cancer. The use of oral anticancer drugs such as TS-1, which facilitates transition from inpatient to ambulatory treatment, reduces medical costs in patients with gastric cancer.

COST REDUCTION IN THE DIAGNOSTIC EVALUATION OF PATIENTS WITH NON-SMALL CELL LUNG CANCER USING ENDOSCOPIC ULTRASONOGRAPHY WITH FINE-NEEDLE ASPIRATION

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OBJECTIVES: The prognosis of non-small cell lung cancer (NSCLC) patients is determined by mediastinal lymph node involvement at the time of diagnosis. The objective of this study was to investigate the cost consequences of using endoscopic ultrasonography with fine-needle aspiration (EUS-FNA) instead of mediastinoscopy (MS) or explorative thoracotomy (ET) in patients with NSCLC and suspected mediastinal involvement on positron emission tomography (PET).

METHODS: Potentially operable patients with NSCLC and positive PET were eligible. If EUS-FNA was negative or inconclusive, patients underwent MS. If MS was negative, ET was performed. If EUS-FNA was positive for malignancy, no ET was performed. The primary outcome was the reduction of invasive diagnostic procedures and as a result, the reduction of direct medical costs, assessed from the hospital viewpoint. The time horizon was the diagnostic trajectory until discharge from the hospital.

RESULTS: Of 82 patients, 49 (60%) had positive EUS-FNA, and did not undergo invasive diagnostic procedures. In 33 patients (40%) EUS-FNA was either negative (6) or inconclusive (27). Surgical staging by MS or ET was performed in 26 of these 33 patients: 12 patients underwent MS, nine patients had ET, and four patients both procedures. The costs were $1590 for MS and $5822 for ET. The costs for EUS-FNA were $591. Assuming that, without EUS-FNA, all patients would undergo MS, and 15% would need additional ET to reach a diagnosis, the differences in total costs were calculated at $55,000.

CONCLUSIONS: Introduction of EUS-FNA in the diag-