EASI 90 Response Sustained Up to 38 Weeks After Lebrikizumab Withdrawal Despite Negligible Serum Concentrations

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BACKGROUND
- Lebrikizumab is a monoclonal antibody that binds with high affinity and slow dissociation rate to IL-13, thereby blocking the downstream effects of IL-13 with high potency.
- Lebrikizumab has been approved in the European Union, Japan, the UK, and United Arab Emirates, and is under investigation elsewhere, for the treatment of moderate-to-severe AD in adults and adolescents who are candidates for systemic therapy.
- Lebrikizumab monotherapy has demonstrated clinical benefit in patients with moderate-to-severe AD in the randomized, placebo-controlled, Phase 3 ADVOCATE1 (NCT04146363) and ADVOCATE2 (NCT04178967) trials.

OBJECTIVE
- To better understand the relationship between lebrikizumab serum concentration levels and sustained clinical response (EASI 90) after treatment cessation in a subpopulation of lebrikizumab protocol-defined responders who discontinued treatment.

METHODS
- Study Design: Study Design: ADVOCATE1 and ADVOCATE2

RESULTS
- At Week 52, 12/16 patients had serum concentrations below the LLOQ for the clinical assay.
- Between Week 14 and Week 32, approximately 5 half-lives had elapsed since patients randomized to the study and received their last dose of lebrikizumab (1 half-life=24.5 days, or 3.5 weeks), extending to approximately 11 half-lives by Week 52. A washout period of 5 half-lives is considered typical for biologics.

CONCLUSIONS
- In this analysis from ADVOCATE1 and ADVOCATE2, a subset of lebrikizumab responders (17/60) maintained a stable EASI 90 response up to 38 weeks after lebrikizumab withdrawal, despite negligible remaining lebrikizumab serum concentrations.
- This is the first analysis in patients with moderate-to-severe AD that provides additional insights into lebrikizumab therapy-free remission.
- Further studies are needed to identify and characterize this subpopulation of AD patients and lebrikizumab’s potential disease-modifying properties.