

Roche presents positive Phase III results for Tecentriq® (atezolizumab) in combination with platinum-based chemotherapy in people with previously untreated advanced bladder cancer

- **IMvigor130 is the first positive Phase III study of a cancer immunotherapy combination in people with previously untreated advanced bladder cancer**
- **Tecentriq combination reduced the risk of disease worsening or death (progression-free survival) compared with chemotherapy alone**
- **Data will be presented today at the 2019 European Society for Medical Oncology (ESMO) Congress**

Basel, 30 September 2019 - Roche (SIX: RO, ROG; OTCQX: RHHBY) today presented positive results from the Phase III IMvigor130 study evaluating Tecentriq® (atezolizumab) plus platinum-based chemotherapy versus chemotherapy alone for the first-line (initial) treatment of people with previously untreated locally advanced or metastatic urothelial carcinoma (mUC) eligible and ineligible for cisplatin chemotherapy. In the study, Tecentriq plus chemotherapy showed a statistically significant improvement in progression-free survival (PFS) compared with platinum-based chemotherapy alone (median PFS=8.2 versus 6.3 months; hazard ratio (HR)=0.82, 95% CI: 0.70-0.96; p=0.007). Encouraging overall survival (OS) results were observed for Tecentriq plus chemotherapy compared with chemotherapy alone in the intention-to-treat population (ITT), however these data did not reach statistical significance at this interim analysis (median OS=16.0 versus 13.4 months; HR=0.83, 95% CI: 0.69-1.00). Safety in the Tecentriq plus chemotherapy arm appeared consistent with the known safety profiles of the individual medicines, and no new safety signals were identified with the combination.

“We are pleased with these positive results from the IMvigor130 study, which show Tecentriq plus chemotherapy may provide a meaningful benefit for people newly diagnosed with advanced bladder cancer,” said Sandra Horning, M.D., Chief Medical Officer and Head of Global Product Development. “There remains a high unmet need for people with advanced bladder cancer, where chemotherapy alone is the current standard of care. These results reinforce the role of immunotherapy in treating this aggressive disease.”

Additional data from the Tecentriq monotherapy arm were also presented in the ITT population and people with different levels of PD-L1 expression. Encouraging OS results were observed with Tecentriq monotherapy in people with high PD-L1 expression (IC2/3), however, these data were not formally tested per the hierarchical design of the trial. Follow up will continue until the next analysis.

These data will be presented today at the European Society for Medical Oncology (ESMO) 2019 Congress Presidential Symposium at 17:53–18:05 CEST (Abstract LBA14) and were featured in the official ESMO press programme.

Tecentriq was the first cancer immunotherapy approved in advanced bladder cancer. Currently, there are four ongoing Phase III studies evaluating Tecentriq alone and in combination with other medicines in early and advanced bladder cancer. Roche has an extensive development programme for Tecentriq, including multiple ongoing and planned Phase III studies, across lung, genitourinary, skin, breast, gastrointestinal, gynaecological, and head and neck cancers. This includes studies evaluating Tecentriq both alone and in combination with other medicines.

About the IMvigor130 study

IMvigor130 is a multicentre, partially blinded, randomised Phase III study, evaluating the efficacy and safety of Tecentriq in combination with chemotherapy or alone versus chemotherapy alone for people with mUC who have not received prior systemic therapy for metastatic disease. It enrolled 1,213 people who received:

- Tecentriq plus platinum-based chemotherapy (gemcitabine with either cisplatin or carboplatin), or
- Tecentriq, or
- Platinum-based chemotherapy (gemcitabine with either cisplatin or carboplatin) plus placebo (control arm).

In the Tecentriq combination arm, the co-primary endpoints are OS and PFS, as assessed by investigator using Response Evaluation Criteria in Solid Tumours Version 1.1 (RECIST v1.1). The secondary endpoints are objective response rate and duration of response, as assessed by investigator using RECIST v1.1, and independent review facility assessed PFS.

A summary of the key study results is included below:

| | Tecentriq + platinum-based chemotherapy n=451 | Placebo + platinum-based chemotherapy n=400 |
|---|--|--|
| PFS (co-primary endpoint) | | |
| Median PFS (months) (95% CI) | 8.2 (6.5, 8.3) | 6.3 (6.2, 7.0) |
| HR (95% CI) P value | 0.82 (0.70, 0.96) P=0.007 | |
| OS (co-primary endpoint) | | |
| Median OS (months) (95% CI) | 16.0 (13.9, 18.9) | 13.4 (12.0, 15.2) |
| HR (95% CI) | 0.83 (0.69, 1.00)* | |

| Objective response rate (ORR) (secondary endpoint) | | |
|---|----------------|----------------|
| Responders (%) | 212 (47.4%) | 174 (43.8%) |
| 95% CI | (42.7%, 52.2%) | (38.9%, 48.9%) |
| Complete response % | 56 (12.5%) | 27 (6.8%) |
| *The OS result did not cross the pre-specified efficacy boundary for statistical significance. Follow-up will continue until the next interim analysis. | | |

Safety for the Tecentriq plus chemotherapy combination appeared consistent with the known safety profile of the individual medicines, and no new safety signals were identified with the combination. There appeared to be no worsening of tolerability with the addition of Tecentriq to chemotherapy compared with chemotherapy alone. All cause Grade 3-4 adverse events (AEs) were reported in 85% of people receiving Tecentriq plus chemotherapy, compared with 86% of people receiving chemotherapy alone. Treatment-related Grade 3-4 AEs were reported in 83% of people receiving Tecentriq plus chemotherapy, compared with 81% of people receiving chemotherapy alone. Any Grade AEs leading to any treatment discontinuation of Tecentriq or placebo were observed in 11% and 7% of people in the combination arm compared with the chemotherapy arm respectively.

About bladder cancer

In 2018, there were over half a million new cases of bladder cancer diagnosed globally, with around 200,000 deaths from the disease.¹ Urothelial carcinoma, which develops in the cells of the bladder lining, is the most common type of bladder cancer, accounting for about 90% of all cases.² In total, 30% of cases are considered advanced based on muscle-invasive or metastatic disease.³ There remains a high unmet need for people facing previously untreated advanced bladder cancer. Despite improvements in tolerability, there have been no efficacy improvements for more than 30 years with chemotherapy as standard of care, and patients continue to experience poor outcomes.^{4,5}

About Tecentriq

Tecentriq is a monoclonal antibody designed to bind with a protein called PD-L1, which is 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 is a cancer immunotherapy that has the potential to be used as a foundational combination partner with other immunotherapies, targeted medicines and various chemotherapies across a broad range of cancers. The development of Tecentriq and its clinical programme is based on our greater understanding of how the immune system interacts with tumours and how harnessing a person's immune system combats cancer more effectively.

Tecentriq is approved in the US, EU and countries around the world, either alone or in combination with targeted therapies and/or chemotherapies in various forms of non-small cell and small cell lung cancer, certain types of metastatic urothelial cancer, and in PD-L1-positive metastatic triple-negative breast cancer.

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. 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 eleventh consecutive year, Roche has been recognised as one of the most sustainable companies 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.

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