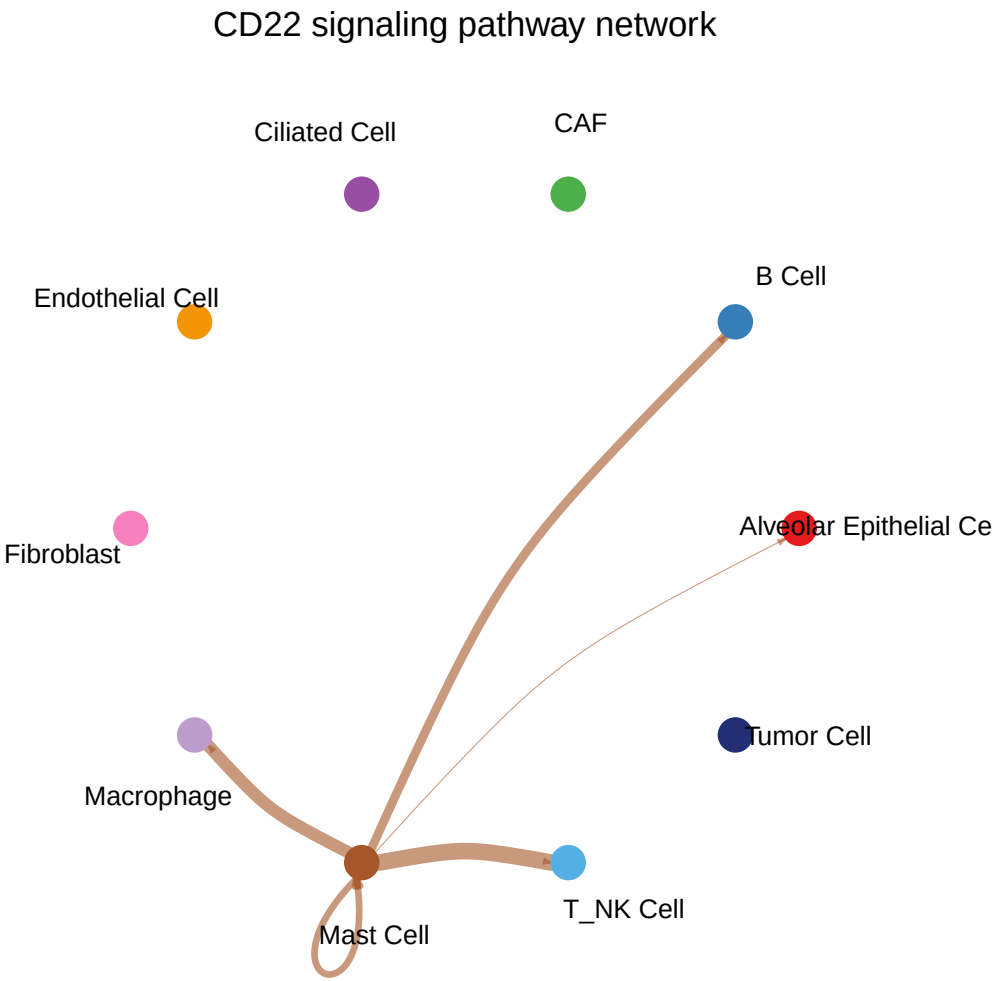
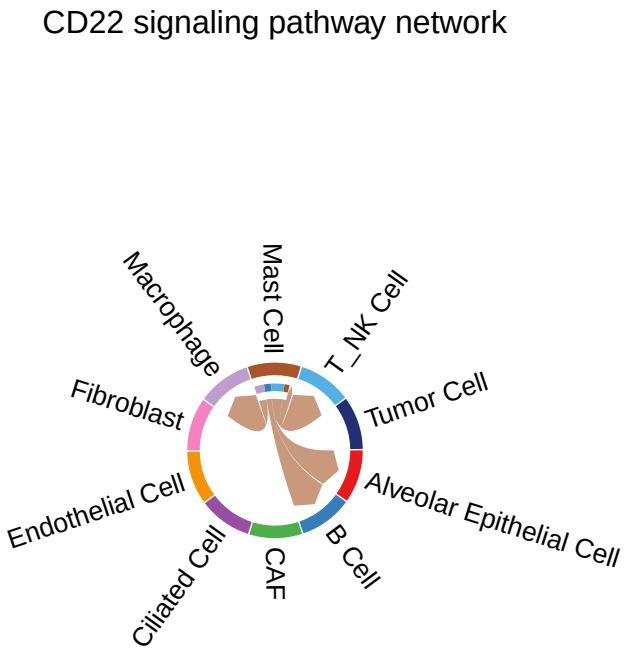
# normal: No signaling

