

**FC-100****The "two-week wait" referral system: how predictive of malignancy are the worrying features for soft tissue sarcomas?****M. Smolle**<sup>1</sup>, A. Leithner<sup>1</sup>, R. Grimer<sup>2</sup><sup>1</sup> *Department of Orthopaedic Surgery, Medical University of Graz, Graz, Austria*<sup>2</sup> *Oncology Department, Royal Orthopaedic Hospital Birmingham, Birmingham, United Kingdom*

**Introduction:** This study was conducted in order to find out how accurate general practitioners (GPs) evaluated the current NICE criteria and whether they should be advanced. According to the criteria, each soft tissue swelling with a size > 5 cm, increase in size, pain and location deep to the fascia should be referred to a specialist centre urgently.

**Methods:** All patients referred under the two-week wait rule between 2013 and 2014 were included into the study. The accuracy of the referrals was evaluated by comparison of the criteria identified by GPs and those approved at the specialist centre. Furthermore, the parameters were investigated for prediction of malignancy.

**Results:** 135 patients with a mean age of 56.4 years were referred to our unit from whom 45 were subsequently diagnosed with a soft tissue sarcoma (STS). GP determined features were accurate in 74% of all cases. The at least useful parameter in predicting malignancy was "pain" (27% sensitivity), while "size > 5 cm" was the best predictor (76% sensitivity). The sensitivity for size increased to 89% when the worrying size was lowered to 4 cm. Imaging techniques performed in 106 cases did not increase the probability of detecting malignancy. The combination of factors most predictive of malignancy was increase in size, deep location, no pain and a size > 5 cm (77% precision).

**Conclusion:** Based on the results of this study we recommend adaption of current NICE guidelines. The feature "size" should be lowered by 1 cm to "size > 4 cm". Furthermore, factor "pain" should be removed from the urgent referral form, as it is not predictive of malignancy.