A 43-year-old male Caucasian house-builder presented with a tumor in the left forearm that had grown in size progressively for 5 months. On examination, the lesion measured approximately 10 cm in the largest axis, with irregular shape and hard consistency, fixed to the superficial and deep planes (panel A and B). He underwent complete resection of the mass under local anesthesia, with preservation of vascular-nervous and muscular structures (panel D, E, F, and G). He had a favorable postoperative course without complications. Pathological examination of the tumor confirmed a malignant mesenchymal neoplasm that showed moderate atypia but no necrosis, ulceration or unequivocal vascular invasion. Free resection margins were observed. The mitotic index was 23 mitoses per 10x field. Immunohistochemical analysis (Leica/Dako automated system) revealed positive staining for vimentin (Clone V9) and Ki67 (Clone M7240); and negative staining for desmin (Clone SP 138), anti-human S-100, alfa-smooth muscle actin (Clone 1A4), myogenin (Clone FSD), transducin-like enhancer of split 1 (Clone 1F5), epithelial membrane antigen (Clone E29) and cytokeratin 7 (Clone OV-TL 12/30). The above analyses confirmed a diagnosis of high-grade fibrosarcoma. The patient received an adjuvant radiochemotherapy therapy. He had a favorable therapeutic response. No tumor recurrence was noted after one year of post-operative follow-up (panel C).