



UNIVERSITAT POLITÈCNICA
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Universitat Politècnica de Catalunya

Engineering Physics

Bachelor's Thesis

Understanding multimorbidity from a systems
biology and complex networks perspective

Book of networks figures

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June 2017

In the following pages, it is supplied, for each minor age group, a figure representing the multimorbidity network. The figures are vectorial, so one can zoom in preserving their quality.

Nodes represent disease categories. Their size represents their centrality in the network: the more central, the greater the size. The colour attributed to the nodes is arbitrary for each network, so are their positions. Nevertheless, nodes of the same colour localized adjacently in the periphery of the network belong to the same community. Nodes represented with a cross do not belong to any community, though they are represented with the same colour and all together. If a node overlaps another it does not have any significance.

Edges represent the relations among nodes by the modified relative risk \widetilde{RR} . Green edges establish a protective relationship, i.e. $\widetilde{RR} < 0$. Black edges represent a positive affinity to multimorbidity, with $\widetilde{RR} > 1$. The width of the edge is quantized with the value of \widetilde{RR} . The greater the absolute value of \widetilde{RR} , the wider the edge.

Age	Women	Men
19-24	Fig. 1 on pg. 2	Fig. 16 on pg. 17
25-29	Fig. 2 on pg. 3	Fig. 17 on pg. 18
30-34	Fig. 3 on pg. 4	Fig. 18 on pg. 19
35-39	Fig. 4 on pg. 5	Fig. 19 on pg. 20
40-44	Fig. 5 on pg. 6	Fig. 20 on pg. 21
45-49	Fig. 6 on pg. 7	Fig. 21 on pg. 22
50-54	Fig. 7 on pg. 8	Fig. 22 on pg. 23
55-59	Fig. 8 on pg. 9	Fig. 23 on pg. 24
60-64	Fig. 9 on pg. 10	Fig. 24 on pg. 25
65-69	Fig. 10 on pg. 11	Fig. 25 on pg. 26
70-74	Fig. 11 on pg. 12	Fig. 26 on pg. 27
75-79	Fig. 12 on pg. 13	Fig. 27 on pg. 28
80-84	Fig. 13 on pg. 14	Fig. 28 on pg. 29
85-89	Fig. 14 on pg. 15	Fig. 29 on pg. 30
≥ 90	Fig. 15 on pg. 16	Fig. 30 on pg. 31

Table 1: Cross-references of the figures.

Women

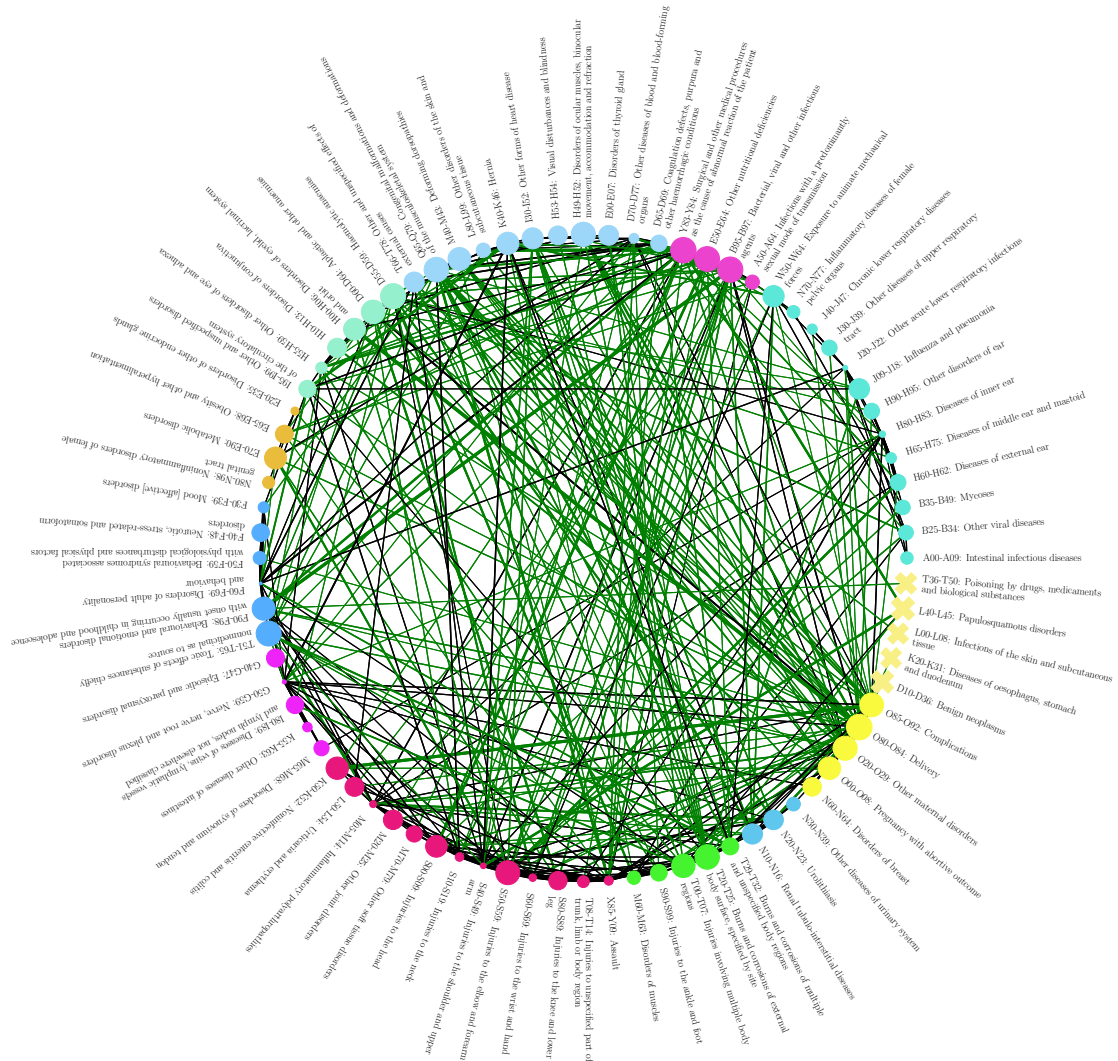


Figure 1: Women aged 19-24.



