

# **TREATMENT OF METASTATIC NSCLC WITH A TARGETABLE TUMOR MUTATION**

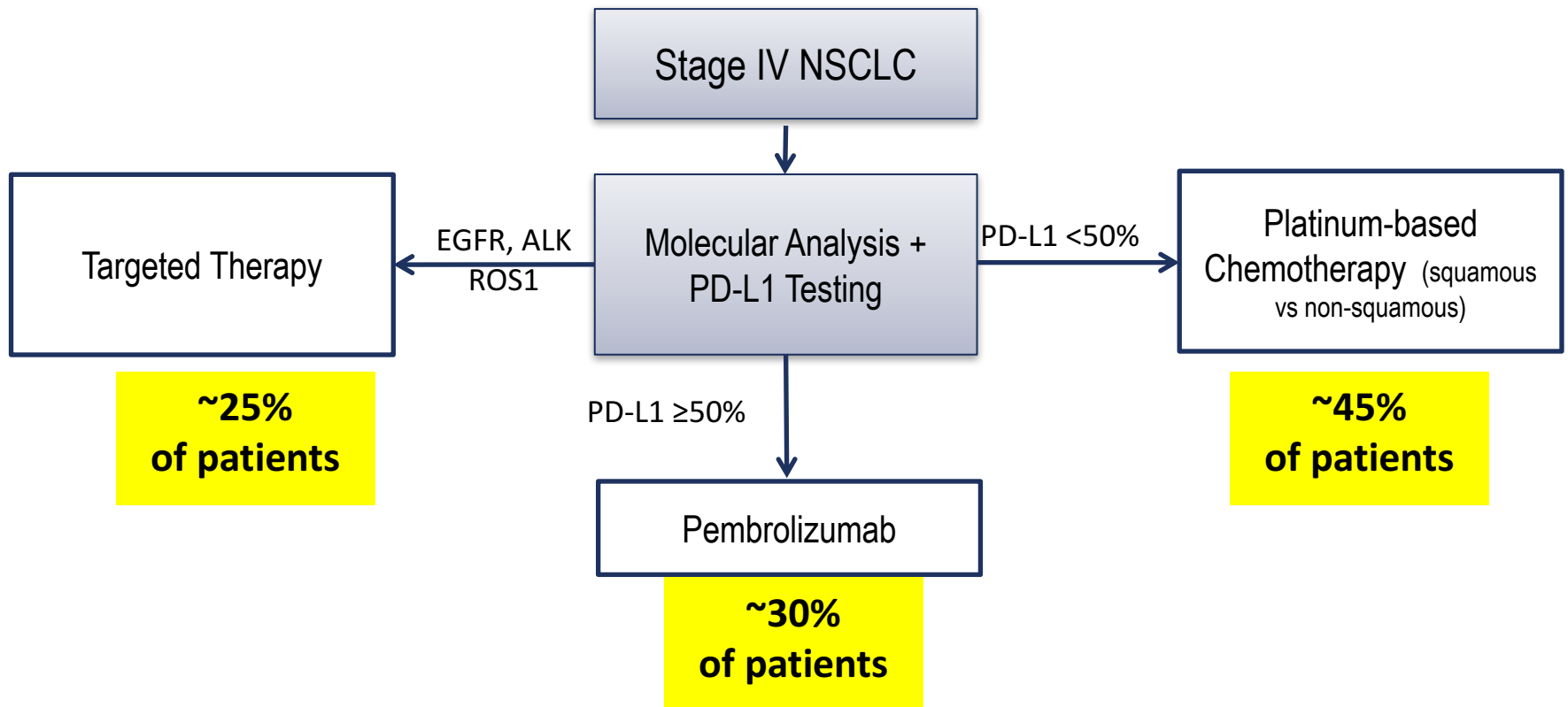
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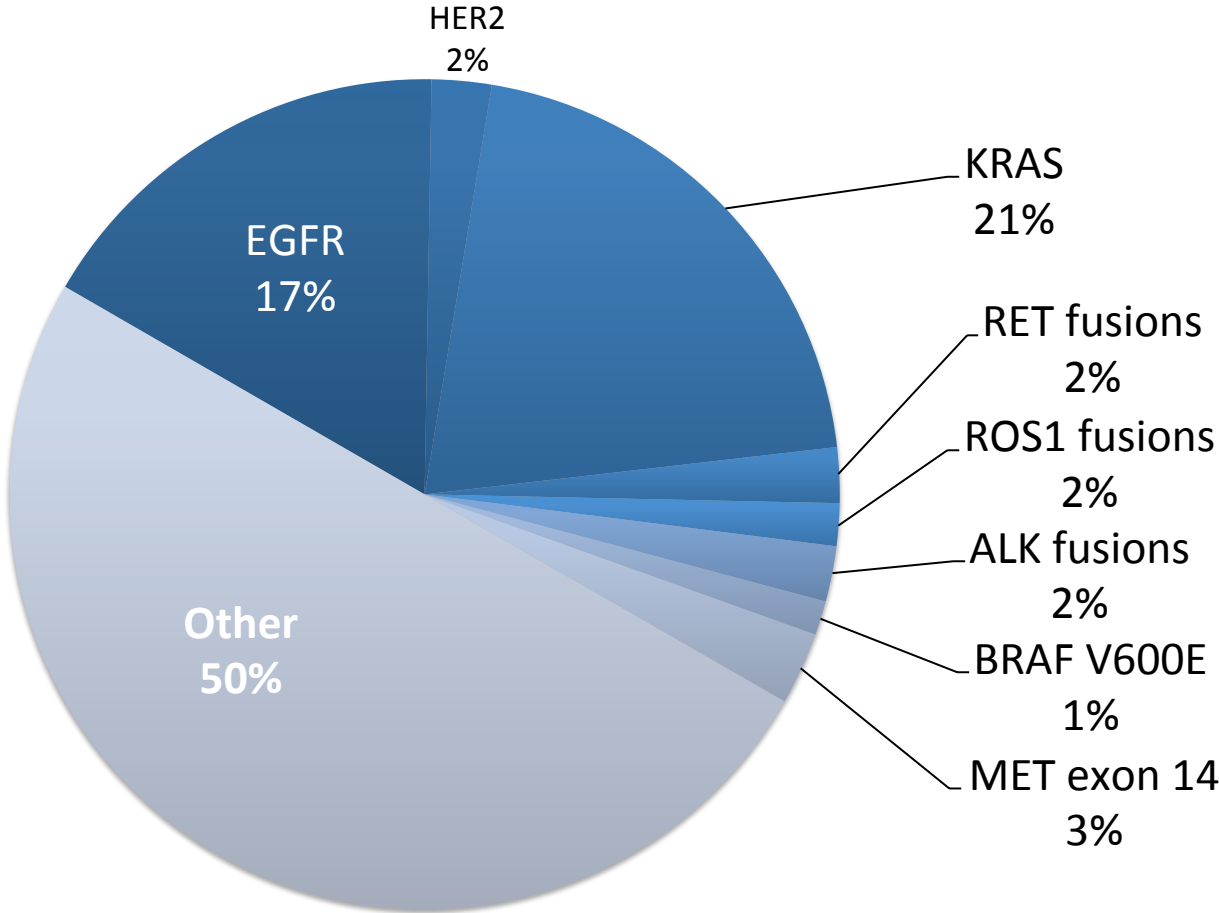
# Disclosures

