00399 Risk Factors, Treatment, and Outcomes of Drug Reaction With Eosinophilia and Systemic Symptoms (DRESS)

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Aims: Drug reaction with eosinophilia and systemic symptoms (DRESS) is a life-threatening and severe adverse drug reaction. Risk factors associated with disease severity, impact of treatment with outcomes, and clinical predisposing factors for developing such reactions have not been well studied. Our primary aim was to characterise DRESS patients, assess risk factors, and evaluate treatment outcomes. Our secondary aim was to assess potential clinical factors associated with developing allopurinol-induced DRESS.

Methodology: Patients admitted to the Department of Dermatology, Singapore General Hospital, from January 2009 to December 2017 were retrospectively reviewed. Cases fulfilling probable or definite case criteria based on the European Registry of Severe Cutaneous Adverse Reactions (RegiSCAR) were included. Demographic and clinical data, treatment choices, and outcomes were retrieved from medical records and analysed

Result: Of the 100 patients, there were 41 (41%) men and 59 (59%) women, with age ranging from 17–86 (mean (SD): 57 (18)) years. Nineteen (19%) patients required ICU admission and/or died inpatient. Heart and lung involvement were significantly associated with mortality and ICU stay. Among both treatment groups, there were no difference in disease outcomes. Female gender and high allopurinol daily dosages (>200mg) were significantly associated with higher risk of allopurinol-induced DRESS.

Conclusion: Our study has shown that heart and lung involvement constitute severe DRESS, for which prognosis is poor. Vigilance to look out for those involvement may facilitate earlier detection and intervention. Physicians should prescribe allopurinol for the right indications, initiate at low doses, and titrate up incrementally. Further studies are required to concretize DRESS treatment modalities.