High STEAP1 expression is associated with improved outcome of Ewing's sarcoma patients.

Ewing's sarcoma (ES) is the second most common bone or soft-tissue sarcoma in childhood and adolescence and features a high propensity to metastasize. The six-transmembrane epithelial antigen of the prostate 1 (STEAP1) is a membrane-bound mesenchymal stem cell marker highly expressed in ES. Here, we investigated the role of STEAP1 as an immunohistological marker for outcome prediction in patients with ES. Membranous STEAP1 immunoreactivity was analyzed using immunohistochemistry in 114 primary pre-chemotherapy ES of patients diagnosed from 1983 to 2010 and compared with clinical parameters and patient outcome. Median follow-up was 3.85 years (range 0.43-17.51). A total of 62.3% of the ES samples displayed detectable STEAP1 expression with predominant localization of the protein at the plasma membrane. High membranous STEAP1 immunoreactivity was found in 53.5%, which correlated with better overall survival (P=0.021). Accordingly, no or low membranous STEAP1 expression was identified as an independent risk factor in multivariate analysis (hazard ratio 2.65, P=0.036). High membranous STEAP1 expression predicts improved outcome and may help to define a specific subgroup of ES patients, who might benefit from adapted therapy.
regimens.

Zeitschriftentitel / Abkürzung:
Ann Oncol

Jahr: 2012

Band: 23

Heft / Issue: 8

Seiten: 2185-90

Sprache: eng


Print-ISSN: 0923-7534

TUM Einrichtung:
Kinderklinik und Poliklinik

Occurences:
Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Klinik und Poliklinik für Kinderheilkunde und Jugendmedizin > 2012

entries: