Investor News

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European Society for Medical Oncology (ESMO) Congress 2019

Updated analysis for larotrectinib confirms high response rate and durable responses over three years in children and adults with TRK fusion cancer

- 79% overall response rate (ORR) in 153 evaluable adult and pediatric patients at time of new data cut off (February 19, 2019); results consistent with previous publications[1,2]
- Similar ORR of 75% in patients with brain metastases[1], adding to the previously reported evidence for larotrectinib's activity in central nervous system (CNS)
- Median progression free survival (mPFS) of 28.3 months and median overall survival (mOS) of more than three years (44.4 months) was achieved; median duration of response (mDOR) of nearly three years[1]
- Largest dataset with longest follow-up of any TRK inhibitor illustrates favorable safety profile across ages and tumor types[1]

Abstract: 445PD

Leverkusen, September 28, 2019 – Updated clinical data for larotrectinib in adult and pediatric patients with TRK fusion cancer showed a high response rate with an overall response rate (ORR) of 79% (95% CI: 72–85) with 16% complete responses (n=24) and 63% partial responses (n=97). These results, which are based on 153 evaluable patients at a data cut-off of February 19, 2019, makes it the largest dataset and longest follow-up data of any TRK inhibitor. Among the patients with confirmed responses (n=108), those responses continued to be durable with a median duration of response of nearly three years (35.2 months; 95% CI: 22.8–NE).[1] For the integrated dataset (n=159), median progression free survival was 28.3 months (95% CI: 22.1–NE) and median overall survival was 44.4 months (95% CI; 36.5–NE), with 88% (95% CI: 83–94) of patients being still alive at one year after the start of therapy. The data were presented in a poster

discussion at the 44th European Society for Medical Oncology (ESMO) Congress 2019 taking place in Barcelona, Spain (EU) from September 27 – October 1, 2019.

“Larotrectinib exemplifies the idea that precision oncology treatments can deliver meaningful, long-term efficacy and safety,” said Ulrik Lassen, MD, PhD, Head of the Department of Oncology, Rigshospitalet, Copenhagen. “It is exciting to see the consistency in larotrectinib’s durability and response rates as we continue to expand to more patients, across a wide range of tumor types and ages, which demonstrates the value in testing our patients for genomic alterations, like NTRK gene fusions.”

In a subanalysis from the integrated dataset (n=12), larotrectinib showed a high ORR of 75% in solid tumors with brain metastases.[1] Larotrectinib activity was previously reported in primary CNS tumors (ASCO 2019, Drilon et al.) CNS tumors are aggressive and larotrectinib has achieved disease control in this patient population over an extended period of time.

The safety data presented at the ESMO 2019 Congress encompassed the entire larotrectinib safety database in cancer patients (n=260), continuing to show a favorable safety profile even as the patient population increases. The majority of adverse events (AE) reported were grade 1 or 2. No treatment-related grade 3 or 4 AEs occurred in more than three percent of patients, and no treatment-related deaths were reported.[1]

“With a patient population that is now three times our initial analysis, Vitrakvi continues to demonstrate impressive efficacy,” said Scott Fields, M.D., Senior Vice President and Head of Oncology Development at Bayer’s Pharmaceutical Division. “We are committed to bringing Vitrakvi to patients around the world, as demonstrated through the recent approvals in multiple global markets.”

On September 19, 2019, the European Commission granted marketing authorization in the European Union (EU) for Vitrakvi® (larotrectinib) for adult and pediatric patients with solid tumors that display an NTRK gene fusion, making it the first tumor-agnostic approval in the EU. Larotrectinib is already approved in the U.S., Canada and Brazil under the brand name Vitrakvi, with additional filings in other regions underway or planned.

About Larotrectinib

Larotrectinib was approved in September 2019 in the European Union under the brand name Vitrakvi® for the treatment of adult and pediatric patients with solid tumors that display a Neurotrophic Tyrosine Receptor Kinase (NTRK) gene fusion, who have a disease that is locally advanced, metastatic or where surgical resection is likely to result in severe morbidity, and who have no satisfactory treatment options. Vitrakvi has also received regulatory approval in the U.S, Brazil and Canada. Filings in other regions are underway or planned.

Following the acquisition of Loxo Oncology by Eli Lilly and Company in February 2019, Bayer has obtained the exclusive licensing rights for the global development and commercialization, including in the U.S., for larotrectinib and the investigational TRK inhibitor selitrectinib (BAY 2731954, previously LOXO-195) progressing through clinical development.

About TRK Fusion Cancer

TRK fusion cancer occurs when an NTRK gene fuses with another unrelated gene, producing an altered TRK protein.[3] The altered protein, or TRK fusion protein, becomes constitutively active or overexpressed, triggering a signaling cascade.[3] These TRK fusion proteins act as oncogenic drivers promoting cell growth and survival, leading to TRK fusion cancer, regardless to where it originates in the body.[3] TRK fusion cancer is not limited to certain types of tissues and can occur in any part of the body.[3] TRK fusion cancer occurs in various adult and pediatric solid tumors with varying frequency, including lung, thyroid, GI cancers (colon, cholangiocarcinoma, pancreatic and appendiceal), sarcoma, CNS cancers (glioma and glioblastoma), salivary gland cancers (mammary analogue secretory carcinoma) and pediatric cancers (infantile fibrosarcoma and soft tissue sarcoma).[3,4]

About Oncology at Bayer

Bayer is committed to delivering science for a better life by advancing a portfolio of innovative treatments. The oncology franchise at Bayer now expands to six marketed products and several other assets in various stages of clinical development. Together, these products reflect the company’s approach to research, which prioritizes targets and pathways with the potential to impact the way that cancer is treated.

About Bayer

Bayer is a global enterprise with core competencies in the life science fields of health care and nutrition. Its products and services are designed to benefit people by supporting efforts to overcome the major challenges presented by a growing and aging global population. At the same time, the Group aims to increase its earning power and create value through innovation and growth. Bayer is committed to the principles of sustainable development, and the Bayer brand stands for trust, reliability and quality throughout the world. In fiscal 2018, the Group employed around 117,000 people and had sales of 39.6 billion euros. Capital expenditures amounted to 2.6 billion euros, R&D expenses to 5.2 billion euros. For more information, go to www.bayer.com.

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Forward-Looking Statements
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[1] Hyman, David M., van Tilburg, Cornelis M., Albert, Catherine M., et al. Durability of response with larotrectinib in adult and pediatric patients with TRK fusion cancer. European Society of Clinical Oncology 2019; September 28, 2019. Barcelona, Spain. Abstract 445PD.
[2] Drilon A, Laetsch TW, Kummar S et al. Efficacy of Larotrectinib in TRK Fusion-Positive Cancers in Adults and Children; *N Engl J Med*. 2018 Feb 22;378(8):731-739. doi: 10.1056/NEJMoa1714448
[3] Vitrakvi® (larotrectinib) capsules and solution for oral use [Prescribing Information]. Whippany, NJ: Bayer HealthCare Pharmaceuticals, Inc.; July 2019.
[4] Vaishnavi A, Le AT, Doebele RC. TRKing down an old oncogene in a new era of targeted therapy. Cancer Discov. 2015;5(1):25-34.