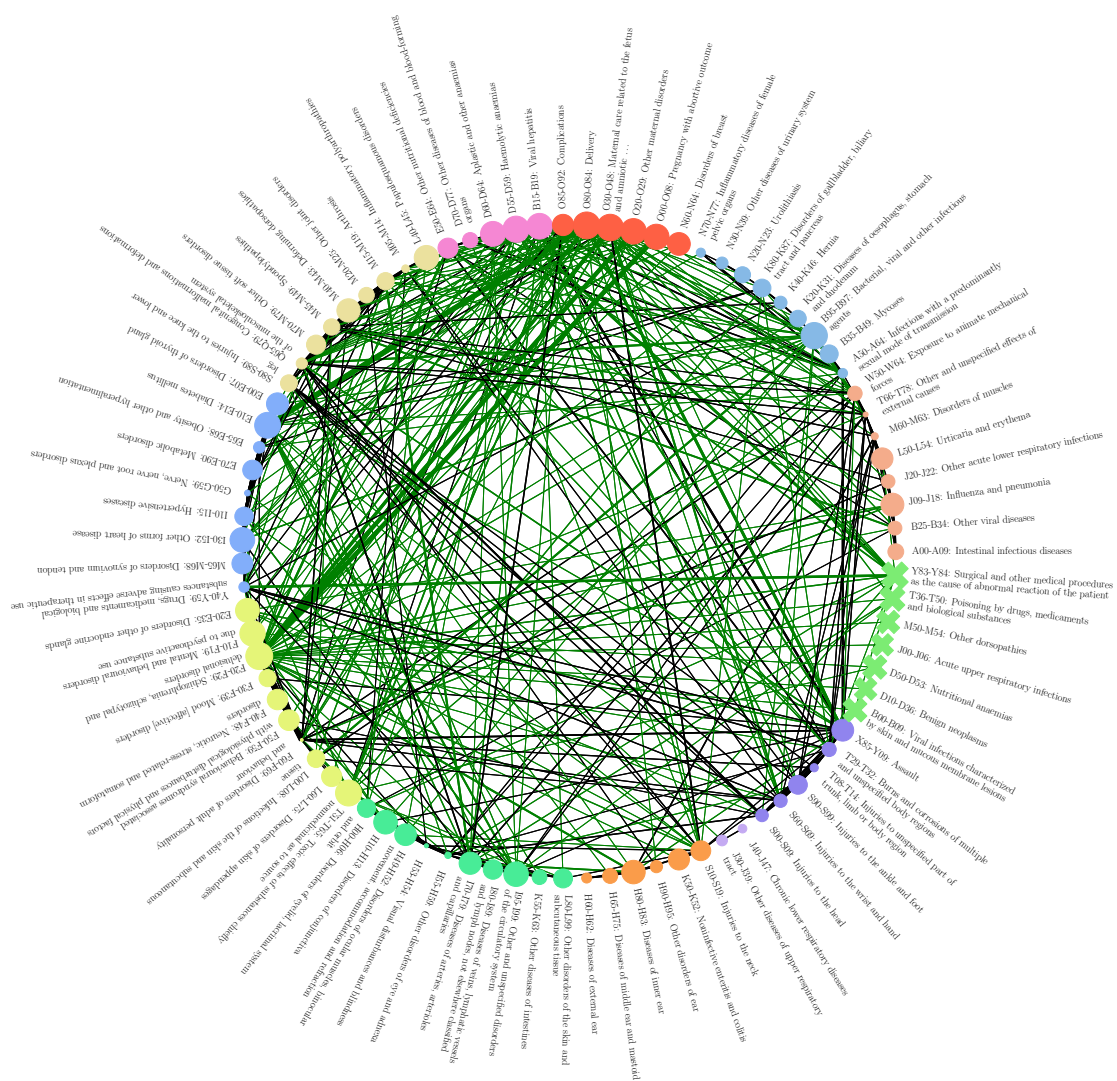


Figure 4: Women aged 35-39.

