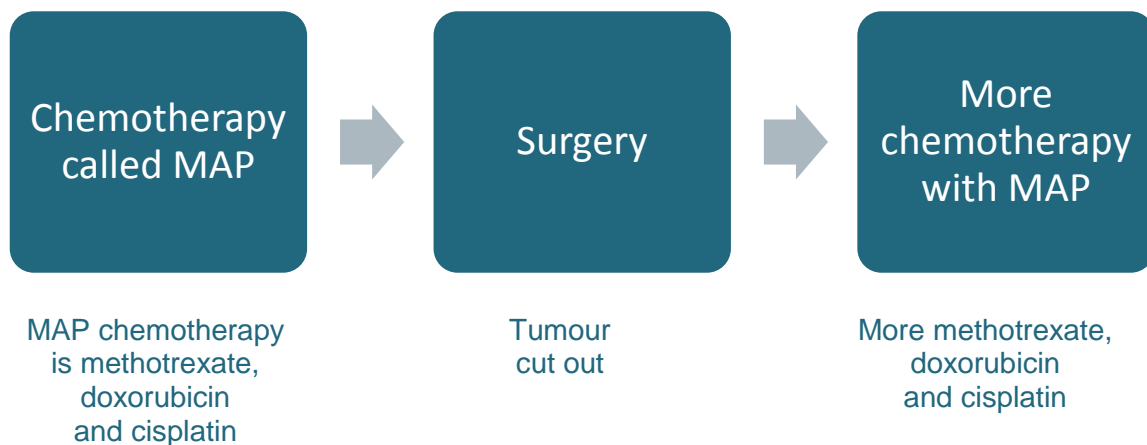


Results of the EURAMOS-1 trial on how to treat osteosarcoma patients whose disease has not responded well to pre-operative chemotherapy

What was EURAMOS-1 about?

EURAMOS-1 was a trial looking at how to treat osteosarcoma. The current standard treatment for osteosarcoma is:



All people in EURAMOS-1 had MAP chemotherapy and then surgery. The trial looked at whether adding more drugs to the chemotherapy after surgery could help people with osteosarcoma.

After the operation, doctors looked at whether the patient's tumour had responded well or poorly to the chemotherapy. 618 people whose tumour had responded poorly to the pre-surgery chemotherapy agreed to be split into two groups, at random, to receive either:

- standard chemotherapy (MAP),
- or standard chemotherapy plus two extra drugs, ifosfamide and etoposide (MAPIE)

after their operation.

So far, we have followed-up how these patients have done for around 5 years after their treatment.

What did EURAMOS-1 find out?

Overall, people in EURAMOS-1 did better than the researchers expected. More than half of people on the trial lived at least three years:

- without the disease coming back again and
- without the disease getting worse and
- without other tumours developing and
- without dying

But people who had MAPIE after their surgery did no better than those who had MAP.

MAPIE was a more difficult treatment than MAP, with more side-effects and more time in hospital. Severe side-effects from the chemotherapy were common in both the MAP and the MAPIE groups. The most common side-effects were blood problems, which 95 in every 100 people had. 87 out of every 100 people on MAPIE, compared to 77 out of every 100 people on MAP had severe side-effects that were not blood problems. More people in the MAPIE group had to stop their treatment early because of severe side-effects.

More people in the MAPIE group have developed a second cancer other than osteosarcoma than those in the MAP group. However, the numbers were small (10 on MAPIE compared to 3 on MAP). We cannot yet be sure this difference was caused by the chemotherapy.

What do these results mean for how osteosarcoma is treated?

These results show that ifosfamide and etoposide should not be added to MAP chemotherapy for osteosarcoma that has responded poorly to MAP. MAPIE did not improve the length of time people lived without the disease coming back again or getting worse, or new tumours developing, or dying. It did increase severe side-effects.

In some places, MAPIE has been used in routine treatment of osteosarcoma. We recommend these places now change back to using MAP. In places that already use MAP, as their standard treatment, we recommend that this continue.

Are these results important?

These results are important, as they clearly show that MAPIE does not help patients with osteosarcoma whose tumour has responded poorly to MAP. As osteosarcoma is a rare disease there have been few trials done to find out how best to treat it. EURAMOS-1 is the biggest ever trial of how to treat osteosarcoma. It means doctors can now base their treatment decisions on reliable evidence. It shows that we can carry out big trials for rare diseases, if doctors in lots of countries work together.

The EURAMOS-1 trial is not over yet. We are continuing to follow-up patients, so we can answer questions about how people in each group do in the long-term. This will help us understand the disease and treatments better.

Any questions?

If you have any questions about EURAMOS-1, please speak to your doctor. If you would like to read the scientific paper, you can find it here

[http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(16\)30214-5/fulltext](http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(16)30214-5/fulltext).

About EURAMOS-1

EURAMOS-1 took part in hospitals throughout Europe (including Austria, Belgium, Czech Republic, Denmark, Finland, Germany, Hungary, Ireland, The Netherlands, Norway, Sweden, Switzerland and the UK), the USA and Canada, Australia and New Zealand.