<b>Consulting Agreement</b>	Genentech BioOncology
<b>Contracted Research</b>	Ariad Pharmaceuticals Inc, Astellas Pharma Global Development Inc, Novartis, Pfizer Inc

# The Current Approach to First-Line Treatment of Patients with Advanced NSCLC

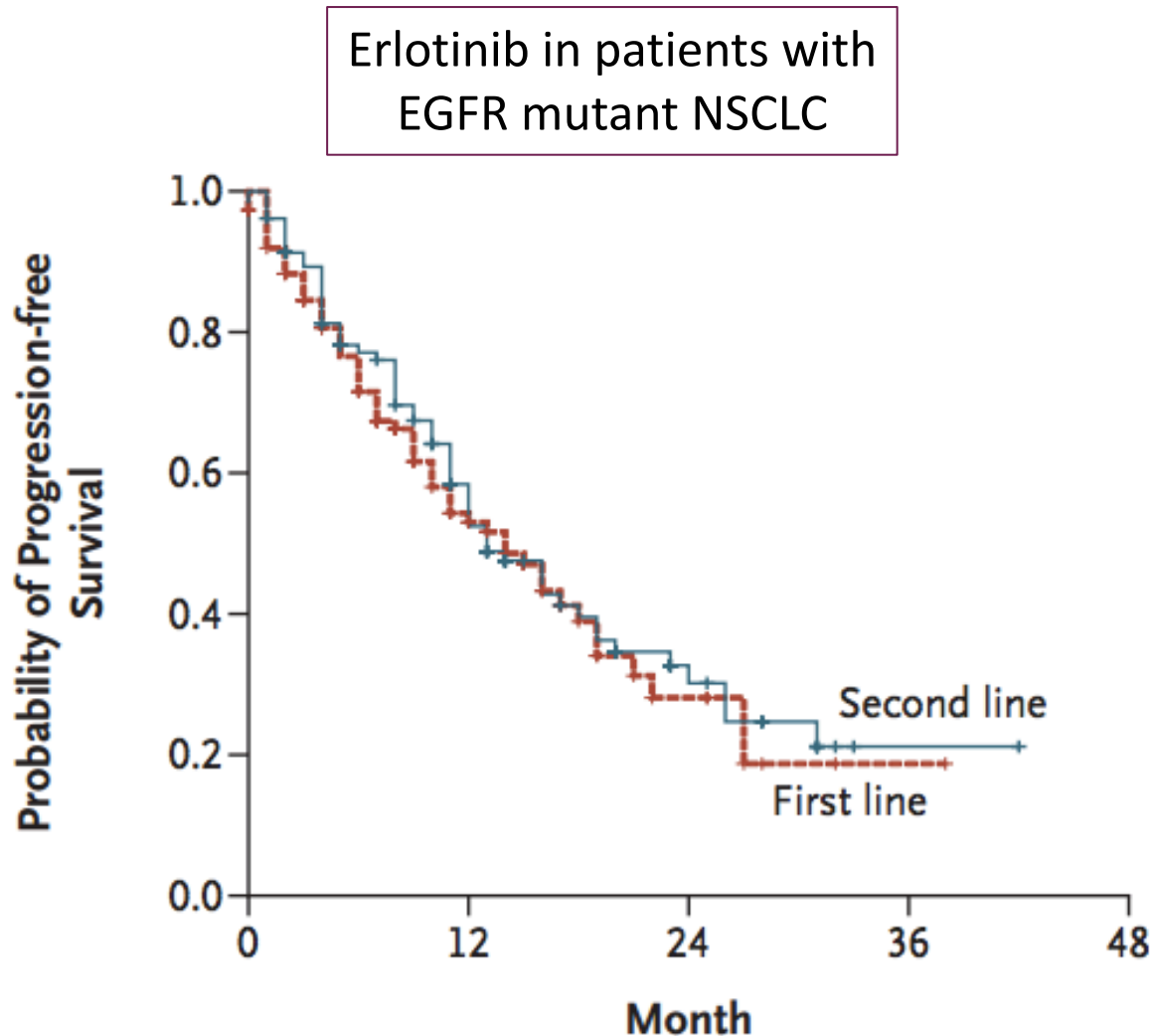


# Subtypes of NSCLC can be defined by genotypes

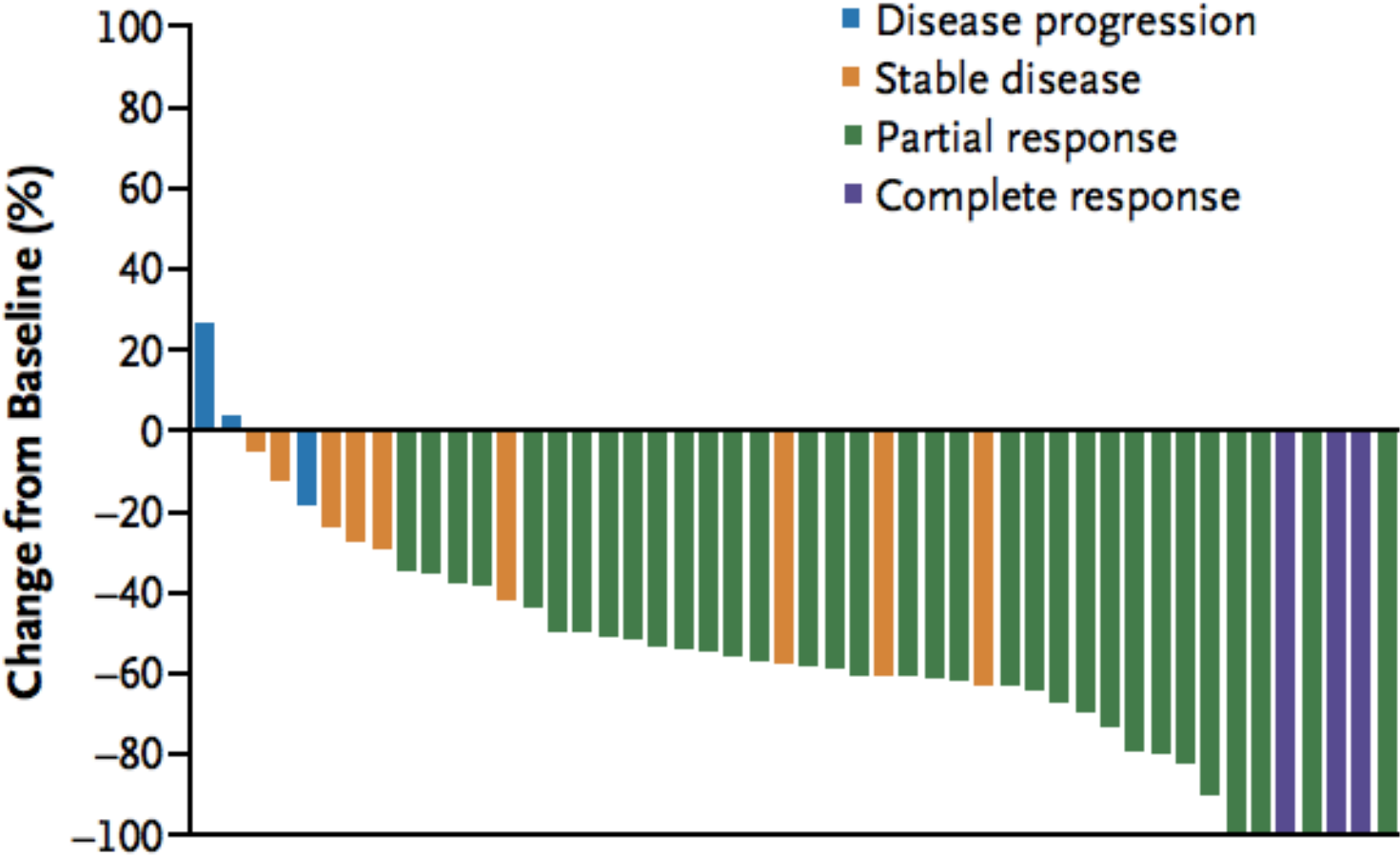


MSK-IMPACT data, n~2000

