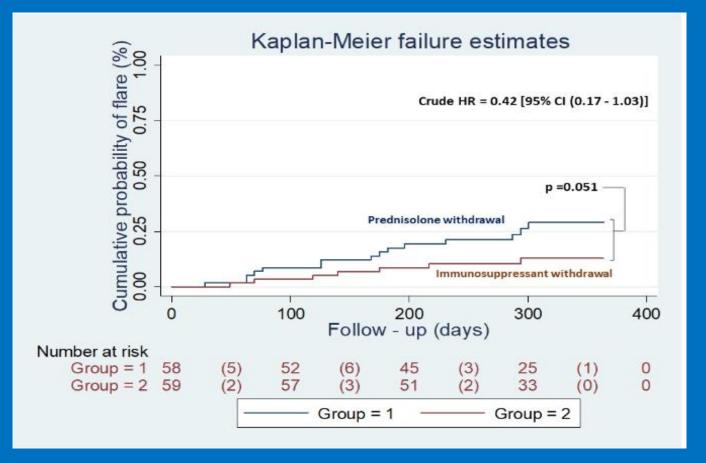
#### Risk of Flares with medication withdrawal in SLE patients in longterm remission: Steroid withdrawal is non-inferior to Immunosuppressant withdrawal



Gopal et al Abstract 0997 ACR Convergence 2022

# Tapering of Medications for SLE was associated with flares in 12.8% of next-visits

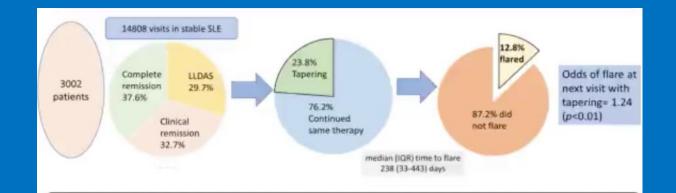
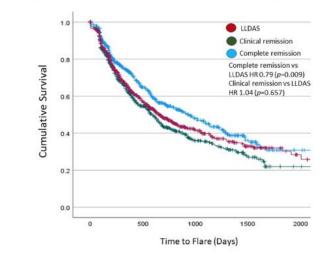


Table 1. Multivariable Generalized Estimating Equation Model for Flares at the Next Visit After Achieving LLDAS, Clinical Remission or Complete Remission

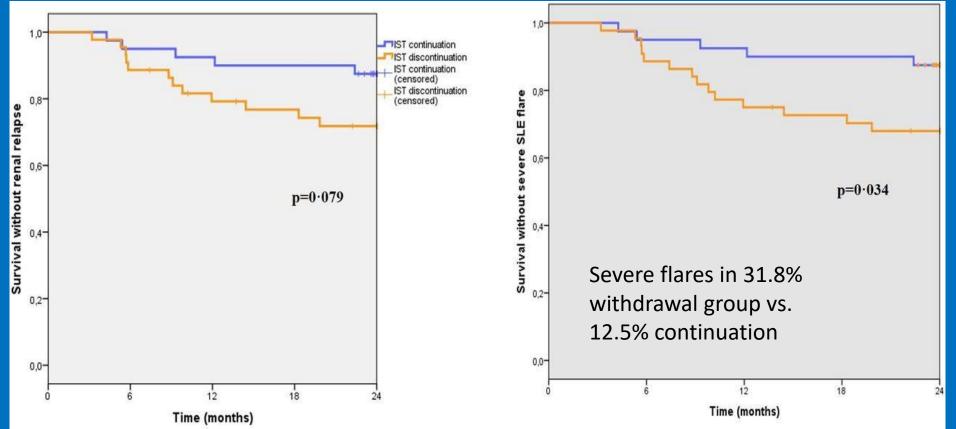
		Odds Ratio (95% CI)	Standard coefficient	p
Tapering of corticosteroids or immunosuppressive	3277 (24.9)	1.23 (1.10-1.39) <sup>β</sup>	0.21	< 0.001
therapy* at this visit, n (%)				
Target SLE state attained at this visit, n (%)				
LLDAS#	3898 (29.7)	1.17 (1.00-1.37) <sup>a</sup>	0.16	0.042
Clinical Remission <sup>*</sup>	4303 (32.7)	1.11 (0.96-1.29) <sup>a</sup>	0.11	0.167
Anti-malarial use currently, n (%)	8316 (63.3)	0.86 (0.75-0.99)**	-0.15	0.033
Cumulative duration of LLDAS or remission before	301.5 (398.5)	0.99 (0.99-1.00)	<-0.01	< 0.001
taper [days], mean (SD)				
Age at visit [years], mean (SD)	44.8 (13.5)	1.00 (0.99-1.00)	<-0.01	0.249
Disease duration at visit [years], mean (SD)	12.1 (8.5)	1.01 (1.01-1.02)	0.01	< 0.001
Adjusted mean SLEDAI, mean (SD)	2.5 (2.0)	1.12 (1.09-1.16)	0.11	< 0.001
Duration from last visit [days], mean (SD)	130.6 (86.1)	1.00 (1.00-1.00)	<-0.01	< 0.001

