

(Lefebvre & Ang 2009) worked out a list of guidelines for better outcome-specification after organ preservation therapy, which should be used in further clinical trials. The paper introduced a new endpoint: "laryngo-esophageal dysfunction-free survival" and addressed the growing problem of lat dysphagia in larynx preservation programs. Due to this discussion, many surgeons come back to more surgical driven decision making since late toxicity outcome after surgery seems to be limited compared to current protocols of simultaneous chemoradiation. Standards in surgery of HNSCC are defined as state of the art tumour resection procedures and reconstruction, following consented resection criteria like clear margins (R0-resection). Also neck dissection is standardized (AJCC) and should be included into the tumour stage related surgical concept. Altogether, primary surgery in HNSCC and additional adjuvant treatment is generally recommended if R0 resection is possible. Regarding late functional outcome, instruments for objective comparison of results are lacking. Health related quality of life (EORTC) and International classification of function (ICF WHO) are relatively new tools for better evaluation of late functional outcome.

References

- Higgins KM, Wang JR (2008) State of head and neck surgical oncology research – a review and critical appraisal of landmark studies. *Head Neck* 30(12):1636–1642
- Lefebvre JL, Ang KK (2009) Larynx Preservation Consensus Panel. Larynx preservation clinical trial design: key issues and recommendations- a consensus panel summary. *Int J Radiat Oncol Biol Phys* 73(5):1293–1303

Special Session (Sat, 24 Sep, 14:15–15:15) Issues in Economic Evaluation of New Cancer Therapies

43 INVITED Cancer Drug Costs – Forecast for Europe – Will the Cost Explode?

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We have seen a number of new cancer drugs being approved over the last 10–15 years. During the first part of this time period an average of 2–3 new drugs were approved each year and over the last years 8–10 drugs. This increase in available drugs is results of improved understanding of cancer biology that we have seen develop during the last three decades. These new treatment options have, however, come at a significant cost. Spending on cancer drugs has increase 5–6 fold, in some countries even more, over the last decade (www.comparatorreports.se). This should be put into the context of about 2–3 times increase in the total costs of cancer care seen in most European countries during the same period of time.

Will this increase in cost of cancer drugs continue and if so, will society be able to handle the costs of cancer care? First we must realize that much of the spending we see on cancer drugs relates to "mature" drugs, i.e. drugs that have been available for more than a decade. Many of these drugs have just gone off patent or will soon go off patent; the price of docetaxel, constituting about 8–10% of the cost for treatment of solid tumours in Sweden, decrease by >95% in just 2–3 months. We will most probably witness a similar cost reduction for the aromatase inhibitors, as all of them are likely to go off patent during 2011. As a majority of the top 20 selling cancer drugs will be generic in a couple of years, this will leave us with some budget available over the next 3–4 years.

We have also seen a number of drugs with similar mode of action (for example TKIs) being approved, resulting in substitution price competition rather than more patients being treated. This, at least temporary, situation will give us opportunity to improve the way we evaluate new cancer drugs and drug combinations, introducing HTA as a key part of the introduction process. We also have time to set up proper, population based, systems for monitoring the effects of new treatments in the "real" world. We can, in addition, continue to develop new innovative pricing models.

Meanwhile, we must also address the inequalities we have within Europe, with many countries in central/ eastern Europe (most of them new members of the EU) having a significantly lower access to up-to-date cancer care, including drugs. These inequalities may need political action on a central EU level. Our aim should be to bring new innovative, evidenced based, cost effective cancer treatment to all cancer patients in need across Europe.

44 INVITED Methodological Issues in Economic Evaluation of New Cancer Therapies

Abstract not received

45 INVITED Performance-Based Agreement – Theory to Practice- the Current Use in Oncology and Future Trend

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Health care systems are increasingly evaluated on performance and outcome, rather than for availability and use of resources. The background to this is the slow growth in health care expenditures and fiscal problems in most developed economies. Improvements in quality of care and outcome through a more cost-effective use of existing resources is the main option for development of the services. Relative effectiveness and cost-effectiveness are new criteria for decisions about adoption and use of new cancer drugs, which gives HTA and reimbursement bodies acting on behalf of payers, an increasing influence over therapeutic decisions.