# For molecularly targeted therapies, line of therapy may not matter

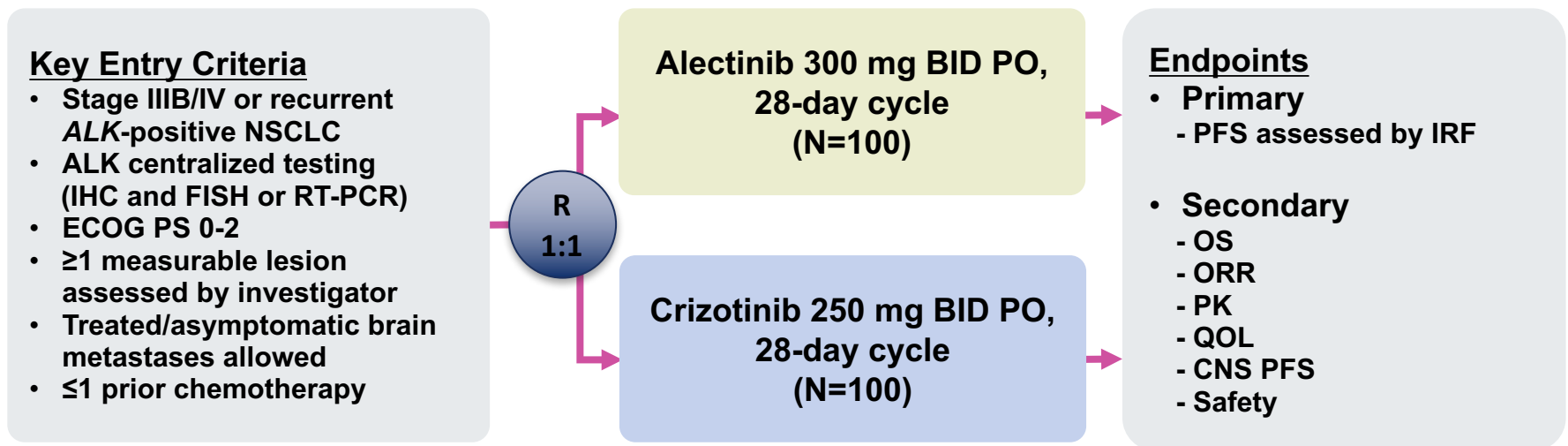


# Crizotinib in patients with *ROS1* positive lung cancers

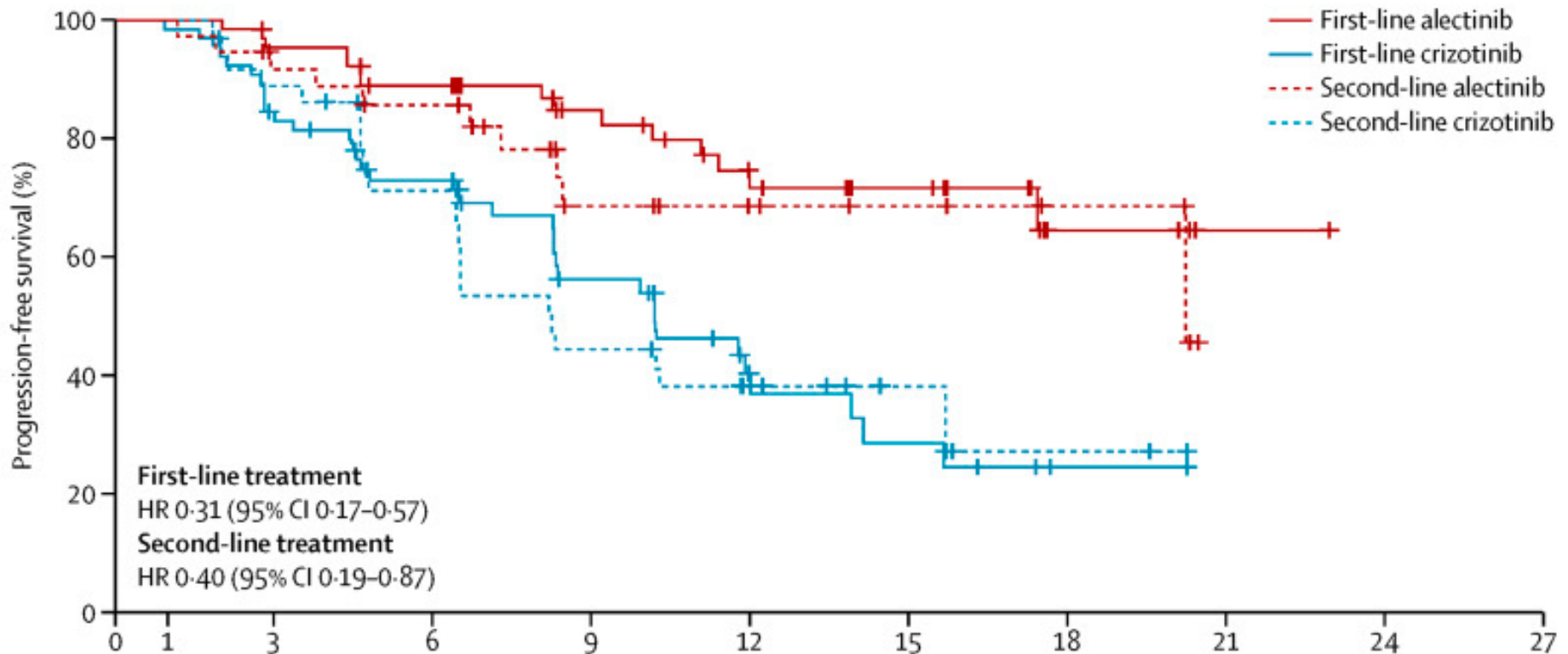


# Alectinib versus crizotinib in patients with ALK-positive non-small-cell lung cancer (J-ALEX): an open-label, randomised phase 3 trial

Toyoaki Hida, Hiroshi Nokihara, Masashi Kondo, YoungHak Kim, Koichi