



**SERVIZIO SANITARIO REGIONALE  
EMILIA - ROMAGNA**  
Istituto Ortopedico Rizzoli di Bologna  
Istituto di Ricovero e Cura a Carattere Scientifico



## “Parosteal OsTeosarcoma: a single institution experience”

<b><u>Study code</u></b>	<b><u>POsT</u></b>
<b>Sponsor's Name and Address:</b>	Istituto Ortopedico Rizzoli Via di Barbiano 1/10 40136 Bologna Italy
<b>Study Number/Version/Date:</b>	Vers 1.0 01 Sep 2018
<b>Coordinating Center:</b>	IRCCS Istituto Ortopedico Rizzoli Pathology Unit Via Pupilli 1 40136 Bologna, Italy
<b>Coordinating Investigator and address:</b>	Alberto Righi MD Phone: 051-6366.665 Email: alberto.righi@ior.it
<b>Scientific/Medical study responsible and developer</b>	Alberto Righi MD
<b>Methodology:</b>	Retrospective study (Single institution case series review of clinical data)
<b>Type:</b>	Academic
<b>Founding:</b>	None
<b>Principal Investigator Signature</b>	I confirm that I've read this protocol and I accept to run the study in compliance with what is stated in the protocol and with the ICH-GCP and all applicable law  Alberto Righi MD Firma <hr/>

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## BACKGROUND

Parosteal osteosarcoma is a low-grade, malignant bone tumor arising usually on the metaphyseal surface of a long bone. It accounts for about 4% of all osteosarcomas and although rare, it is the most common type of osteosarcoma of the surface of bone (1). Around 15-25% of cases reported in literature showed high-grade spindle cell areas, indicating progression to high-grade sarcoma (dedifferentiation) that may resemble conventional osteosarcoma or undifferentiated spindle or pleomorphic sarcoma (2-5). This progression (dedifferentiation) may be seen at the time of the first diagnosis or, more often, at the time of recurrence. The medullary involvement of the tumor evaluated on CT and MRI and confirmed on histological specimen is another important feature of parosteal osteosarcoma that has been described in a variable percentage of cases reported in literature (range, 28-48% of series published) (2-5). The presence of the medullary involvement could change the surgical treatment, even if it does not seem to have an impact on survival and on local recurrence or metastases, at difference to the presence of progression (dedifferentiation) areas and of inadequate surgical margins that are the most important prognostic factors in parosteal osteosarcoma reported in literature (1-5). This data should be verified in a wide series of parosteal osteosarcoma with an adequate follow-up, because the case series but two, reported in literature, are limited in terms of number of cases and of time of follow-up (4,5).

## OBJECTIVE OF THE STUDY

The aim of the present study is to review all the cases with a diagnosis of primary parosteal osteosarcoma treated at the Rizzoli Institute from 1900 up to 31 July 2018, retrospectively.

The study will exam all the clinical, radiological, and histological features of this tumor with regard importance of medullary involvement, the types of treatment, the status of surgical margins, the presence of progression (dedifferentiation) areas and the relationship of these factors to individual outcome.

## STUDY DESIGN

This is single institution cases series review of histological and clinical data

## POPULATION

### Inclusion criteria

- 1) Male and female patients treated at Rizzoli Institute from 01 Jan 1900 to 31 Jul 2018
- 2) Diagnosis of parosteal osteosarcoma

- 3) Written informed consent prior to any study-specific analysis and/or data collection

According to the Italian “*Autorizzazione generale n. 9/2016 al trattamento dei dati personali effettuato per scopi di ricerca scientifica*” of the Privacy Tutor (and the corresponding regulation in the other participating countries) the informed consent is not required to be obtained by the deceased subjects, as long as all the other enrolment criteria are met and the study has been approved by the Ethic Committee (refers to INFORMED CONSENT section)

### **Exclusion criteria**

- 1) Patients with histological diagnosis different from parosteal osteosarcoma

### **MATERIAL AND METHODS**

We will retrieve from the database of the Rizzoli institute all the cases with a histological diagnosis of parosteal osteosarcoma from 01Jan1900 to 31Jul2018.

