GSK’s Jemperli (dostarlimab) plus chemotherapy approved as the first and only frontline immuno-oncology treatment in the European Union for dMMR/MSI-H primary advanced or recurrent endometrial cancer

- European Commission also converts previous conditional approval for Jemperli to full approval as a monotherapy for second-line dMMR/MSI-H recurrent or advanced endometrial cancer

GSK plc (LSE/NYSE: GSK) today announced the European Commission (EC) has granted marketing authorisation for Jemperli (dostarlimab) in combination with carboplatin-paclitaxel (chemotherapy), for the treatment of adult patients with mismatch repair deficient (dMMR)/microsatellite instability-high (MSI-H) primary advanced or recurrent endometrial cancer and who are candidates for systemic therapy. Additionally, with the authorisation in this indication, the EC’s conditional approval for Jemperli as a monotherapy for treating adult patients with dMMR/MSI-H recurrent or advanced endometrial cancer that has progressed on or following prior treatment with a platinum-containing regimen is now converted to full approval.

Hesham Abdullah, Senior Vice President, Global Head Oncology, R&D, GSK, said: “People living with this type of endometrial cancer typically experience disease progression and poor long-term outcomes with current standard of care. With this approval, we can expand the number of patients who can potentially benefit from treatment with Jemperli in Europe, including patients who are earlier in their journey. We are proud of the recent approvals for Jemperli as we believe that it continues to transform the frontline endometrial cancer treatment landscape and shows promise as a foundational immuno-oncology therapy.”

Dr Mansoor Raza Mirza, Chief Oncologist, Copenhagen University Hospital, Denmark and RUBY principal investigator, said: “Today’s European Commission approval is welcomed news as I believe it will define a new standard of care for certain patients with advanced or recurrent endometrial cancer in the EU. The results from the RUBY trial, which led to this approval, underscore the practice-changing potential of dostarlimab for these patients.”

The EC authorisation of Jemperli is based on interim analysis results from the dMMR/MSI-H population of Part 1 of the RUBY/ENGOT-EN6/GOG3031/NSGO phase III trial, which reflected a robust median duration of follow-up of ≥25 months. The trial met its primary endpoint of investigator-assessed progression-free survival (PFS), demonstrating a statistically significant and clinically meaningful benefit in patients treated with Jemperli plus carboplatin and paclitaxel in the dMMR/MSI-H population. In this population, a 72% reduction in the risk of disease progression or death was observed relative to chemotherapy alone (HR: 0.28 [95% CI: 0.16-0.50]).

In a prespecified, exploratory analysis of overall survival (OS) in the dMMR/MSI-H population, the addition of Jemperli to chemotherapy resulted in a 70% reduction in the risk of death relative to chemotherapy alone (HR: 0.30 [95% CI: 0.13-0.70]).

Results were presented at the European Society for Medical Oncology (ESMO) Virtual Plenary and Society of Gynecologic Oncology (SGO) Annual Meeting on 27 March 2023, and simultaneously published in The New England Journal of Medicine.
Press release
For media and investors only

PFS is one of two primary endpoints in the RUBY Part 1 trial. In a subsequent planned analysis, the RUBY trial met its other primary endpoint of OS, demonstrating a statistically significant and clinically meaningful benefit in the overall patient population.

The safety and tolerability profile for Jemperli plus carboplatin and paclitaxel was generally consistent with the known safety profiles of the individual agents. The most common adverse reactions (≥10%) in patients receiving Jemperli plus chemotherapy were rash, hypothyroidism (underactive thyroid), increased alanine aminotransferase or increased aspartate aminotransferase (increased liver enzyme levels in the blood), pyrexia (fever) and dry skin.

About endometrial cancer
Endometrial cancer is found in the inner lining of the uterus, known as the endometrium. Endometrial cancer is the most common gynaecologic cancer in developed countries, with approximately 417,000 new cases reported each year worldwide[1], and incidence rates are expected to rise by almost 40% between 2020 and 2040.[2-3] Approximately 15-20% of patients with endometrial cancer will be diagnosed with advanced disease at the time of diagnosis.[4] An estimated 20-29% of all endometrial cancers are dMMR/MSI-H.[5] In the EU4 (France, Germany, Italy and Spain), approximately 3,000 people are estimated to be diagnosed with dMMR/MSI-H primary advanced or recurrent endometrial cancer each year.[6]

About RUBY
RUBY is a two-part global, randomised, double-blind, multicentre phase III trial of patients with primary advanced or recurrent endometrial cancer. Part 1 is evaluating dostarlimab plus carboplatin-paclitaxel followed by dostarlimab versus carboplatin-paclitaxel plus placebo followed by placebo. Part 2 is evaluating dostarlimab plus carboplatin-paclitaxel followed by dostarlimab plus niraparib versus placebo plus carboplatin-paclitaxel followed by placebo.

