

Standard Chemotherapy for Osteosarcoma

Statement of the London Sarcoma Service July 27th 2011

The London Sarcoma Service, a joint service between University College Hospitals NHS Foundation Trust and the Royal National Orthopaedic Trust (see www.londonsarcoma.org for further details), is one of the largest centres for treatment of bone sarcomas, with approximately 150 new cases of bone sarcomas managed in 2010. The values of the London Sarcoma Service include

- ensuring the highest level of diagnostic, investigative and treatment expertise.
- delivery of care with the utmost consideration and honesty in partnership with patients and families, and primary care teams.
- the constant pursuit of improvements in care through audit and research.

Clinical research is embedded in our service and a particular emphasis is placed on evidence-based practice. The development of and participation in clinical trials to establish new standards of care is a vital part of our work.

Standard chemotherapy for osteosarcoma

A major challenge to our service and indeed clinicians around the world is improving survival from osteosarcoma. Of particular importance is the identification of more effective chemotherapy regimens. Clinical trials are the key route through which advances are made and the London Sarcoma Service has been the single largest recruiter to EURAMOS-1, itself the largest randomised clinical trial conducted in osteosarcoma. EURAMOS-1 represents a key success of a global coalition working to improve osteosarcoma survival as, in just 6 years, it has recruited over 2,200 patients with newly diagnosed osteosarcoma from 15 countries including the USA and other European countries. Recruitment to this study ended on June 30th 2011 and the results, analysis of which will start in 2012-13, will determine whether alteration of chemotherapy after surgery leads to better survival.

The EURAMOS-1 investigators have issued guidance for treatment of osteosarcoma now that the study is closed and before a further study opens, not expected until 2012.

Treatment recommendation for future osteosarcoma patients treated outside of trial

Following the closure to accrual of EURAMOS-1, the Trial Management Group members consider MAP (high-dose methotrexate, doxorubicin, cisplatin), with no adjustment of post-operative treatment based on histological response, to be the standard of care for their patients with newly diagnosed, resectable osteosarcoma. All emerging data from the analyses of EURAMOS-1 will be disseminated to investigators when available. Plans for a further international trial, EURAMOS-2, are in development. MAP will again be the chosen standard treatment arm. In the meantime, inclusion of patients in well designed clinical trials when available is encouraged.

Source EURAMOS Newsletter July 2011 at www.euramos.org

The issue of an appropriate standard of chemotherapy for osteosarcoma outside of EURAMOS-1 has also been discussed by the National Cancer Research Institute Bone sub group of the NCRIS Sarcoma Clinical Studies Group, the expert body charged with the development and maintenance of a clinical research portfolio for patients with sarcoma. The bone sub group recommended that MAP should remain the standard of care for patients with osteosarcoma and this was endorsed by the Sarcoma CSG on May 11th 2011.

Chemotherapy for osteosarcoma in the London Sarcoma Service

In line with the expert guidance described above, the London Sarcoma Service will continue to use MAP¹ as standard first-line chemotherapy for all patients with osteosarcoma. In some circumstances, for example in older patients, less intensive chemotherapy may be indicated and this will be given in accordance with our institutional guidelines. No routine alterations of chemotherapy will be recommended, for example, the addition of other agents to MAP on the basis of histological response or other considerations.

The London Sarcoma Service will constantly review new information that may have relevance for osteosarcoma chemotherapy. Members of the Service will continue to take an active part in the development of new clinical trials and other research for osteosarcoma.

¹ MAP comprises 6 cycles: AP M M x 4 and A M M x 2

Where AP at Day 1 is Doxorubicin 75 mg/m² as 48 hr civ and cisplatin 120 mg/m² as 72hr civ

And M at Days 22, 29 is 12g/m². For cycles 5 and 6, A as for AP and M is at Days 15, 22