### INTRODUCTION

- **STING** is an intracellular nuclease sensor expressed in immune cells, cancers, and in certain tumor cells that acts as an immunomodulator. "Dendritic Cell" may refer to dendritic cell, which is a type of immune cell.

### METHODS

**Eligibility criteria**

- All patients had ≥1 tumor lesion suitable for injection (≥200 μg dose).
- Cycles were 21 days.
- 1426-0001 (NCT04147234) was a Phase I, first-in-human trial evaluating the STING agonist BI 1387446 alone and in combination with ezabenlimab.

**Tumor characteristics**

- Dendritic cell leukemia

**Pharmacodynamics and pharmacokinetics**

- Type 1 interferon secretion
- Tumor-activating and infiltration

**Efficacy**

- IP dose and stability: BI 1387446 alone is stable for 24 hours.
- DLTs were reported in one patient receiving BI 1387446 200 μg monotherapy.
- No patients receiving combination therapy reported DLTs.

**Pharmacodynamic analysis**

- Phytohemagglutinin
- IFN γ

### RESULTS

**Baseline characteristics**

- Median duration of treatment was 1.8 months (range: 0.4–11.8 months) for mono- and combination therapy, respectively.

**Pharmacokinetics**

- Cmax was generally observed within 2 hours of administration.
- For the 13 patients evaluated per itRECIST, there was one partial response with monotherapy and one complete response with combination therapy.

**Pharmacodynamics**

- Increased plasma exposure of IP-10 and IFN γ was observed after BI 1387446 administration.
- These cytokines correlated with clinical efficacy.

### CONCLUSIONS

- BI 1387446 was well tolerated as a monotherapy and in combination with ezabenlimab.
- DLTs were reported in one patient receiving BI 1387446 200 μg monotherapy.
- No patients receiving combination therapy reported DLTs.

**Abbreviations**

- AEs, adverse events; BCG, Bacillus Calmette-Guérin; CR, complete response; CTR, cutaneous T-cell lymphoma; DLBCL, diffuse large B-cell lymphoma; ECOG PS, Eastern Cooperative Oncology Group performance status; ERT, enzyme replacement therapy; GAG, glycosaminoglycan; HCQ, hydroxychloroquine; HLA, human leukocyte antigen; IFN γ, interferon gamma; MRD, minimal residual disease; nCRT, neoadjuvant chemoradiation; OR, overall response; OS, overall survival; PD-1, programmed death ligand 1; PD-L1, programmed death receptor ligand 1; PD-L2, programmed death receptor ligand 2; RECIST, Response Evaluation Criteria in Solid Tumors; SD, stable disease; T1/2, the time required for plasma concentration of a drug to decrease by half.

### REFERENCES