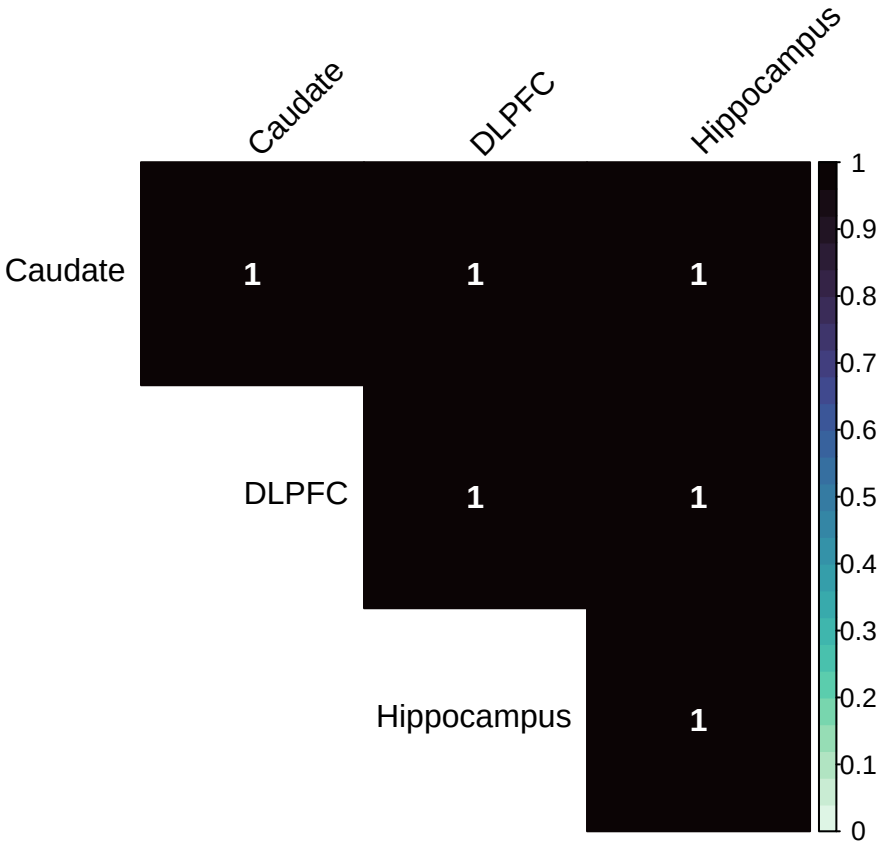Pairwise Sharing by Magnitude