We aspect to find approximately 220 cases.

We will review all the medical records, radiological imaging, and histological data of these cases.

### **STATISTICS**

To the case series will be applied a descriptive statistic.

### **ENROLLMENT PROCEDURE**

Patients considered eligible will be included in the study, after providing a written informed consent.

Since we will include cases of several decades ago, and due to the high incidence of mortality of the disease under investigation, it would be possible that some eligible subjects will be deceased.

### **DATA COLLECTION**

Clinical data will be retrieved by patient charts.

A protocol-specific CRF reporting the results of the review will be provided.

A CRF is required and should be completed for each included subject.

## ETHICS AND QUALITY ASSURANCE

The clinical trial protocol and its documents will be sent before initiating the study to the competent Authorities and Ethics Committees of each participating country for its approval.

The responsible investigator will ensure that this study is conducted in agreement with either the most updated Declaration of Helsinki and all the international and local laws that apply to clinical trials and to patient protection.

The protocol has been written, and the study will be conducted according to the principles of the ICH Harmonized Tripartite Guideline for Good Clinical Practice  
(ref: <http://www.emea.eu.int/pdfs/human/ich/013595en.pdf>).

## INFORMED CONSENT

All patients will be informed, by the investigator, of the aims of the study, the possible risks and benefits that will derive from the study participation. \*

The Investigator must clearly inform that the patient is free to refuse participation in the study and that can withdraw consent at any time and for any reason.

They will be informed as to the strict confidentiality of their patient data, but that their medical records may be reviewed for trial purposes by authorized individuals other than their treating physician.

The informed consent procedure must conform to the ICH guidelines on Good Clinical Practice. This implies that "the written informed consent form should be signed and personally dated by the patient or by the patient's legally acceptable representative".

The Investigator must also sign the Informed Consent form, and will keep the original at the site and a copy of the original must be handed to the patient.

The competent ethics committee for each Institution participating to the study must validate local informed consent documents before the study can be opened. It will be emphasized that the participation is voluntary and that the patient is allowed to refuse further participation in the study whenever he/she wants. This will not prejudice the patient's subsequent care.

Due to the high incidence of mortality of the disease under investigation, it would be possible that some potential eligible subjects will be deceased.

In order to allow and promote the increase in the knowledge of this rare disease that could be beneficial for other patient that are or will be affected, according to the Italian "Autorizzazione generale n. 9/2016 al trattamento dei dati personali effettuato per scopi di ricerca scientifica" of

the Privacy Tutor and the corresponding regulation in the other participating country, as well as the EU General Data Protection Regulation 679/2016 (that will be applicable from 25 May 2018), the informed consent is not required to be obtained by the deceased subjects according the aforementioned laws/dispositions.

## **CONFIDENTIALITY**

In order to ensure confidentiality of clinical trial data as disposed the national and European applicable regulation, data will be only accessible for the trial Sponsor and its designees, for monitoring/auditing procedures, the Investigator and collaborators, the Ethics Committee of each corresponding site and the Health Authority.

Investigator and the Institution will allow access to data and source documentation for monitoring, auditing, Ethic Committee revision and inspections of Health Authority, but maintaining at all times subject personal data confidentiality as specified in the "Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995".

The Investigator must guarantee that patient anonymity is kept at all times and their identity must be protected from unauthorized persons and institutions.

All patients included in the study will be identified with a numeric code, so that no identifiable personal data will be collected (pseudo anonymization)

The Investigator must have and conserve a patients' inclusion registry where it figures the personal data of the patient: name, surname, address and corresponding identification code into the study, this register will be kept on the Investigator File.

## **PUBLICATION OF RESULTS**

The results from this study will be published or shown at scientific conferences.

The final publication of the study results will be written by the Principal Investigator.

## **SPONSOR ROLE AND RESPONSIBILITY**

The sponsor is the sole owner of the data and is responsible of all the clinical trial activities from study design, development, data collection, management, analysis, interpretation of data, writing and the decision to submit the report for publication written by the Principal Investigator,

**REFERENCES**

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