

10960

Lanreotide autogel/depot (LAN) in patients with advanced bronchopulmonary (BP) neuroendocrine tumors (NETs): Results from the phase III SPINET study

E. Baudin¹, D. Horsch², S. Singh³, M.E. Caplin⁴, D. Ferone⁵, E.M. Wolin⁶, J. Capdevila⁷, W.A. Buikhuisen⁸, M. Raderer⁹, E. Dansin¹⁰, C. Grohe¹¹, A. Houchard¹², X-M. Truong Thanh¹³, D. Reidy-Lagunes¹⁴

¹ Endocrine Oncology Unit (Imaging), Gustave Roussy Institut de Cancerologie, Villejuif, France, ² Internal Medicine/Gastroenterology and Endocrinology, Zentralklinik Bad Berka GmbH, Bad Berka, Germany, ³ Medical Oncology and Hematology, Sunnybrook Odette Cancer Center, Sunnybrook HSC, Toronto, ON, Canada, ⁴ Neuroendocrine Tumour Unit, Royal Free Hospital School of Medicine, London, UK, ⁵ Neuroendocrine Tumour Unit, Department of Internal Medicine & Medical Specialties, University of Genova, Genoa, Italy, ⁶ Icahn School of Medicine at Mount Sinai, New York, NY, USA, ⁷ Medical Oncology Department, Vall d'Hebron University Hospital, Vall d'Hebron Institute of Oncology (VHIO), Barcelona, Spain, ⁸ Department of Thorax Oncology, Netherlands Cancer Institute, Amsterdam, Netherlands, ⁹ Department of Oncology, Medical University of Vienna, Vienna, Austria, ¹⁰ Thoracic Oncology, Centre Oscar Lambret, Lille, France, ¹¹ Department of Respiratory Diseases, ELK, Berlin, Germany, ¹² Data and Insights Generation and Strategy, Ipsen, Boulogne, France, ¹³ Global Medical Affairs, Ipsen, Boulogne Billancourt, France ¹⁴ Medicine, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Background

Well-differentiated BP-NETs (typical and atypical carcinoid; TC and AC) account for ~25% of all NETs. However, there is a lack of prospective data with somatostatin analogs (SSAs) in BP-NETs. SPINET evaluated LAN in advanced somatostatin receptor (SSTR)-positive TC and AC BP-NETs.

Methods

SPINET (EudraCT 2015-004992-62; NCT02683941) was a phase 3, randomized (2 LAN: 1 PBO, stratified by TC vs AC), double-blind (DB) study of LAN (120 mg/28 days), with optional open-label LAN treatment phase (OL-LAN). Enrollment was stopped due to slow accrual and ongoing patients in the DB phase could transition to open-label LAN. The primary endpoint was adapted: centrally assessed (RECIST 1.1) PFS during the DB/OL-LAN phases in patients randomized to LAN. Secondary endpoints included PFS and objective response rate (ORR) [central] and time to treatment failure (TTF) [local/central] in each treatment arm during DB phase, and safety.

Results

Overall, 77 patients were randomized and treated (intention-to-treat set: LAN, n=51; PBO, n=26; [OL-LAN, n=40]). Mean (SD) age was 66.2 (12.5) years and 42 (54.5%) were male; 45 (58.4%) and 32 (41.6%) patients had TC and AC respectively, all (Octreoscan) patients had a Krenning score ≥2, 6 (7.8%) had received prior cytotoxic chemotherapy, 71 (92.2%) had hepatic tumor load ≤25%, and 28 (57.1%) and 19 (38.8%) patients had liver and bone metastases, respectively. Median (95% CI) PFS in the LAN randomized group was 16.6 (12.8–21.9) months (TC 21.9 [12.8–not calculable (NC)] months; AC 14.1 [5.6–16.6] months). Key secondary endpoints are shown in the table. In the DB phase, PFS for LAN and PBO, respectively, was 21.9 (13.8–NC) vs 13.9 (13.4–NC) months in TC and 13.8 (5.6–16.6) vs 11.0 (2.8–16.9) months in AC. Table: 10960

	DB LAN (n=51)	PBO (n=26)	HR [95% CI] ^a
PFS (TC & AC), median (95% CI), mths	16.6 (11.3–21.9)	13.6 (8.3–NC)	0.90 [0.46–1.88]
ORR, % (95% CI)	14.0 (5.8–26.7)	0 (0.0–13.7)	–
TTF, median (95% CI), mths	13.3 (5.6–14.1)	9.8 (5.4–13.6)	0.86 [0.50–1.50]
	DB LAN (n=51)	OL-LAN PBO (n=26)	All pts (n=40)
TEAEs, n (%) ^b			
Any	49 (96.1)	25 (96.2)	26 (65.0)
Related	38 (74.5)	14 (53.8)	13 (32.5)
Grade 12345	44 (86.3)37 (72.5)13 (25.5)1 (2.0)1 (2.0)	23 (88.5)19 (73.1)8 (30.8)00	25 (62.5)14 (35.0)3 (7.5)00
Leading to study treatment withdrawal	2 (3.9)	3 (11.5)	0
Serious AEs	10 (19.6)	7 (26.9)	1 (2.5)

	DB LAN (n=51)	PBO (n=26)	HR [95% CI] ^a
Related	2 (3.9)	1 (3.8)	0

^aLAN vs PBO; ^bExcludes death/progression (part of PFS assessment) TEAE, treatment-emergent adverse event.

