

## INVESTIGATIONAL IMMUNOTHERAPY

**LBA41 LEAP-005: Phase II study of lenvatinib (len) plus pembrolizumab (pembro) in patients (pts) with previously treated advanced solid tumours**

Z. Lwin<sup>1</sup>, C. Gomez-Roca<sup>2</sup>, E. Saada-Bouzi<sup>3</sup>, E. Yanez<sup>4</sup>, F. Longo Muñoz<sup>5</sup>, S-A. Im<sup>6</sup>, E. Castanon<sup>7</sup>, H. Senellart<sup>8</sup>, D. Graham<sup>9</sup>, M. Voss<sup>10</sup>, M. Doherty<sup>11</sup>, J. Lopez<sup>12</sup>, R. Ghori<sup>13</sup>, P. Kubiak<sup>14</sup>, F. Jin<sup>15</sup>, K. Norwood<sup>15</sup>, H.C. Chung<sup>16</sup>

<sup>1</sup>Department of Medical Oncology, Royal Brisbane and Women's Hospital, University of Queensland, Herston, Australia; <sup>2</sup>Medical Oncology, Institut Claudius Regaud, Toulouse, France; <sup>3</sup>Department of Medical Oncology, Centre de Lutte Contre le Cancer Antoine Lacassagne, Nice, France; <sup>4</sup>Oncology-Hematology Unit, Department of Internal Medicine, School of Medicine, Universidad de la Frontera, Temuco, Chile; <sup>5</sup>Hospital Universitario Ramón y Cajal, IRYCIS, CIBERONC, Madrid, Spain; <sup>6</sup>Department of Internal Medicine, Seoul National University Hospital, Seoul, Republic of Korea; <sup>7</sup>Department of Medical Oncology, Clínica Universitaria de Navarra, Pamplona, Spain; <sup>8</sup>Institut de Cancèrologie de l'Ouest, Centre René Gauducheau ICO, Saint-Herblain, France; <sup>9</sup>Department of Medical Oncology, The Christie NHS Foundation Trust, Manchester, UK; <sup>10</sup>Department of Medical Oncology, Universitaetsklinikum Frankfurt, Frankfurt, Germany; <sup>11</sup>Department of Medical Oncology, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, ON, Canada; <sup>12</sup>Department of Medical Oncology, The Royal Marsden Foundation Trust and the Institute of Cancer Research, London, UK; <sup>13</sup>Biostatistics, Merck & Co., Inc., Kenilworth, NJ, USA; <sup>14</sup>Clinical Development, Eisai Inc., Woodcliff Lake, NJ, USA; <sup>15</sup>Clinical Development, Merck & Co., Inc., Kenilworth, NJ, USA; <sup>16</sup>Yonsei Cancer Center, Yonsei University College of Medicine, Seoul, Republic of Korea

**Background:** Len (antiangiogenic multiple receptor tyrosine kinase inhibitor) + pembro (anti-PD-1 agent) showed promising clinical outcomes across several cancers in early-phase trials and is FDA-approved for pts with previously treated advanced endometrial cancer that is not MSI-H or mismatch repair-deficient who are ineligible for curative surgery/radiation. We report the first results from the phase 2 LEAP-005 study (NCT03797326), which evaluates the efficacy and safety of len + pembro in pts with select previously treated advanced solid tumors.

**Methods:** This open-label, multicohort study enrolled pts aged  $\geq 18$  y with one of the following previously treated, histologically/cytologically confirmed advanced tumors: triple negative breast (TNBC), ovarian, gastric, colorectal (non-MSI-H/mismatch repair proficient), glioblastoma multiforme (GBM), or biliary tract (BTC; ampulla of Vater excluded). Pts received len 20 mg/d + pembro 200 mg Q3W for 35 cycles or until confirmed PD or unacceptable toxicity. Primary endpoints are ORR by blinded independent central review per RECIST v1.1 or RANO (GBM only), and safety.

**Results:** 187 pts have been enrolled in LEAP-005. Median study follow-up at Apr 10, 2020 data cutoff was 8.6 (range, 1.9–13.1) mo. Encouraging efficacy was observed across cohorts, and toxicity was manageable (Table).

**Conclusions:** Len + pembro showed promising antitumor activity and manageable toxicity across the previously treated tumor cohorts evaluated in LEAP-005. The study is ongoing; all cohorts will expand to enroll  $\leq 100$  pts/cohort.

