



# Treatments and prognostic factors for bone and soft tissue sarcoma in non-urban areas in Japan

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## Abstract

**Background** Although bone and soft tissue sarcoma is recognized as a rare cancer that originates throughout the body, few comprehensive reports regarding it have been published in Japan.

**Patients and methods** Bone and soft tissue sarcomas were tabulated from the Cancer Registries at eight university hospitals in the Chugoku–Shikoku region. Prognostic factors in cases were extracted in a single facility and have been analyzed.

**Results** From 2016 to 2019, 3.4 patients with bone and soft tissue sarcomas per a general population of 100,000 were treated at eight university hospitals. The number of patients who underwent multidisciplinary treatment involving collaboration among multiple clinical departments has been increasing recently. In the analysis carried out at a single institute (Ehime University Hospital), a total of 127 patients (male/female: 54/73) with an average age of 67.0 y (median 69.5) were treated for four years, with a 5-year survival rate of 55.0%. In the analysis of prognostic factors by multivariate, disease stage and its relative treatment, renal function (creatinine), and a patient's ability of self-judgment, and a patient's mobility and physical capability were associated with patient prognosis regarding bone and soft tissue sarcomas. Interestingly, age did not affect the patient's prognosis ( $> 70$  vs  $\leq 70$ ).

**Conclusions** Physical and social factors may affect the prognosis of patients with bone and soft tissue sarcomas, especially those living in non-urban areas.

**Keywords** Bone and soft tissue sarcoma · Non-urban area · Prognostic factors

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