Table 2. Multivariate analyses of clinical variables in relation to cause-specific survival

Factor	RR	95% CI
BMI		
Per unit BMI increment	0.92	0.85–0.99
Age (years)		
16–45	1.0 (reference)	
46+	2.3	1.4–4.0
Stage		
I	1.0 (reference)	
II	1.8	0.5–6.8
III	3.3	0.97–11
IV	4.3	1.2–15
Therapy		
ABVD variants	1.0 (reference)	
MOPP-like	2.8	1.6–4.7
Other	2.5	0.3–19
Relative dose intensity[a]		
High	1.0 (reference)	
Intermediate	2.6	1.4–5
Low	3.8	1.5–10

[a]RDI on a three-graded arbitrary scale: individuals who received six to eight cycles of MOPP-like or three to four cycles of MOPP/ABVD treatment were assigned to group 'high RDI'. The group 'low RDI', included patients that received less than three cycles of MOPP-like or less than two cycles of MOPP/ABVD treatment. The group 'intermediate RDI' included all patients that could not be assigned to either the high or low RDI group. RR, relative risk; CI, confidence interval; BMI, body mass index; MOPP, mechlorethamine, vincristine, procarbazine and prednisone; ABVD, doxorubicin, bleomycin, vinblastine and dacarbazine; RDI, relative dose intensity.

In the current series of HL patients treated with chemotherapy, adiposity was thus associated with both a significantly better prognostic risk profile, and an improved CSS in multivariate analysis. These results were somewhat unexpected, and appear to be in contrast to the limited number of reports on obesity in relation to outcome in breast cancer, colon cancer and non-HL patients treated with chemotherapy [2–4].

We have no clear explanation to the present findings. It may be, given the association between received drug dose and tumor response in HL [5], that BSA-based chemotherapy results in a relative 'under-treatment' of normal and underweight individuals. Other explanations for the improved survival among obese patients include residual confounding from other (and systematically more favorable, as indicated in Table 1) set-up of prognostic markers in HL. It may also be that our weight measurement did not accurately reflect pre-disease weight, but was influenced by (prognostically unfavorable) disease-related factors such as B-symptoms.

Notwithstanding our present inability to explain potential mechanisms underlying the association between adiposity and improved prognosis following chemotherapy in HL, we believe that the role of adiposity should be explored in prospective cohorts.

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Oncology for medical students: a new ESO educational avenue

Although cancer is the second leading cause of death and medical knowledge is rapidly advancing, oncology teaching in medical schools shows considerable variations worldwide.

Several publications, using questionnaire surveys, have attempted to investigate the status of oncology curricula in medical schools and to measure the knowledge levels of medical students in cancer medicine. During the last two decades, academic bodies in Europe, the USA, Australia and other regions questioned medical students to assess teaching about cancer in their own medical schools. Most results demonstrated that appropriate integration of oncology is limited in many medical schools, especially in relation to cancer prevention, bedside teaching and palliative care.

In May 1988 a European Commission/EORTC Workshop held in Bonn proposed a curriculum in oncology for medical students in Europe [1]. The main reasons for this were: (i) the recognized deficiency of undergraduate cancer education in many European medical schools; and (ii) the need to ensure that newly qualified doctors possess the adequate skills to deal with prevention, early diagnosis, curative management and palliative care.

In addition, in the year 2000 the UICC/WHO Collaborating Centre for Cancer Education started an international pilot project that aims to develop a network among medical schools for implementation of multidisciplinary cancer courses in their own curricula [2].

To overcome the existing situation, several academic and non-academic centers have tried to organize educational courses and/or intra-institutional modules for medical students.

The Faculty of Medical Sciences of the State University of Groningen initiated a 2-week international summer oncology training program for medical students (ISOMS). The aims were to increase knowledge of cancer care, to improve interaction between medical students and cancer patients, and to make students familiar with cancer-related issues in other countries. Both pre- and post-course tests were used [3].

The European School of Oncology (ESO) has a 22-year history of cancer education in Europe and beyond. The major impact of ESO has been to promote continuing medical education to oncologists of all disciplines. In addition, educational activities for nurses, researchers and medical secretaries became feasible after the collaboration with EONS, EORTC and other forums.

The new initiatives of ESO in the field of undergraduate education are not different from the basic concerns experienced by most academic bodies. The European medical student requires adequate exposure to common, chronic and fatal disease, reduction of fear of contact with cancer patients, and appropriate acquisition of knowledge and skills in cancer prevention, early diagnosis, treatment of curable tumors and management of terminally ill patients.

After carefully searching the real needs for a novel and comprehensive undergraduate educational program, the following prerequisites were taken into consideration in the design of a dedicated course for medical students.

(i) It should be an intensive 5-day course covering basics in the epidemiology, prevention, natural history, diagnosis and therapeutic management of all six 'big killers', i.e. breast, lung, colorectal, prostate, gastric and uterus cancers. Other common and/or curable tumors should also be incorporated.

(ii) It be restricted to sixth-year medical students from European medical schools. The selected students should not exceed 35–40 participants.

(iii) It should be a clinically orientated and interactive course, along with case presentations.

(iv) It should be accompanied by adequate educational material.

(v) It should be followed by daily testing with multiple-choice questions.

On the 5–11 September 2004 the first ESO course on 'Oncology for Medical Students' was organized in the campus of the University of Ioannina. Seventy-two medical students from different European medical schools applied or expressed interest, and 35 were finally selected. Selection was based on each student's curriculum vitae, a letter of recommendation from an academic professor, a letter of intent written by the student explaining his/her reasons for wishing to attend the course, as well as his/her expectations, and finally on each student's level of knowledge of English language. Distinguished European academic speakers have been involved in this rather interactive educational program. An educational ESO book of $\sim$500 pages with short written chapters, references, copies of all presented slides and case presentations was provided to all participated students. A total of 140 multiple-choice questions were administered to each student (20–30 per day).

The course was endorsed by ESMO and EORTC.

Given its high success, as measured by a student evaluation questionnaire, ESO is planning to repeat the course on 23–29 July 2005. Extra to the 2004 program, there will be lectures on humanistic medicine and on those ethical issues frequently encountered in oncology. ESO's aim is to provide an in-depth comprehensive approach to the cancer patient and to what defines state-of-the-art care in oncology from an holistic perspective.

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