**Clinical trial identification:** NCT03797326.

**Editorial acknowledgement:** Medical writing and editorial assistance was provided by Rozena Varghese, PharmD, CMPP, and Michael S. McNamara, MS, of ICON plc (North Wales, PA, USA). This assistance was confunded by the study sponsors, Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA, and Eisai Inc., Woodcliff Lake, NJ, USA.

**Legal entity responsible for the study:** Eisai Inc. and Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

**Funding:** Eisai Inc. and Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

**Disclosure:** Z. Lwin: Honoraria (self), Advisory/Consultancy, Travel/Accommodation/Expenses: AbbVie; AstraZeneca; BMS; Roche; Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA. C. Gomez-Roca: Honoraria (self): Genentech/Roche, Pierre Fabre, AstraZeneca, and BMS; Advisory/Consultancy: Erytech, BMS, Roche/Genentech, Novartis, and Eisai; Research grant/Funding (institution): BMS and Roche/Genentech; Travel/Accommodation/Expenses: Pierre Fabre, BMS, Roche/Genentech, and MSD. E. Saada-Bouzi: Advisory/Consultancy, Travel/Accommodation/Expenses: BMS

and MSD; Travel/Accommodation/Expenses: AstraZeneca. E. Yanez: Research grant: Amgen, Pfizer, Astellas, BMS, Roche, AbbVie, MSD. F. Longo Muñoz: Research grant/Funding (institution): MSD; Honoraria (self), Advisory/Consultancy, Travel/Accommodation/Expenses: MSD, BMS, Roche, Merck, Amgen, Lilly, Sanofi, Servier, Bayer, and Ferrer Pharma. S-A. Im: Research grant/Funding (self): AstraZeneca, Pfizer; Advisory/Consultancy, Travel/Accommodation/Expenses: Novartis; Advisory/Consultancy: AstraZeneca, Amgen, Eisai, Novartis, Roche, Hanmi Corp., and Pfizer. E. Castanon: Travel/Accommodation/Expenses: AstraZeneca, MSD, BMS, and Roche; Advisory/Consultancy: BMS, Roche, and BeiGene. D. Graham: Research grant/Funding (institution): Pfizer; Honoraria (self): Clinigen Group and McCann Health. M. Doherty: Research grant/Funding (self): Merck and AstraZeneca; Advisory/Consultancy, Consulting fees: AstraZeneca, Merck, Eisai, Boehringer Ingelheim, Takeda, Pfizer, and Roche. J. Lopez: Advisory/Consultancy: Eisai, Novartis, and Genmab; Speaker Bureau/Expert testimony, Research grant/Funding (self): Roche, Basilea Pharmaceutica, Genmab. R. Ghori, F. Jin, K. Norwood: Full/Part-time employment: Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA. P. Kubiak: Full/Part-time employment: Eisai Inc., Woodcliff Lake, NJ, USA. H.C. Chung: Research grant/Funding (self): Lilly, GSK, MSD, Merck-Serono, BMS/Ono, Taiho, Amgen, BeiGene, Incyte; Honoraria (self): Lilly/Foundation Medicine; Consultation: Taiho, Celltrion, MSD, Lilly, Quintiles, BMS, Merck-Serono, Gloria, BeiGene, Amgen, Zymeworks. All other authors have declared no conflicts of interest.

<https://doi.org/10.1016/j.annonc.2020.08.2271>

**LBA42 POD1UM-202: Phase II study of retifanlimab in patients (pts) with squamous carcinoma of the anal canal (SCAC) who progressed following platinum-based chemotherapy**

S. Rao<sup>1</sup>, J. Capdevila<sup>2</sup>, D. Gilbert<sup>3</sup>, S. Kim<sup>4</sup>, L. Dahan<sup>5</sup>, T. Kayyal<sup>6</sup>, M. Fakhri<sup>7</sup>, A. Demols<sup>8</sup>, L.H. Jensen<sup>9</sup>, K-L.G. Spindler<sup>10</sup>, D. Arnold<sup>11</sup>, S. Tambari<sup>12</sup>, M.G. Guren<sup>13</sup>, M. Cornfeld<sup>14</sup>, M. Jones<sup>14</sup>, C. Tian<sup>15</sup>, M. Catlett<sup>16</sup>, J-P. Spano<sup>17</sup>

