

The MEST Score in IgA Nephropathy: Implications for Clinical Management

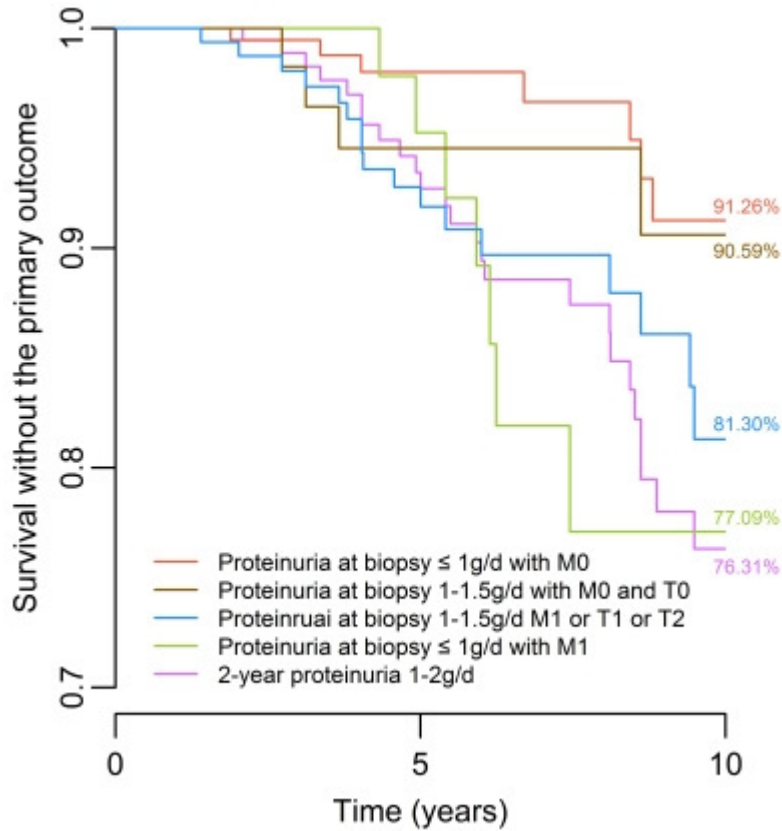
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BACKGROUND: The MEST score from the Oxford classification of IgA nephropathy (IgAN) is independently associated with renal outcome. Current risk stratification in IgAN requires clinical data over 2 years of follow-up. Using modern prediction tools, we examined whether combining MEST with cross-sectional clinical data at biopsy provides earlier risk prediction in IgAN than our current best methods that use 2 years of follow-up data.

METHODS: We used a cohort of 901 adults with IgAN from the Oxford derivation, North American validation and VALIGA studies to analyze the risk of a 50% decrease in eGFR or ESRD using Cox regression models. Median follow-up was 5.6yrs. We considered the following covariates: clinical data at biopsy (eGFR, proteinuria, MAP) with or without MEST, and 2-year clinical data alone (2-year average of proteinuria/MAP, eGFR at biopsy). Prediction was assessed using the AIC, R², NRI, IDI, C-statistic and calibration curves.

RESULTS: There was significant improvement in prediction by adding MEST to clinical data at biopsy, and the combination predicted the outcome as well as using 2-year clinical data alone. Results did not change in subgroups treated or not with RAS blockade or immunosuppression. The figure provides examples of how using MEST with clinical data at biopsy can identify high or low risk groups compared to using 2-year clinical data alone.



CONCLUSIONS: These results demonstrate that combining MEST with cross-sectional clinical data at biopsy provides earlier risk prediction in IgAN than our current best methods, and should allow modification of treatment based on risk assessment using data readily available at the time of biopsy.