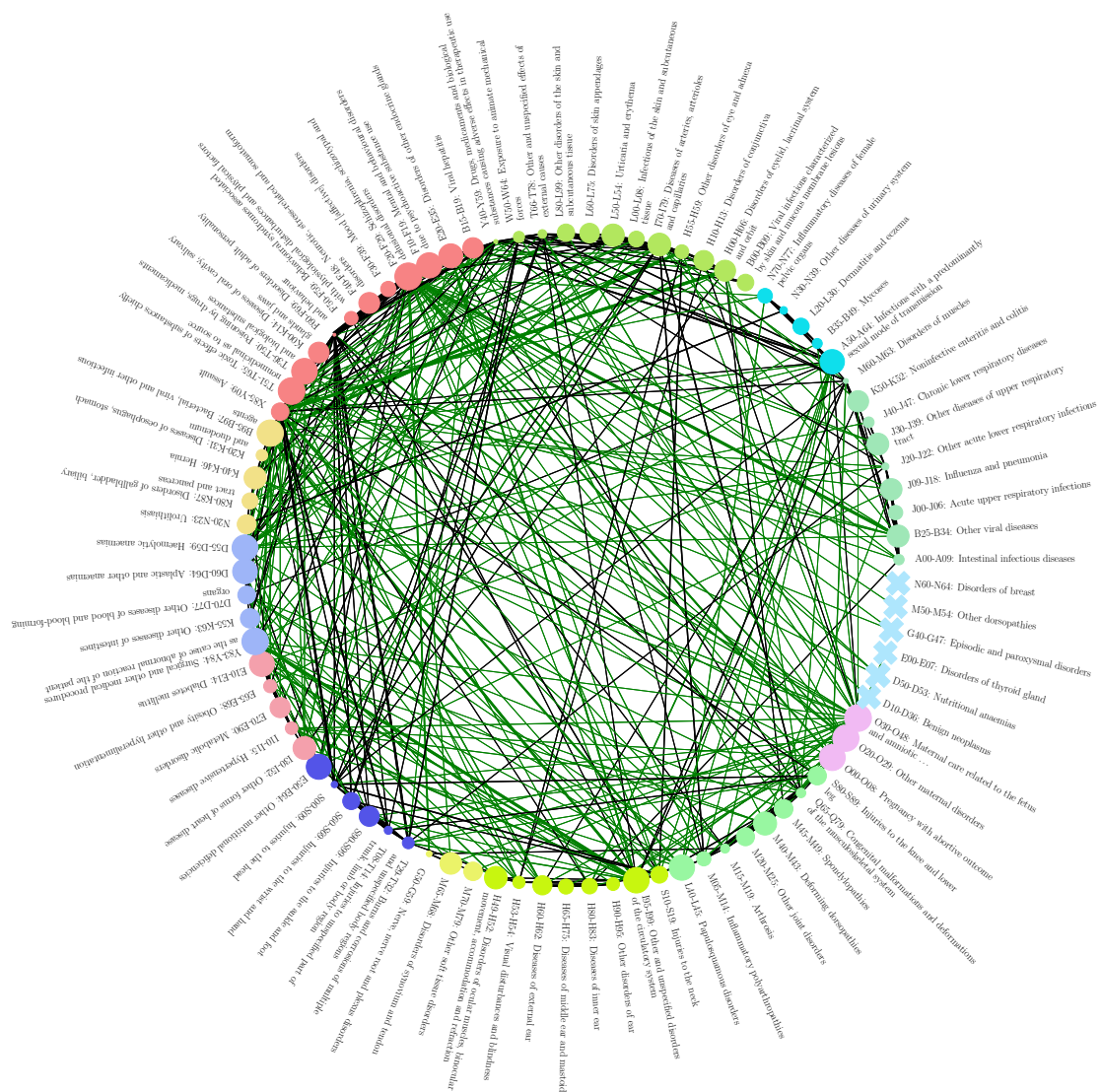


Figure 5: Women aged 40-44.



