

GSK showcases progress from the DREAMM clinical trial programme in multiple myeloma at the 2021 ASH Annual Meeting

 PUBLISHED NOV 18, 2021
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For media and Investors only

Data demonstrate potential of Blenrep (belantamab mafodotin-blmf) in combination with standard of care therapies in patients with newly diagnosed and relapsed/refractory multiple myeloma

GlaxoSmithKline (GSK) plc today announced 11 abstracts on Blenrep (belantamab mafodotin-blmf) will be presented at the upcoming American Society of Hematology (ASH) Annual Meeting and Exposition, to be hosted in Atlanta, Georgia, US and virtually from 11-14 December 2021. Presentations include updates from the DREAMM (DRiving Excellence in Approaches to Multiple Myeloma) clinical trial programme and two collaborative studies that will demonstrate the potential of belantamab mafodotin, a first-in-class anti-BCMA (B-cell maturation antigen) therapy, in multiple myeloma.

Key presentations at ASH include results from trials of belantamab mafodotin in combination with standard therapies in patients with newly diagnosed and relapsed/refractory multiple myeloma, including:

- DREAMM-9 trial (poster #2738) highlighting outcomes of a quadruplet combination treatment regimen of belantamab mafodotin with bortezomib, lenalidomide and dexamethasone in transplant-ineligible patients with newly diagnosed multiple myeloma.
- BelaRd (poster #2736), a trial being led by the Hellenic Society of Hematology in collaboration with GSK, evaluating belantamab mafodotin in combination with lenalidomide and dexamethasone in patients with transplant-ineligible newly diagnosed multiple myeloma.
- ALGONQUIN (poster #1653), a trial being led by the Canadian

Myeloma Research Group in collaboration with GSK, evaluating the combination of belantamab mafodotin with pomalidomide and dexamethasone (PomDex) in relapsed/refractory patients who were previously treated with two or more prior lines of treatment that must have included lenalidomide and a proteasome inhibitor. Updated results being presented at ASH will demonstrate the efficacy and safety of belantamab mafodotin plus PomDex and inform dosing for the part two expansion phase of the trial.

As part of GSK's ongoing commitment to the multiple myeloma community, several real-world studies assessing unmet needs and use of belantamab mafodotin will also be presented.

Blenrep is an anti-BCMA (B-cell maturation antigen) treatment that received accelerated and conditional approvals in the US and EU, respectively, for adult patients with relapsed/refractory multiple myeloma who have received at least four prior therapies, including an anti-CD38 antibody, a proteasome inhibitor, and an immunomodulatory agent.

Full list of belantamab mafodotin DREAMM trials and analyses

| Abstract Name | Presenter | Presentation Details |

| DREAMM-9: Phase I Study of Belantamab Mafodotin Plus Standard of Care in Patients with Transplant-Ineligible Newly Diagnosed Multiple Myeloma| S. Usmani | Poster #2738 |

| Exploring Alternative Dosing Regimens of Single-Agent Belantamab Mafodotin on Safety and Efficacy in Patients with Relapsed or Refractory Multiple Myeloma: DREAMM-14| M. Hultcrantz | Poster #1645 |

| Can Patient-Reported Ocular Symptoms Guide Dose Modifications in Patients with Relapsed/Refractory Multiple Myeloma Receiving Belantamab Mafodotin?| R. Popat | Poster #2746 |

| DREAMM-5 Study: Investigating the Synergetic Effects of Belantamab Mafodotin plus Inducible T cell Co-Stimulator Agonist (ICOS) Combination Therapy in Patients with Relapsed/Refractory Multiple Myeloma| N. Callander | Oral #897 |

