Incorporation of Banff classification in Lupus nephritis histopathology assessment emphasizes the importance of tubulointerstitial changes

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INTRODUCTION

Lupus nephritis (LN) occurs in about 30-60% of patients with SLE. LN is currently classified according to the ISN/RPS classification but is centered on glomerular changes. The Banff classification has been established which also incorporates tubulointerstitial findings. With the present study, we aim to describe histopathologic changes according to the Banff classification and their association to creatinine and proteinuria.

METHODS

- Single-center cohort study
- Primary outcomes:
  Creatinine at 12 months
  Proteinuria at 12 months
- 1 pathologist and 1 resident re-analyzed LN biopsies

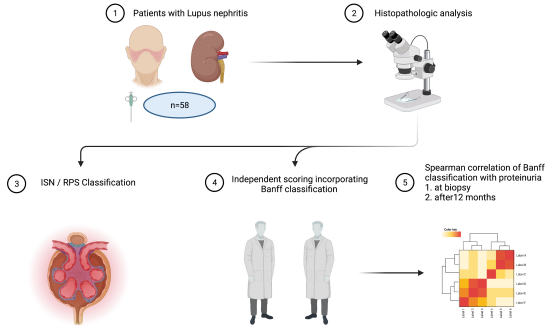

Figure was created with BioRender.com

CONCLUSIONS

- ISN/RPS classification is centered on glomerular changes
- Total inflammation on Banff is associated with higher creatinine at 12 months
- Interstitial fibrosis is associated with higher proteinuria at 12 months
- Application of Banff criteria potentially adds prognostic information in Lupus nephritis
- Data need to be corroborated in additional prospective cohorts

RESULTS

1

♀ 48 (83%) ♂ 10 (17%)

Age 38.46 (14-78)
Disease duration 70.51 (1-204) mths

Remission induction
Prednisolone 47/58 (81.03%)
CYC 10/58 (17.24%)
MMF 23/58 (39.66%)

Maintenance therapy
Prednisolone 44/58 (75.86%)
HCQ 26/58 (44.83%)
AZA 8/58 (13.79%)
MMF 26/58 (44.83%)

Figure 1. Baseline data. **data expressed as median (range) or n/%*

2

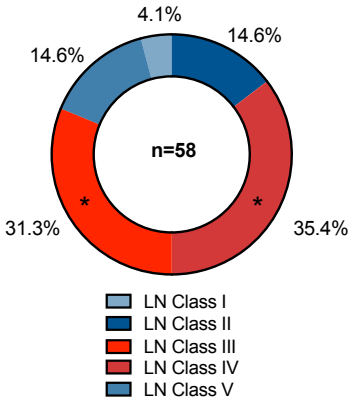

Figure 2. Distrubution of LN classes. **n=4 additional class V*

3

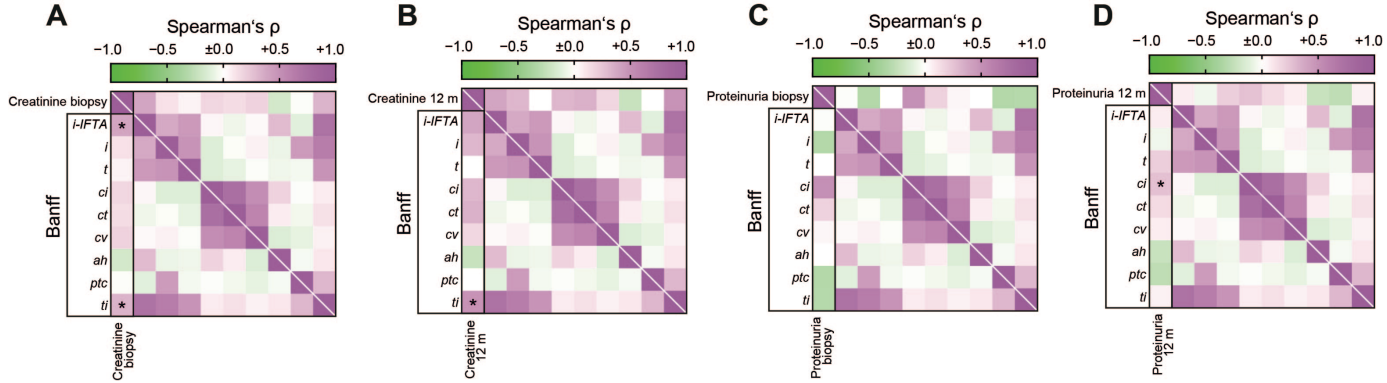

Figure 3. Correlation of Banff criteria *with creatinine at biopsy (**A**), 12 months (**B**), and proteinuria at biopsy (**C**), and 12 months (**D**).*

References: Roufosse C et al. Transplantation 2018; Gomes MF et al. J Nephr 2021. **Contact information:** Dr Peter Korsten I peter.korsten@med.uni-goettingen.de