

## **Roche's Tecentriq in combination with Avastin and chemotherapy for the initial treatment of people with a specific type of metastatic lung cancer shows positive data in those with liver metastases**

- **Data will be presented at the American Society of Clinical Oncology (ASCO) annual meeting on 2 June 2019**

Basel, 2 June 2019 – Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced positive additional results of a prespecified exploratory analysis from the Phase III IMpower150 study, which demonstrated that the combination of Tecentriq® (atezolizumab), Avastin® (bevacizumab), carboplatin and paclitaxel (chemotherapy) gave patients with chemotherapy-naïve, metastatic non-squamous non-small cell lung cancer (NSCLC), with baseline liver metastases an overall survival (OS) advantage compared with the combination of Avastin and chemotherapy (median OS=13.3 vs 9.4 months; hazard ratio [HR]=0.52; 95% CI: 0.33–0.82) in the intention-to-treat (ITT) population.<sup>1</sup> Safety for the Tecentriq, Avastin, and chemotherapy combination appeared consistent with the known safety profiles of the individual medicines, and no new safety signals were identified with the combination.

“We are pleased to present further positive results from the Phase III IMpower150 study that show benefit in people with baseline liver metastases, a population with a worse prognosis for survival”, said Sandra Horning, MD, Roche’s Chief Medical Officer and Head of Global Product Development. “Initial treatment with Tecentriq, Avastin and chemotherapy may represent an important new option for people with baseline liver metastases, as their risk of death was reduced by nearly half and 60% responded to the combination treatment”.

These data will be presented at the American Society of Clinical Oncology (ASCO) annual meeting on Sunday, 2 June 2019 at 16:30–18:00 CDT (Abstract #9012).

In December 2018, the US Food and Drug Administration approved Tecentriq in combination with Avastin, carboplatin and paclitaxel for the first-line treatment of adults with metastatic non-squamous NSCLC with no EGFR or ALK genomic tumour aberrations. This approval was based on positive data from Arm B of the Phase III IMpower150 study, which showed that Tecentriq and Avastin plus carboplatin and paclitaxel helped people live significantly longer compared with Avastin plus carboplatin and paclitaxel (median OS=19.2 vs 14.7 months; HR=0.78; p=0.016) in the intention-to-treat wild-type (ITT-WT) population.<sup>2</sup>

In March 2019, the European Commission also approved and granted marketing authorisation for Tecentriq in combination with Avastin, paclitaxel and carboplatin for the first-line treatment of adults with metastatic non-squamous NSCLC. In people with EGFR-mutant or ALK-positive NSCLC, Tecentriq, in combination with Avastin, paclitaxel and carboplatin, is indicated only after failure of appropriate targeted therapies. This approval was based on positive data from Arm B of the Phase III IMpower150 study, which showed that Tecentriq and Avastin plus carboplatin and paclitaxel helped people live significantly longer compared with

Avastin plus carboplatin and paclitaxel (median OS=19.8 vs 14.9 months; HR=0.76; 95% CI: 0.63–0.96; p=0.006) in the ITT population.<sup>3</sup>

### **About the IMpower150 study**

IMpower150 is a multicentre, open-label, randomised, controlled Phase III study evaluating the efficacy and safety of Tecentriq in combination with chemotherapy (carboplatin and paclitaxel) with or without Avastin in people with stage IV or recurrent metastatic non-squamous NSCLC who had not been treated with chemotherapy for their advanced disease. A total of 1,202 people were enrolled, of whom 1,045 were in the ITT-WT subpopulation, which excluded those people with EGFR and ALK mutations. People were randomised (1:1:1) to receive:

- Tecentriq plus carboplatin and paclitaxel (Arm A), or
- Tecentriq and Avastin plus carboplatin and paclitaxel (Arm B), or
- Avastin plus carboplatin and paclitaxel (Arm C, control arm).

The co-primary endpoints comparing Arms B and C were OS and progression-free survival (PFS), as determined by the investigator using Response Evaluation Criteria in Solid Tumours Version 1.1 (RECIST v1.1) and assessed in the ITT-WT subpopulation. Key secondary endpoints included investigator-assessed PFS, OS and safety in the ITT population. Exploratory analyses included efficacy and safety in people with baseline liver metastases.

A summary of the ITT data for the liver metastases population (a prespecified exploratory subgroup) from the IMpower150 study is included below:<sup>1</sup>

- A survival advantage was observed in people who received Tecentriq in combination with Avastin and chemotherapy, compared with Avastin and chemotherapy alone (median OS=13.3 vs 9.4 months; HR=0.52; 95% CI: 0.33–0.82).
- In addition, Tecentriq, Avastin and chemotherapy reduced the risk of disease worsening or death (PFS) by 59%, compared with Avastin and chemotherapy (HR=0.41; 95% CI: 0.26–0.62).
- Tecentriq, Avastin and chemotherapy shrank tumours (overall response rate) in 60.8% of people (95% CI: -0.75–40.18) compared with 41.1% of people receiving Avastin and chemotherapy.
- The median duration of response for people receiving Tecentriq, Avastin and chemotherapy was 10.7 months (95% CI: 0.21–0.73) compared with 4.6 months for people on Avastin and chemotherapy.
- Grade 3–4 treatment-related adverse events occurred in 52.1% and 54.5% of patients with liver metastases in Arm B and Arm C, respectively.

### **About NSCLC**

Lung cancer is the leading cause of cancer death globally.<sup>4</sup> Each year 1.76 million people die as a result of the disease; this translates into more than 4,800 deaths worldwide every day.<sup>4</sup> Lung cancer can be broadly divided into two major types: NSCLC and small cell lung cancer. NSCLC is the most prevalent type, accounting for around 85% of all cases.<sup>5</sup> NSCLC comprises non-squamous and squamous-cell lung cancer, the squamous form of which is characterised by flat cells covering the airway surface when viewed under a microscope.<sup>5</sup> Typically, 15–20% of NSCLC cases will also present with liver metastasis, which are difficult-to-treat; these patients have a poorer prognosis, with an approximately 50% increased risk of death.<sup>6</sup> In addition, patients with liver metastases are more likely to have other metastases in the body.<sup>7</sup>

### **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.

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. Tecentriq is also approved in the United States as an initial treatment for extensive-stage small cell lung cancer (ES-SCLC). 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 90 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.

### **About Avastin**

Avastin is a prescription-only medicine that is a solution for intravenous infusion. It is a biologic antibody designed to specifically bind to a protein called vascular endothelial growth factor (VEGF) that plays an important role throughout the lifecycle of the tumour to develop and maintain blood vessels, a process known as angiogenesis. Avastin is designed to interfere with the tumour blood supply by directly binding to the VEGF protein to prevent interactions with receptors on blood vessel cells. The tumour blood supply is thought to be critical to a tumour's ability to grow and spread in the body (metastasis).

### **About the Tecentriq (atezolizumab) and Avastin (bevacizumab) combination**

There is a strong scientific rationale to support the use of Tecentriq plus Avastin in combination. The Tecentriq and Avastin regimen may enhance the potential of the immune system to combat first-line advanced NSCLC. Avastin, in addition to its established anti-angiogenic effects, may further enhance Tecentriq's ability to restore anti-cancer immunity, by inhibiting VEGF-related immunosuppression, promoting T-cell tumour infiltration and enabling priming and activation of T-cell responses against tumour antigens.

### **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](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](http://www.roche.com).

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**Roche Group Media Relations**

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

- Nicolas Dunant (Head)
- Patrick Barth
- Ulrike Engels-Lange
- Simone Oeschger
- Anja von Treskow