FDA approves Roche's Tecentriq in combination with chemotherapy for the initial treatment of adults with extensive-stage small cell lung cancer

- **Tecentriq in combination with chemotherapy (carboplatin and etoposide) is the first and only cancer immunotherapy approved for the initial treatment of extensive-stage small cell lung cancer (ES-SCLC)**
- **First new initial treatment option approved by FDA for people with ES-SCLC in more than 20 years**

Basel, 19 March 2019 – Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced that the U.S. Food and Drug Administration (FDA) approved Tecentriq® (atezolizumab), in combination with carboplatin and etoposide (chemotherapy), for the initial (first-line) treatment of adults with extensive-stage small cell lung cancer (ES-SCLC). This approval is based on results from the Phase III IMpower133 study, which showed that Tecentriq in combination with chemotherapy helped people live significantly longer compared to chemotherapy alone (median overall survival [OS]=12.3 vs. 10.3 months; hazard ratio [HR]=0.70, 95% CI: 0.54–0.91; p=0.0069) in the intention-to-treat (ITT) population.[1] The Tecentriq-based combination also significantly reduced the risk of disease worsening or death (progression-free survival, PFS) compared to chemotherapy alone (PFS=5.2 versus 4.3 months; HR=0.77, 95% CI: 0.62-0.96; p=0.017). Safety for the Tecentriq and chemotherapy combination appeared consistent with the known safety profile of Tecentriq.

"Tecentriq is the first cancer immunotherapy approved for the initial treatment of extensive-stage small cell lung cancer, which is especially difficult to treat," said Sandra Horning, M.D., Roche's Chief Medical Officer and Head of Global Product Development. "Until now, there have been limited treatment advances for this disease, and we are excited to bring a potential new standard of care to patients that has been shown to improve survival compared to chemotherapy.

Results from the Phase III IMpower133 study were simultaneously presented at the 2018 World Conference on Lung Cancer (WCLC) and published in The New England Journal of Medicine.

In the US, Tecentriq is approved in combination with Avastin® (bevacizumab), paclitaxel and carboplatin (chemotherapy), for the initial (first-line) treatment of adults with metastatic non-squamous NSCLC with no EGFR or ALK genomic tumour aberrations. In Europe, the Tecentriq and Avastin combination is approved for the initial treatment of people with metastatic non-squamous NSCLC, including people with EGFR mutant or ALK genomic tumour aberrations after failure of appropriate targeted therapies. Tecentriq is also approved by the FDA to treat adults with metastatic NSCLC who have disease progression during or following platinum-containing chemotherapy. Patients with EGFR or ALK genomic tumour aberrations should have disease progression on FDA approved therapy for NSCLC harbouring these aberrations prior to receiving Tecentriq.

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About the IMpower133 study
IMpower133 is a Phase III, multicentre, double-blinded, randomised placebo-controlled study evaluating the efficacy and safety of Tecentriq in combination with chemotherapy (carboplatin and etoposide) vs. chemotherapy (carboplatin and etoposide) alone in chemotherapy-naïve adults with ES-SCLC.

The study enrolled 403 people who were randomised equally (1:1) to receive:

- Tecentriq in combination with carboplatin and etoposide (Arm A), or
- Placebo in combination with carboplatin and etoposide (Arm B, control arm)

During the treatment-induction phase, people received treatment on 21-day cycles for four cycles, followed by maintenance with Tecentriq or placebo until progressive disease (PD) as assessed by the investigator using Response Evaluation Criteria in Solid Tumours Version 1.1 (RECIST v1.1). Treatment could be continued until persistent radiographic PD or symptomatic deterioration was observed.

The co-primary endpoints were progression-free survival (PFS) as determined by the investigator using RECIST v1.1 and OS in the ITT population.

A summary of the ITT data from the IMpower133 study that support this approval is included below.[1]

- Tecentriq in combination with chemotherapy helped people live significantly longer compared to chemotherapy alone (OS=12.3 vs. 10.3 months; HR=0.70, 95% CI: 0.54-0.91; p=0.0069) in the ITT population.
- The Tecentriq-based combination also significantly reduced the risk of disease worsening or death compared to chemotherapy alone (PFS=5.2 vs. 4.3 months; HR=0.77; 95% CI: 0.62-0.96; p=0.017).
- Safety for the Tecentriq and chemotherapy combination appeared consistent with the known safety profile of Tecentriq. Serious adverse reactions occurred in 37% of people receiving Tecentriq plus chemotherapy compared to 35% of people receiving chemotherapy alone. The most common adverse reactions (≥20%) in people receiving Tecentriq plus chemotherapy were feeling tired or weak (fatigue/asthenia; 39%), nausea (38%), hair loss (alopecia; 37%), decreased appetite (27%) and constipation (26%) and vomiting (20%).

About SCLC
Lung cancer is the leading cause of cancer death globally.[2] Each year 1.76 million people die as a result of the disease; this translates into more than 4,800 deaths worldwide every day.[2] Lung cancer can be broadly divided into two major types: NSCLC and SCLC, with SCLC accounting for approximately 15% of all lung cancer cases.[3]

About Tecentriq
Tecentriq is a monoclonal antibody designed to bind with a protein called PD-L1 expressed on tumour cells and tumour-infiltrating immune cells, blocking its interactions with both PD-1 and B7.1 receptors. By inhibiting PD-L1, Tecentriq may enable the activation of T cells. Tecentriq has the potential to be used as a foundational combination partner with cancer immunotherapies, targeted medicines and various chemotherapies across a broad range of cancers. Currently, Roche has nine Phase III lung cancer studies evaluating Tecentriq alone or in combination with other medicines.

In the United States Tecentriq in combination with nab-paclitaxel is approved for treatment of PD-L1-positive metastatic triple-negative breast cancer; and in combination with Avastin and chemotherapy for the initial treatment of people with metastatic non-squamous NSCLC. In the Europe Union, the non-squamous NSCLC indication includes people with EGFR mutant or ALK genomic tumour aberrations after failure of appropriate targeted therapies. Tecentriq is also approved in the European Union, United States and more than 85 countries for people with previously treated metastatic non-small cell lung cancer (NSCLC) and for certain types of untreated or previously treated metastatic urothelial carcinoma who are not eligible for cisplatin chemotherapy, or who have had disease progression during or following platinum-containing therapy.

About Roche in cancer immunotherapy
For more than 50 years, Roche has been developing medicines with the goal to redefine treatment in oncology. Today, we're investing more than ever in our effort to bring innovative treatment options that help a person's own immune system fight cancer. By applying our seminal research in immune tumour profiling within the framework of the Roche-devised cancer immunity cycle, we are accelerating and expanding the transformative benefits with Tecentriq to a greater number of people living with cancer. Our cancer immunotherapy development programme takes a comprehensive approach in pursuing the goal of restoring cancer immunity to improve outcomes for patients.

To learn more about the Roche approach to cancer immunotherapy please follow this link: http://www.roche.com/research_and_development/what_we_are_working_on/oncology/cancer-immunotherapy.htm

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 under one roof have made Roche the leader in personalised healthcare – a strategy that aims to fit the right treatment to each patient in the best way possible.

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. 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. 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 tenth consecutive year, Roche has been recognised as the most sustainable company in the Pharmaceuticals Industry by the Dow Jones Sustainability Indices (DJSI).

The Roche Group, headquartered in Basel, Switzerland, is active in over 100 countries and in 2018 employed about 94,000 people worldwide. In 2018, Roche invested CHF 11 billion in R&D and posted sales of

CHF 56.8 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.

References

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