

## Comparison of the EORTC criteria and PERCIST in solid tumors: a pooled analysis

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Two sets of response criteria using PET are currently available to monitor metabolic changes in solid tumors: the criteria developed by the European Organization for Research and Treatment of Cancer (EORTC criteria) and the PET Response Criteria in Solid Tumors (PERCIST). We conducted this pooled study to investigate the strength of agreement between the EORTC criteria and PERCIST in the assessment of tumor response. We surveyed MEDLINE, EMBASE and PUBMED for articles with terms of the EORTC criteria and PERCIST from 2009 and January 2016. We searched for all the references of relevant articles and reviews using the 'related articles' feature in the PUBMED. There were six articles with the data on the comparison of the EORTC criteria and PERCIST. A total of 348 patients were collected; 190 (54.6%) with breast cancer, 81 with colorectal cancer, 45 with lung cancer, 14 with basal cell carcinoma in the skin, 12 with stomach cancer, and 6 with head and neck cancer. The agreement of tumor response between the EORTC criteria and PERCIST was excellent ( $k = 0.946$ ). Of 348 patients, only 12 (3.4%) showed disagreement between two criteria in the assessment of tumor response. The shift of tumor response between two criteria occurred mostly in patients with PMR and SMD. The estimated overall response rates were not significantly different between the two criteria (72.7% by EORTC vs. 73.6% by PERCIST). In conclusion, this pooled analysis demonstrates that the EORTC criteria and PERCIST showed almost perfect agreement in the assessment of tumor response. **Keywords:** PET; EORTC criteria; PERCIST; tumor response

## Transmission of malignancy in kidney transplantation

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**Highlight** In kidney transplantation (KT), transmission of hidden malignancy from donor kidney to recipients is a disastrous event. Furthermore, immunosuppressive agent can facilitate rapid tumor growth and metastatic potential of malignancy. Our case showed transmitted malignancy from donor kidney, and we emphasize on careful examination of hidden malignancy of donor kidney before KT. Case A 57-year-old male patient with end-stage renal disease (ESRD) secondary to hypertension received KT from a deceased donor and underwent an immunosuppressive therapy based on corticosteroid, tacrolimus and mycophenolate. After 2 months of KT, he complained of pain in allograft region. CT scan showed 9.5cm sized rim enhancing hypodense mass arising from renal sinus of transplanted kidney and lung, bone metastasis (Figure). We performed biopsy on the mass of graft kidney, and the result showed transitional cell carcinoma. Discussion Transplantation is the treatment of choice for most patients with ESRD. However, transplantation of biological material from a donor to a host unavoidably carries some risk of disease transmission, such as infection and malignancy. These malignancies are often more aggressive and associated with a poor prognosis due to immunosuppressive agents. Our case showed a transmitted malignancy from donor kidney which had progressed rapidly after use of immunosuppressive drugs. Therefore, we would like to emphasize on a careful examination of hidden malignancy of a donor kidney before KT and careful follow up after KT.

