abstracts

1060 Brigatinib (BRG) vs crizotinib (CRZ) in the phase III ALTA-1L trial

<u>R. Califano¹</u>, M.J. Hochmair², C. Gridelli³, A. Delmonte⁴, M.R. Garcia Campelo⁵, A. Bearz⁶, F. Griesinger⁷, A. Morabito⁸, E. Felip⁹, S. Ghosh¹⁰, M. Tiseo¹¹, J. Haney¹², D. Kerstein¹², S. Popat¹³, D.R. Camidge¹⁴

¹Department of Medical Oncology, The Christie NHS Foundation Trust, Manchester, UK, ²Department of Respiratory and Critical Care Medicine and Ludwig Boltzmann Institute for COPD and Respiratory Epidemiology, Vienna, Austria, ³Azienda Ospedaliera S. Giuseppe Moscati, Avellino, Italy, ⁴Scientific Institute of Romagna for the Study and Treatment of Cancer (IRST), IRCCS, Meldola, Italy, ⁵Complejo Hospitalario Universitario A Coruna Hospital, Coruna, Spain, ⁶Centro di Riferimento Oncologico, Istituto Nazionale Tumori, IRCCS Struttura Operativa Complessa Oncologia Medica A, Aviano, Italy, ⁷Department of Hematology and Oncology, University Department of Internal Medicine-Oncology, Pius Hospital, Oldenburg, Germany, ⁸Thoracic Medical Oncology, Istituto Nazionale Tumori, IRCCS Fondazione G. Pascale, Naples, Italy, ⁹Medical Oncology Service (Lung Cancer Unit), Vall d'Hebron University Hospital, Barcelona, Spain, ¹⁰Guy's and St Thomas' NHS Foundation Trust, London, UK, ¹¹Medical Oncology Unit, University Hospital of Parma, Parma, Italy, ¹²Millennium Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Limited, Cambridge, MA, USA, ¹³Royal Marsden Hospital, and National Heart and Lung Institute, Imperial College London, London, UK, ¹⁴University of Colorado Cancer Center, Aurora, CO, USA

Background: We report results of the first interim analysis (IA) from the ALTA-1L study of BRG vs CRZ in anaplastic lymphoma kinase (ALK) inhibitor–naive, ALK-positive non–small cell lung cancer (ALK+ NSCLC; NCT02737501).

Methods: This open-label, multicenter study enrolled patients (pts) with advanced ALK+ NSCLC. Eligible pts had ≤ 1 prior systemic therapy for advanced NSCLC. Asymptomatic central nervous system (CNS) metastases were allowed. Pts were randomized 1:1 to BRG 180 mg QD with 7-day lead-in at 90 mg or CRZ 250 mg BID. Primary endpoint was blinded independent review committee (BIRC)-assessed progression-free survival (PFS; RECIST v1.1); secondary efficacy endpoints included BIRC-assessed objective response rate (ORR), intracranial ORR (iORR), and intracranial PFS (iPFS). IAs were planned at 50% and 75% of 198 expected PFS events. **Results:** 275 pts were randomized (BRG/CRZ, n = 137/138); median age (years) 58/60. 26%/27% received prior chemotherapy for advanced disease, and 29%/30% had baseline brain metastases. At data cutoff (19 Feb 2018), with a median follow-up of 11.0/9.3 months (BRG/CRZ) and 99 PFS events, BRG met the prespecified threshold for statistical superiority vs CRZ in the primary endpoint of BIRC-assessed PFS (HR 0.49; 95% CI, 0.33–0.74; log-rank P = 0.0007); BRG median PFS was not reached (NR; 95% CI, NR) vs CRZ 9.8 months (95% CI, 9.0-12.9). Investigator-assessed PFS HR 0.45 (95% CI, 0.30-0.68); log-rank P = 0.0001. Table shows additional efficacy data. Most common grade ≥3 treatment-emergent adverse events (AEs): BRG: increased blood creatine phosphokinase (16.2%) and lipase (13.2%), hypertension (9.6%); CRZ: increased alanine aminotransferase (9.5%), aspartate aminotransferase (5.8%), and lipase (5.1%). Any grade interstitial lung disease/pneumonitis: BRG, 3.7%; CRZ, 2.2%. Discontinuations due to AE (BRG/CRZ): 11.8%/8.8%

