First of all we really appreciate the invitation to this meeting. My name is Hiroaki Hiraga, chief of the division of orthopaedics at Hokkaido Cancer Center in Japan. We are thrilled to be here today. I'm a little worried about presenting in English, but I'll do my best. We are members of the Bone and Soft Tissue Tumor Study Group of the Japan Clinical Oncology Group. We call the group JCOG.
JCOG is the biggest clinical study group in Japan and is composed of fourteen study groups, including a lung cancer study group, a gastrointestinal oncology study group, and so on. It is founded mainly by the Ministry of Health, Labour and Welfare.
Bone and Soft Tissue Tumor Study Group
- 26 institutes -

The Bone and Soft Tissue Tumor Study Group is composed of twenty six institutes all over Japan at this time. I come from here, Sapporo in Hokkaido. Dr. Kawai and Dr. Hosono come from here, Tokyo.
JCOG0905

- A randomized control study for osteosarcoma of extremities.
- The aim: to evaluate the superiority of addition of ifosfamide over standard chemotherapy MAP (methotrexate, adriamycin, cisplatin) for poor responders after neoadjuvant chemotherapy with MAP and tumor resection in nonmetastatic resectable high grade osteosarcoma.

Our group planned JCOG0905, which is randomized control study for osteosarcoma of extremities. I am a manager of the study. The registration has just started in the last month. The aim of this study is to evaluate the superiority of addition of ifosfamide over standard chemotherapy MAP (methotrexate, adriamycin, cisplatin) for poor responders after neoadjuvant chemotherapy with MAP and tumor resection in nonmetastatic resectable high grade osteosarcoma.
Neoadjuvant Chemotherapy for Osteosarcoma: NECO-95J

M, high-dose methotrexate 8~12g/m²;  
P, cisplatinum 120mg/m²;  
A, adriamycin 60mg/m²/2days;  
A*, adriamycin 90mg/m²/3days  
I, high-dose ifosfamide 16g/m²/7days;  
S, surgery.

Good Responder  
2 cycle

Poor Responder  
96g/m² IFO  
2.5 cycles


I am going to explain the background briefly. In 1995, we didn't belong to JCOG at that time, multiinstitutional phase II study of neoadjuvant chemotherapy for osteosarcoma began. That has been called as NECO 95J study. NECO means cat in Japanese. We added 96g/m² of ifosfamide for poor responders after neoadjuvant chemotherapy with MAP and tumor resection in this study.
As a result sixty three patients were registered and five year disease free survival was 76.2%, and five year overall survival was 82.5%
In addition the difference between survival of good responders and that of poor responders was not significant. Therefore we have supposed that this dose of ifosfamide can improve the survival of poor responders after neoadjuvant chemotherapy.
In JCOG0905, we think we can verify this hypothesis. In the study 90g/m² of ifosfamide is introduced to poor responders after neoadjuvant chemotherapy and surgical resection. We need at least one hundred patients for randomization and about two hundred patients for primary registration. In Japan, about two hundred osteosarcoma patients occur per year and about sixty percents of those are eligible, and so it takes over five years for the registration. We are looking forward to successful project. Thank you for your time.