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GSK's *Omjjara* (mometotinib) approved in Japan for treatment of myelofibrosis

- *Omjjara* approved for use in both newly diagnosed or previously treated myelofibrosis patients
- Differentiated mechanism of action addresses key manifestations of myelofibrosis, namely anaemia, constitutional symptoms and splenomegaly
- In Japan, about 70% of patients diagnosed with primary myelofibrosis have moderate to severe anaemia at the time of diagnosis^{1,2,3}

GSK plc (LSE/NYSE: GSK) today announced that Japan's Ministry of Health, Labour and Welfare (MHLW) has approved *Omjjara* (mometotinib) for the treatment of myelofibrosis. *Omjjara* is a once-a-day, oral JAK1/JAK2 and activin A receptor type 1 (ACVR1) inhibitor. The approval is based on data from the pivotal phase III MOMENTUM and SIMPLIFY-1 trials.

This is the fourth major regulatory approval for GSK's mometotinib in the treatment of myelofibrosis, following approval under the brand name *Ojjaara* from the US Food and Drug Administration and authorisations under the brand name *Omjjara* from the European Commission and the Medicines and Healthcare products Regulatory Agency in the UK.

Nina Mojas, Senior Vice President, Oncology Global Product Strategy, GSK, said: "Myelofibrosis has a heavy disease burden, with symptomatic patients experiencing spleen enlargement, fatigue, night sweats and bone pain, along with anaemia which can lead to treatment discontinuation and dependence on regular blood transfusions. With the approval of *Omjjara*, myelofibrosis patients in Japan will have a new treatment option for this complex blood cancer."

Myelofibrosis is a blood cancer that affects approximately 1 in 500,000 people worldwide, with up to 5,000 patients impacted in Japan.^{4,5,6} In Japan, about 70% of patients diagnosed with primary myelofibrosis, and about half of those patients diagnosed with secondary myelofibrosis, have moderate to severe anaemia at the time of diagnosis.^{1,2,3} Nearly all patients are estimated to develop anaemia over the course of the disease.^{7,8,9,10} Myelofibrosis patients with anaemia require additional supportive care, including transfusions, and more than 30% will discontinue treatment with established therapies due to anaemia.¹¹ Patients who are anaemic and transfusion dependent have a poor prognosis and shortened survival.^{12,13,14,15,16,17,18,19,20}

The approval is based on data from the MOMENTUM and SIMPLIFY-1 pivotal phase III trials. MOMENTUM was designed to evaluate the safety and efficacy of mometotinib versus danazol for the treatment and reduction of key manifestations of myelofibrosis in an anaemic, symptomatic, JAK inhibitor-experienced population. SIMPLIFY-1 was designed to evaluate the efficacy and safety of mometotinib versus ruxolitinib in myelofibrosis patients who had not received a prior JAK inhibitor therapy.

About *Omjjara* (mometotinib)

Mometotinib has a differentiated mechanism of action, with inhibitory ability along three key signalling pathways: Janus kinase (JAK) 1, JAK2, and activin A receptor, type I (ACVR1).^{1,21,22,23} Inhibition of JAK1 and JAK2 may improve constitutional symptoms and splenomegaly.^{1,21,23} Additionally, inhibition of ACVR1 leads to a decrease in circulating hepcidin levels, potentially contributing to anaemia-related benefit.^{1,21,22,23}

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In September 2023, the US Food and Drug Administration [licensed](#)²⁴ momelotinib under the brand name *Ojjaara* for the treatment of intermediate or high-risk myelofibrosis, including primary myelofibrosis or secondary myelofibrosis (post-polycythaemia vera and post-essential thrombocythemia), in adults with anaemia.

In January 2024, the European Commission [granted marketing authorisation](#)²⁵ for *Omjjara* for disease-related splenomegaly (enlarged spleen) or symptoms in adult patients with moderate to severe anaemia who have primary myelofibrosis, post polycythaemia vera myelofibrosis or post essential thrombocythemia myelofibrosis and who are Janus kinase (JAK) inhibitor naïve or have been treated with ruxolitinib. *Omjjara* was also [approved](#)²⁶ by the Medicines and Healthcare products Regulatory Agency (MHRA) in the United Kingdom to treat the symptoms experienced by adult myelofibrosis patients who have moderate or severe anaemia.

