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RESULTS

METHODS

- | | Control | PSP/CBS |
|---------------------------|-----------|-----------|
| Age (SD)
p=0.29 | 71 (6.06) | 73 (7.24) |
| Sex (F:M)
p=1.0 | 9:12 | 27:33 |

1. Malpetti, M., et al., *Blood inflammation relates to neuroinflammation and survival in frontotemporal lobar degeneration*. *Brain*, 2025. **148**(2): p. 493-505.
2. Strauss, A., et al., *Peripheral innate immunophenotype in neurodegenerative disease: blood-based profiles and links to survival*. *Molecular Psychiatry*, 2025. **30**(5): p. 1985-1994.
3. Muñoz-Delgado, L., et al., *Peripheral immune profile and neutrophil-to-lymphocyte ratio in progressive supranuclear palsy: Case-control study and meta-analysis*. *Eur J Neurol*, 2024. **31**(12): p. e16451.

%Proportion (Count/Total live cells)

Classical monocytes: ns

Transitional monocytes: *

Nonclassical monocytes: *

Total Monocytes: ns

Treg: *

Th17-like: *

Th2-like: *

Total CD4abeta: ns

Component scores

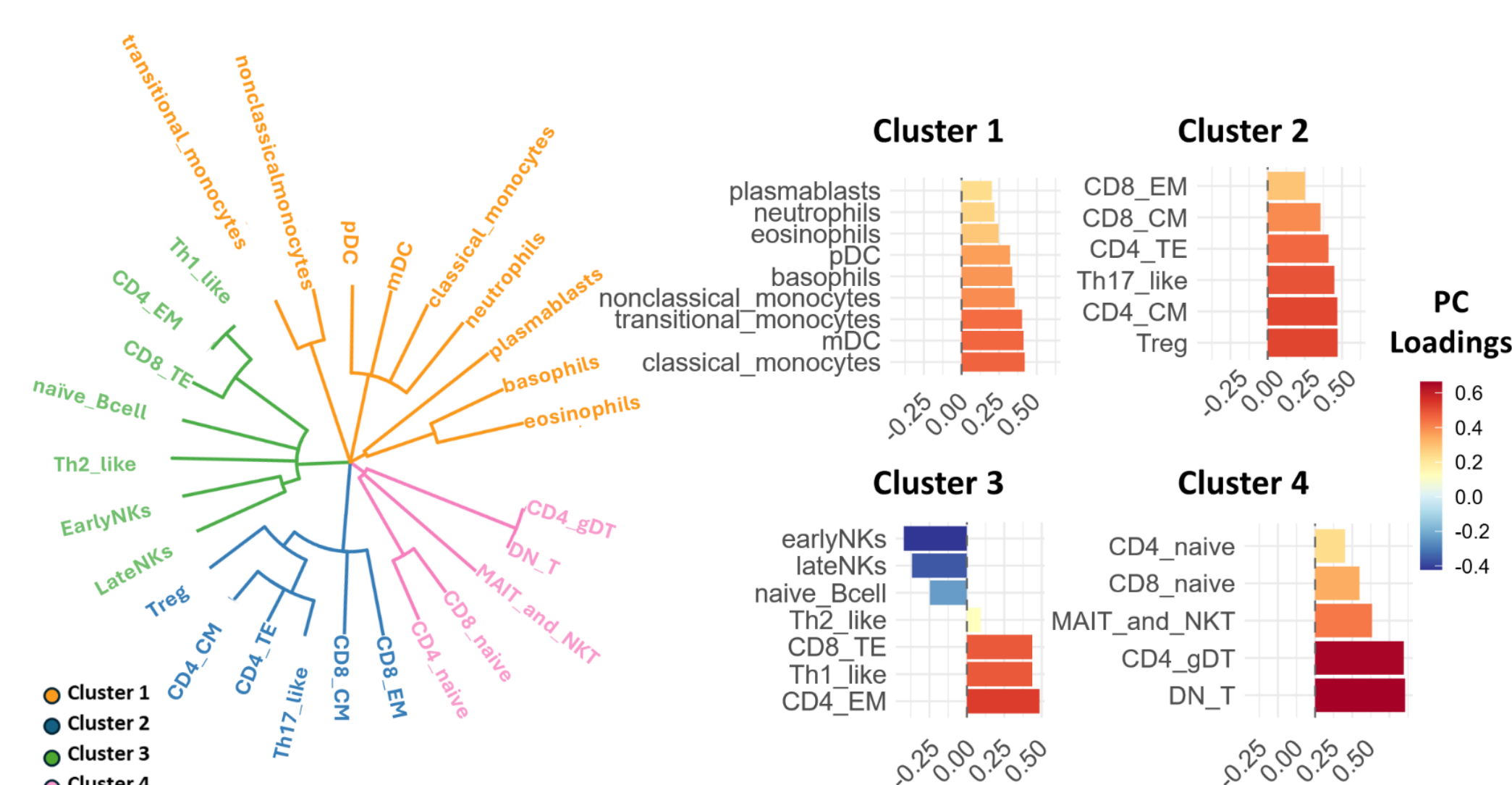
Cluster 1: *

Cluster 2: **

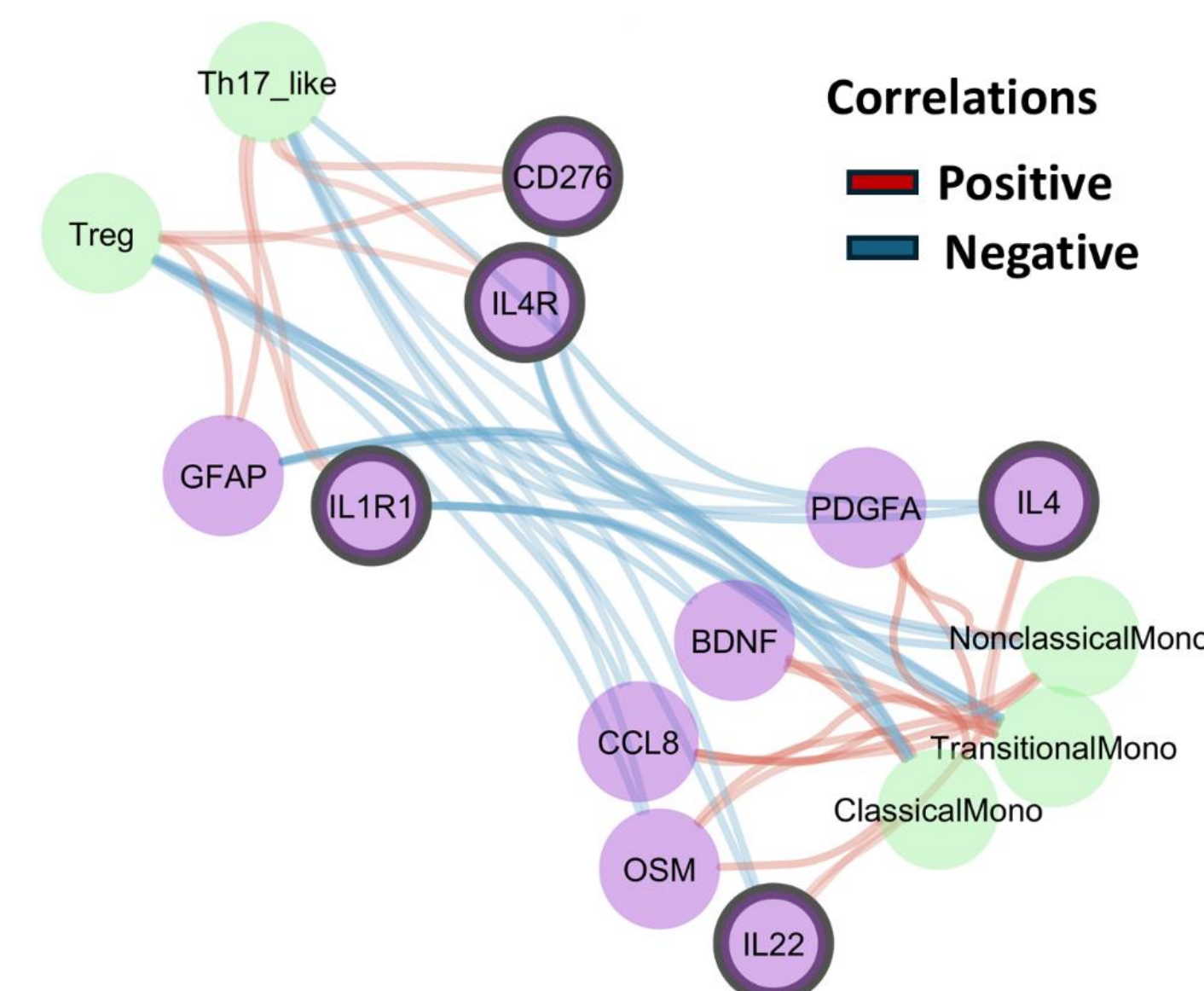
Cluster 3: ns

Cluster 4: ns

Control PSP/CBS



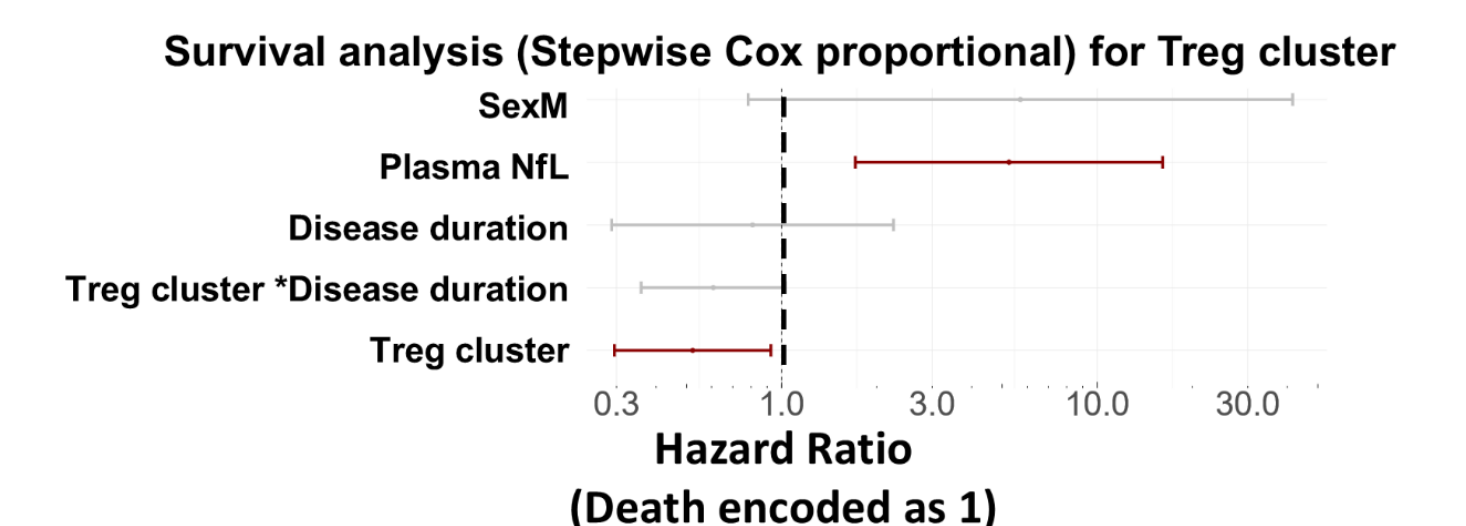
Peripheral cell types- inflammatory molecules coordinated response in PSP/CBS



Spearman rho

0.4
0.2
0
-0.2
-0.4

	Cluster 2	Cluster 3	Cluster 4	Cluster 1
ACER Total	*			
Fluency	†			
Memory	*			*
Visuospatial				
Language				
Attention and Orientation	*			
PSPRS Total				



- People with PSP and CBS harbor a distinct peripheral blood immune cells signature from controls.
- Patterns of correlation with plasma inflammatory mediators suggest that Tregs exert antagonistic effects against classical monocytes, consistent with a dysregulated Treg–monocyte axis.
- Together, our data reinforces the growing view that peripheral immune interactions may contribute directly to the pathogenesis of neurodegenerative diseases

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INSTITUTE**

**RACE
AGAINST
DEMENZA**

