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Title of Presentation	Efficacy and Safety of Bezuclastinib in Patients With Advanced Systemic Mastocytosis: Results From the Apex Study
abstract-hint	
Abstract of Presentation	Background: Advanced systemic mastocytosis (AdvSM) is associated with significant burden. Bezuclastinib is an oral tyrosine kinase inhibitor (TKI) with high selectivity against KIT p.D816V, the driving mutation in most SM cases. The Apex study evaluated bezuclastinib in AdvSM. Methods: Apex is an open-label, registrational study evaluating bezuclastinib in AdvSM. Primary endpoint was overall response rate (ORR) per mIWG-MRT-ECNM criteria. Key secondary endpoints were ORR per pure pathologic response (PPR) criteria and safety. Results: 81 patients (intention-to-treat population [ITTp]) received bezuclastinib 150mg daily. Sixty-eight were evaluable per mIWG-MRT-ECNM. In ITTp, median age (range), 70 (43-87) years; 28%

	female; 35% received prior KIT-targeted TKI. Median (range) baseline bone marrow mast cell (MC) burden, serum tryptase, and blood KIT p.D816V variant allele frequency (VAF) were 35% (3-95), 191 ng/mL (23.3-1987), and 6.7% (0.0-91.4), respectively. As of 9/19/2025, ORR was 57% in evaluable patients per mIWG-MRT-ECNM and 80% in ITTp per PPR. At datacutoff, median time to response: 2.0 months; response duration was immature; median treatment duration: 9.4 months. Bezuclastinib reduced MC burden, tryptase, and KIT p.D816V VAF by >50% in 89%, 89%, and 91% of patients, respectively. Treatment-related adverse events (TRAEs) occurred in 93% of patients. Most frequent TRAEs (total/grade≥3) were hair color change (31%/0%), neutropenia (30%/24%), altered taste (28%/0%), thrombocytopenia (25%/14%), and ALT/AST increased (21%/1%). Dose reductions due to TRAEs occurred in 14.8% of patients and were mainly due to hematologic events. Conclusions: In Apex, bezuclastinib demonstrated high response rates, led to deep reductions in objective MC burden markers, and was well-tolerated.