Please refer to the updated Product Information (PI) for precautions concerning indication and important dosage, administration, and safety information in Japan which will shortly be updated at this link: [Japan Pharmaceuticals and Medical Devices Agency](#)²⁷.

About myelofibrosis

Myelofibrosis is a rare blood cancer that disrupts the body's normal production of blood cells because of dysregulated JAK-signal transducer and activator of transcription protein signalling. The clinical hallmarks of myelofibrosis are splenomegaly (enlarged spleen), severely low blood counts, including anaemia and thrombocytopenia, and debilitating constitutional symptoms, such as fatigue, night sweats and bone pain, attributable to ineffective haematopoiesis and excessive production of proinflammatory cytokines.^{28,29}

About the pivotal clinical trials

MOMENTUM was a phase III, global, multicentre, randomised, double-blind study investigating momelotinib versus danazol in patients (n=195) with myelofibrosis who were symptomatic and anaemic and had been previously treated with a licensed JAK inhibitor. The trial was designed to evaluate the safety and efficacy of momelotinib for treating and reducing key hallmarks of the disease: symptoms, blood transfusions (due to anaemia) and splenomegaly. The MOMENTUM trial met all its primary and key secondary endpoints, demonstrating statistically significant response with respect to constitutional symptoms, splenic reduction and transfusion independence in patients treated with momelotinib versus danazol (Total Symptom Score reduction of 50% or greater: 25% momelotinib, 9% danazol, p=0.0095; reduction of spleen volume by 35% or greater: momelotinib 22%, danazol 3%, p=0.0011; no transfusions and all haemoglobin values ≥ 8 g/dL in the 12 weeks prior to week 24: momelotinib 30%, danazol 20%).³⁰ The most common non-haematological treatment-emergent adverse events in momelotinib-treated patients over the entire study period as of the data cutoff were diarrhoea (45 [26%] of 171) and asthenia (28 [16%]); the most common grades 3 and 4 treatment-emergent adverse events were thrombocytopenia (33 [19%]) and anaemia (19 [11%]).³¹ Results from the 24-week randomised treatment period were presented at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting and subsequently published in *The Lancet*,^{32,33} with 48-week data presented at the 64th American Society of Hematology (ASH) Annual Meeting and Exposition in December 2022 and subsequently published in *The Lancet Hematology*.^{31,34}

SIMPLIFY-1 was a multicentre randomised, double-blind, phase III study that compared the safety and efficacy of momelotinib to ruxolitinib in patients with myelofibrosis who had not received prior treatment with a JAK inhibitor (momelotinib: n=215 and ruxolitinib: n=217). SIMPLIFY-1 met its primary endpoint, demonstrating non-inferiority of momelotinib to ruxolitinib in spleen volume response (reduction by 35% or greater) with a difference of 9% (95% CI 2%-16%), and substantial improvements in transfusion independence rates (66.5% for momelotinib compared to 49.3% for ruxolitinib), a difference of 18% (95% CI 9%-26%).^{35,36} The most common grade 3 or higher haematologic abnormalities in either group were thrombocytopenia and anaemia. Grade 3 or higher infections occurred in 7% of patients who received momelotinib and 3% of patients who received ruxolitinib.³⁷

GSK in oncology

Oncology is an emerging therapeutic area for GSK where we are committed to maximising patient survival with a current focus on haematologic malignancies, gynaecologic cancers, and other solid tumours through breakthroughs in immuno-oncology and tumour-cell targeting therapies.

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About GSK

GSK is a global biopharma company with a purpose to unite science, technology, and talent to get ahead of disease together. Find out more at [gsk.com](https://www.gsk.com).

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Cautionary statement regarding forward-looking statements

GSK cautions investors that any forward-looking statements or projections made by GSK, including those made in this announcement, are subject to risks and uncertainties that may cause actual results to differ materially from those projected. Such factors include, but are not limited to, those described under Item 3.D "Risk factors" in GSK's Annual Report on Form 20-F for 2023, and GSK's Q1 Results for 2024.

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