Azuma, Takashi Seto, Yuichi Takiguchi, Makoto Nishio, Hiroshige Yoshioka, Fumio Imamura, Katsuyuki Hotta, Satoshi Watanabe, Koichi Goto, Miyako Satouchi, Toshiyuki Kozuki, Takehito Shukuya, Kazuhiko Nakagawa, Tetsuya Mitsudomi, Nobuyuki Yamamoto, Takashi Asakawa, Ryoichi Asabe, Tomohiro Tanaka, Tomohide Tamura



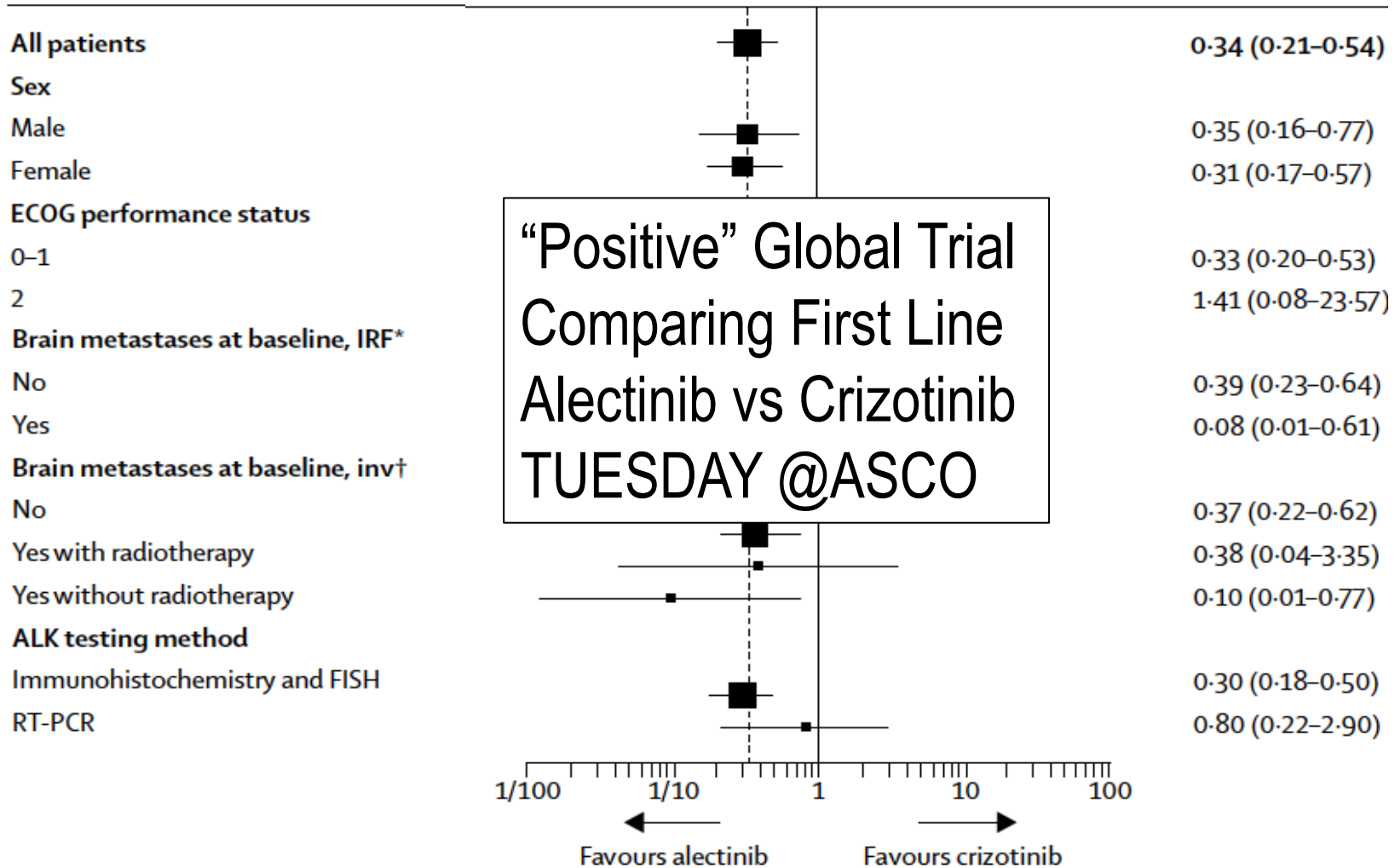
# ALECTINIB VS CRIZOTINIB AS 1<sup>ST</sup> LINE ALK INHIBITOR





