Revista Portuguesa de Pneumología
ISSN: 0873-2159
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Sociedade Portuguesa de Pneumologia
Portugal

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Revista Portuguesa de Pneumología, vol. 22, núm. 5, septiembre-octubre, 2016, pp. 287-288
Sociedade Portuguesa de Pneumologia
Lisboa, Portugal

Rev Port Pneumol. 2016;22(5):287–295

revista portuguesa de PNEUMOLOGIA
portuguese journal of pulmonology
www.revportpneumol.org

RESEARCH LETTERS

MuTAR study, Phase II, open-label study of erlotinib (E) treatment in patients (pts) with locally advanced or metastatic non-small cell lung cancer (mNSCLC) who present activating mutations (MUT+) in the tyrosine kinase (TKI) domain of the epidermal growth factor receptor (EGFR), assessed the efficacy of 1L in Portuguese pts with mNSCLC EGFR Mut+

Clinical notes

Activating mutations in EGFR are important markers of response to TKI therapy in mNSCLC.[1,2] In robust phase 3 trials, erlotinib (E) has been shown to improve progression free survival (PFS), compared with chemotherapy (CT), in first-line treatment (1L), patients with mNSCLC EGFR MUT+, ORR – 58%, PFS – 9.7 months and overall survival (OS) 22.9 months in caucasions.[1,2] MuTAR study, assessed the efficacy of 1L Erlotinib in portuguese pts.

We undertook this open-label multicenter, phase II trial, at 9 hospitals in Portugal. Eligible patients included adult patients with histologically or cytological documented inoperable mNSCLC EGFR MUT+ with no history of chemotherapy or therapy against metastatic disease.

Treatment consisted of Erlotinib 150 mg/day *per os*, in tablet form, until disease progression, unacceptable toxicity, death or withdrawal of consent.

The primary efficacy endpoint was objective response rate (ORR), defined as complete or partial response according to RECIST version 1.1.

An interim analysis was conducted with a cut-off date on the 30th September 2013, to analyse preliminary clinical benefits and compare it with the available literature. At the time of interim analysis, 3 patients were still in treatment.

The recruitment period was between February 2011 and March 2012. Of the 216 screened patients, 205 performed EGFR mutation test, with 38 showing activating EGFR mutations and 30 (14.6%) were eligible to be included in the study (44.7% with exon 19 and 55.3% with exon 21). The ORR (ITT population) was 63.3% (95%CI: 46.1%–80.6%) (Table 1). The median PFS and overall survival (OS) (ITT population) were 10 months (95%CI: 7.7–16) and 20.7 months respectively. A total of 340 adverse events (AE) were observed in 29 patients;

In conclusion, E in 1L treatment of mNSCLC EGFR Mut + pts showed similar results compared with other clinical trials in Caucasian patients regarding ORR, PFS and OS. First-line E was effective and well tolerated in Portuguese EGFR Mut + patients. Our findings strengthen also the rationale for routine baseline assessment of EGFR mutation status in pts with mNSCLC and for treatment benefit of mutation positive patients with EGFR TKIs.

Table 1 Best overall response: RECIST criteria – ITT population.

		Total ($n = 30$)
Best overall response, n (%)		
Complete response	0	0.00%
Partial response	19	63.33%
Stable disease	9	30.00%
Progressive disease	1	3.33%
Inevaluable	0	0.00%
Not available/not accessed	1	3.33%
Total	30[a]	100.0%
Objetive response rate[b], *n* (%), 95% CI	19 (63.33%), [0.4609, 0.8058]	

[a] For the 7 patients without information of overall response at the end of the study visit, best overall response was obtained according to the information from the study treatment visits available.
[b] Objective response rate: patients with complete or partial response.
95% CI: 95% confidence interval.

Authorship

All the authors approved the final draft of the manuscript for submission. Dr. Fernando Barata conceived this study and supervised all aspects of its implementation. All the authors

contributed to data collection and the interpretation of the results and the proof reading of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

This work was sponsored by Roche Farmacêutica Química, Lda and was presented in 6o Congresso Português do Cancro do Pulmão, October 10th 2014.

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http://dx.doi.org/10.1016/j.rppnen.2016.03.009

Transbronchial cryobiopsy in the diagnosis of desquamative interstitial pneumonia

Desquamative interstitial pneumonia (DIP) is a rare interstitial pneumonia usually associated with cigarette smoke.[1,2] It is characterized by the accumulation of intra-alveolar macrophages, sometimes associated with giant cells.[1,3] The diagnosis may be suggested by patchy ground-glass opacification with a predilection for the mid and lower lung lobes on high-resolution computed tomography (HRCT); subpleural involvement is also typical. Irregular lines, traction bronchiectasis, cysts, emphysema, and nodules are other possible findings of DIP.[4] Bronchoalveolar lavage fluid nearly always contains an increased number of alveolar macrophages.[2,4] Histologically, DIP is characterized by the accumulation of macrophages in the alveolar spaces associated with interstitial inflammation and/or fibrosis. The macrophages usually contain light brown pigment. Lymphoid nodules and a sparse but distinct eosinophilic infiltrate are common.[3] Surgical lung biopsy is still required to make a definitive diagnosis.[1–3]

Transbronchial lung cryobiopsy (TBLC) is a new endoscopic technique that has recently shown superior diagnostic yield to conventional transbronchial biopsy (TBB).[5–7] The advantage of the cryoprobe, compared with conventional TBB or TBB using jumbo forceps is that larger pieces of tissue, without crush artifacts, can be extracted during the freeze-thaw cycle, allowing the identification of complex pathologic patterns. The technique permits visualization of peripheral structures of the secondary pulmonary lobule and facilitates immunohistochemical staining. In addition, TBLC can be performed on an outpatient basis and is both an easier and safer procedure for patients with comorbidities, as it reduces the complications and mortality associated with surgical lung biopsy.[6]

Most of the data available to date is on TBLC overall diagnostic yield and complication rates.[5] However, it is also important for clinicians to know the diagnostic accuracy of TBLC in particular diffuse lung diseases, especially in cases in which histologic evaluation is an essential component of multidisciplinary diagnostic approach, as is the case with DIP.

Our aim was to investigate the diagnostic accuracy of TBLC in patients with clinical and radiological findings

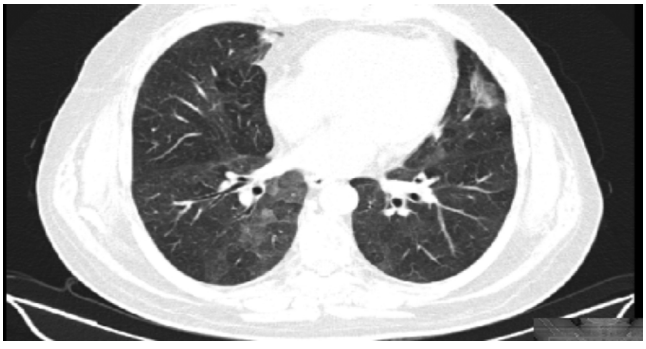

Figure 1 HRCT scan showing ground-glass pattern in the lower pulmonary lobes.