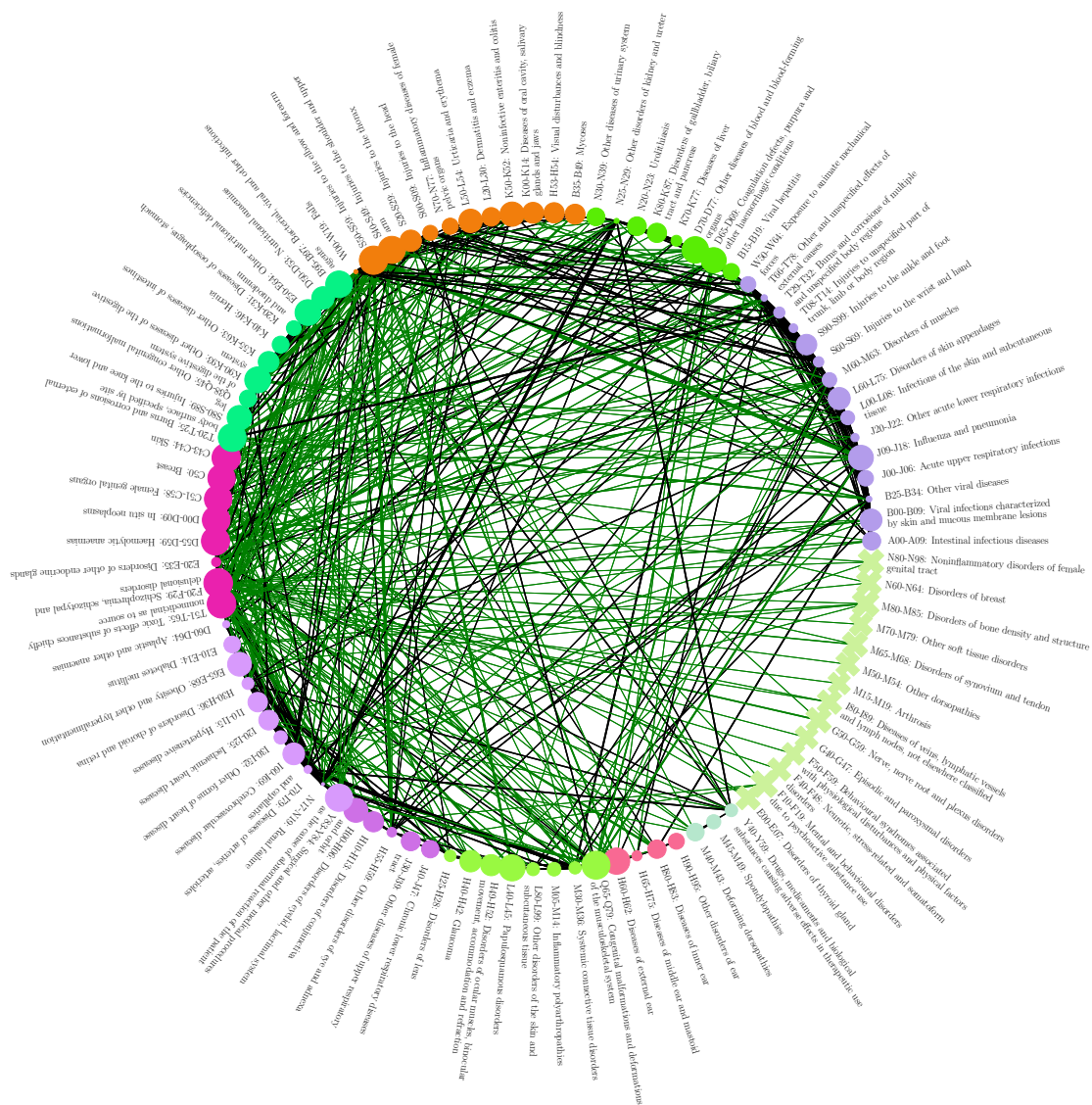


Figure 8: Women aged 55-59.

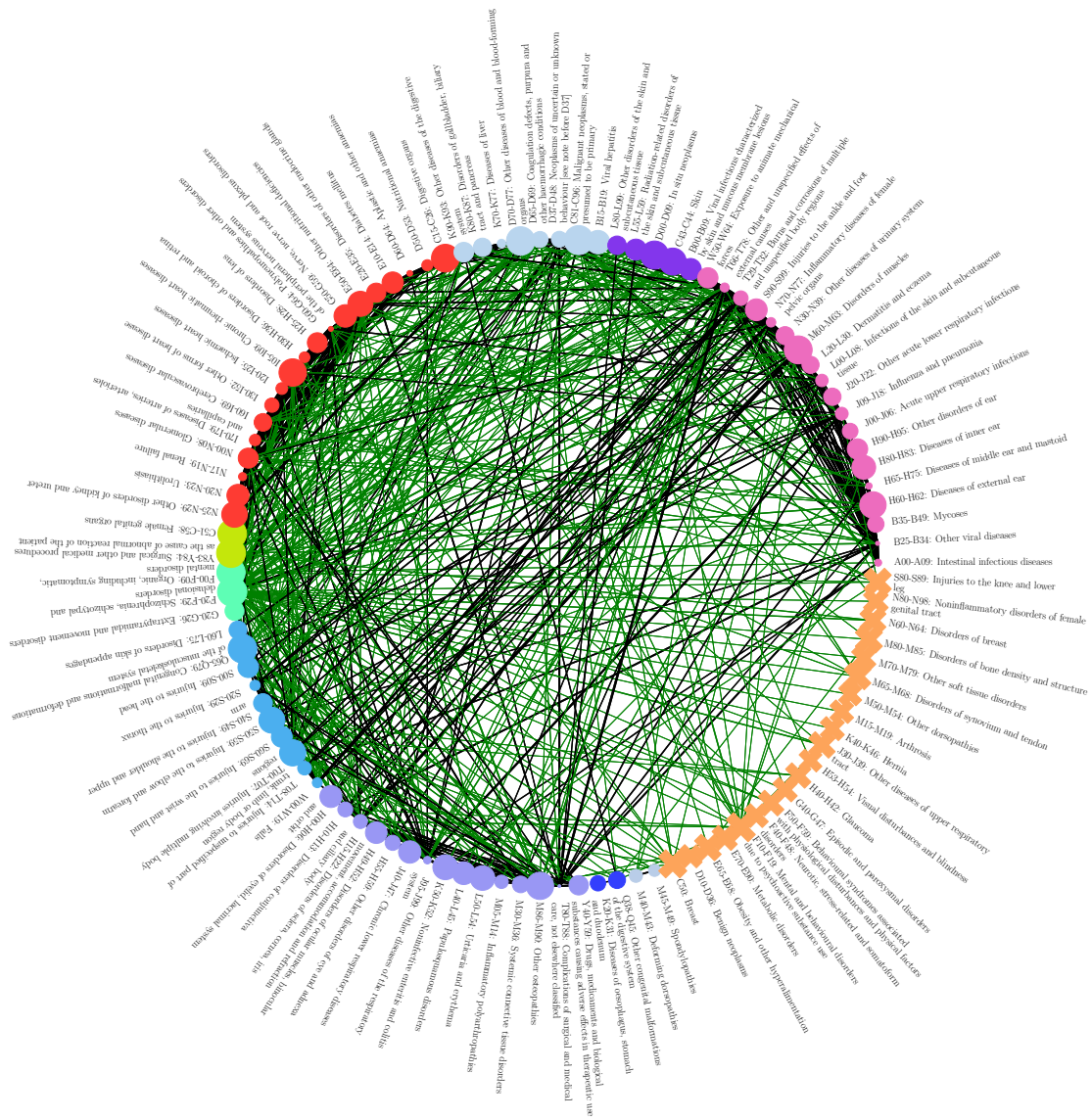


Figure 10: Women aged 65-69.



