

between time with side effects, time to progression and duration of survival for MAB versus bilateral orchiectomy.

Results: Two hundred and ninety seven patients were included in the analysis (148 in the orchiectomy arm and 149 in the MAB arm). Based on Q-utility scores obtained using time-trade-off questions in a study by J.C. Weeks *et al.* (J Urol, abstr in press) the mean quality adjusted survival was 40.6 and 35.4 months for the MAB and orchiectomy arms respectively. Thus the adjustment resulted in a 5.2 month difference (95% C.I. -1.1;11.5 months) in favour of MAB.

Discussion: A Q-TWIST analysis may be preferred over the classical approach in clinical trials where the health states are clearly distinct, and differ significantly either in duration or QOL or in both. Individual treatment choices may be obtained for patients using the results of the threshold utility analysis.

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PP54. Economic impact of the harmonization of practice using guidelines: The example of breast cancer surveillance

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Background: We are interested in the development of guidelines and the evaluation of their implementation in practice. A previous study on the adjuvant treatment of breast cancer measured the changes in practice induced by the implementation of a local guideline in a French cancer center. There was an increase of practice conform with the recommendations in the guideline. However the amount of non conform practice for follow-up remains significant. Our goal is to assess the economic impact of this harmonization, particularly for post-therapeutic surveillance in breast cancer.

Methods: We performed a retrospective survey of 200 medical records from patients treated and followed in the Centre Léon BÉRARD, in Lyon France between 1993 and 1995. We collected the quantitative data, i.e. the number of examinations and visits during the clinical surveillance. Second, we attributed a monetary value to these physical quantities to compare the cost of follow-up conform with the guidelines and non conform follow-up.

Results: We obtained 106 usable records for a total of 2610 months of follow-up, with a median of 21.5 months per patient. Of these records, 37 met the guidelines and 69 did not (Table 1).

Table 1. Information in 106 records of patients followed up after treatment for breast cancer

Year	In accord with guidelines					Not in accord				
	1	2	3	4	Total	1	2	3	4	Total
Usable records	37	25	3	2	682	69	57	36	24	1928
Months of surveillance	median: 17					median: 28				
Mammography*	26	18	4	1	49	47	44	27	16	134
Visits*	83	44	5	3	135	169	111	68	39	687
Thoracic radiotherapy*	2	2	0	0	4	60	37	14	10	121
Tumor markers*	8	5	0	0	13	99	75	36	11	221
Liver ultrasonography*	2	1	0	0	3	45	25	5	3	78

* : No of clinical exams

The results are being evaluated in monetary terms, and the overall costs are being analysed. We have already observed a large difference between minimal and intensive follow-up, the latter being much more costly.

Discussion: No significant difference has been showed in global survival with intensive and with minimal surveillance. Follow-up of breast cancer patients is of real economic interest from the point of view of reducing costs by decreasing the number of clinical examinations. Standardization of current practice is not necessarily synonymous with cost reduction. Other therapeutic aspects of adjuvant treatment of breast cancer are also interesting, and the next step in our project is a similar study on

chemotherapy, for which results might be different in view of its importance in breast cancer, in health-care programs.

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PP55. Brain stem tumors treatment: Economical cost

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Background: Annual cancer incidence in childhood is 120 new cases per million children under 15 years of age. Tumors of Central Nervous System are, after leukemias, the most common group of malignant tumors (21%). The Brain Stem Tumors are rare in pediatric oncology (5% of all childhood CNS Tumors) and their current prognosis is poor despite the therapeutic advances (Overall Survival 15-20%). In the last years some studies directed to evaluate the impact in the survival of these children of combined treatment (Radiotherapy + Chemotherapy) have been started.

Methods: In our Unit, in the last five years, 13 brain stem endophytic tumors have been diagnosed in children aged between 4 and 11. It has been about a not explained increment of incidence. All were diagnosed through neurologic examination and MRI. All the 13 children were treated with radiotherapy (RT Linac 55-65 Gy) and chemotherapy using chemotherapeutic agents like: Vincristine, Carboplatin, VP-16 and Cyclophosphamide. To evaluate the cost of this treatment we have used an informatic program (ICM) developed in our Unit for the control of our patient treatment costs. We have quantified the expense of chemotherapeutic agents, diagnostic and therapeutic procedures and material since the moment of the diagnosis until the end of the treatment. The admission expenses for intercurrent process conditioned by the side effects of drugs have been included too.

Results: The OS in this group of patient is 16%. The cost average per patient has been of 6410.5 \$ (current change) which has represented a global cost of 83336.5 \$ (current change) for all the 13 patients.

Discussion: The historic Overall Survival (OS) and Event Free Survival (EFS) of Brain Stem tumors in our Unit until that moment was of the 15% with radiotherapy treatment only. Despite the use of chemotherapy we could not have demonstrated an increment of the survival of our patients affected of brain stem endophytic tumors. However, the use of chemotherapy has represented an increment of economical cost without evidence of increments in the OS rate.

In our experience the design of therapeutic protocols should do under a strict economical control that allows to identify clearly the criterions of cost/effectiveness.

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PP56. A model of patients' preferences for chemotherapy outcomes in advanced colorectal cancer: Do gains in survival justify the toxicity?

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Background: New aggressive chemotherapy protocols have been developed recently for the treatment of advanced colorectal cancer. They show promising results, measured either as response rate, progression-free survival or overall survival. However, these results seem to be obtained at the expense of increased toxicity. As a consequence, oncologists and patients are faced with puzzling choices between a large variety of treatments, each involving a large variety of risks and benefits. The aim of this study is to show how these puzzling choices may be broken down into simpler choices, and how patients' preferences between various treatments may be predicted.