Belantamab mafodotin GSK supported collaborative studies

| Abstract Name | Presenter | Presentation Details |

| Part 1 Results of a Dose-Finding Study of Belantamab Mafodotin in Combination with Pomalidomide and Dexamethasone for the Treatment of Relapsed/Refractory Multiple Myeloma (RRMM)| S. Trudel | Poster #1653 |

| A Phase 1/2, Dose and Schedule Evaluation Study to Investigate the Safety and Clinical Activity of Belantamab Mafodotin Administered in Combination with Lenalidomide and Dexamethasone in Transplant-Ineligible Patients with Newly Diagnosed Multiple Myeloma| E. Terpos | Poster #2736 |

Multiple myeloma real-world assessments

| Abstract Name | Presenter | Presentation Details |

| A Retrospective Database Analysis of Treatment Pathways in US Medicare Patients with Multiple Myeloma and Prior Exposure to Daratumumab, an Immunomodulatory Agent, and a Proteasome Inhibitor| N. Boytsov | Poster #4019 |

| Current Clinical Practice and Decision-Making in Multiple Myeloma Treatment in the United States of America: A Real-World Survey| N. Boytsov | Poster #3001 |

| Treatment Patterns and Outcomes of Patients with Double-Class Refractory or Triple-Class Refractory Multiple Myeloma: A Retrospective US Electronic Health Record Database Study| F. Wang | Poster #2705 |

| A Retrospective Database Analysis of Treatment Pathways in US Medicare Patients with Multiple Myeloma Following Sequential Treatment with Lenalidomide and a Proteasome Inhibitor| N. Boytsov | ePublication |

| Real-World Assessment of Prior Treatment Patterns in Patients Receiving Belantamab Mafodotin Using A Longitudinal Pharmacy and Medical Open-Source Claims Database| N. Boytsov | ePublication |

| Abstract Name | Presenter | Presentation Details |

| Safety and Efficacy of Letetresgene Autoleucel (lete-cel;

GSK3377794) Alone or in Combination with Pembrolizumab in Relapsed and Refractory Multiple Myeloma| T. Nishihori | Poster #3865 |

Multiple myeloma is the second most common blood cancer in the US and is generally considered treatable, but not curable. , In the US, more than 32,000 people are estimated to be diagnosed with multiple myeloma this year and nearly 13,000 people will die from the disease. Research into new therapies is needed as multiple myeloma commonly becomes refractory to available treatments.

About B-cell maturation antigen (BCMA)

The normal function of BCMA is to promote plasma cell survival by transduction of signals from two known ligands, BAFF (B-cell activating factor) and APRIL (a proliferation-inducing ligand). This pathway has been shown to be important for myeloma cell growth and survival. BCMA expression is limited to B cells at later stages of development. BCMA is expressed at varying levels in myeloma patients and BCMA membrane expression is universally detected in myeloma cell lines.

Blenrep is an antibody drug conjugate comprising a humanised BCMA monoclonal antibody conjugated to the cytotoxic agent auristatin F via non-cleavable linker. The drug linker technology is licensed from Seagen; monoclonal antibody is produced using POTELLIGENT Technology licensed from BioWa Inc. a member of the Kyowa Kirin Group.

Blenrep is indicated for the treatment of adults with relapsed or refractory multiple myeloma who have received at least four prior therapies, including an anti-CD38 monoclonal antibody, a proteasome inhibitor, and an immunomodulatory agent.

This indication is approved under accelerated approval based on response rate. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).

IMPORTANT US SAFETY INFORMATION

| WARNING: OCULAR Toxicity

BLNREP caused changes in the corneal epithelium resulting in changes in vision, including severe vision loss and corneal ulcer, and symptoms such as blurred vision and dry eyes.

Conduct ophthalmic exams at baseline, prior to each dose, and promptly for worsening symptoms. Withhold BLNREP until improvement and resume, or permanently discontinue, based on severity.