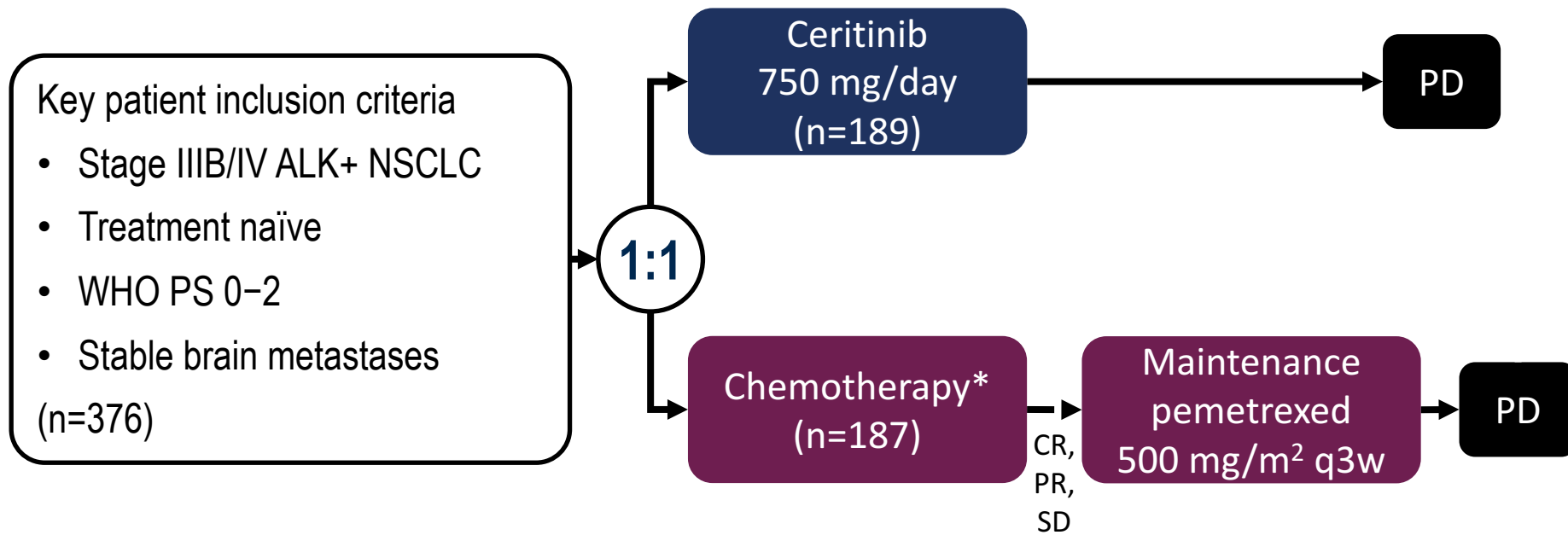
# ALECTINIB VS CRIZOTINIB AS 1<sup>ST</sup> LINE ALK INHIBITOR

HR (95% CI)



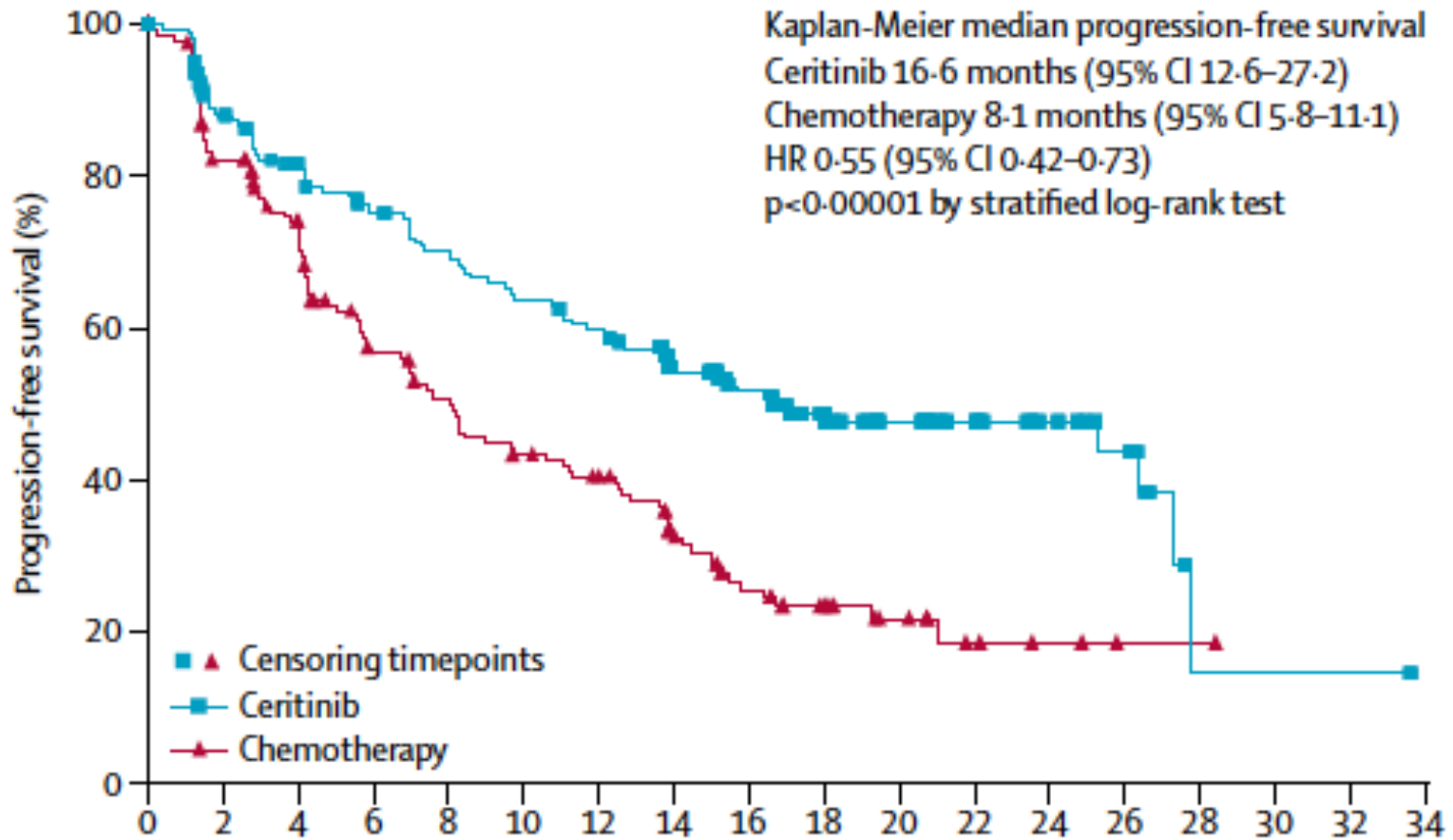
# First-line ceritinib versus platinum-based chemotherapy in advanced ALK-rearranged non-small-cell lung cancer (ASCEND-4): a randomised, open-label, phase 3 study

