

European Commission approves Roche's Tecentriq in combination with Abraxane for people with PD-L1-positive, metastatic triple-negative breast cancer

- **The Tecentriq combination marks the first cancer immunotherapy regimen to be available in Europe for triple-negative breast cancer – an aggressive and difficult-to-treat disease**
- **Approval based on the Phase III IMpassion130 study, which showed that the combination improved outcomes in people with PD-L1-positive metastatic triple-negative breast cancer**

Basel, 29 August 2019 – Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced that the European Commission has approved Tecentriq® (atezolizumab) plus chemotherapy (Abraxane® [paclitaxel protein-bound particles for injectable suspension (albumin-bound); nab-paclitaxel]) for the treatment of adult patients with unresectable locally advanced or metastatic triple-negative breast cancer (TNBC) whose tumours have PD-L1 expression ($\geq 1\%$) and who have not received prior chemotherapy for metastatic disease. Roche's VENTANA PD-L1 (SP142) Assay is now CE marked and commercially available in the European Union as an aid for identifying patients with TNBC eligible for treatment with the Tecentriq combination.

“For the past 30 years, we have been dedicated to transforming the lives of people with breast cancer. Now, we are pleased to build on this foundation with the news that the first immunotherapy treatment for triple-negative breast cancer is available to people in Europe with PD-L1-positive, metastatic triple-negative breast cancer,” said Sandra Horning, MD, Roche's Chief Medical Officer and Head of Global Product Development. “The European approval of this Tecentriq combination represents a significant step forward in the treatment of this aggressive breast cancer, where the unmet medical need is great.”

This approval is based on the results from the Phase III IMpassion130 study. Progression-free survival (PFS) results demonstrated a statistically significant benefit for Tecentriq in combination with nab-paclitaxel and showed that Tecentriq plus nab-paclitaxel significantly reduced the risk of disease worsening or death (PFS) by 38% compared with nab-paclitaxel alone (median PFS=7.5 vs 5 months; hazard ratio [HR]=0.62, 95% CI: 0.49-0.78, $p < 0.0001$) in people who were tested positive for PD-L1 expression on tumour-infiltrating immune cells. At the second interim analysis, Tecentriq and nab-paclitaxel showed a clinically meaningful overall survival (OS) improvement of seven months vs placebo and nab-paclitaxel in the PD-L1-positive population (median OS=25.0 vs 18.0 months; HR=0.71, 95% CI: 0.54 –0.93). OS results in the PD-L1-positive population were not formally tested due to the hierarchical design of the study as statistical significance was not met for OS in the intention-to-treat (ITT) population (median OS=21.0 vs 18.7 months; HR=0.86, 95% CI: 0.72–1.02, $p=0.078$).

The assessment of PD-L1 on tumour-infiltrating immune cells is essential for identifying the patients with TNBC benefiting from this Tecentriq combination. PD-L1 expression status in the IMpassion130 study was assessed by the VENTANA PD-L1 (SP142) assay.

Safety in the Tecentriq plus nab-paclitaxel arm appeared consistent with the known safety profiles of the individual medicines, and no new safety signals were identified with the combination. The nature and incidence of severe adverse events (SAEs) and Grade 3–4 adverse events (AEs) were consistent with the known safety profiles of the individual study drugs or the underlying disease. SAEs were reported in 23% of people receiving Tecentriq plus nab-paclitaxel compared to 18% of people receiving chemotherapy alone. Grade 3–4 AEs were reported in 49% of people receiving Tecentriq plus nab-paclitaxel compared to 42% of people receiving chemotherapy alone.

Currently, there are seven ongoing Phase III studies investigating Tecentriq in TNBC, including early and advanced stages of the disease.

About the IMpassion130 study

The IMpassion130 study is a Phase III, multicentre, randomised, double-blind study evaluating the efficacy, safety and pharmacokinetics of Tecentriq plus nab-paclitaxel compared with placebo plus nab-paclitaxel in people with unresectable locally advanced or metastatic TNBC who have not received prior systemic therapy for metastatic breast cancer. The study enrolled 902 people who were randomised equally (1:1). The co-primary endpoints are PFS per investigator assessment (RECIST 1.1) and OS in the ITT population and in the PD-L1-positive population. Performing a test for statistical significance for OS in the PD-L1-positive population is dependent upon OS results from all randomised patients. Secondary endpoints include objective response rate and duration of response.

About triple-negative breast cancer

Breast cancer is the most common cancer among women with more than 2 million diagnosed worldwide each year.¹ TNBC represents ~15% of all breast cancers and is more common in women under the age of 50, compared with other forms of breast cancer.²⁻⁴ It is defined by the lack of expression and/or amplification of the targetable receptors for oestrogen, progesterone and HER2 amplification.⁵ Patients with metastatic TNBC generally experience rapid progression and shorter OS compared to other subtypes of breast cancer.³

About Roche in breast cancer

Roche has been advancing breast cancer research for more than 30 years with the goal of helping as many people with the disease as possible. Our medicines, along with companion diagnostic tests, have contributed to bringing breakthrough innovations in HER2-positive breast cancer. As our understanding of breast cancer biology rapidly improves, we are working to identify new biomarkers and approaches to treatment for all forms of early and advanced breast cancer, including triple-negative and hormone receptor-positive.

Our targeted medicines Herceptin, Perjeta and Kadcyra are continuing to transform the treatment of early and advanced HER2-positive breast cancer and, through our Tecentriq and ipatasertib clinical programmes, we hope to bring new treatment combinations to people with breast cancer, ultimately improving outcomes.

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 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.

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Roche Group Media Relations

Phone: +41 61 688 8888 / e-mail: media.relations@roche.com

- Nicolas Dunant (Head)
- Patrick Barth
- Ulrike Engels-Lange
- Karsten Kleine
- Barbara von Schnurbein