Media Release



Roche's Tecentriq improves overall survival as a first-line monotherapy in certain people with advanced non-small cell lung cancer

- Phase III IMpower110 study showed Tecentriq monotherapy helped people with advanced nonsmall cell lung cancer (NSCLC) with high PD-L1 expression live longer compared with chemotherapy alone
- Data will be shared with health authorities globally, including the US Food and Drug Administration (FDA) and European Medicines Agency (EMA)

Basel, 27 September 2019 – Roche (SIX: RO, ROG; OTCQX: RHHBY) today announced positive data from the Phase III IMpower110 study evaluating Tecentriq* (atezolizumab) as a first-line (initial) monotherapy compared with cisplatin or carboplatin and pemetrexed or gemcitabine (chemotherapy) in advanced non-squamous and squamous non-small cell lung cancer (NSCLC) without ALK or EGFR mutations (wild-type; WT).¹

The study met its primary endpoint in an interim analysis showing that Tecentriq monotherapy improved overall survival (OS) by 7.1 months compared with chemotherapy alone (median OS=20.2 versus 13.1 months; hazard ratio [HR]=0.595, 95% CI: 0.398–0.890; p=0.0106) in people with high PD-L1 expression (TC3/IC3-WT). Encouraging OS (18.2 versus 14.9 months; HR=0.717, 95% CI: 0.520–0.989) was also observed in people with medium levels of PD-L1 expression (TC2/3 or IC 2/3-WT), however these data did not reach statistical significance at this interim analysis. The study will continue to final analysis for patients with lower levels of PD-L1 expression.¹ Safety for Tecentriq appeared to be consistent with its known safety profile and no new safety signals were identified.

"We are excited to share these positive data, showing that Tecentriq alone offers a significant survival benefit over chemotherapy as an initial treatment in people with squamous or non-squamous non-small cell lung cancer with high PD-L1 expression," said Sandra Horning, MD, Roche's Chief Medical Officer and Head of Global Product Development. "The IMpower110 results demonstrate the potential of first-line Tecentriq monotherapy in certain types of advanced lung cancer, and could provide an additional treatment option for oncologists and the patients that they treat."

These data will be presented at the European Society for Medical Oncology (ESMO) 2019 Congress on Friday the 27th of September from 16:00-17:30 CET (Abstract LBA78; Barcelona Auditorium – Hall 2).

Roche will submit these data to global health authorities, including the US Food and Drug Administration (FDA) and European Medicines Agency (EMA), and will discuss how best to bring this option to patients as quickly as possible.

The Tecentriq lung programme currently consists of nine Phase III lung cancer studies as either monotherapy or in combination with other medicines across different types of lung 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 IMpower110 study

IMpower110 is a Phase III, randomised, open-label study to evaluate the efficacy and safety of Tecentriq monotherapy compared with cisplatin or carboplatin and pemetrexed or gemcitabine (chemotherapy) in programmed death-ligand 1 (PD-L1)-selected, chemotherapy-naive participants with advanced non-squamous or squamous NSCLC without ALK or EGFR mutations (wild-type; WT).

A total of 572 people (555 WT) were enrolled and were randomised 1:1 to receive:

- Tecentriq monotherapy, until loss of clinical benefit (as assessed by the investigator), unacceptable toxicity or death; or
- Cisplatin or carboplatin (per investigator discretion) combined with either pemetrexed (non-squamous) or gemcitabine (squamous), followed by maintenance therapy with pemetrexed alone (non-squamous) or best supportive care (squamous) until disease progression, unacceptable toxicity or death.

The primary efficacy endpoint is OS by PD-L1 subgroup (TC3/IC3-WT; TC2/3/ IC2/3-WT; and TC1,2,3/IC1,2,3-WT), as determined by the SP142 assay test. Key secondary endpoints include investigator-assessed progression-free survival (PFS), objective response rate (ORR) and duration of response (DoR).

An overview of the key OS results is below:

	Median OS					
	Arm A (Tecentriq)		Arm B (chemo)		HRª	P Value
	n	months	n	months	95% CI	
TC3 or IC3-WT	107	20.2	98	13.1	0.595 (0.398, 0.890)	0.0106
TC2/3 or IC2/3-WT*	166	18.2	162	14.9	0.717 (0.520, 0.989)	0.0416
TC1/2/3 or IC1/2/3-WT**	277	17.5	277	14.1	0.832 (0.649, 1.067)	0.1481 ^b

TC, tumour cell; IC, tumour-infiltrating immune cells. PD-L1 expression was centrally evaluated with the VENTANA SP142 IHC assay. TC3 or IC3 = TC \geq 50% or IC \geq 10% PD-L1+; TC1/2/3 or IC1/2/3 = TC \geq 1% or IC \geq 1% PD-L1+; TC2/3 or IC2/3 = TC \geq 5% or IC \geq 5% PD-L1+. a Stratified. b Only for descriptive purpose.

^{*}TC2/3 or IC2/3-WT did not cross the pre-specified boundary for statistical significance

^{**}TC1/2/3 or IC1/2/3-WT was not formally tested and did not meet statistical significance

The safety population comprised 286 patients in Arm A and 263 in Arm B. Treatment-related AEs (TRAEs) and Grade 3-4 TRAEs occurred in 60.5% (Arm A) and 85.2% (Arm B), and 12.9% (Arm A) and 44.1% (Arm B), respectively.

About NSCLC

Lung cancer is the leading cause of cancer death globally. Each year 1.76 million people die as a result of the disease; this translates into more than 4,800 deaths worldwide every day. 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. 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.

About Tecentriq (atezolizumab)

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 (CIT) 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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References

[1] Spigel D et al. IMpower110: Interim OS Analysis of a Phase III Study of Atezolizumab (atezo) vs Platinum-Based Chemotherapy (chemo) as 1L Treatment (tx) in PD-L1-selected NSCLC [ESMO Abstract LBA78].

 $[2] GLOBOCAN\ 2018; Lung\ Cancer: Estimated\ cancer\ incidence, mortality\ and\ prevalence\ worldwide.\ World\ Health\ Organization.$ Available from: $\frac{http://gco.iarc.fr/today/data/factsheets/cancers/15-Lung-fact-sheet.pdf.}{http://gco.iarc.fr/today/data/factsheets/cancers/15-Lung-fact-sheet.pdf.}$

 $\label{thm:concern} \ensuremath{\texttt{[3]}}\ American\ Cancer\ Society;\ What\ Is\ Non-Small\ Cell\ Lung\ Cancer\ [Internet]:\ Available\ from:$

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