Table: 1060

BIRC-Assessed Endpoint, %	BRG (n = 137)	CRZ (n = 138)	P Value
All pts			
ORRª	76 (68–83 ^b)	73 (65–80 ^b)	
Confirmed ORR	71 (62–78 ^b)	60 (51–68 ^b)	0.0678
With any intracranial CNS me	tastases		
	(n = 43)	(n = 47)	
iORR ^a	79 (64–90 ^b)	23 (12–38 ^b)	
Confirmed iORR	67 (51–81 ^b)	17 (8–31 ^b)	< 0.0001
Median iPFS, months	NR (11–NR ^b)	6 (4–9 ^b)	
1-year iPFS	67 (47–80 ^b)	21 (6–42 ^b)	
HR	0.27 (0.13-0.54)		< 0.0001 °
With measurable intracranial CNS metastases			
	(n = 18)	(n = 21)	
iORR ^a	83 (59–96 ^b)	33 (15–57 ^b)	
Confirmed iORR	78 (52–94 ^b)	29 (11–52 ^b)	0.0028
^a Response, ≥1 assessment;			
^b 95% CI;			

^cLog-rank

Conclusions: BRG showed a statistically and clinically significant improvement in PFS vs CRZ in ALK inhibitor–naive ALK+ NSCLC.

Clinical trial identification: NCT02737501.

Editorial acknowledgement: Professional medical writing assistance was provided by Lauren Gallagher, PhD, (Peloton Advantage, Parsippany, NJ) and funded by Millennium Pharmaceuticals, Inc.

Legal entity responsible for the study: ARIAD Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Limited.

Funding: ARIAD Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Limited.

Disclosure: R. Califano: Honoraria, consulting/advisory role: AstraZeneca, BMS, Roche, MSD, Boehringer Ingelheim, Takeda, Novartis, Pfizer, Lilly Oncology. C. Gridelli: Speakers bureau, advisory role: Pfizer, Roche, A. Delmonte: Consulting/advisory role: AstraZeneca, Boehringer Ingelheim. M.R. Garcia Campelo: Honoraria: ARIAD, AstraZeneca, Roche, Pfizer, BMS, Boehringer Ingelheim; Speakers bureau, advisory role: ARIAD, AstraZeneca, Roche, Pfizer, BMS, Boehringer Ingelheim, A. Bearz: Speakers bureau, advisory role: AstraZeneca, Pfizer, Eli Lilly, BMS, Novartis, Roche, MSD, Boehringer Ingelheim, Takeda. F. Griesinger: Research funding to institution: AstraZeneca, Boehringer Ingelheim, BMS, Celgene, Lilly, MSD, Novartis, Pfizer, Roche, Takeda, Siemens; Consulting or advisory role: ARIAD, AstraZeneca, Boehringer Ingelheim, BMS, Celgene, Lilly, MSD, Novartis, Pfizer, Roche, Takeda, ARIAD, AbbVie, Siemens. E. Felip: Consulting/advisory role: AbbVie, AstraZeneca, Blue Print Medicines, Boehringer Ingelheim, BMS, Celgene, Eli Lilly, Guardant Health, Janssen, Merck KGaA, MSD, Novartis, Pfizer, Roche, Takeda; Speakers bureau: AbbVie, AstraZeneca, Boehringer Ingelheim, BMS, Eli Lilly, Merck KGaA, MSD, Novartis, Pfizer, Roche, Takeda. S. Popat: Research funding to institution: Boehringer Ingelheim, Epizyme, BMS, Clovis Oncology, Roche, Lilly, Takeda; Honoraria: Boehringer Ingelheim, AstraZeneca, Roche, Takeda, Chugai Pharma; Consulting or advisory role: Boehringer Ingelheim, Roche, Novartis, Pfizer, AstraZeneca, BMS, MSD, Guardant Health, AbbVie; Travel, accommodations, expenses: Boehringer Ingelheim, BMS, Merck Sharp & Dohme. A. Morabito: Honoraria: AstraZeneca, Roche, Boehringer Ingelheim, Pfizer, MSD, BMS. S. Ghosh: Honoraria/speakers bureau: Pfizer. M. Tiseo: Speakers bureau, advisory role: AstraZeneca, BMS, Boehringer Ingelheim, Eli Lilly, MSD, Novartis, Otsuka, Pfizer, Pierre Fabre, Roche. J. Haney, D. Kerstein: Employment, stock and other ownership interests: Arîad. D.R. Camidge: Honoraria: AstraZeneca, Takeda, Arrys/Kyn, Genoptix, G1 Therapeutics (DSMB), Mersana Therapeutics, Roche/Genentech, Ignyta, Daichii Sankyo (ILD adjudication committee), Hansoh SRC, Bio-Thera DSMB, Lycera, Revolution Med, Orion, Clovis, Celgene, Novartis); Research funding (ARIAD/Takeda). All other authors have declared no conflicts of interest.