The dual-primary endpoints in Part 1 are investigator-assessed PFS based on the Response Evaluation Criteria in Solid Tumours v1.1 and OS. The statistical analysis plan included pre-specified analyses of PFS in the dMMR/MSI-H and overall populations and OS in the overall population. Pre-specified exploratory analyses of PFS and OS in the mismatch repair proficient (MMRp)/microsatellite stable (MSS) population and OS in the dMMR/MSI-H populations were also performed. RUBY Part 1 included a broad population, including histologies often excluded from clinical trials and had approximately 10% of patients with carcinosarcoma and 20% with serous carcinoma. In Part 2, the primary endpoint is investigator-assessed PFS. Secondary endpoints in Part 1 and Part 2 include PFS per blinded independent central review, overall response rate, duration of response, disease control rate, patient-reported outcomes, and safety and tolerability.

RUBY is part of an international collaboration between the European Network of Gynaecological Oncological Trial groups (ENGOT), a research network of the European Society of Gynaecological Oncology (ESGO) that consists of 22 trial groups from 31 European countries that perform cooperative clinical trials, and the GOG Foundation, a non-profit organisation dedicated to transforming the standard of care in gynaecologic oncology.

About Jemperli (dostarlimab)
Jemperli is a programmed death receptor-1 (PD-1)-blocking antibody that binds to the PD-1 receptor and blocks its interaction with the PD-1 ligands PD-L1 and PD-L2.[7]

In the US, Jemperli is indicated in combination with carboplatin and paclitaxel, followed by Jemperli as a single agent for the treatment of adult patients with primary advanced or recurrent endometrial cancer that is mismatch repair deficient (dMMR), as determined by an FDA-approved test, or microsatellite instability-high (MSI-H), and as a single agent for adult patients with mismatch repair-deficient (dMMR) recurrent or advanced endometrial cancer, as determined by a US FDA-approved test, that has progressed on or following a prior platinum-containing regimen in any setting and are not candidates for curative surgery or radiation. The sBLA supporting the new indication in combination with carboplatin and paclitaxel received Breakthrough Therapy designation from the FDA. Jemperli is also indicated in the US for patients with dMMR recurrent or advanced solid tumours, as determined by a US FDA-approved test, that have progressed on or following prior treatment and who have no satisfactory alternative treatment options. The latter indication is approved in the US under accelerated approval based on tumour response rate and durability of response. Continued approval for this indication in solid tumours may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).
Jemperli was discovered by AnaptysBio, Inc. and licensed to TESARO, Inc., under a collaboration and exclusive license agreement signed in March 2014. Under this agreement, GSK is responsible for the ongoing research, development, commercialisation, and manufacturing of Jemperli, as well as cobolimab (GSK4069889), a TIM-3 antagonist.

Important Information for Jemperli in the EU

**Indication**

Jemperli is indicated:
- in combination with carboplatin-paclitaxel, for the treatment of adult patients with mismatch repair deficient (dMMR)/microsatellite instability-high (MSI-H) primary advanced or recurrent endometrial cancer and who are candidates for systemic therapy;
- as monotherapy for treating adult patients with mismatch repair deficient (dMMR)/microsatellite instability-high (MSI-H) recurrent or advanced endometrial cancer that has progressed on or following prior treatment with a platinum-containing regimen.

Refer to the [Jemperli EMA Reference Information](#) for a full list of adverse events and the complete important safety information in the EU.

**GSK in oncology**

GSK is committed to maximising patient survival through transformational medicines, with a current focus on breakthroughs in immuno-oncology and tumour-cell targeting therapies, and development in haematologic malignancies, gynaecologic cancers and other solid tumours.

**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.

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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 the company’s Annual Report on Form 20-F for 2022, and Q3 Results for 2023.
Press release
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References

4 Kantar Health, Cust Study (2018).