Figure 1. Time to Flare for Tapering Initiated in LLDAS, Clinical Remission and Complete Remission



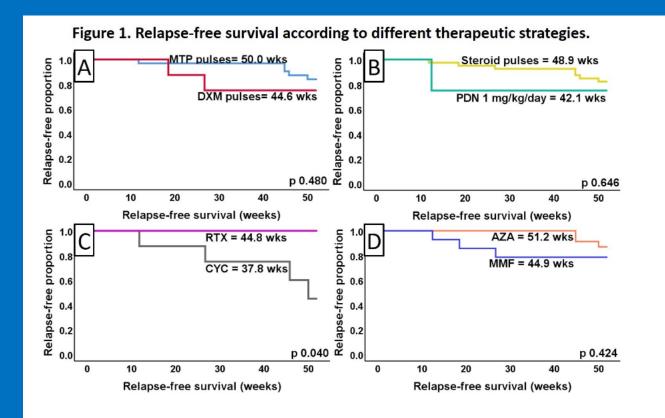
#### Cho et al. Abstract 0996 ACR Convergence

# Withdrawal of Lupus Nephritis Therapy after 2-3 years DID NOT MEET non-inferiority (the WIN-LUPUS trial



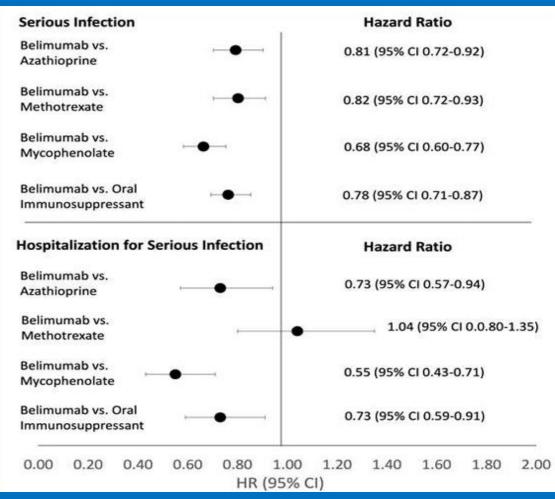


### Treatment strategies for Severe Thrombocytopenia: Observatonal Cohort study



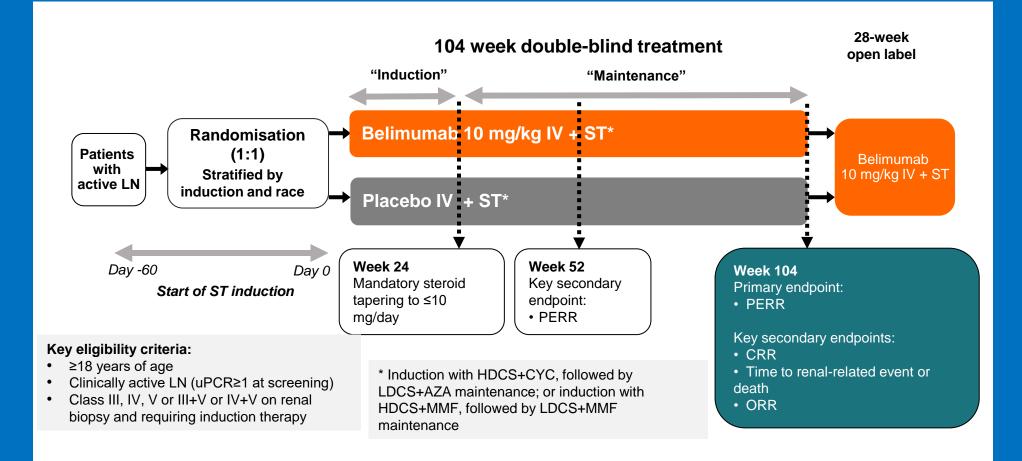
Cime'-Ake' et al abstract 0368 ACR Convergence 2022

