Background
Belantamab mafodotin (Belumad; GSK2857916) is a first-in-class B-cell maturation antibody (BCMA) targeting, humanized, monoclonal antibody-drug conjugate, with a novel mechanism of action.

Methods
Details of the DREAMM-2 study design (Figure 1) have been previously published. Primary endpoint was ORR in a subgroup of patients with renal impairment from the DREAMM-2 6-month follow-up. Renal function was assessed according to estimated glomerular filtration rate (eGFR), and classified as:
- normal (≥90 mL/min/1.73 m²);
- mildly impaired (60–<90 mL/min/1.73 m²);
- moderately impaired (30–<60 mL/min/1.73 m²);
- severely impaired (<30 mL/min/1.73 m²);

A 12-week phase 1/2 study evaluated belamaf in patients with RRMM. A total of 120 patients were treated with belamaf 3.4 mg/kg (0) on day 1, and 2 mg/kg (BCMA) every 3 weeks. Patients were randomized 2:2:1:1 to receive belamaf 3.4 mg/kg (0) or 2 mg/kg (BCMA) with 25% of the dose as 1 mg/kg (BCMA) for 6 cycles and then belamaf 3.4 mg/kg (0) or 2 mg/kg (BCMA) for 6 cycles. Safety was assessed by adverse events (AEs), which were graded by the investigator according to the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI-CTCAE) version 5.0.

Results
Table 1. Patient Demographics and Baseline Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Standard (n=52)</th>
<th>Belamaf 3.4 mg/kg (0) (n=52)</th>
<th>Belamaf 2 mg/kg (BCMA) (n=52)</th>
<th>Belamaf 2 mg/kg (BCMA) (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORR (n=51)</strong></td>
<td>18 (92)</td>
<td>19 (95)</td>
<td>7 (31)</td>
<td>*Number of patients (%) with AE by preferred term; **All patients were treated with belamaf 3.4 mg/kg (0) on day 1, and 2 mg/kg (BCMA) every 3 weeks. Patients were randomized 2:2:1:1 to receive belamaf 3.4 mg/kg (0) or 2 mg/kg (BCMA) with 25% of the dose as 1 mg/kg (BCMA) for 6 cycles and then belamaf 3.4 mg/kg (0) or 2 mg/kg (BCMA) for 6 cycles. Safety was assessed by adverse events (AEs), which were graded by the investigator according to the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI-CTCAE) version 5.0.</td>
</tr>
</tbody>
</table>

Conclusions
The majority of patients included in this study had mild or moderate renal impairment, representing a common, real-world population in patients with RRMM and poor prognosis.

Efficacy and safety of single-agent belan was similar in patients with renal impairment versus patients with normal renal function.

ORR and DFS were similar to those observed in the overall DREAMM-2 population.

Belan may represent an important new treatment in patients with RRMM and poor prognosis who are not candidates for standard-of-care therapies.

Further studies of belan in patients with renal impairment (particularly those with severe renal impairment) receiving single-agent belan is planned.