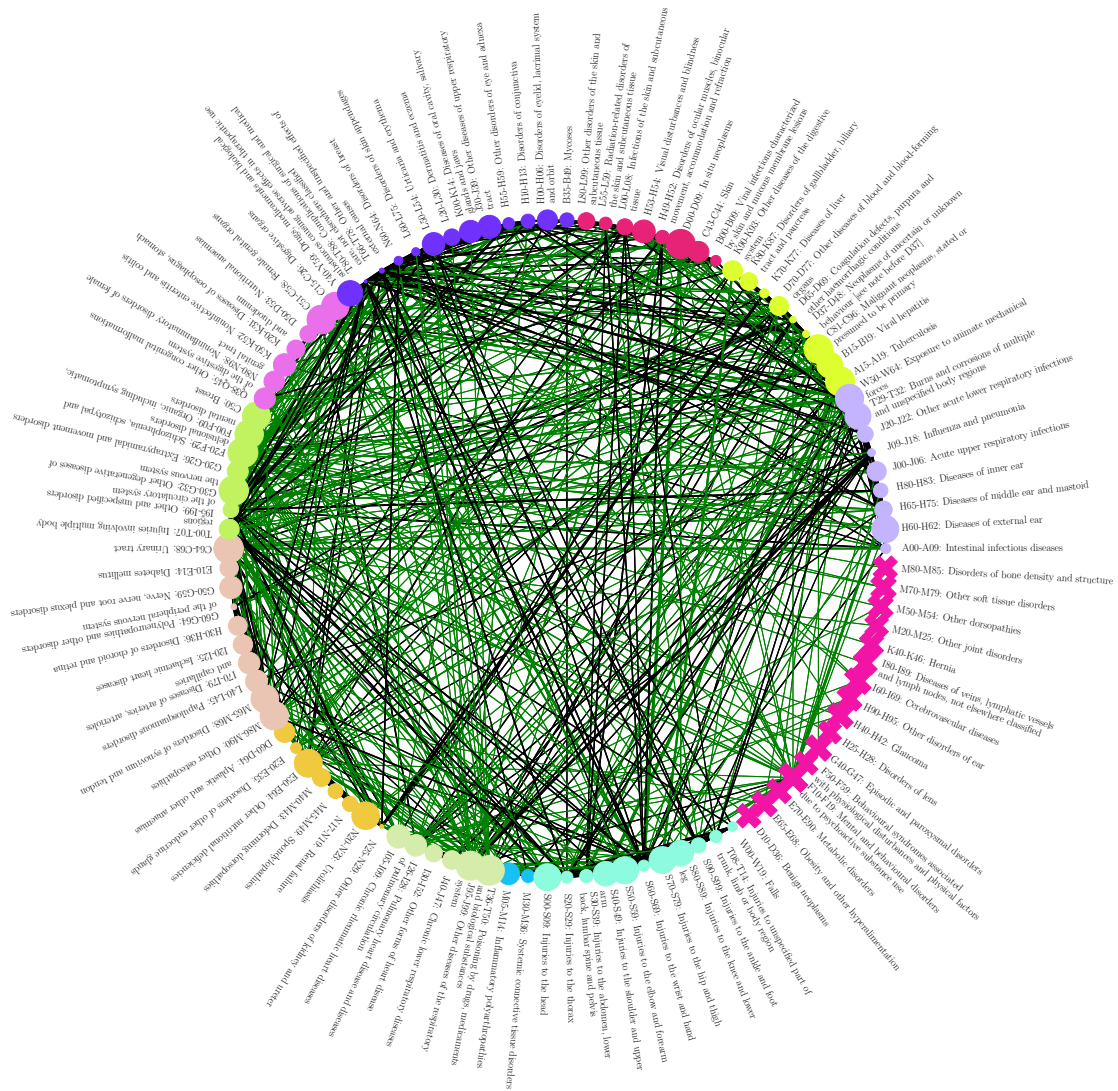


Figure 13: Women aged 80-84.

