## **ELECTROCHEMOTHERAPY OF MELANOMA METASTASES**

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Due to its propensity to recur on the skin, melanoma represents a leading indication to electrochemotherapy (ECT). With the advent of targeted and immune therapies, prolonged survival is being achieved and new patterns of disease have emerged. Thus, ECT is increasingly applied not only as a palliative, but also as a complementary therapy, to enhance the care of patients with superficially metastatic melanoma precise targeting through tumor prolonged locoregional control. and Historically, several ECT studies included patients with melanoma, and since 2006 ESOPE guidelines nine case series have been published. Complete response (CR) rate ranged between 20% and 50%. In well-selected cases, ECT allowed to managing metastases in challenging anatomical locations such as the face, oral cavity, and perianal region. Interestingly, ECT can be combined with surgery, with either a neoadjuvant or adjuvant intent, and the 2018 ESOPE guidelines include the option of performing debulking surgery and ECT within the same procedure. Patient-reported outcomes have been previously investigated in 36 patients by means of a dedicated questionnaire. In the short-term, 34 of them reported a positive impact on wound healing. bleeding, aesthetic impairment, activities of daily living, social relations, or pain. These findings have been subsequently confirmed in 211 melanoma patients by the EORTC QLQ-C30 questionnaire. Cutaneous and subcutaneous metastases from melanoma often occur in the setting of metastatic, disseminated disease and are often associated with clinical complications, including bleeding, pain and ulceration, and with resulting quality of life deterioration. Although a locoregional approach for a solitary lesion can be indicated, the primary aim of treatment in advanced cases is palliative, but can nonetheless include various combination/ sequencing of locoregional treatments (surgery, isolated limb perfusion/infusion, radiotherapy, T-VEC oncovirotherapy, ECT), and systemic therapies (immuno-, targeted-therapy).