

## European Commission approves Roche's Gavreto (pralsetinib) for the treatment of adults with RET fusion-positive advanced non-small cell lung cancer

- Gavreto is the first and only precision medicine approved in the EU for first-line treatment of people with RET fusion-positive advanced NSCLC
- Conditional approval is based on results from the phase I/II ARROW study, in which Gavreto led to durable responses in people with RET fusion-positive advanced NSCLC

Basel, 19 November 2021 - Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced that the European Commission (EC) has granted conditional marketing authorisation for Gavreto® (pralsetinib) as a monotherapy for the treatment of adults with rearranged during transfection (RET) fusion-positive advanced non-small cell lung cancer (NSCLC) not previously treated with a RET inhibitor. Gavreto is the first and only precision medicine approved in the European Union (EU) for the first-line treatment of people with RET fusion-positive advanced NSCLC.<sup>1</sup>

"Today's approval represents an important step forward in delivering precision medicine to people with RET fusion-positive advanced non-small cell lung cancer, for whom treatment options have historically been limited," said Levi Garraway, M.D., Ph.D., Roche's Chief Medical Officer and Head of Global Product Development. "By using cancer genomic profiling upfront, healthcare professionals may identify specific genetic alterations that predict clinical benefit of targeted treatment options like Gavreto in the first-line setting."

The approval is based on results of the ongoing phase I/II ARROW study, in which Gavreto led to durable responses in people with advanced RET fusion-positive NSCLC.<sup>2</sup> In 75 treatment-naïve patients, Gavreto demonstrated an overall response rate (ORR) of 72.0% (95% CI: 60.4%, 81.8%), and median duration of response (DOR) was not reached (NR) (95% CI: 9.0 months, NR).<sup>2</sup> In 136 patients who had previously received platinum-based chemotherapy, Gavreto demonstrated an ORR of 58.8% (95% CI: 50.1%, 67.2%), and median DOR was 22.3 months (95% CI: 15.1 months, NR).<sup>2</sup> Gavreto was also generally well-tolerated, with a low rate of treatment discontinuation; common grade 3-4 adverse reactions were neutropenia (reported in 20.1% of patients), anaemia (17.6%) and hypertension (16.1%).<sup>2</sup>

Approximately 37,500 people are diagnosed with RET fusion-positive NSCLC worldwide each year; the disease often affects people with minimal to no history of smoking, and who are typically younger than the average person diagnosed with lung cancer.<sup>3,4,5</sup> Roche is committed to providing a tailored treatment option for every person with lung cancer, no matter how rare or difficult-to-treat their type of disease. Gavreto in RET fusion-positive advanced NSCLC, along with Alecensa® (alectinib) in ALK-positive advanced NSCLC and Rozlytrek® (entrectinib) in ROS1-positive advanced NSCLC, is part of Roche's growing portfolio of precision medicines. Together, they offer personalised treatment options for almost one in ten people with advanced NSCLC, and biomarker testing is the most effective way to identify those people who may benefit.<sup>6</sup>

Beyond NSCLC, RET alterations are also key disease drivers in other cancer types, such as thyroid cancers. Gavreto has shown activity across multiple solid tumour types, reflecting tumour-agnostic potential.<sup>7</sup> It is approved by the U.S. Food and Drug Administration (FDA) for the treatment of adults with metastatic RET fusion-positive NSCLC, and for the treatment of adult and paediatric patients 12 years of age and older with advanced RET-altered thyroid cancers. Gavreto is also approved in Canada, mainland China and Switzerland. In the EU, a submission for RET-altered thyroid cancers is planned. Regulatory submissions for advanced RET fusion-positive NSCLC and RET-altered thyroid cancers are also underway in multiple countries worldwide.