Jean-Charles Soria, Daniel SW Tan, Rita Chiari, Yi-Long Wu, Luis Paz-Ares, Juergen Wolf, Sarayut L Geater, Sergey Orlov, Diego Cortinovis, Chong-Jen Yu, Maximilian Hochmair, Alexis B Cortot, Chun-Ming Tsai, Denis Moro-Sibilot, Rosario G Campelo, Tracey McCulloch, Paramita Sen, Margaret Dugan, Serafino Pantano, Fabrice Branle, Cristian Massacesi, Gilberto de Castro Jr



\* Cisplatin 75 mg/m<sup>2</sup>, or carboplatin (target AUC 5-6)/pemetrexed 500 mg/m<sup>2</sup> q3w

# 1<sup>ST</sup> LINE CERITINIB IS BETTER THAN CHEMOTHERAPY



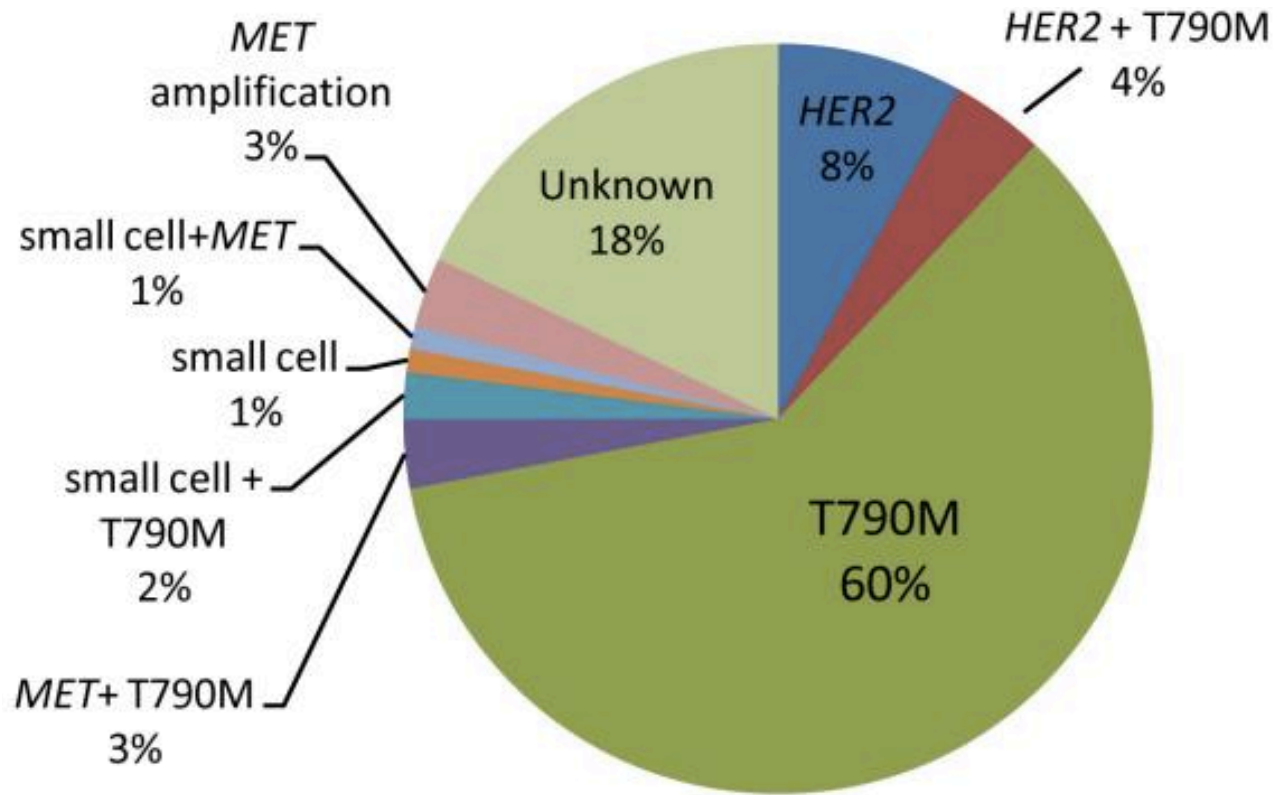
# **PRESS RELEASE: FDA APPROVAL FOR EXPANDED USE OF CERITINIB**

May 26, 2017

The US Food and Drug Administration (FDA) approved the expanded use of ceritinib to include the first-line treatment of patients with metastatic non-small cell lung cancer (NSCLC) whose tumors are anaplastic lymphoma kinase (ALK)-positive, as detected by an FDA-approved test ...

