HORMONE DEPENDENCE AND CANCER IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Observational studies have previously found associations between glucocorticoid therapy and irreversible organ damage in SLE. As glucocorticoid use and lupus disease activity are highly concordant, disease activity potentially confounds analysis of the contribution of glucocorticoid use to organ damage. This could be obviated through the study of glucocorticoids on SLE damage accrued in patients with no clinical or serological lupus disease activity (SLEDAI-2K=0).

Methods: 1077 SLE patients were recruited from 13 centres in 8 countries and followed longitudinally between 2013-2016. As per a standardised protocol, disease activity (SLEDAI-2K) and treatment details were recorded at each visit, and organ damage measured annually (SDI). Cox-proportional hazards analyses were used to examine time-dependent associations of glucocorticoid use with damage accrual.

Results: 196/1707 (11.4%) patients had no clinical or serological disease for the entire study period (time adjusted mean (TAM) SLEDAI2K=0). Of these 96% were female; median (IQR) age at diagnosis 36.5yrs (26.0-46.5) years, median (IQR) baseline SDI 0 (0-1). 68% were exposed to prednisolone, with a median (IQR) TAM-prednisolone dose 2mg/day (0-5). Despite SLEDAI2K=0 throughout, irreversible damage accrual occurred in 13% of the cohort, with 26 damage events captured over median (range) 1.9 years (1.0-2.2) followup. Prednisolone exposure at dosing in the upper two quartiles was associated with damage accrual (HR 1.11 (1.02, 1.22), p<0.02).

Conclusion: Irreversible damage accrual occurs in patients with no clinical or serological disease activity as captured by SLEDAI-2K, and glucocorticoid use contributes to the risk of organ damage in these patients.

Disclosure of Interests: None declared.


EFFECT OF GLUCOCORTICOIDS ON DAMAGE ACCRUAL IN SLE PATIENTS WITH NO CLINICAL OR SEROLOGICAL DISEASE ACTIVITY

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