Blueprint Medicines and Roche are co-developing Gavreto globally, with the exception of certain territories in Asia, including China.\* Blueprint Medicines and Genentech, a wholly owned member of the Roche Group, are commercialising Gavreto in the US and Roche has exclusive commercialisation rights for Gavreto outside of the US, with the exception of certain territories in Asia, including China.\*

#### **About the ARROW study<sup>8</sup>**

ARROW is an ongoing phase I/II, open-label, first-in-human study designed to evaluate the safety, tolerability and efficacy of Gavreto, administered orally in people with rearranged during transfection (RET) fusion-positive non-small cell lung cancer (NSCLC), RET-mutant medullary thyroid cancer, RET fusion-positive thyroid cancer and other RET-altered solid tumours. ARROW is being conducted at multiple sites across the United States, Europe and Asia.

#### **About rearranged during transfection (RET)-altered cancers**

RET gene alterations, such as fusions and mutations, are key disease drivers in many types of cancer, including non-small cell lung cancer (NSCLC) and several types of thyroid cancer. There are approximately 2.21 million cases of lung cancer diagnosed each year worldwide,<sup>3</sup> of which approximately 1.8 million are NSCLC and RET fusions are present in approximately 1-2% of these patients,<sup>4,5</sup> meaning RET fusion-positive NSCLC affects up to 37,500 people each year. Additionally, approximately 10-20% of people with papillary thyroid cancer (the most common type of thyroid cancer) have RET fusion-positive tumours,<sup>9</sup> and roughly 90% of people with advanced medullary thyroid cancer (a less prevalent form of thyroid cancer) carry RET mutations.<sup>10</sup> Oncogenic RET fusions also are observed at low frequencies in other cancers, including cholangiocarcinoma, colorectal, neuroendocrine, ovarian, pancreatic and thymus cancers.

#### **About Gavreto<sup>®</sup> (pralsetinib)**

Gavreto is a once-daily, oral precision medicine designed to selectively target rearranged during transfection (RET) alterations, including fusions and mutations, regardless of the tissue of origin. Preclinical data have shown that Gavreto inhibits primary RET fusions and mutations that cause cancer in subsets of patients, as well as secondary RET mutations predicted to drive resistance to treatment. Blueprint Medicines and Roche are co-developing Gavreto for the treatment of people with various types of RET-altered cancers.

## **About Roche in lung cancer**

Lung cancer is a major area of focus and investment for Roche, and we are committed to developing new approaches, medicines and tests that can help people with this deadly disease. Our goal is to provide an effective treatment option for every person diagnosed with lung cancer. We currently have six approved medicines to treat certain kinds of lung cancer, and a pipeline of investigational medicines to target the most common genetic drivers of lung cancer, or to boost the immune system to combat the disease.

## **About Roche**

Roche is a global pioneer in pharmaceuticals and diagnostics focused on advancing science to improve people's lives. The combined strengths of pharmaceuticals and diagnostics, as well as growing capabilities in the area of data-driven medical insights help Roche deliver truly personalised healthcare. Roche is working with partners across the healthcare sector to provide the best care for each person.

Roche is the world's largest biotech company, with truly differentiated medicines in oncology, immunology, infectious diseases, ophthalmology and diseases of the central nervous system. Roche is also the world leader in in vitro diagnostics and tissue-based cancer diagnostics, and a frontrunner in diabetes management. In recent years, the company has invested in genomic profiling and real-world data partnerships and has become an industry-leading partner for medical insights.

Founded in 1896, Roche continues to search for better ways to prevent, diagnose and treat diseases and make a sustainable contribution to society. The company also aims to improve patient access to medical innovations by working with all relevant stakeholders. More than thirty medicines developed by Roche are included in the World Health Organization Model Lists of Essential Medicines, among them life-saving antibiotics, antimalarials and cancer medicines. Moreover, for the thirteenth consecutive year, Roche has been recognised as one of the most sustainable companies in the pharmaceutical industry by the Dow Jones Sustainability Indices (DJSI).

The Roche Group, headquartered in Basel, Switzerland, is active in over 100 countries and in 2020 employed more than 100,000 people worldwide. In 2020, Roche invested CHF 12.2 billion in R&D and posted sales of CHF 58.3 billion. Genentech, in the United States, is a wholly owned member of the Roche Group. Roche is the majority shareholder in Chugai Pharmaceutical, Japan. For more information, please visit [www.roche.com](http://www.roche.com).