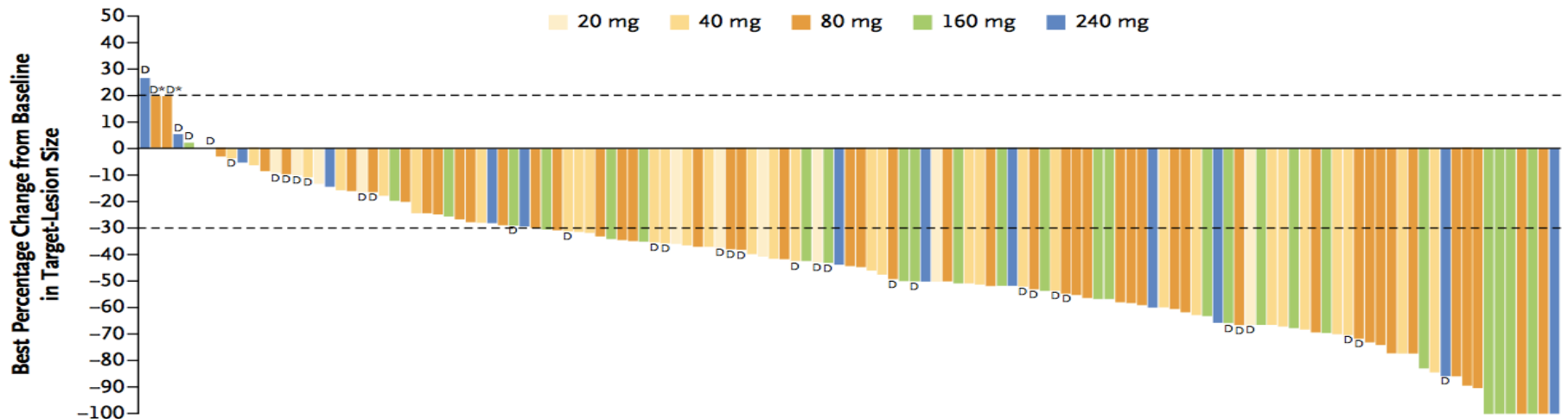
... based on results from an open-label, randomized, multicenter, global, Phase III trial, ASCEND-4.

# Mechanisms of Acquired Resistance to EGFR TKI



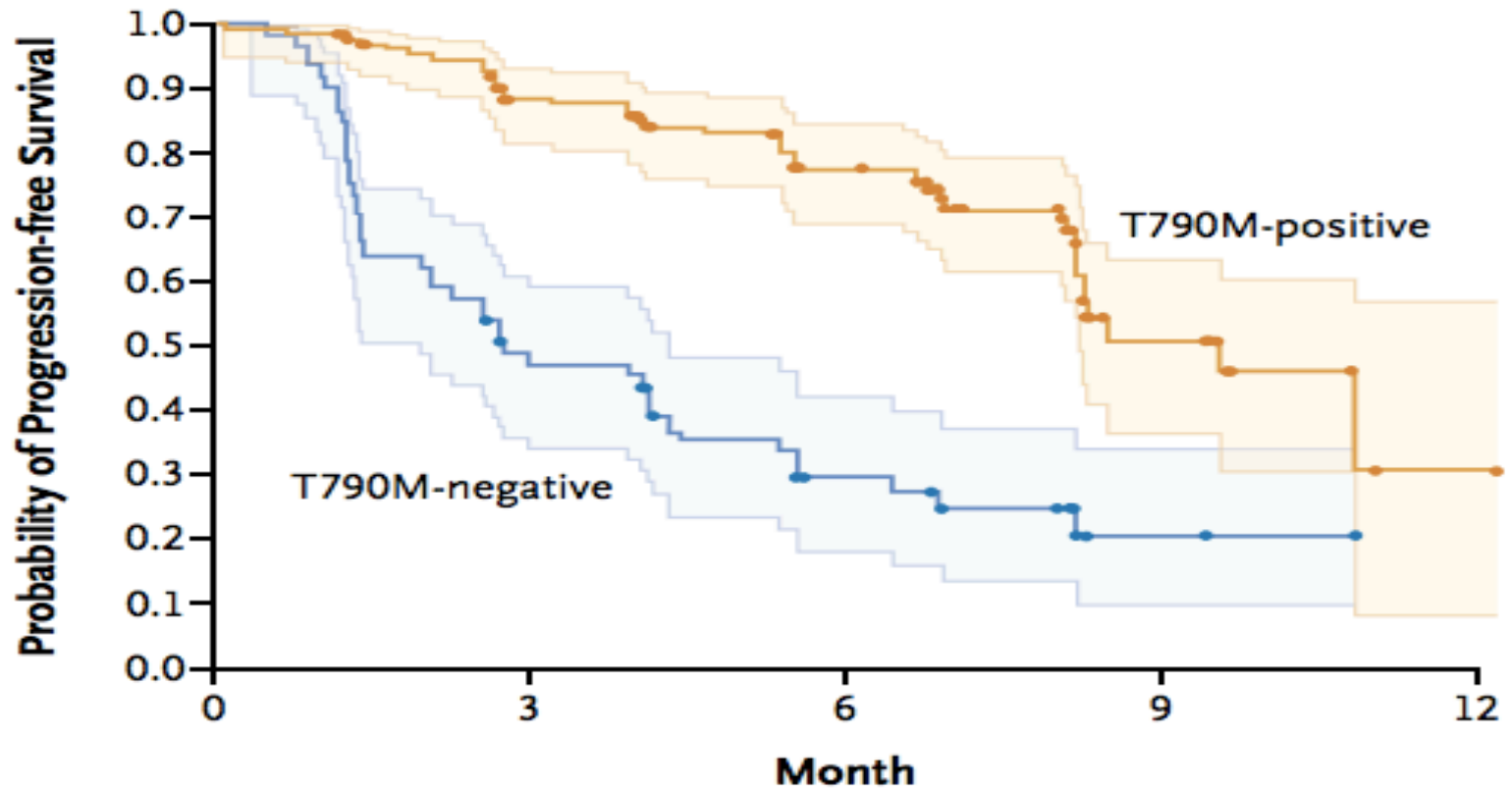
# Osimertinib in Patients With Acquired Resistance to EGFR TKI and *EGFR* T790M

