Background Nearly all anti-PD-1 antibodies are of the IgG4 effector functions and are also associated with immune tolerance and escape due to instability of the CH3 domain. Penpulimab is a novel IgG1 anti-PD-1 antibody that has a good stability and reduced Fc-mediated effector function that compromises anti-tumor immune cell function. Penpulimab also showed numerous contacts with N58 glycosylation on the BC loop of PD-1 which may contribute to slower binding off-rate. In this trial, we examined the efficacy and safety of penpulimab in patients (pts) with R/R cHL. Here we report results from up to 30 months follow-up.

Methods AK105-201 (NCT03722147) is a multicenter, single-arm, open-label study of penpulimab in R/R cHL. Adult pts (≥18 years of age) received penpulimab 200 mg once biweekly until progression or unacceptable toxicities. Eligible pts had prior autologous stem cell transplant (ASCT) or at least 2 lines of prior chemotherapy. The primary endpoint was ORR based on the Lugano 2014 classification in the full analysis set (FAS; n=85).

Conclusions Penpulimab was well tolerated, with a good safety profile in long-term use in R/R cHL pts. It demonstrated promising therapeutic activity and continued PFS and OS benefit.