



## A quiet revolution

→ Alberto Costa\* ■ GUEST EDITOR

Every two years, doctors specialising in breast cancer gather in St Gallen to discuss developments and update guidelines on adjuvant therapies. It is always an important conference, but its conclusions tend to be measured rather than headline grabbing.

St Gallen 2005 appeared to be much in the same vein. Yet on reflection, it is clear that in its own quiet way it signalled that a revolution is underway and that breast cancer treatment will never be the same again.

Weighing up the latest evidence, the conference concluded that every breast cancer should be characterised according to eight elements: its size, histological type, grading, hormone receptor status, lymph node status, proliferation index (Ki67), cErbB2 status and the presence or absence of peritumour vascular invasion. Each of these eight parameters of breast cancer is independent of the others, which means breast cancer comes in 64 (8x8) different variants.

The implications of this are very far reaching. The whole concept of breast cancer as a single disease is now dead, and we therefore need to make fundamental changes in the way we approach treatment decisions. For a start, the tradition-

al TNM classification can no longer be considered an adequate guide to treatment, because it provides information on only two of the eight parameters of significance. The value of cytological examination has also been brought into question, because all it can tell us is that we are dealing with a breast cancer.

Many treatment dogmas will also need re-examining. For instance, is radiotherapy always needed after conservative surgery? What if you have just operated on a 70-year-old patient, for a very-low-risk tumour – 1 cm in size, no lymph node invasion, grade I, 90% oestrogen-receptor positive, 5% Ki67, no vascular invasion and cErbB2? It may take the patient two hours by bus to reach her nearest radiotherapy centre and another two hours home again. Is six weeks of daily radiotherapy really worth the time, energy and cost in this case?

Recognising how complex and varied breast cancer is also vindicates the many voices who have been calling for breast cancer to be treated in specialist units by teams comprising a surgeon, an oncoplastic surgeon, specialised pathologist, radiotherapist, medical oncologist and breast care nurse. Given what we now know, it would be utterly irresponsible to continue to treat any patient outside of such a specialist setting.

\*Fondazione Maugeri, Pavia, Italy, and Centro di Senologia della Svizzera Italiana, Bellinzona, Switzerland