### Comparative Risk of Infection with Belimumab vs. Traditional DMARDs



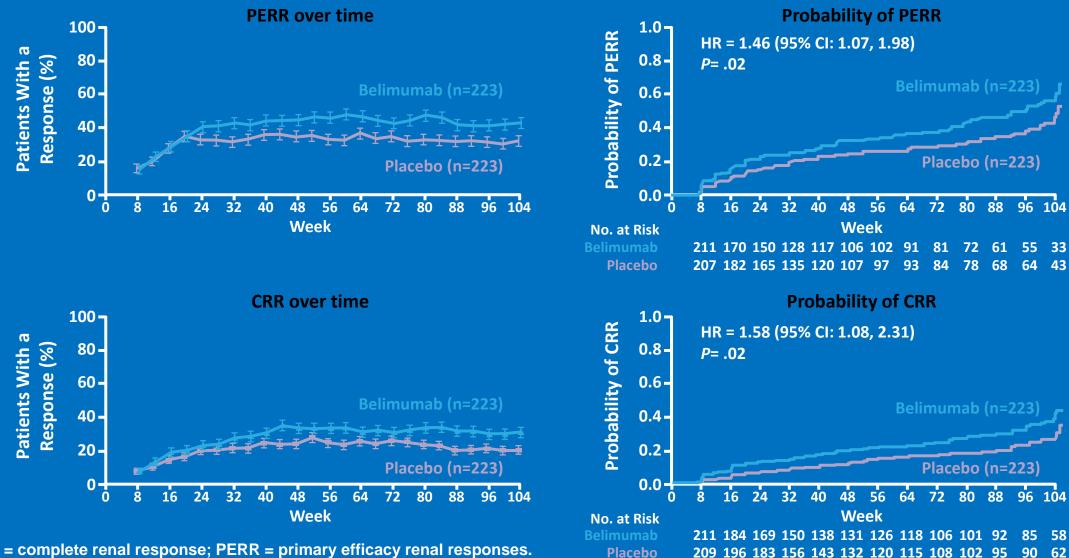
Materne et al. abstract ACR Convergence 2022

# **Belimumab for Nephritis**



#### Furie, N Engl J Med 383: 1117-1120)

## **Belimumab: Now FDA Approved to Treat SLE Nephritis**



CRR = complete renal response; PERR = primary efficacy renal responses.

Furie R, et al. N Engl J Med. 2020;383:1117-1128.

# Emerging Treatment Strategies for LN: Rituximab + Belimumab

#### **BLISS-BELIEVE**<sup>1</sup>

- SC belimumab + rituximab
- Belimumab elevates BlyS, which mobilizes B memory cells; these are then killed by rituximab

