11,000 French Francs (1995) to detect a benign lesion and between 81,000 FF and 96,000 FF to detect a cancer. Taking into account the ability of benign lesions to degenerate, we estimate a cost per cancer equivalent of 60,000 FF to 72,000 FF.
Discussion : The results of this cost-effectiveness analysis have to be considered with caution because of the quality of gathered data and of the assumption made to assess the cost of complementary exams. They do not allow to conclude if colorectal screening is a cost-effective strategy due to the lack of cancer registration in Nord/Pas-de-Calais and Picardie (we assess the cost per lesion detected and not the cost per lesion avoided). Nevertheless these results give some indications to the decisionmaker. A greater participation of the population is required to produce a decrease in colorectal mortality and will undoubtedly increase the value of the cost-effectiveness ratio.

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**PP59. Medico-economic evaluation of breast cancer adjuvant treatment**

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Background: The aim of the study was to evaluate the medico-economic interest of adjuvant treatment in the management of breast cancer. Four different therapeutic strategies could be administered: chemotherapy (CT), hormone therapy (HT), both treatments (CT+HT) or no adjuvant therapy.
Methods: The number of patients for each situation on the decision tree was defined through a Markov statistical model, combined with the Monte-Carlo method. The assessment of specific outcomes was done using published clinical data. The different situations were: well (no disease), loco regional recurrence operated or not, distant recurrence, complete response, partial response, no change, progression and death. The model was developed for a ten year period, with six months intervals.
Three types of costs were identified : the Investment Costs of the strategy (IC), the Total Cost (TC) of management for a 10 year follow-up (taking into account the costs of recurrences), and the difference between both (TC* = TC-IC). IC in the hospital were estimated according to the type of adjuvant treatment and to the patient monitoring carried out during the period without recurrence. A prospective survey was performed to quantify the costs external to the hospital. TC* was evaluated from the medical history of patients having presented distant metastases or local recurrence followed or not by metastases and we checked that the frequency of the metastatic risk is negligible beyond 5 years after the local recurrence. Costs were expressed in 1995 French Francs (FF), according to the collectivity point of view, with an accounting rate of 5.5% per year.
Results were expressed according to two ratios: the incremental cost-effectiveness ratio representing the cost of one additional unit of efficacy, and the incremental cost-benefit ratio i.e. the monetary benefit (or avoided cost) per FF invested in each adjuvant strategy. A sensitivity analysis was also performed.
Results: Respective incremental costs due to adjuvant treatment compared to no adjuvant treatment were 5 125 FF for HT, 25 302 FF for CT and 31 266 FF for CT+HT. The mean costs of each type of recurrence were 175 168 FF [95% C.I. ± 25 337 FF] (n=99) for metastatic recurrence, and respectively 287 284 FF [95% C.I. ± 60 937 FF] (n=21) and 115 698 FF [95% C.I. ± 30 244 FF] (n=26) for local recurrence followed or not by metastases (1US$ ≡ 5.8 FF 1997). Integrating the results of clinical trials, each life year saved had a cost of respectively 7 356 FF, 68 501 FF and 16 459 FF for HT, CT and CT+HT. The monetary benefits were 4,06 and 1.21 FF per FF invested in HT and CT+HT strategy, and no benefit was observed for CT (-0.28 FF per FF invested).
Conclusion: This study showed that all adjuvant strategies are cost-effective compared to no adjuvant treatment, especially HT. Conversely, the cost benefit analysis emphasizes the fact that adjuvant chemotherapy is not economically favorable, since the clinical results have no impact on avoided costs.
In order to help medical decision on adjuvant treatments, further analysis using this model will be performed, taking into account the prognostic factors for each patient.

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**PP60. Cost and outcome in UK palliative care services**

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Background: The development of palliative medicine and of specialised palliative care provision has been considerable. It is an area in which the UK is widely acknowledged to be at the forefront. The first modern hospice, opened in London in 1967 and the first recognition of the specialism of Palliative Medicine (1987) provide examples. Specialist provision is overwhelmingly concentrated on the palliative needs of people with cancer. As yet there has been no published data on cost that incorporates all three main sites of palliative care delivery, hospitals, hospices and the community. Cost effectiveness analysis has been restricted to new services in single settings and narrow geographic areas. Further, outcome studies include very few Randomised Control Trials and no clear agreement about which measures to use in an area where the patient is near death.
Method: The UK Department of Health commissioned a study to gather data on cost and effectiveness of palliative care. Eight health districts were selected as representative of England and Wales both in age structure and in degrees of social deprivation. Data were collected during six months of 1994 from hospitals, hospices and community care services in each region. A total of 661 patients were interviewed, 87% had a diagnosis of cancer. In addition 235 lay carers were interviewed. Cost data was assembled from each treatment site and in addition patients were asked who they had seen and for what length of time. Outcome data included Quality of Life - EORTC QLQ-C30: Hospital Anxiety and Depression Scale: Satisfaction with care.
Results: Mean costs per week of receiving palliative care in the community £146 (+ drug costs), hospital £1067, hospice £1462. The three settings offer different services, they are not comparable. A typical patient history would see them receiving care in each setting depending on clinical need and treatment severity. Costs of informal care are not included in the above although the study did record time committed by informal carers. Presence of a carer reduced length of inpatient care. Outcome measures on the first week of palliative care showed patient rated Quality of Life improving only in hospice patients. Symptom improvement in all areas in hospices, pain and dyspnoea improved in hospitals, fatigue and constipation in community. Anxiety and depression improved in hospice. Satisfaction with Care was high in hospice and community.
Discussion: Our data allows us to compare patient characteristic, both biographical and diagnostic, and outcome in each setting. Likewise some calculation of cost in each setting can be identified. Cost and outcome can be combined in such a way as to inform health care planning re the optimum balance between community, hospital and hospice and the efficacy of referral to specific setting when linked with symptom and patient characteristic. Patients in this study, and overwhelmingly in specialist palliative care, have cancer. Given both demographic and epidemiological trends and the increasing ability of palliative care to effectively treat symptoms one can hypothesise that demand for such services will increase. This study contributes to the existing data set on cost and outcome and offers methodological pointers for the future.

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