

a report by

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Improvements in the survival of patients with solid tumors are related not only to the remarkable advances in drug treatment, but to many factors including earlier diagnosis. *Business Briefing: US Oncology Review 2006* contains excellent contributions highlighting progresses in biology, diagnosis, radiotherapy (RT), and medical therapy.

Business Briefing: US Oncology Review 2006 also contains papers addressing side effects and their impact on patient quality of life, an issue that merits continuous attention. Importantly, authors address the spectrum of cancer throughout the patients' lives, and cancer in the elderly has a prominent place. This is one of the areas that had been sadly neglected until the past few years, and where evidence-based treatment guidelines were lacking. It is encouraging to observe the increasing number of studies that take into account the specificities of patients above the age of 70. It is also important to realize that many studies claiming to address elderly patients actually look at a subgroup of patients just above the age of 65, without significant co-morbidities. Age *per se* is not a major limiting factor, although one has to recognize that there is an upper limit beyond which more caution needs to be taken. Geriatricians suggest the age of 85 as this upper limit; after this time, the body reserves are often insufficient to tolerate a major stress easily. This limit is certainly not an absolute one, as is well known from the experience of hip fracture operations.

Progress in cancer treatment is focussing increasingly on individualized treatment strategies, which take into account the extraordinarily diverse biology of most cancers. Progress will come from the application of modern pathological characterization, which will define tumors that need no medical treatment after surgery and/or radiation, and when needed will determine tumors that respond best to one or another therapeutic approach. Experts of lymphoma have shown how such data can be used and, as an example in the solid tumor area, breast cancer shall soon be spoken of as many breast cancers.

The importance of endocrine sensitivity has been recognized for many years; a drug that changes profoundly the outcome of patients whose tumor overexpresses the human epidermal growth factor receptor-2 (HER-2), and drugs that aim at other receptors or at the tumor environment, including angiogenesis, have been discovered. The best way to tailor treatment using the p53 and topoisomerase II results of the tumor cell will soon be learnt. We will also be able to look at the changes in the proteomic profile of a tumor on the day after the first treatment, in order to know whether the treatment is going to be effective. This is much sooner than can be currently achieved with magnetic resonance imaging (MRI) or positron emission tomography (PET) scanning and much, much sooner than using clinical observation.

What do such observations imply? Probably that in the future tumors will be biopsied and characterized that they will not be curable by surgery or RT alone; in that case one will probably not remove it immediately but test its predicted response profile and only then remove the bulk of the cancer to concentrate the effort on microscopic disease. It is not unlikely that assays indicating that occult cancer is present will be obtained and that we will be able to observe the response of the markers and use them as predictors of the success of the therapy. This therapy will continue in many cases to use chemotherapy, but also an increasing number of biological agents, sometimes exclusively biological agents, including vaccination. ■



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