EVALUATION OF THE EFFICACY AND SAFETY OF MIFAMURTIDE IN OSTEOGENIC SARCOMA TREATMENT IN PAEDIATRIC PATIENTS

Osteosarcoma is a common bone tumor, with an incidence of 0.2 to 3/100,000, is an orphan disease.

PURPOSE
Mifamurtide has managed to increase survival without increasing side effects. We try to evaluate the safety and efficacy of mifamurtide in two paediatric patients diagnosed of osteogenic sarcoma.

MATERIALS AND METHODS

Protocol administered: SEOP-SO-2010 of the Spanish Society of Paediatric Oncology (during 37 weeks)

- **Start Protocol**: Week 1
- **Surgery**: Week 15
- **Start Mifamurtide**: 2 mg/m² twice weekly (adjuvant therapy)
- **Followed Mifamurtide**: 2 mg/m² once-weekly
- **Total**: 48 infusions in 36 weeks

**Monitoring patients**
- During the chemotherapy: Weekly: we assist to the oncology sessions and we track them
- After chemotherapy: Through the electronic clinical history

**RESULTS**

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<th>Patient 1</th>
<th>Patient 2</th>
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<tbody>
<tr>
<td><strong>Age Start Chemotherapy</strong></td>
<td>12</td>
<td>15</td>
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<tr>
<td><strong>Start Date</strong></td>
<td>July 2010</td>
<td>November 2010</td>
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**SIDE EFFECTS**
- Flu-reaction (1st dose)
- Anemia and Thrombocytopenia
- Vomits

**SOLUTIONS**
- Following dose administered with premedication (acetaminophen and dexchlorpheniramine)
- Human stimulating factors and platelet concentrates
- Aprepitant

• From the chemotherapy finished to the actually: Both patients are in **complete remission**, 10 and 13 months later

**CONCLUSIONS**

- Protocol SEOP plus mifamurtide has achieved a complete remission in both cases.
- The use of mifamurtide can be considered safe and it hasn’t increased side effects, we observed only attributed to mifamurtide, a flu syndrome resolved with premedication.
- The effectiveness of mifamurtide in osteogenic sarcoma treatment can not be completed due to the small sample size.