<sup>1</sup>GI Unit, The Royal Marsden, London, UK; <sup>2</sup>Medical Oncology Department, Vall d'Hebron University Hospital and Vall Hebron Institute of Oncology (VHIO), Barcelona, Spain; <sup>3</sup>Sussex Cancer Centre, Royal Sussex County Hospital, Brighton, UK; <sup>4</sup>Department of Medical Oncology, Centre Hospitalier Régional Universitaire de Besançon, Besançon, France; <sup>5</sup>Hepato-Gastroenterology Department, Hôpital La Timone, Marseille, France; <sup>6</sup>Clinical Research, Renovatio Clinical, Houston, TX, USA; <sup>7</sup>Medical Oncology & Therapeutics Research, City of Hope Comprehensive Cancer Center, Duarte, CA, USA; <sup>8</sup>Medical Gastroenterology, Cub Hôpital Erasme, Brussels, Belgium; <sup>9</sup>Oncology, University Hospital of Southern Denmark, Vejle, Denmark; <sup>10</sup>Department of Oncology, Aarhus University Hospital, Aarhus, Denmark; <sup>11</sup>Oncology, Hematology and Rheumatology, Asklepios Tumorzentrum Hamburg, Hamburg, Germany; <sup>12</sup>Dept. Oncology/Haematology, AUSL Romagna Oncology Unit Faenza Hospital, Faenza, Italy; <sup>13</sup>Department of Oncology, Oslo University Hospital, Oslo, Norway; <sup>14</sup>Immunology Department, Incyte Corporation, Wilmington, DE, USA; <sup>15</sup>Biostatistics, Incyte Corporation, Wilmington, DE, USA; <sup>16</sup>Clinical Research, Incyte Corporation, Wilmington, DE, USA; <sup>17</sup>Medical Oncology Department, APhP-Sorbonne University-IUC, Paris, France

**Background:** Effective salvage treatment for advanced SCAC has not been established; however, checkpoint immunotherapy shows promise. Retifanlimab (INCMGA00012), a humanized IgG4 monoclonal antibody that recognizes human programmed cell death protein 1 (PD-1), has demonstrated activity and tolerability across a broad range of solid tumors. POD1UM-202 was designed to evaluate retifanlimab in pts with previously treated advanced SCAC.

**Methods:** Phase II, single-arm study in pts 18 years or older with progression following standard therapy and RECIST measurable disease. Prior immunotherapy was not allowed. Pts with well-controlled human immunodeficiency virus (HIV) infection were eligible. Retifanlimab was administered intravenously at 500 mg every 4 weeks. The primary study endpoint was overall response rate (ORR) assessed by independent central review (ICR) per RECIST v1.1.

**Results:** 94 pts were enrolled with median age of 64 years, most were female (64.9%) and white (76.6%), and had an ECOG PS of 0 (41.5%) or 1 (58.5%). 73.4% had received prior CRT, 17% RT alone, and 97% had received platinum. Liver metastasis was reported in 39 (41.5%) pts and 9 (9.6%) were known to be HIV-positive. Median (range) duration of follow-up was 7 (<1–19) months. ICR confirmed responses were reported in 13 (13.8%) pts (1 complete response; 12 partial responses) and 33 (35.1%) pts had stable disease; median (range) DOR was 9.5 (5.6–not estimable) months. Responses were observed regardless of PD-L1 expression, liver metastases, or HIV-positive status. Median (95% CI) PFS and OS were 2.3 (1.9–3.6) and 10.1 (7.9–NE) months, respectively. Responses were associated with marked prolongation of PFS and OS. Retifanlimab was well-tolerated, including in the HIV-positive population,

Table: LBA41

	Cohort					
	2L/3L TNBC (n = 31)	4L Ovarian (n = 31)	3L Gastric (n = 31)	3L Colorectal (n = 32)	2L GBM (n = 31)	2L BTC (n = 31)
ORR, % (95% CI)	29 (14–48)	32 (17–51)	10 (2–26)	22 (9–40)	16 (6–34)	10 (2–26)
DCR, n (%)	18 (58)	23 (74)	15 (48)	15 (47)	18 (58)	21 (68)
DOR, median (range), mo	NR (0.0+ to 8.4+)	NR (1.5+ to 7.9+)	NR (2.1+ to 2.3+)	NR (2.1+ to 10.4+)	3.2 (2.5 to 4.9+)	5.3 (2.1+ to 6.2)
Grade $\geq 3$ treatment-related AEs, n (%)	17 (55)	21 (68)	13 (42)	16 (50)	11 (35)	15 (48)
Discontinued drug due to treatment-related AE, n (%)	3 (10)	4 (13)	2 (6)	3 (9)	2 (6)	2 (6)

+, no PD as of last disease assessment; DCR, disease control rate (best confirmed response: complete/partial response; stable disease); DOR, duration of response; NR, not reached.