\*CStone Pharmaceuticals retains all rights to the development and commercialisation of Gavreto in these territories (mainland China, Taiwan, Hong Kong and Macau) under its existing collaboration with Blueprint Medicines.

All trademarks used or mentioned in this release are protected by law.

Blueprint Medicines, Gavreto and associated logos are trademarks of Blueprint Medicines Corporation.

## **References**

[1] Gavreto, Summary of Product Characteristics. 2021.

[2] Roche data on file.

[3] World Health Organization. Cancer [Internet; cited 2021 Nov]. Available from: <https://www.who.int/news-room/fact-sheets/detail/cancer>

[4] American Cancer Society. Key Statistics for Lung Cancer [Internet; cited 2021 Nov]. Available from: <https://www.cancer.org/cancer/lung-cancer/about/key-statistics.html>

- [5] Drilon A, et al. Brief Report: Frequency of Brain Metastases and Multikinase Inhibitor Outcomes in Patients With RET-Rearranged Lung Cancers. J Thorac Oncol. 2018;13:1595-601.
- [6] Pakkala S, Ramalingam SS. Personalized therapy for lung cancer: striking a moving target. JCI Insight. 2018;3(15):e120858.
- [7] Subbiah V, et al. Clinical activity and safety of the RET inhibitor pralsetinib in patients with RET fusion-positive solid tumors: Update from the ARROW trial. Presented at the American Society of Clinical Oncology (ASCO) Annual Meeting 2021; 04-08 Jun, 2021. Abstract #3079.
- [8] ClinicalTrials.gov. Phase 1/2 Study of the Highly-selective RET Inhibitor, Pralsetinib (BLU-667), in Patients With Thyroid Cancer, Non-Small Cell Lung Cancer, and Other Advanced Solid Tumors (ARROW) [Internet; cited 2021 Nov]. Available from: <https://clinicaltrials.gov/ct2/show/NCT03037385>
- [9] Santoro M, et al. RET Gene Fusions in Malignancies of the Thyroid and Other Tissues. Genes. 2020;11(4):424.
- [10] Romei C, et al. RET mutation heterogeneity in primary advanced medullary thyroid cancers and their metastases. Oncotarget. 2018;9(11):9875-84.

### **Roche Group Media Relations**

Phone: +41 61 688 8888 / e-mail: [media.relations@roche.com](mailto:media.relations@roche.com)

Dr. Nicolas Dunant  
Phone: +41 61 687 05 17

Sileia Urech  
Phone: +41 79 935 81 48

Dr. Barbara von Schnurbein  
Phone: +41 61 687 89 67

Karsten Kleine  
Phone: +41 61 682 28 31

Nina Mählitz  
Phone: +41 79 327 54 74

Nathalie Meetz  
Phone: +41 61 687 43 05

### **Roche Investor Relations**

Dr. Karl Mahler  
Phone: +41 61 68-78503  
e-mail: [karl.mahler@roche.com](mailto:karl.mahler@roche.com)

Dr. Sabine Borngräber  
Phone: +41 61 68-88027  
e-mail: [sabine.borngraeber@roche.com](mailto:sabine.borngraeber@roche.com)

Dr. Bruno Eschli  
Phone: +41 61 68-75284  
e-mail: [bruno.eschli@roche.com](mailto:bruno.eschli@roche.com)

Dr. Birgit Masjost  
Phone: +41 61 68-84814  
e-mail: [birgit.masjost@roche.com](mailto:birgit.masjost@roche.com)

Dr. Gerard Tobin  
Phone: +41 61 68-72942  
e-mail: [gerard.tobin@roche.com](mailto:gerard.tobin@roche.com)

### **Investor Relations North America**

Loren Kalm  
Phone: +1 650 225 3217  
e-mail: [kalm.loren@gene.com](mailto:kalm.loren@gene.com)