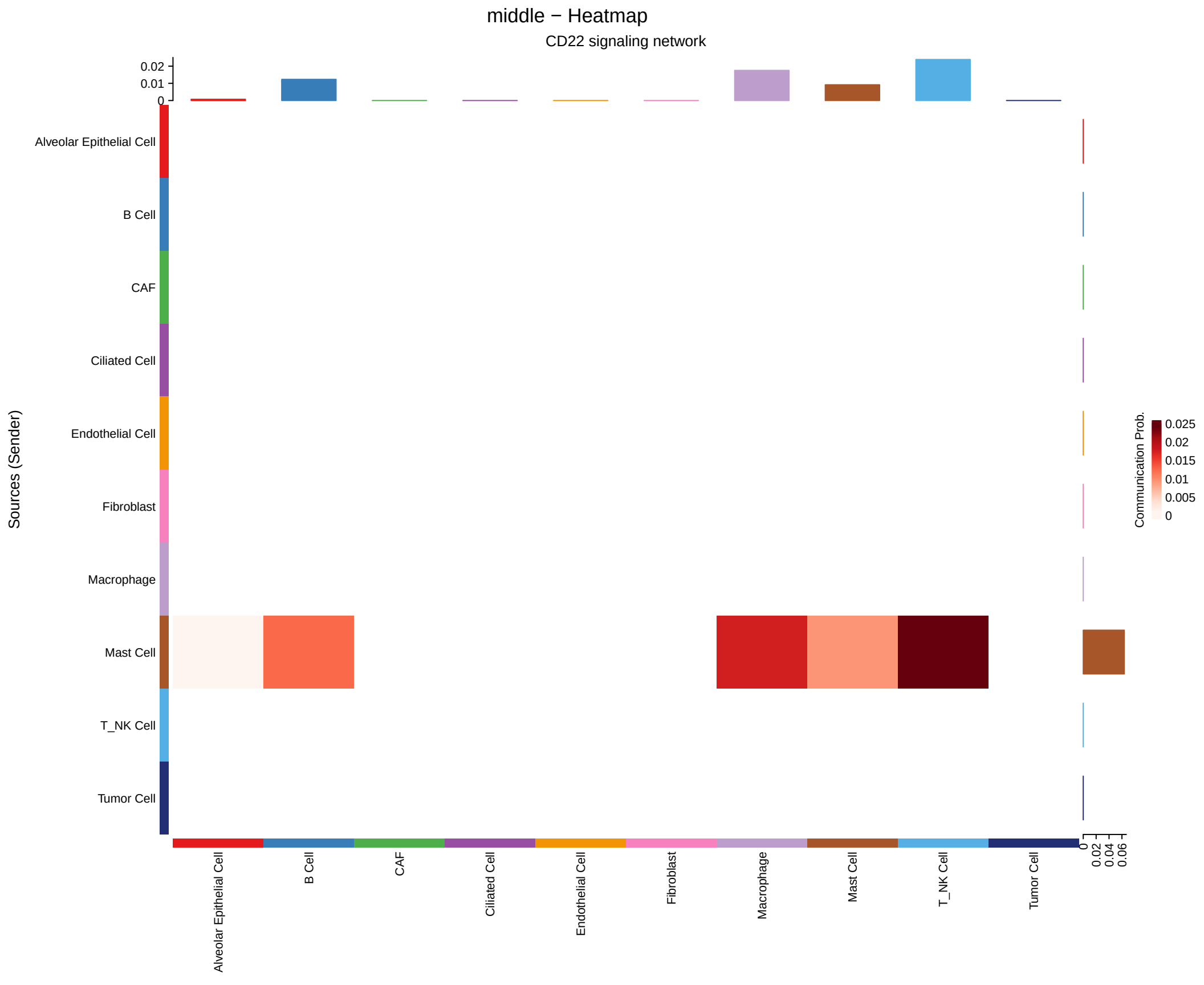
# early: No signaling

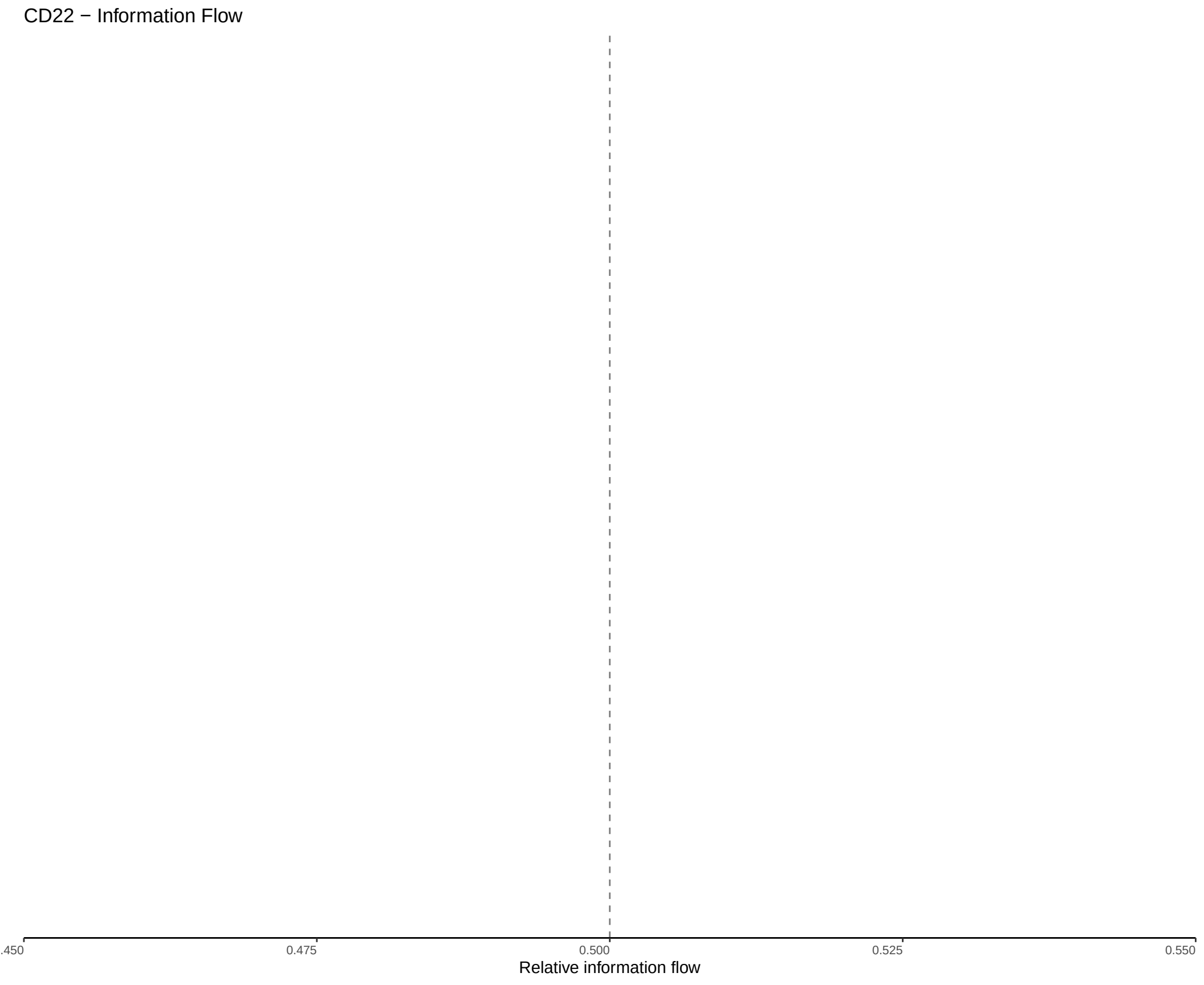
**middle − Circle**




**middle − Chord**




middle − Heatmap
CD22 signaling network
0.02
0.01
0
Alveolar Epithelial Cell
B Cell
CAF
Ciliated Cell
Endothelial Cell
Fibroblast
Macrophage
Mast Cell
T_NK Cell
Tumor Cell
Sources (Sender)
Communication Prob.
0.025
0.02
0.015
0.01
0.005
0
0
0.02
0.04
0.06


CD22 − Information Flow
.450
0.475
0.500
0.525
0.550
Relative information flow