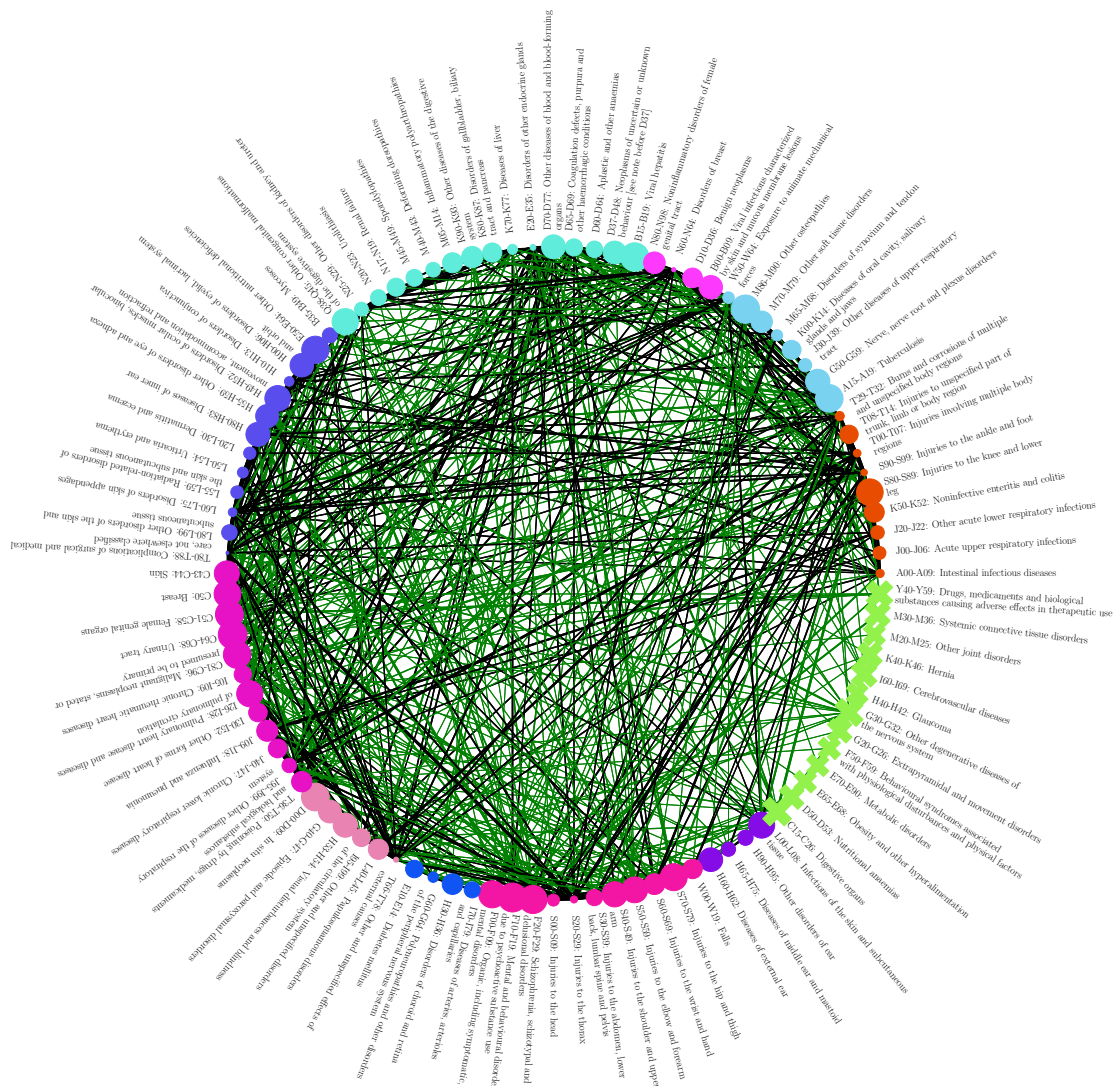


Figure 14: Women aged 85-89.

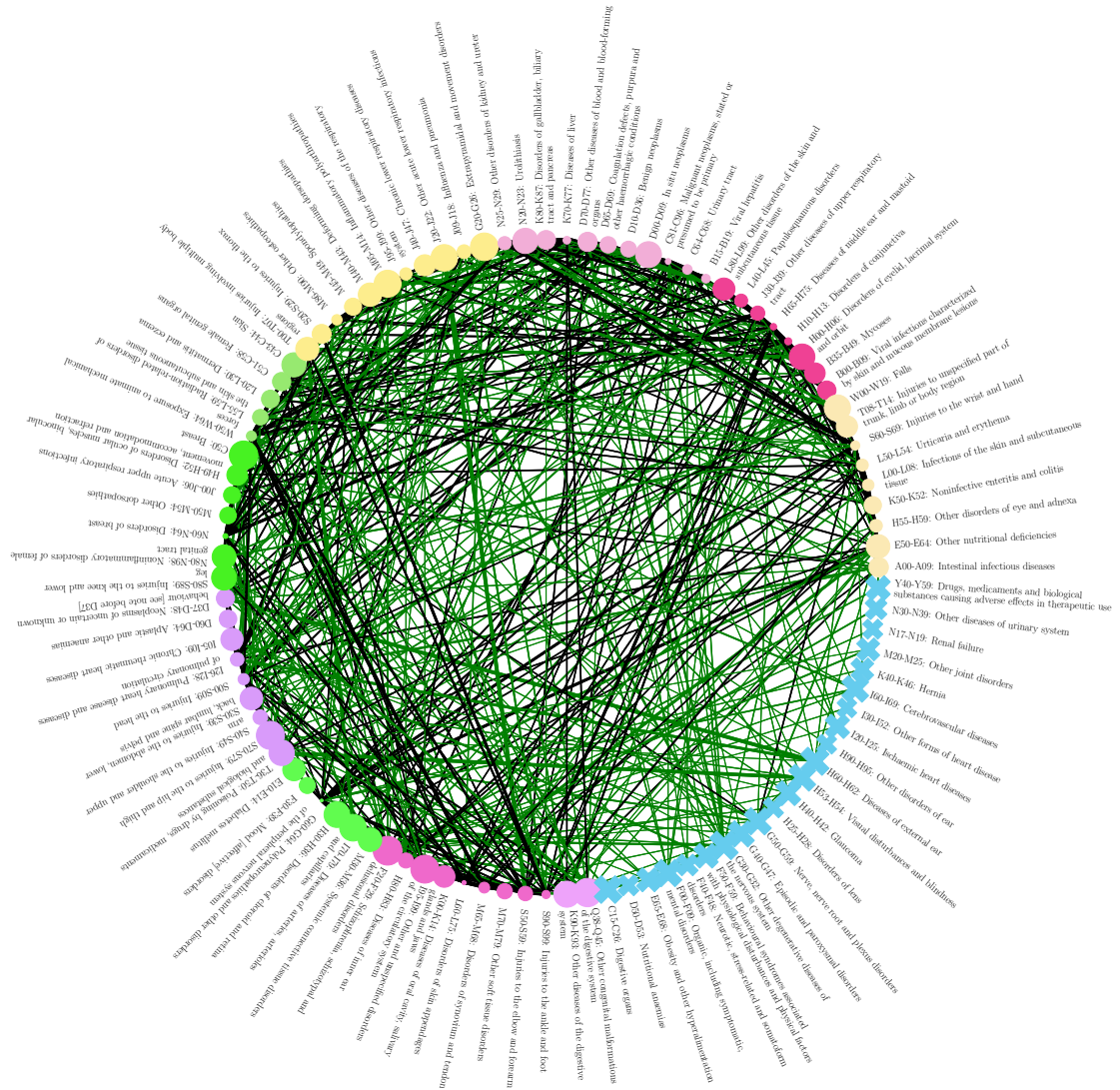


Figure 15: Women aged ≥ 90 .

