

## THE VIENNA SLE DATABASE: FIRST RESULTS

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**Background.** Systemic lupus erythematosus is a heterogenous systemic autoimmune disease which might affect multiple organ systems. Despite new treatment approaches many patients do not achieve clinical remission emphasizing the need to understand the heterogeneity and the pathological mechanisms of the disease for identification of biomarkers.

**Methods.** The structure of the database is based on existing SLE databases, which covers three main areas: organ manifestations are assessed and allow to classify SLE patients based on the EULAR/ACR 2019 or the ACR 1997 criteria. Secondly, disease activity is assessed at each visit, which is represented by several disease activity scores in combination with laboratory results. Lastly, damage due to either the disease or treatment is evaluated using a validated damage score. Baseline characteristics, such as age, sex, occupation, medical and family history are collected at baseline visit. The database has a simple input form with prespecified input field types. Trained study personnel enter the medical data from the hospitals' patient chart. The output of the database can be transformed in an Excel spreadsheet and subsequently analyzed with statistical software, such as the R Project for Statistical Computing.

**Results.** So far 210 patients and 4410 patients' visits have been entered into the database. Ongoing projects aim to understand drug survival in SLE patients and predications of organs manifestations.

**Conclusion.** For better insight into the disease course and new treatment target identification, biobanked material needs to be linked to clinical datasets to guarantee translational research. Heterogeneity of the disease demands high patient numbers for statistical analysis. Therefore, integration of national and international databases is required.

**Keywords:** SLE, Vienna, database, results

**Conflict of interest statement:** The authors declare no conflict of interest.