Immunoscintigraphy with $^{99m}$Tc-Nimotuzumab in Patients with Non Small Cell Lung Cancer that will Receive Therapy with the Monoclonal Antibody

Yamili Peña1*, Tania Crombet2, Juan F Batista1, Leonel A Torres1, Alex Vergara1 and Alejandro Perera1

1Direction for Clinical Research, Isotope Center, Havana, Cuba
2Center of Molecular Immunology, Havana, Cuba

Clinical Image

The NSCLC is the most common type of lung cancer and is highly lethal [1]. The application of new therapies is in constant investigation [2,3]. Targeted drugs, as well as immunotherapies, are beginning to change the treatment prognosis for people with advanced NSCLC. Research efforts are...
currently focusing on tailoring such therapies according to predictive clinical and molecular markers (Figure 1) [4]. Nimotuzumab is a humanized IgG1 monoclonal antibody directed against epidermal growth factor receptor (EGFr) that has been evaluated in solid tumors [3,5-7]. Some researchers have explored the effect of the monoclonal antibody that block the EGFr from the perspective of the oncogenic addiction. The addiction to the epidermal growth factor is observed in the patients that show an over expression of one receptor and a clinical answer to the antibody humanized Nimotuzumab [8] (Figure 2). The selection of patients that carry tumors with addiction to the EGF is crucial to maximize the clinical benefit of this immunotherapy [8].

References