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DOI: 10.2967/jnumed.109.063909

REPLY: We agree with Pantaleo et al. on the importance of developing novel molecular imaging agents that can provide information on epidermal growth factor receptor (EGFR) mutations to identify potential responders to EGFR-targeted therapeutics. We agree also that the value of wild-type EGFR expression as a predictive biomarker for anti-EGFR therapy in lung and colorectal cancer has not been demonstrated using common contemporary methods. However, the role of wild-type EGFR as a predictive biomarker for therapy of several malignancies has been shown using the existing detection methods. For example, a prospective study (*1*) has demonstrated that a high level of EGF expression can predict local–regional relapse after radiotherapy of head and neck squamous cell carcinomas. Another study (*2*) has proved the key role of high EGFR expression for selection of patients who may benefit from hyperfractionated accelerated radiotherapy of head and neck squamous cell carcinomas. High EGFR expression is also a predictive biomarker for a poor response to preoperative radiotherapy in advanced rectal carcinoma (*3*) and for tamoxifen treatment of early-stage breast cancer (*4*). These studies show that EGFR expression data may change patient management. In addition, clinical studies suggest that overexpression of EGFR is a prognostic biomarker in breast (*5*), prostate (*6*), and ovarian (*7*) cancers. Furthermore, downregulation of EGFR may serve as a rapid pharmacodynamic biomarker for anti-HSP90 therapy as shown by Niu et al. (*8*).

Pantaleo et al. stated in a recent review article (*9*) that "The assessment of EGFR in *ex vivo* tumours specimens is still controversial for both methodological and biological reasons. EGFR was evaluated by immunohistochemistry (IHC) in most clinical studies and in clinical practice, but it is now well known that IHC is not an ideal method for EGFR detection for several factors. . . ." Radionuclide molecular imaging may be combined with ex vivo detection of EGFR expression, adding the clear advantages of being global, minimally invasive, less sensitive to intratumoral heterogeneity of expression, and easily repeatable for following a patient. Therefore, radionuclide molecular imaging has the potential to become a powerful and convenient tool to fully assess the diagnostic value of EGFR overexpression in a broader spectrum of malignancies.

Thus, in vivo imaging of EGFR expression may provide important diagnostic information. We believe that radionuclide molecular imaging of EGFR expression has several potential clinical uses as an important complement to other diagnostic information.

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DOI: 10.2967/jnumed.109.064188