Title: DEVELOPING A POINT-OF-CARE SCREENING AND ALGORITHM TOOL TO IDENTIFY AND TREAT SEVERE UNCONTROLLED ASTHMA (SUA)

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Background: SUA is under-identified and sub-optimally treated, with a disproportionately high burden accounting for ~40% of asthma-related costs. A need exists to optimize SUA recognition, management, and referrals by PCPs to qualified specialists.

Study Objective: To describe development of a best-practice tool for SUA, based on insights from an advisor network of scientific/clinical experts and HCPs, as part of the AstraZeneca US PRECISION initiative.

Methods: Focus groups of national experts, local specialists, PCPs, and practice members were conducted to: understand clinical criteria used to detect, treat, and track SUA; identify/create materials to address education gaps/practice barriers; determine efficient ways to implement developed resources. Focus groups were in geographic regions of SUA unmet need, based on public morbidity/mortality indices and patterns of asthma medication use in collaboration with a CRO.

Results: 9 focus groups in 6 regions of high disease burden included 64 HCPs. Major patient/provider challenges for SUA included: diagnosis, assessment, treatment; morbidity monitoring; unfamiliarity/confusion with guidelines and biomarkers; poor clinic infrastructure to engage patients; patient misunderstanding of regimens and inhalers; nonadherence. The primary need identified was a tool to seamlessly fit into clinic workflow, capturing symptoms, exacerbations, medication use, lung function, and directed work-up incorporating biomarkers and care plans. Based on advisor insights, published guidelines, and expert recommendations, a SUA point-of-care screening/treatment algorithm was developed integrating: symptoms, activity limitation, sleep interference, oral corticosteroid use, and exacerbations; level of medication; lung function. The tool will be accessible within an adaptive, interactive website incorporating treatment guidelines, tools for precision medicine, referral recommendations, and education materials.

Conclusion: The development of a SUA point-of-care screening/treatment algorithm as part of the AstraZeneca US PRECISION program is an initiative to advance precision medicine. The tool unites recommendations of national experts and needs of local HCPs to provide optimal care in an age of personalized medicine.

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