Men

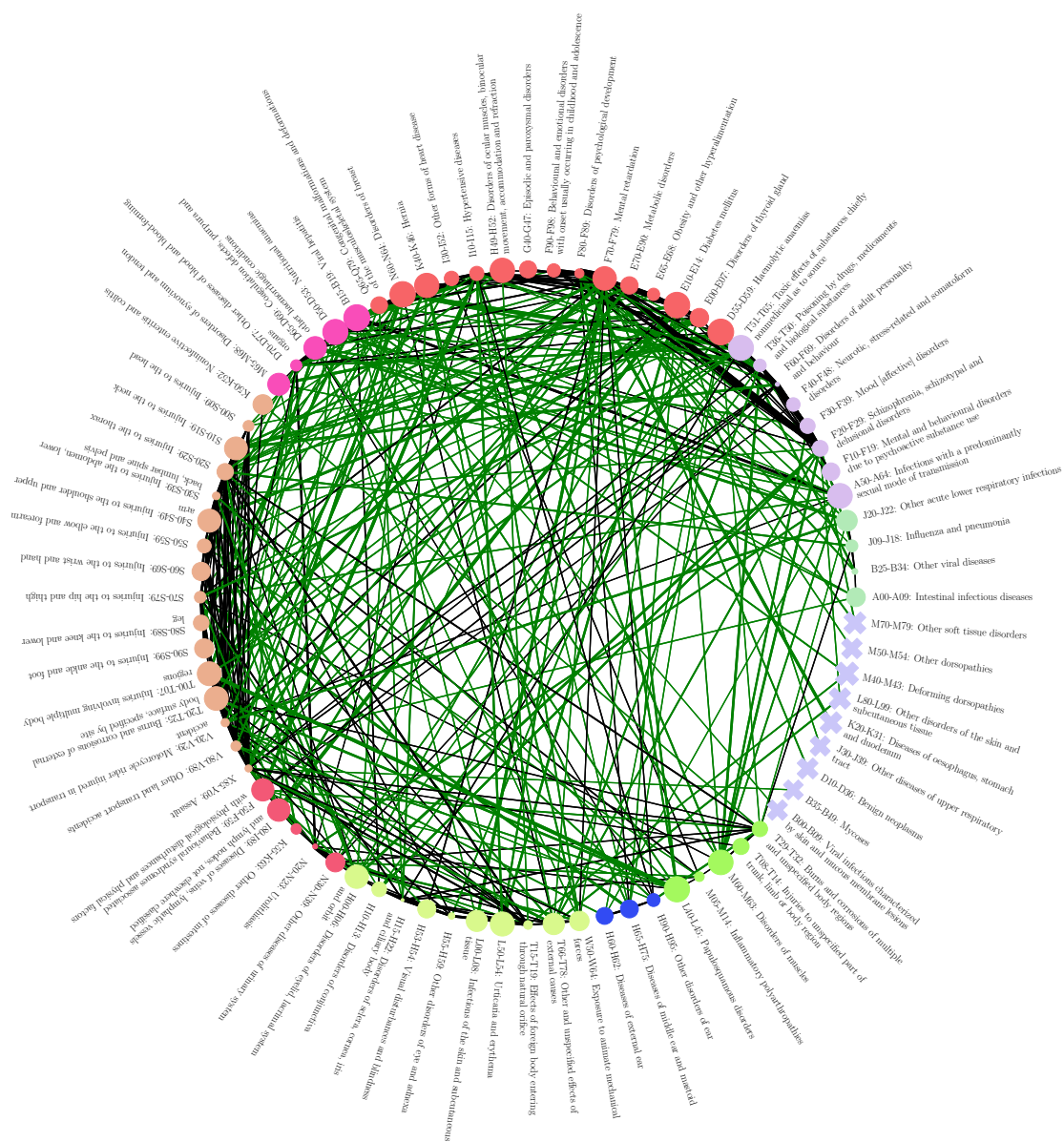


Figure 16: Men aged 19-24.

