Results: Adult survivors, both men and women, were more likely than controls to have impaired close relationships (love relationships and friendships) -OR 8.47, 3.14-22.86 - and poorer day to day coping - OR 3.65, CI 1.67-7.99. Cancer survivors were more likely than controls to experience current lack of encouragement from their fathers (OR 2.23 1.22-4.06), and to a lesser extent from their mothers (OR 1.92 CI 1.08-3.40). In women lack of paternal encouragement was strongly associated with impaired close relationships (OR 11.37, 2.33-55.6) but not in men (OR 2.97, 0.90-9.82). Lack of maternal encouragement was modestly associated in men with poor close relationships (3.33, 1.12-10.02) but not at all in women. Paternal encouragement (OR 4.25, 1.56-11.57) and maternal encouragement (2.84, 1.16-6.99) were moderately associated with poor coping in men, but not women. These effects were seen equally across the cancer and control groups.

Conclusions: Encouragement from fathers seemed to be particularly important to daughters establishment of close relationships outside the family. There may be considerable implications for adult survivors of cancer who have a high rate of difficulties in this area. Prospective studies are needed to clarify whether the relationships influence or reflect relationships and coping in the young adults.

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Changing financial incentives by a new reimbursement system for radiotherapy

Y. Lievens[1], K. Kesteloot[2], W. Van den Bogaert[1]. [1] *University Hopsital, Radiotherapy, Leuven, Belgium;* [2] *Catholic University, Centre for Health Services and Nursing Research, Leuven, Belgium*

Purpose: Although randomised trials support single fractions in palliative treatments of bone metastases, fractionated schedules remain the mainstay in Belgium. It was analysed whether the forthcoming change in the Belgian radiotherapy reimbursement system might induce financial incentives towards the use of single fractions.

Materials and Methods: The radiotherapy costs of different palliative fractionation schedules were computed with an Activity-Based Costing model developed at the Leuven radiotherapy department. Resource costs (wage, equipment, space, material and overhead costs) were collected for the year 1999, as well as data on this year's productivity. The thus calculated costs were compared to the Belgian reimbursement modalities. This was done as well for the actual system, which is dependent of the number of fractions, as for the new system to be implemented in 2001, which is not fractionation related.

Results: The calculated costs of palliative irradiation treatments for bone metastases with parallel opposed fields using simulation, monitor unit calculation, blocks and in vivo dosimetry are 600, 1010 and 1513 Euro for delivering 8Gy/1fr, 20Gy/5fr and 30Gy/10fr respectively. The actual reimbursement foresees respectively 164, 1664 and 2079 Euro, resulting in a net loss of 437 Euro in case of a single fraction, and in a net gain of 654 and 565 Euro if a schedule of 5, respectively 10 fractions is administered. When considering the future reimbursement, being 1924 Euro irrespective of the number of fractions, the monetary gain progressively diminishes (from 1323 to 913 and 411 Euro) with increasing number of fractions.

Conclusion: Actual financial incentives stimulate the delivery of fractionated regimes for the palliation of bone metastases in Belgian radiotherapy centres. With the future reimbursement system it is hoped that by penalising the fractionated schedules unnecessary long treatments can be abolished.

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Examining preferences, utility values and cost-effectiveness for gemcitabine plus cisplatin (GEM/cis) for the treatment of bladder cancer - A discrete choice conjoint analysis conducted in Australia

P. Davey[1], N. Rajan[2], P. De Souza[2], J. Chen[1], M. Schulz[1]. [1] *M-TAG Pty Limited, Chatswood, Australia;* [2] *Eli Lilly, Oncology, Indianapolis, USA*

