

A. FERRER MACHÍN, J.A. LEON GIL, J.A. MARTÍN CONDE, T. BETANCOR GARCÍA, M. VERA CABRERA,
S. HERNÁNDEZ ROJAS, I. GONZÁLEZ GARCÍA, K. ÁLVAREZ TOSCO, J. MERINO ALONSO

Hospital Universitario Nuestra Señora de Candelaria (S/C de Tenerife, Spain)
25th EAHP Congress (Gothenburg 2020)

PURPOSE

The aim of the study is to evaluate the cost-effectiveness of osimertinib in patients with mutated EFGR NSCLC compared to other tyrosinkinase inhibitors (TKIs).

MATERIAL AN METHODS

Cost-effectiveness study of osimertinib in patients with EFGR-mutated NSCLC in a third level hospital considering a period of one year of treatment (01/01/2019-12/01/2019).

The protocol of the hospital was reviewed to include all therapeutic alternatives: afatinib, gefitinib and erlotinib. The main variable of the study was the incremental cost-effectiveness ratio (ICER) of osimertinib compared to other TKIs. Secondary variables included: cost of treatment per month (euros), efficacy (life-months gained), total cost of treatment (euros) and incremental cost of osimertinib compared to other TKIs.

RESULTS

	OSIMERTINIB	ERLOTINIB	GEFITINIB	AFATINIB
Dosage	80 mg/24h	150 mg/24h	250 mg/24h	40 mg/24h
Cost of treatment/month	4.313 €/month	2045 €/month	1.227 €/month	1964 €/month
Total cost of treatment	81.516 €*	22.904 €**	12.515 €*	20.033 €*
Incremental cost of osimertinib compared to other TKIs	Reference drug	Δ 58.612 €	Δ 69.001 €	Δ 61483 €
Efectiveness (progression-free survival)	18.9 months ⁺	10.4 months ⁺⁺	10.2 months ⁺	10.2 months ⁺

* PFS FLAURA study; ** PFSEURTAC study
+ FLAURA study; ++ EURTAC study

CONCLUSIONS

- At the current commercialized price, first-line osimertinib therapy in patients with EGFR-mutant NSCLC would mean an incremental cost of € 7455 ± € 439 per month of progression-free survival gained compared to other TKIs. If we consider a year of treatment, the incremental cost of osimertinib would be an additional € 74547 ± 4388.
- The reduction of the cost of osimertinib would significantly improve its cost-effectiveness profile. The main limitation of this study was that the cost of the complete treatment was calculated using the drug's PVL.