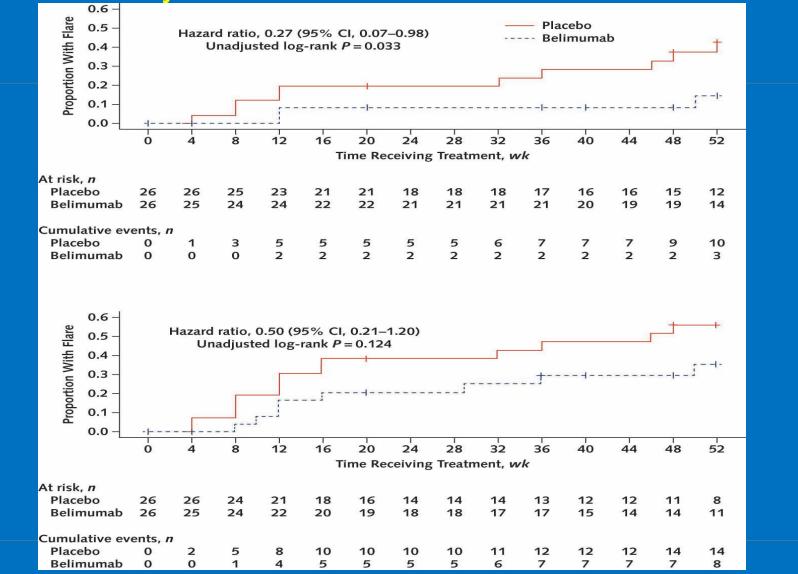
#### SYMBIOSE<sup>2</sup>

• Belimumab + rituximab reduces neutrophil extracellular traps (NET) formation

#### **CALIBRATE**<sup>3</sup>

- Belimumab + CYC + rituximab for LN in 43 patients. Did not meet primary endpoint
- 1. Teng YKO, et al. BMJ Open 2019;9:e025687
- 2. Kraaj T, et al. J Autoimmun. 2018;91:45-54.
- 3. Dall'Era M, et al. 2018 ACR/ARHP Annual Meeting, October 22, 2019. Abstract 4M081.

#### Effectiveness of Belimumab After Rituximab in Systemic Lupus Erythematosus: BEAT-LUPUS

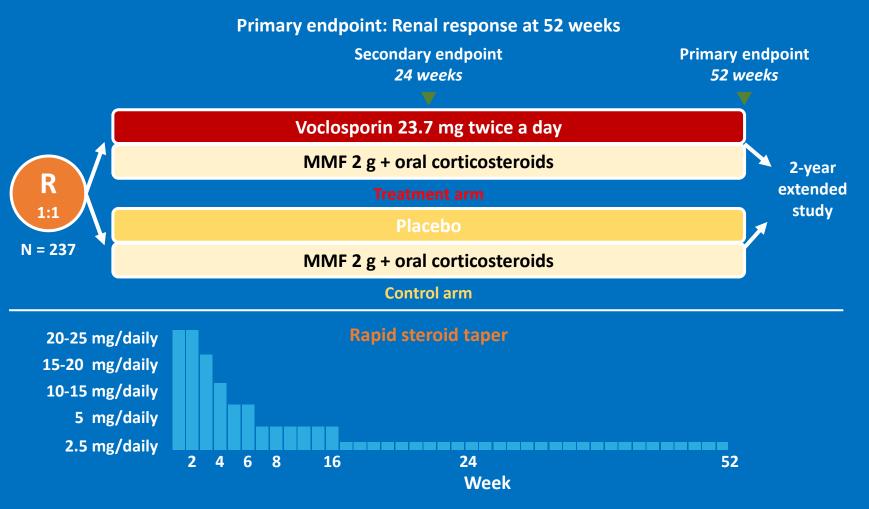


Shipa et al. Ann Intern Med. 2021; 174(12):1647-1657. doi:10.7326/M21-2078

# **Voclosporin: AURORA Phase 3 Study Design**

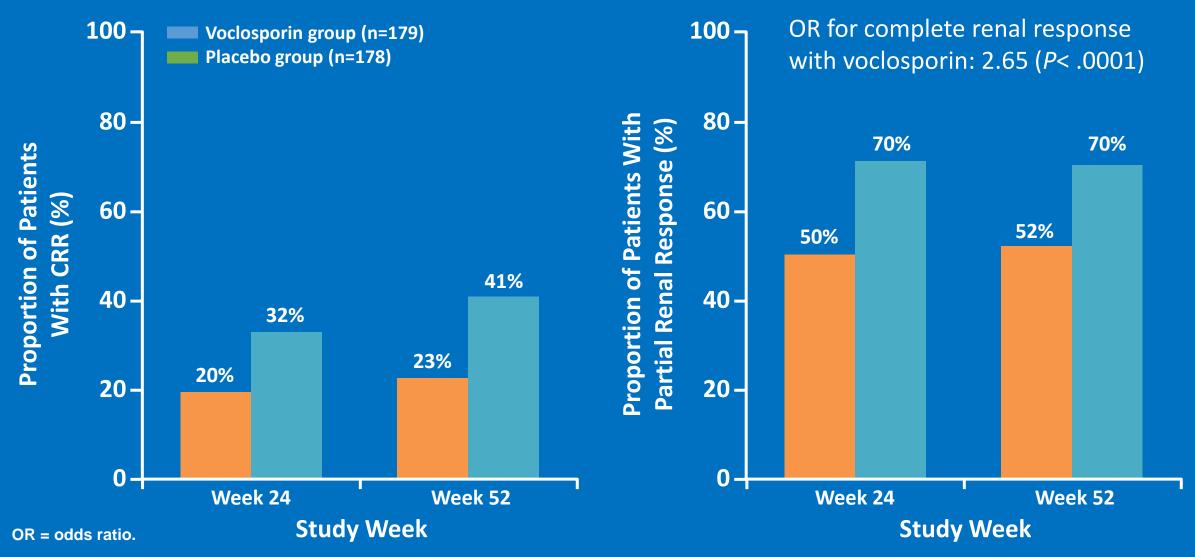
- Voclosporin: 3rd generation calcineurin inhibitor
- Phase 2 study in LN demonstrated benefit
- Phase 3 study ongoing, 1:1 randomization (voclosporin versus placebo) on background mycophenolate