GEM/cis displays similar efficacy to treatment with methotrexate, vinblastine, doxorubicin plus cisplatin (MVAC) in the treatment of advanced bladder cancer. The main advantage of GEM/cis over MVAC is superior tolerability and lower incidence of severe adverse effects. In cost-containing environments, payers must decide whether a more favorable toxicity profile justifies the higher cost of newer agents. This decision should include not just consideration of direct medical costs, but also patient quality of life (QoL). Our objective was to determine whether GEM/cis offers value for money when compared to MVAC. Direct medical costs were calculated for each treatment based on resource utilization data collected during a randomized phase III trial. Costs included were chemotherapy, hospitalizations, concomitant medications, transfusions, health care professional visits, and medical procedures. Utility values were determined to capture the QoL differences between the two therapies. Utility values are weightings that reflect the QoL of different health states. Utility values range from 0-1, with 0 representing death and 1 perfect health. A novel methodology, called discrete choice conjoint analysis, was employed to examine the value associated with the toxicity profile of GEM/cis compared to MVAC. This approach offers the potential to provide discrete utility values for each attribute of an intervention. Utility values were obtained from surveys of oncology nurses. Attributes considered were alopecia, weight improvement, mouth ulcers, thrombocytopenia, and febrile neutropenia. Results from the surveys indicated a preference for treatment with GEM/cis. The extra utility benefit with GEM/cis was 0.204, with most of the benefit deriving from reduced risk of febrile neutropenia, mouth ulcers and alopecia. Using these results, a cost-utility analysis was conducted and submitted to the Australian Pharmaceutical Benefits Advisory Committee to assist in deciding whether GEM/cis should receive public subsidy. The ratio derived was cost-effective, with an incremental cost per quality-adjusted life-year gained (QALY) of AUS$25,000, which falls within an acceptable range for Australia. Sensitivity analyses indicated that the results were robust. Cost-effectiveness ratios are very valuable in deciding whether an intervention represents value for money. In addition to being cost-effective, GEM/cis offers comparable survival with a superior toxicity profile and QoL benefit.

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Outpatient integrated psycho-functional rehabilitative treatment after primary therapy for breast and head & neck cancer: final results on 280 patients

M.R. Strada[1], E. Lodola[1], P. Crotta[1], A. Bergaglio[1], Q. Cuzzoni[2], A. Bernardo[2], R. Palumbo[2], G. Villani[2], G. Bernardo[2]. [1] *Fondazione S. Maugeri, Operative Unit of Rehabilitative Oncology, Pavia, Italy;* [2] *Fondazione S. Maugeri, Service of Oncologic Prevention, Pavia, Italy*

Purpose: To verify the activity and feasibility of an experimental integrated protocol targeted to patients (pts) referring at our institution following primary surgery for breast (BC) or head & neck (H&N) cancer, being these two populations both characterized by a high incidence over the working age, a significant social impact, relatively long-term disease-free interval, and similar functional post-surgical disabilities.

Patients and Methods: 1) Quantification of residual disabilities and rehabilitative needs: physical deficit, functional damage (Constant's scale), and psychologic distress (psycho-oncological file and SAT-P); 2) Integrated rehabilitative treatment: grouping therapy (max 6 pts) of 10 sittings, lasting 2 hours each, 2 times/week, starting within 2-4 weeks (max 8) from surgery; educational training focused on physico-functional restoring and adaptation to the new body scheme; psychological counseling for the emotional discomfort disease and/or treatment-related; personalized occupational therapy to restoring daily home occupational and/or working activity; 3) Ergonomic assessment through WorkSET equipment; 4) Rehabilitative follow-up at 6 and 12 months from the end of treatment.

Results: From September 1998 to March 2000, a total of 280 pts (227 BC and 53 H&N) were treated, while on chemo- and/or radiotherapy adjuvant treatment. Data analysis showed a statistically significant improvement of functional score for all evaluated parameters ($p<0.001$), with good patient compliance and low drop-out. The ergonomic assessment showed a restarting of working activity within 3-8 weeks (median 5), with a satisfactory occupational fitness in both groups; a good recovery of most aspects of daily life was detected in 90% of pts, while the emotional and social abilities resulted longer endangered in H&N pts.

Conclusions: The innovative model we proposed resulted feasible in the outpatient setting, assessable in all the considered parameters, reproducible and effective, since different levels of treatment can be identified in relation to disease outcome and existing disabilities. The identification of a therapeutic "standard" based on both practical aspects (deficit quantification and correction) and speculative issues (cognitive approach, data production, comparative trials) was also allowed, while the ergonomic evaluation was useful in identifying the patient's ability in recovering his/her own role in the socio-familial circle.