## *EGFR* T790M-Positive

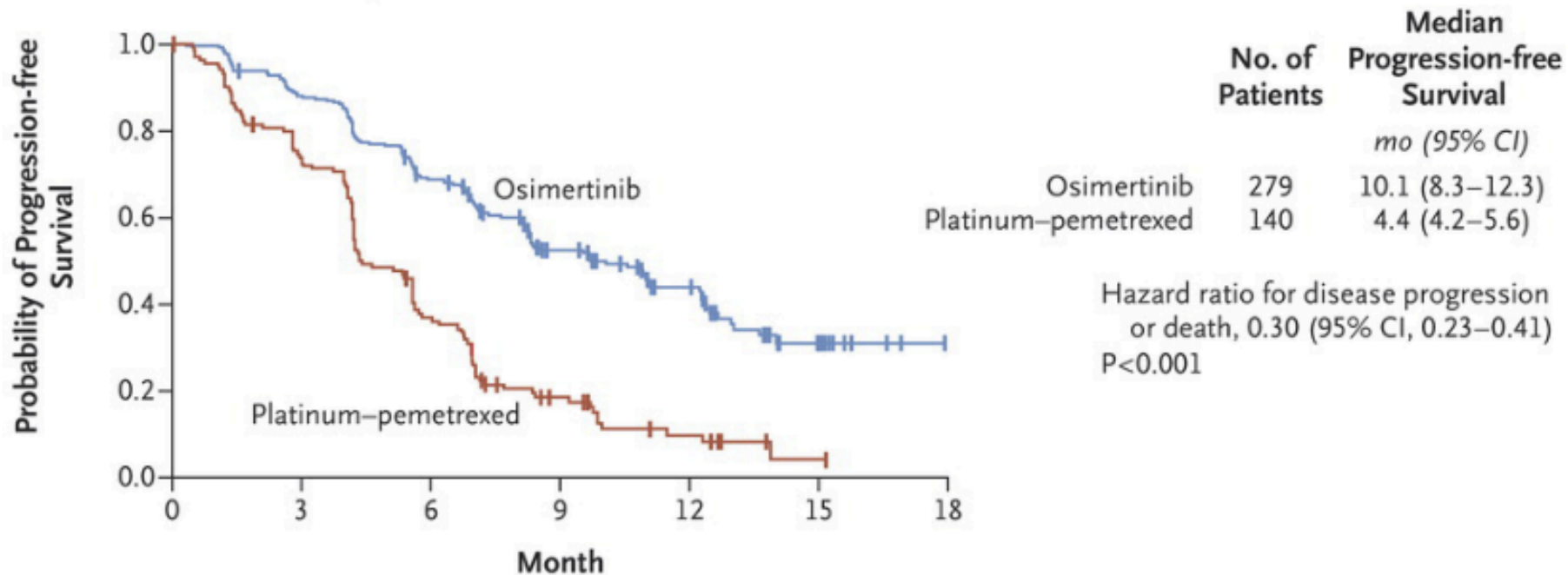


Objective Response Rate = 61%

# Osimertinib Progression-Free Survival by T790M

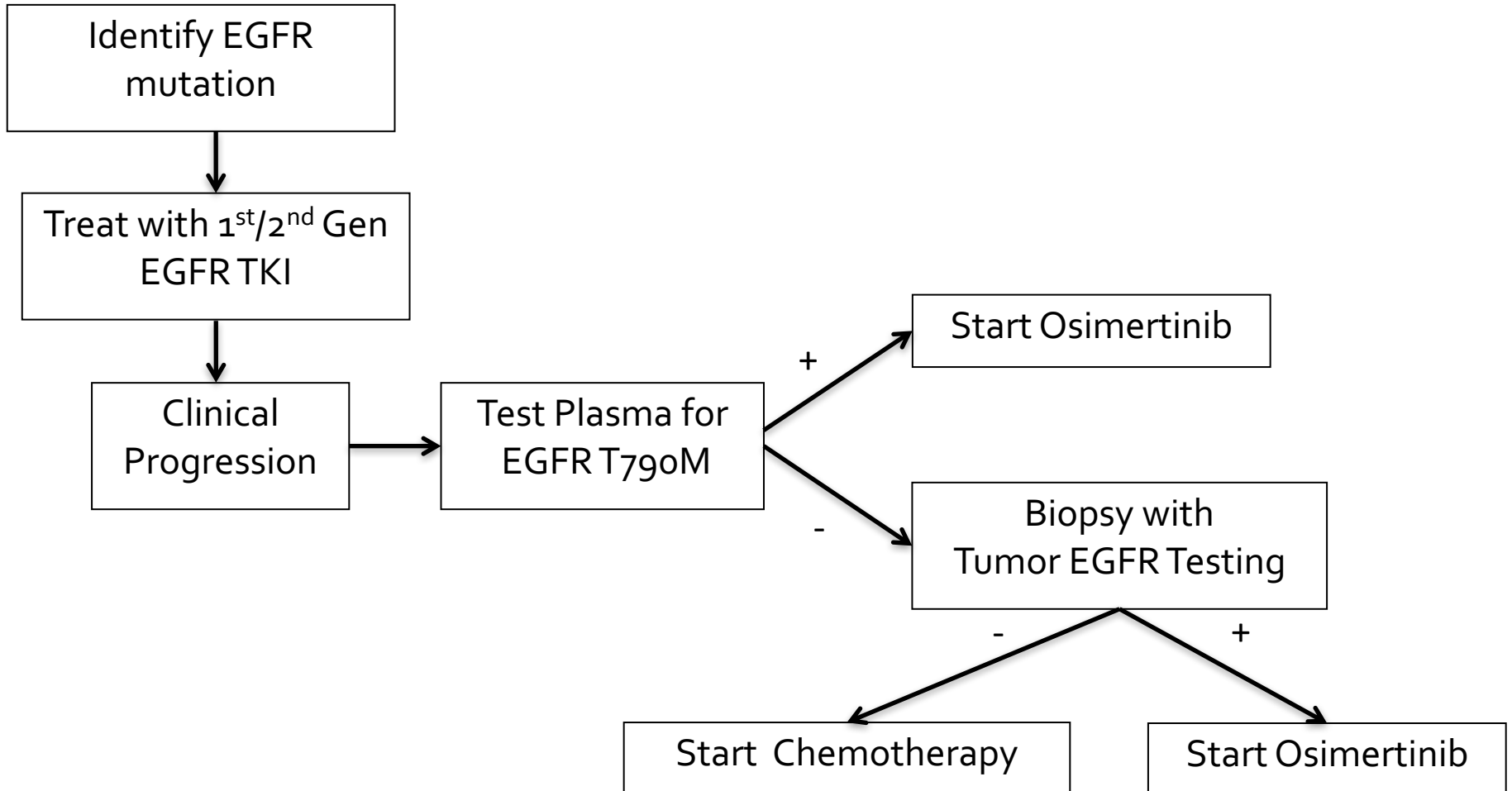


# Osimertinib as Second Line Therapy





# How I Treat Patients with EGFR mutant NSCLC



# The Method of Molecular Analysis Matters