A problem for decision makers is that there is limited information available for undertaking such evaluations before there is evidence from actual clinical use of the drugs. In addition, payers are concerned that expensive new drugs are used for the patients that can benefit most. The increasing use of coverage by evidence schemes and risk-sharing agreements between manufacturers and health authorities are responses to the above. In performance based agreements, the payment for the drug is dependent on the outcome or result of the intervention. The theoretical arguments for such arrangements are for the payers that it gives incentives for an efficient use of resources and access for patients, and for manufacturers that it may give a faster introduction on the market.

Oncology drugs seems to dominate the among the performance-based agreements we know today. In Italy for example, 16 out of 18 risk sharing agreements until October 2010 relate to cancer drugs. However, it should be noted that not all contracts are based on performance. Many risk sharing agreements include just a price discount, for example related to the number of cycles given. Most contracts in cancer use response as criteria for performance. The precise definition of "performance", or more often non-performance, is obviously of great importance for both parties of the agreement. But those criteria are seldom very explicit, carefully followed up, and openly discussed.

The trend is for an increasing number of performance based agreements in the future. So far private and public health insurers have mainly requested and paid for data on patient characteristics, but the new interest in comparative effectiveness research will likely result in payments related to outcome. Public health care systems in Europe, usually organized as a payer-provider split, will increasingly look for contract that help them manage costs and outcome.

Special Session (Sat, 24 Sep, 14:15–15:15) Too Little or Too Much Surgery for Melanoma

46 INVITED For Sentinel Node Positive Patients – is Complete Lymph Node Resection Still the Standard of Care?

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Standard of care is defined as how reasonable and similarly qualified physicians would act under the same or similar circumstances. The largest study on what surgeons do in case of a tumour positive sentinel node concerns 2942 patients in the USA. Of these patients, 1470 were subjected to a completion node dissection (50.0%). The other 50.0% were spared a node dissection. Apparently, there is no standard of care. This is understandable because the only prospective randomized study addressing this important question is in progress. For now, the practicing surgeon has to rely on circumstantial evidence.

Completion node dissection reveals additional metastases in 11–20% of the patients. Half of these patients will develop distant metastases from which they will die irrespective of a node dissection. Another third can still be cured if the node dissection is deferred until the development of palpable nodal disease. So, the potential gain in survival is limited.

A watch and wait policy limits the node dissection to the minority of patients who do have metastases and spares the vast majority of individuals an unnecessary operation. The downside is that the disease may disseminate from the nodal basin to distant organs in the time before the first nodal metastasis becomes palpable.

The sentinel node with a minimal metastasis in particular is subject to considerable discussion. This concerns patients with a single metastasis in the subcapsular area, with a Starz level I or II, or a minimum size of less than 0.1 mm. The currently available evidence seems to endorse a wait and see approach, but the duration of follow up in the various studies is too short for a definitive stance.

Does the prospect of a perhaps somewhat improved chance of survival after a node dissection outweigh the known substantial risk of unnecessary morbidity? Most melanomologists would currently proceed with a node dissection. Another option is to carry out a selective node dissection. SPECT/CT enables the accurate localization of sentinel nodes but also of second-tier nodes. A pilot study with a median follow-up of five years suggests that it is safe to limit the node dissection in the groin to the level of the second-tier nodes if these are not affected.

In conclusion, the surgeon has to tread carefully between chance of survival and risk of morbidity from node dissection until there is unequivocal evidence for the practical implication (or lack thereof) of an involved sentinel node.

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INVITED

For Patients With Distant Metastases – Surgery is First Choice of Treatment

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The American Joint Committee on Cancer staging criteria defines sub stages of stage IV Melanoma based on the site of metastases: M1a-soft tissue or nodal recurrence, M1b -Lung and M1c-Other.

Complete Surgical Resection can result in favorable overall survival for M1a and M1b sub stages: Median survival rates of 15–50 months (mts) and 5-year survival (5 y Surv) rate of 14–61% in patients with M1a, and a median survival rate of 18–28 mts and 5 y Surv of 14–50% for M1b patients. Results for M1c patients are less favorable except for single small bowel metastasis.

Cytoreductive Surgery, a novel approach to multiple site metastatic melanoma, is enabled today due to reduced morbidity and mortality from complex surgical procedures and improved staging with CT, MRI and PET scans allowing better distinction between single vs. multiple metastases.

Canvaxin™ is an experimental specific active immunotherapy composed of three human replication-incompetent melanoma tumour cell lines, developed at the John Wayne Cancer Institute (JWCI). Studying adjuvant specific active immunotherapy for cytoreductive surgery in the minimal residual disease setting has been scientifically appealing.

