Follow-up strategy of germ cell tumour patients

We read with interest the 2005 version of the ESMO Minimum Clinical Recommendations (MCR) for diagnosis, treatment and follow-up of germ cell tumour (GCT) patients [1, 2]. Although we are in agreement that MCR are intended to provide just a basic standard of care for all European countries, we would like to express some concerns regarding the recommendations for the follow-up strategy of GCT patients. Despite the fact that patients with advanced GCT in complete remission after chemotherapy have a much more elevated risk of recurrence than patients with stage I non-seminoma, in the MCR the follow-up schedule, including clinical examination, tumour markers, chest X-ray and computerized tomography (CT) scan, appears to be absolutely more intensive in the stage I non-seminoma patients [1]. In these patients, chest X-ray examinations are scheduled monthly in the first year, 2 monthly in the second year, 4 monthly in the third year, then 6 monthly until 5 years [1]. Even in patients with low-stage seminoma and those with GCT in complete remission after chemotherapy, chest X-ray examinations appear coupled with every clinical examination [1, 2]. The recommendations for the use of CT scan are also questionable. The MCR follow-up strategy, based on intensive chest X-ray examinations, is not evidence-based, as suggested by the very low grade of evidence/recommendation reported by authors [1, 2]. Since the introduction of cisplatin in the mid-1970s, GCT has become a highly curable disease. In early 1980s, both the clinical studies with cisplatin-based chemotherapy in patients with advanced GCT and the first trials assessing the utility of surveillance after orchiectomy for stage I disease introduced a very strict follow-up schedule including routine chest X-ray in order to detect ‘low volume’ relapse, which could be potentially cured [3]. These intensive follow-up schedules were introduced in order to assess the efficacy of the treatment, not to define the optimal follow-up schedule, but during the last 20 years remained in the major guidelines (ESMO MCR, PDQ, National Comprehensive Cancer Network) [1, 2, 4, 5]. The literature on this topic is scarce. Nevertheless, in the last decade three large single-centre experiences showed that routine chest X-ray has no additional value in the detection of recurrence in patients with stage I non-seminoma, low stage seminoma and advanced GCT in complete remission after treatment [6–8]. In absence of cost-effective evidence, we also need to take into consideration
the patient stress provoked by intensive examinations with the risk of false-positives.

Armed with such evidence, the rationale for using such a strict follow-up schedule based on chest X-ray vanishes and should not be considered the ‘basic standard’ in the ESMO MCR. Recently, the European Germ Cell Cancer Consensus Group (EGCCCG) has developed guidelines on diagnosis and treatment of GCT based on the highest evidence level available: no specific recommendations have been given for follow-up [9]. The optimum follow-up strategy of GCT patients remains controversial. It is essential to take into account all the evidence to make correct decisions in the follow-up management. No firm guidelines can be given. The intensity of the follow-up investigations should be modified according to the risk of recurrence/progression among GCT patients, stage and sites of disease, and natural history of histological subtypes.

In addition, in previous years other issues have emerged during the follow-up of these patients as secondary tumours, long-term cardiovascular and renal side-effects, hearing impairment, metabolic syndrome and gonadal dysfunction, which can be in a large part influenced by the treatment [10–12]. In the future, monitoring and moderating these specific long-term complications will be part of the follow-up management. This will require new large studies to target this approach. In this fashion, the role of referring institutions and cooperative groups will be important.

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