

**FC-167****Mifamurtide (L-MTP-PE) in children with osteosarcoma: the Turkish experience****R. Kebudi**, I. Ilhan, M. Kantar, F. Cakir, E. Guler, N. Olgun, T. Celkan*Oncology Institute, Istanbul University, Çapa, Sehremeni, Turkey*

**Objectives:** Mifamurtide (liposomal muramyl tripeptide), activates macrophages, provides antitumor effect in lungs. Mifamurtide+chemotherapy improved survival in nonmetastatic osteosarcoma patients, in phase III study. After EMA approved mifamurtide for nonmetastatic osteosarcoma, it could be used off-label by the approval of the Ministry of Health on a patient basis, in Turkey. This multicentric study aims to evaluate the demographic characteristics, adverse effects, outcome of adding mifamurtide to chemotherapy in children with osteosarcoma in Turkey.

**Methods:** From September 2011-February 2014, in 40 nonmetastatic, 3 metastatic (after metastasectomy) osteosarcoma patients, mifamurtide was added to chemotherapy after surgery in 7 centers in Turkey. Chemotherapy regimens used were epirubicin/ifosfamide/cisplatin in 21 (Istanbul University Oncology Institute-IUOI) and other in 22 (MayoPilotII, EURAMOS, ICE etc.). Mifamurtide was given i.v.2 mg/m<sup>2</sup>, twice weekly for 12 weeks, followed by once weekly for 24 weeks.

**Results:** Median age was 13 years (4-17 years). Total of 1296 doses of mifamurtide were administered, with no major side effects. Chills, fever initially were frequent. Median follow-up time for all was 15 months (3-57mo.). For nonmetastatic patients 2 year EFS was 76 %, OS 83 %. Fifteen/40 (38%) nonmetastatic patients completed mifamurtide, all have no evidence of disease (NED) at median 17,5 mo. (12-29 mo.); 4 relapsed at median 14 months (11-17), 1 died, 3 AWD; 21 continue treatment. 2/3 metastatic patients died (28, 57 months). When 20 nonmetastatic patients from center IUOI were compared with the historical control receiving same chemotherapy, the median FU was 14 mo (4-57), 2 had relapsed at present, whereas 33/94 of the historical cases had relapsed at median 9 months (1-40).

**Conclusions:** In this multicentric study, mifamurtide could be administered safely with no major side effects. The experience with mifamurtide in patients with nonmetastatic osteosarcoma is promising; a longer follow up is needed to make further conclusions for survival benefit.