Because of the risk of ocular toxicity, BLNREP is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the BLNREP REMS. |

Ocular Toxicity: Ocular adverse reactions occurred in 77% of the 218 patients in the pooled safety population. Ocular adverse reactions included keratopathy (76%), changes in visual acuity (55%), blurred vision (27%), and dry eye (19%). Among patients with keratopathy (n = 165), 49% had ocular symptoms, 65% had clinically relevant visual acuity changes (decline of 2 or more lines on Snellen Visual Acuity in any eye), and 34% had both ocular symptoms and visual acuity changes.

Keratopathy: Keratopathy was reported as Grade 1 in 7% of patients, Grade 2 in 22%, Grade 3 in 45%, and Grade 4 in 0.5% per the KVA scale. Cases of corneal ulcer (ulcerative and infective keratitis) have been reported. Most keratopathy events developed within the first 2 treatment cycles (cumulative incidence of 65% by Cycle 2). Of the patients with Grade 2 to 4 keratopathy (n = 149), 39% recovered to Grade 1 or lower after median follow-up of 6.2 months. Of the 61% who had ongoing keratopathy, 28% were still on treatment, 9% were in follow-up, and in 24% the follow-up ended due to death, study withdrawal, or lost to follow-up. For patients in whom events resolved, the median time to resolution was 2 months (range: 11 days to 8.3 months).

Visual Acuity Changes: A clinically significant decrease in visual acuity of worse than 20/40 in the better-seeing eye was observed in 19% of the 218 patients and of 20/200 or worse in the better-seeing eye in 1.4%. Of the patients with decreased visual acuity of worse than 20/40, 88% resolved and the median time to resolution was 22 days (range: 7 days to 4.2 months). Of the patients with decreased visual acuity of 20/200 or worse, all resolved and the median duration

was 22 days (range: 15 to 22 days).

Monitoring and Patient Instruction: Conduct ophthalmic examinations (visual acuity and slit lamp) at baseline, prior to each dose, and promptly for worsening symptoms. Perform baseline examinations within 3 weeks prior to the first dose. Perform each follow-up examination at least 1 week after the previous dose and within 2 weeks prior to the next dose. Withhold BLENREP until improvement and resume at same or reduced dose, or consider permanently discontinuing based on severity. Advise patients to use preservative-free lubricant eye drops at least 4 times a day starting with the first infusion and continuing until end of treatment. Avoid use of contact lenses unless directed by an ophthalmologist. Changes in visual acuity may be associated with difficulty for driving and reading. Advise patients to use caution when driving or operating machinery. BLENREP is only available through a restricted program under a REMS.

Thrombocytopenia: Thrombocytopenia occurred in 69% of 218 patients in the pooled safety population, including Grade 2 in 13%, Grade 3 in 10%, and Grade 4 in 17%. The median time to onset of the first thrombocytopenic event was 26.5 days. Thrombocytopenia resulted in dose reduction, dose interruption, or discontinuation in 9%, 2.8%, and 0.5% of patients, respectively. Grade 3 to 4 bleeding events occurred in 6% of patients, including Grade 4 in 1 patient. Fatal adverse reactions included cerebral hemorrhage in 2 patients. Perform complete blood cell counts at baseline and during treatment as clinically indicated. Consider withholding and/or reducing the dose based on severity.

Infusion-Related Reactions: Infusion-related reactions occurred in 18% of 218 patients in the pooled safety population, including Grade 3 in 1.8%. Monitor patients for infusion-related reactions. For Grade 2 or 3 reactions, interrupt the infusion and provide supportive treatment. Once symptoms resolve, resume at a lower infusion rate. Administer premedication for all subsequent infusions. Discontinue BLENREP for life-threatening infusion-related reactions and provide appropriate emergency care.

Embryo-Fetal Toxicity: Based on its mechanism of action, BLENREP can cause fetal harm when administered to a pregnant woman. Advise pregnant women of the potential risk to a fetus. Advise females of

reproductive potential to use effective contraception during treatment with BLENREP and for 4 months after the last dose. Advise males with female partners of reproductive potential to use effective contraception during treatment with BLENREP and for 6 months after the last dose. Pregnancy testing is recommended for females of reproductive potential prior to initiating BLENREP.