Conclusions

SPINET, the largest prospective study to date with a SSA in SSTR-positive BP-NETs, suggests that LAN 120 mg could be an appropriate treatment option, especially for TC.

Clinical trial identification

EudraCT 2015-004992-62; NCT02683941.

Editorial acknowledgement

Dr Nicky French of Oxford PharmaGenesis, Oxford, UK, provided medical writing and editorial support, which was sponsored by Ipsen.

Legal entity responsible for the study

Ipsen.

Funding

Ipsen.

Disclosure

E. Baudin: Financial Interests, Personal and Institutional, Expert Testimony, Advisory Board, Research grant, Principal Investigator: Novartis; Financial Interests, Personal and Institutional, Advisory Board, Research grant: HRA; Financial Interests, Personal and Institutional, Project Lead, Principal Investigator: Ipsen; Financial Interests, Personal and Institutional, Advisory Board, Research grant: AAA; Financial Interests, Personal and Institutional, Research Grant: Pfizer; Financial Interests, Personal and Institutional, Advisory Board: Hutchinson Pharma. D. Horsch: Financial Interests, Personal, Advisory Board: Advanz Pharma; Financial Interests, Personal, Advisory Board: Novartis Pharma GmbH; Financial Interests, Personal, Advisory Board: Ipsen Pharma GmbH; Financial Interests, Personal, Invited Speaker: Ipsen Pharma GmbH. S. Singh: Financial Interests, Institutional, Research Grant: AAA; Financial Interests, Institutional, Research Grant: Ipsen; Financial Interests, Personal, Advisory Board, Invited speaker: Ipsen. M.E. Caplin: Financial Interests, Personal, Speaker's Bureau, Advisory Board, Research grant: Ipsen; Financial Interests, Personal, Speaker's Bureau, Advisory Board: Novartis; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Research grant: Advanced Accelerator Applications; Financial Interests, Personal, Speaker's Bureau, Advisory Board: Pfizer; Financial Interests, Personal, Advisory Board: Sirtex. D. Ferone: Other, Institutional, Invited Speaker, Advisory Board, Research grant: Ipsen; Other, Institutional, Invited Speaker, Advisory Board, Research grant: Novartis-AAA; Other, Institutional, Invited Speaker, Research grant: Pfizer; Other, Institutional, Advisory Board: Sandoz; Other, Institutional, Advisory Board: BMS; Other, Institutional, Advisory Board, Research grant: Camurus. E.M. Wolin: Non-Financial Interests, Personal, Advisory Board: Chiasma; Non-Financial Interests, Personal, Advisory Board: Progenics; Non-Financial Interests, Personal, Advisory Board: RadioMedix. J. Capdevila: Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: Amgen; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: Bayer; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: AAA; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: AstraZeneca; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: Eisai; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: Exelixis; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: Ipsen; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: ITM; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: Hutchinson Pharma; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: Lilly; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: Merck; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: Novartis; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker, Research grant: Pfizer; Financial Interests, Personal, Speaker's Bureau, Advisory Board, Invited speaker: Sanofi. M. Raderer: Financial Interests, Personal, Other, Honoraria: Gilead; Financial Interests, Personal, Other, Honoraria: Ipsen; Financial Interests, Personal, Other, Honoraria: Novartis; Financial Interests, Personal, Other, Honoraria: Eli Lilly; Financial Interests, Personal, Other, Honoraria: Eisai; Financial Interests, Personal, Other, Honoraria: Roche. C. Grohe: Financial Interests, Institutional, Research Grant: Ipsen. A. Houchard: Financial Interests, Institutional, Stocks/Shares: Ipsen. X. Truong Thanh: Financial Interests, Institutional, Full or part-time Employment, Project Lead, Stocks/Shares: Ipsen. D. Reidy-Lagunes: Financial Interests, Institutional, Principal Investigator, SPINET: Ipsen; Financial Interests, Personal and Institutional, Advisory Board, Research grant: Novartis; Financial Interests, Personal, Advisory Board: AAA; Financial Interests, Personal, Advisory Board: Chiasma. All other authors have declared no conflicts of interest.