#### AURORA phase 3 study design



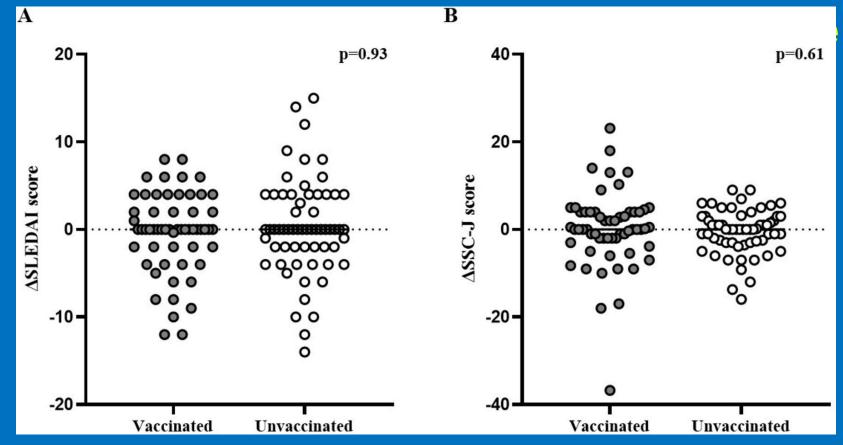
Clinicaltrials.gov. Accessed 10.7.2020. (https://www.clinicaltrials.gov/ct2/show/record/NCT03021499). Arriens C, et al. EULAR 2020. Abstract OP0277.

# **Voclosporin: Now FDA Approved for SLE Nephritis**



Rovin BH, et al. *Lancet.* 2021;397:2070-2080.

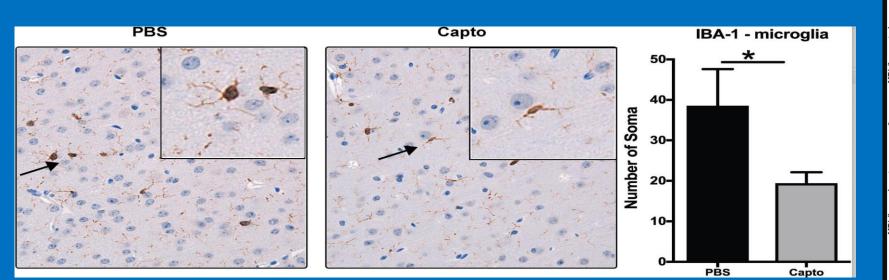
## Quantitative change in the SLEDAI-2K and SSC-J scores in the vaccinated and



Tsuneyasu Yoshida et al. Lupus Sci Med 2022;9:e000727

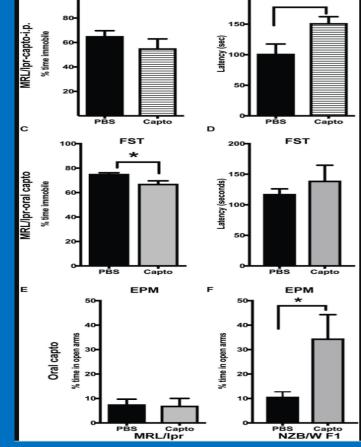


Captopril reduces expression of interferon related genes in brain, decreased microglial activation (IBA-1 expression) and reduced depressive-like behavior (swim test) in lupus mice



Captopril---crosses blood brain barrier unlike ARBs and targets microglial cell activation. In preparation: Clinical trial of captopril vs ARB with PET neuronal imaging as the primary outcome

Nocito et al. Frontiers Immunol 2020



200