Background. Concurrent chemoradiotherapy with weekly Cisplatin became a standard procedure in patients with locally advanced cervical cancer. However, in case of relapse, most cervical malignancies are associated with very poor prognosis. Efficacy of local and systemic therapy can be enhanced by increasing temperature of target tissue to 41-43 degrees which leads to local hyperaemia and increases the response to cytotoxic interventions. Addition of hyperthermia to radiotherapy has been proved to yield an advantage in survival and local control in pts affected by recurrent and local advanced cervical cancer in the Dutch Phase III trial so that the Consensus Forum of Kadoka included cervical cancer among tumours treatable with hyperthermia. Platinum derivatives have shown synergistic effect and the combination of both has elicited high response rates in recurrent cervical carcinoma.

Patients and method. Since January 2003 to now 16 patients affected by cervical cancer with stage IB2 through IVA N0-N+ pelvic or paraaortic started the treatment. Fourteen patients were treated at initial diagnosis and two patients after chemotherapy which had achieved stable disease. Treatment regimen consisted in 5 courses of weekly chemotherapy (cisplatin 40 mg/mq) with concurrent external radiotherapy to a total dose of 64-66 Gy on CTV1 and 45 Gy on para-aortic nodes plus boost in pts with enlarged nodes identified by imaging. Five weekly sessions of hyperthermia were performed by using BSD 2000 system and sigma 60 applicator.

Results. Our own experience has shown that adding hyperthermia to chemoradiotherapy is well tolerated by the patients: compliance, tolerability and clinical response rates are consistent with that of other reported experiences.

Conclusions. Triple modality treatment combining radiotherapy, chemotherapy and hyperthermia for the treatment of patients with locally advanced cervical carcinoma appears to be very promising.