The pooled safety population described in Warnings and Precautions reflects exposure to BLENREP at a dosage of 2.5 mg/kg or 3.4 mg/kg (1.4 times the recommended dose) administered intravenously once every 3 weeks in 218 patients in DREAMM-2. Of these patients, 194 received a liquid formulation (not the approved dosage form) rather than the lyophilized powder.

Patients received BLENREP at the recommended dosage of 2.5 mg/kg administered intravenously once every 3 weeks (n = 95). Permanent discontinuation due to an adverse reaction occurred in 8% of patients who received BLENREP; keratopathy (2.1%) was the most frequent adverse reaction resulting in permanent discontinuation. Dosage interruptions due to an adverse reaction occurred in 54% of patients who received BLENREP. Adverse reactions which required a dosage interruption in >3% of patients included keratopathy (47%), blurred vision (5%), dry eye (3.2%), and pneumonia (3.2%). Dose reductions due to an adverse reaction occurred in 29% of patients. Adverse reactions which required a dose reduction in >3% of patients included keratopathy (23%) and thrombocytopenia (5%).

The most common adverse reactions ($\geq 20\%$) were keratopathy (71%), decreased visual acuity (53%), nausea (24%), blurred vision (22%), pyrexia (22%), infusion-related reactions (21%), and fatigue (20%). The most common Grade 3 or 4 ($\geq 5\%$) laboratory abnormalities were lymphocytes decreased (22%), platelets decreased (21%), hemoglobin decreased (18%), neutrophils decreased (9%), creatinine increased (5%), and gamma-glutamyl transferase increased (5%).

Serious adverse reactions occurred in 40% of patients who received BLENREP. Serious adverse reactions in >3% of patients included pneumonia (7%), pyrexia (6%), renal impairment (4.2%), sepsis (4.2%), hypercalcemia (4.2%), and infusion-related reactions (3.2%). Fatal adverse reactions occurred in 3.2% of patients, including sepsis (1%), cardiac arrest (1%), and lung infection (1%).

USE IN SPECIFIC POPULATIONS

Lactation: Because of the potential for serious adverse reactions in the breastfed child, advise women not to breastfeed during treatment with BLENREP and for 3 months after the last dose.

Females and Males of Reproductive Potential: Based on findings in animal studies, BLENREP may impair fertility in females and males.

Geriatric Use: Of the 218 patients who received BLENREP in DREAMM-2, 43% were aged 65 to less than 75 years and 17% were aged 75 years and older. Keratopathy occurred in 80% of patients aged less than 65 years and 73% of patients aged 65 years and older. Among the 95 patients who received BLENREP at the 2.5-mg/kg dose, keratopathy occurred in 67% of patients aged less than 65 years and 73% of patients aged 65 years and older.

Renal or Hepatic Impairment: The recommended dosage has not been established in patients with severe renal impairment (eGFR 15 to 29 mL/min/1.73 m²) or end-stage renal disease (ESRD) with eGFR 1.5 × ULN and any AST).

Please see full Prescribing Information, including BOXED WARNING and Medication Guide for BLENREP [here](#).

GSK is focused on maximising patient survival through transformational medicines. GSK's pipeline is focused on immuno-oncology, cell therapy, tumour cell targeting therapies and synthetic lethality. Our goal is to achieve a sustainable flow of new treatments based on a diversified portfolio of investigational medicines utilising modalities such as small molecules, antibodies, antibody-drug conjugates and cell therapy, either alone or in combination.

GSK is a science-led global healthcare company. For further information please visit www.gsk.com/about-us.

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 in the Company's Annual Report on Form 20-F for 2020, GSK's Q3 Results and any

impacts of the COVID-19 pandemic.

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Press release distributed by Wire Association on behalf of GSK, on Nov 18, 2021. For more information subscribe and [follow](#) us.

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