

CRP E33028

Investigation of Optimal Radiotherapy Regimen and Type of Irradiation in Treatment of Painful Bone Metastasis

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Summary:

Treatment of metastatic cancer (e.g. bone, lung, brain metastases) is an important aspect in radiation oncology worldwide, especially for developing countries where it is assumed that up to 70 % of all cancer patients are more suitable for palliative approach than for curative treatment. This is especially so in cases of bone metastases, where improving the access to and quality of care in pain relief are the major goals. Member states will benefit more for rational use of existing equipment and personnel allocations by optimising fractionation in palliative radiotherapy and by employing a single fraction treatment in palliation of bone metastases. This will decrease costs and provide optimal treatment by current standards for patient

Specific Research Objectives:

- Is a single dose of 4 Gy equally effective to a single dose of 8 Gy in palliation of painful single bone metastasis? Is the efficacy related to the origin of cancer, type of metastasis and pain?
- Is a single dose of 8 Gy equally effective to a fractionated radiotherapy regimen consisting of 12 Gy in 4 fractions in 2 consecutive days in palliation of painful multiple bone metastases located in the lower part of the body using lower hemibody irradiation (LHBI)?
- Is the pattern of pain relief, need for re-treatment, complication rate and quality of life similar between the two regimens investigated for both single and multiple bone metastases?
- Can first and/or second reirradiation (each using 8 Gy, but on the spine only once) be effectively used in a prospective multinational, multi-institutional trial?

Expected Research Outputs:

- Timely accrual of patients into the study.
- Proper collection and analysis of the patient data

Participating institutions:

<i>Country</i>	<i>City</i>	<i>Institution</i>
INDIA	MUMBAI	Tata Memorial Centre
SPAIN	PALMA DE MALLORCA	Hospital Son Dureta
SERBIA	BELGRADE	Institute of Oncology and Radiology
SPAIN	BARCELONA	Universidad de Barcelona; Hospital Clinic

UK	NORTHWOOD	Mount Vernon Cancer Centre (data management)
ALGERIA	ALGER	Centre Pierre et Marie Curie (CPMC)
EGYPT	CAIRO, NASR CITY	Misr Oncology Center (MOC)
MEXICO	MEXICO	Instituto Nacional de Cancerología (INCAN)
SPAIN	MADRID	Hospital Ramón y Cajal
TUNISIA	TUNIS	Ministère de la Santé Publique; Institut National de Cancer Salah Azaiz
MEXICO	MEXICO	Instituto Mexicano del Seguro Social; Hospital de Oncología CMN Siglo XXI
LITHUANIA	VILNUS	Vilnius University; Institute of Oncology