One of the 40 (3%) evaluable patients had a RECIST complete response, 19 (48%) had a partial response (PR), 11 (24%) had stable disease (SD), and 3 (7%) had disease progression (PD). Notably, 1 patient had a PR following treatment with demcizumab when chemotherapy was stopped due to a severe adverse event. The clinical benefit rate was 66.7% (31 of 46 patients) and the overall response rate (ORR) was 46.7% (21 of 46 patients)

**Methods**

This was an open-label, Phase 1b dose-exploration study of demcizumab administered in combination with chemotherapy in patients with stage IV non-small cell lung cancer (NSCLC). Patients were eligible if they had disease progression on previous chemotherapy and had a performance status of 0 to 1. Demcizumab was administered weekly at dose levels of 5, 7, 10, 15, 20, and 30 mg/kg (Q2W or Q3W) for up to 15 cycles, or until disease progression, unacceptable toxicity, or the patient elected to discontinue therapy. Patients were monitored for the development of demcizumab-related adverse events (AEs) and for evidence of disease progression.

**Background**

The Notch pathway plays a key role in the regulation of cellular proliferation, differentiation, and survival. The NOTCH1 ligands Delta-like 4 (DLL4) and Jagged1 (JAG1) are expressed in tumors and are involved in tumor growth, angiogenesis, and immune evasion. DLL4 and JAG1 are also involved in the development of NSCLC. However, the efficacy of DLL4 inhibition in NSCLC has not been fully evaluated.

**Summary**

**Overall Survival Exploratory Biomarker Analyses**

**Survival – Truncated Demcizumab Patients**

**Survival – Continuous Demcizumab Patients**

**Conclusion**

The data from this study suggest that demcizumab, in combination with chemotherapy, has the potential to improve outcomes in patients with NSCLC. Further investigation is needed to confirm these preliminary findings and to explore the mechanisms of action of demcizumab in this setting.