Morton et al, JWCI, conducted a retrospective matched pair analysis of stage IV melanoma patients who had undergone surgical resection, comparing 107 patients with stage IV melanoma who received Canvaxin™ in phase II clinical trials to 107 who did not receive it. Results indicated that those patients who received Canvaxin™ experienced an approximate doubling in median overall survival when compared to those who did not: 38 vs. 19 mts (p=0.0009) and a 5 y Surv rate of 39% vs. 20%.

A Double-Blind Phase 3 Trial (MMAIT IV) of BCG and Canvaxin™ vs BCG and Placebo as Post-Surgical Adjuvant in Metastatic Melanoma showed a 5 year disease free survival rate of 27.4% for Canvaxin™ and 20.9% for Placebo (p=0.418). Median survival for the Canvaxin™ arm was 31.5 mts and for placebo was 38.7 mts, with a 5 y Surv of 39.6% and 44.9% for Canvaxin™ and Placebo respectively (p=0.245).

Conclusions: Observed survival in the Canvaxin arm of MMAIT IV is similar or slightly better than JWCI phase II, but the BCG and Placebo arm survival was higher than expected, highlighting the major role of surgery. This high survival rate may be attributed to the effectiveness of cytoreductive surgery or BCG immunotherapy. A newly designed trial of surgery vs. surgery and BCG vs. non-surgical treatment has been recently initiated.

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INVITED

A Critical View – Selection is the Standard

Abstract not received

Special Session (Sat, 24 Sep, 14:15–15:15)

Adolescent and Young Adult Cancer Patients: Are We Meeting Their Needs?

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INVITED

Why are Adolescents Diagnosed Later With Cancer?

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The difficulties in ensuring prompt diagnosis, referral and treatment of cancer in young people are thought to be a contributing factor for poorer outcomes. Published studies hypothesise reasons for patient delay, suggesting that in the absence of physician and parental awareness, that includes frequent observation, diagnosis relies on self-reporting, that may be unreliable. What is absent from this body of evidence is the voice of the young person that might illuminate determinants for late diagnosis that relate more to behaviour and experiences of accessing health care.

An interpretive qualitative research study was undertaken to understand how young people 16–24 years experience the diagnostic phase. Twenty-four young people between two to four months from diagnosis, with a solid tumour, were recruited from four cancer centres in England. Narrative interviews were undertaken as well as analysis of medical notes. Data were analysed to examine how accounts were constructed and connected to broader contextual issues concerning cancer and this age group, diagnostic timelines and entry into specialist care.

Shared themes shaped a group narrative and an emerging conceptual framework. This included the individual's perception of, and meaning given to symptoms; the impact of others in determining the identification of a threat within symptoms; the negotiation of generalist health care and then entry into specialist care. A narrative of delay was evident in some stories. This paper will briefly present what is currently known about delay in this age group before focussing on young peoples' accounts, which has contributed to the evidence on delay.

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INVITED

Life Four to Six Years Beyond Diagnosis

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Findings regarding effects on social life after treatment for childhood cancer are scarce. Moreover, they are not consistent. Our research group has followed a national cohort of school children diagnosed with cancer with focus on social life. Results from a follow-up conducted four to six years after diagnosis (n=63, age 12–22) will be presented. The aim of the study was to investigate how survivors of childhood cancer experience school and relationships to peers four to six years after being diagnosed for cancer. A further aim was to compare self-reported quality of life between survivors and peers. The young persons were interviewed over the telephone regarding how they perceive their lives. In addition they answered questions measuring quality of life. A matched control group was drawn from the general Swedish population (n=234, age 11–23).

The semi-structured interviews were analyzed using qualitative content analysis. The preliminary results show physical and mental impairments affecting life, e.g. participation in activities, change in relationships to others and influences on personal identity and attitude towards life. Overall, the survivors appear to get along well in life.

Quality of life was measured with the KIDSCREEN-27 including five dimensions: Physical Well-being, Psychological Well-being, Autonomy & Parent Relations, Social Support & Peers and School Environment. Preliminary results show only one significant difference between the survivors and the control group, regarding the dimension Autonomy & Parent Relations. In this dimension, the survivors showed a higher mean (p<0.05), indicating better quality of life. One explanation for this could be experiences related to having had cancer such as a closer contact to parent(s) during treatment periods. A tentative explanation for why the remaining dimensions did not differ between the groups could be that possible negative effects due to cancer treatment are revealed later than four to six years after diagnosis or that the cancer experience did not affect the quality of life to a large extent.