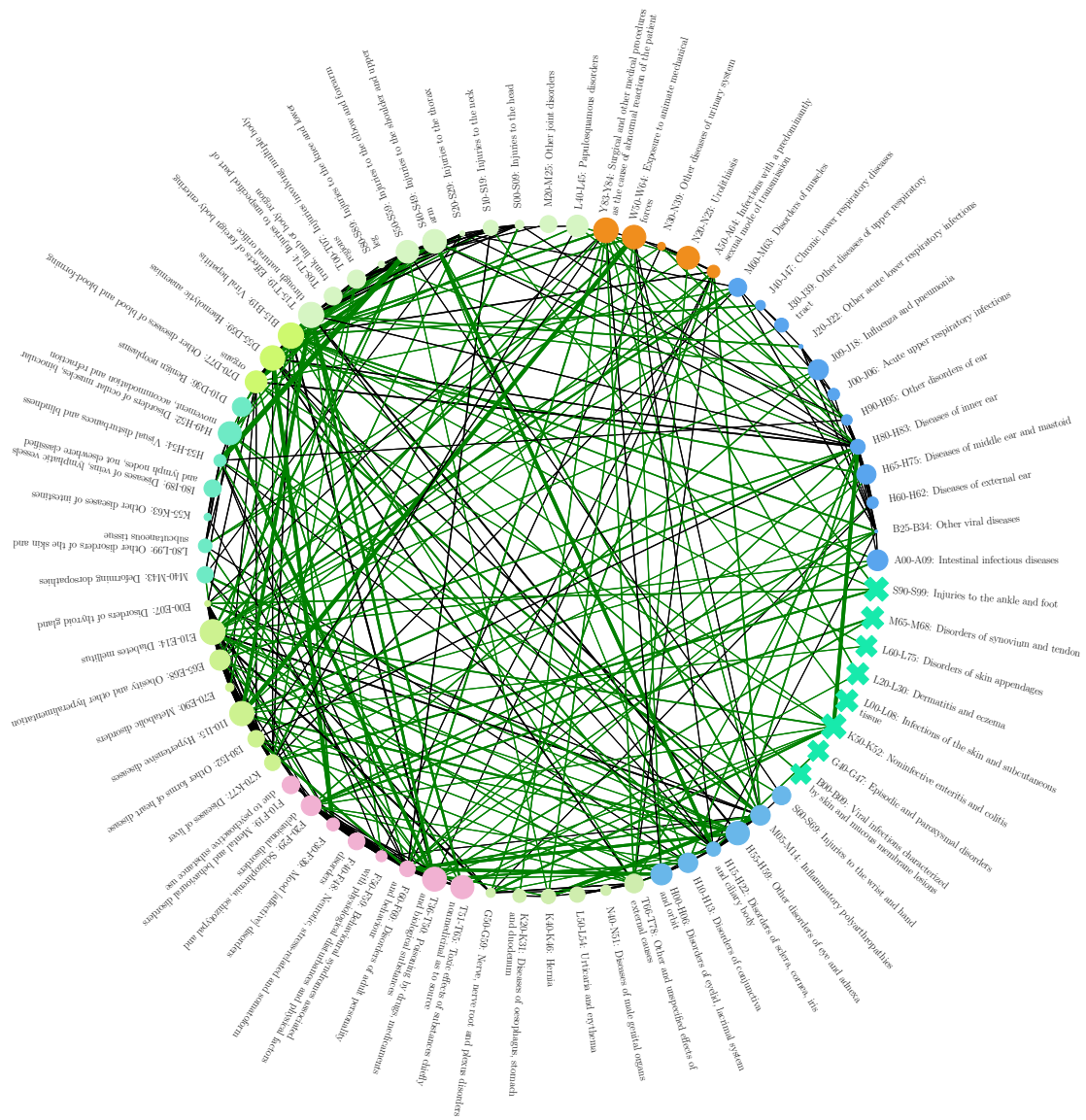


Figure 17: Men aged 25-29.



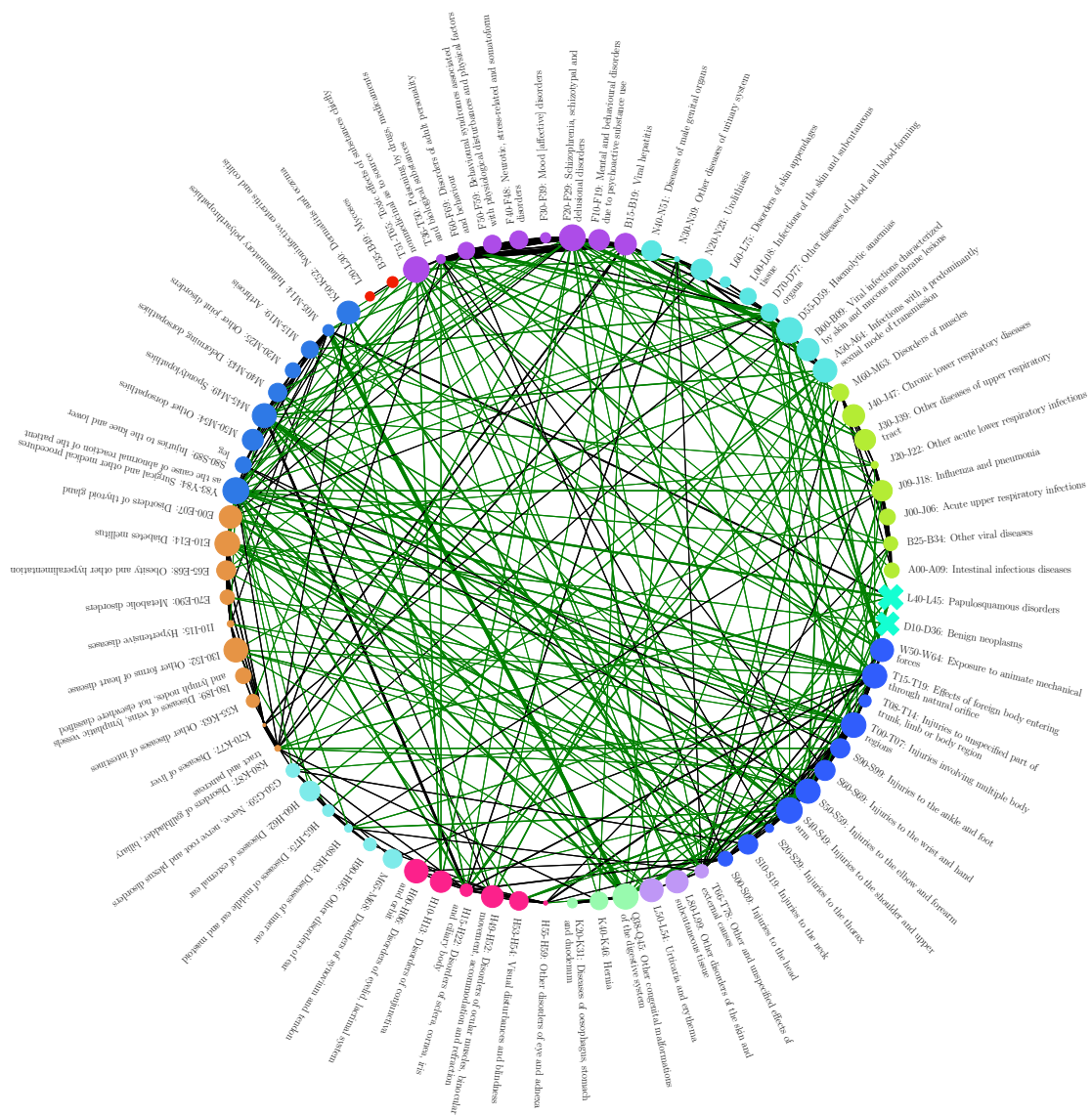


Figure 19: Men aged 35-39.

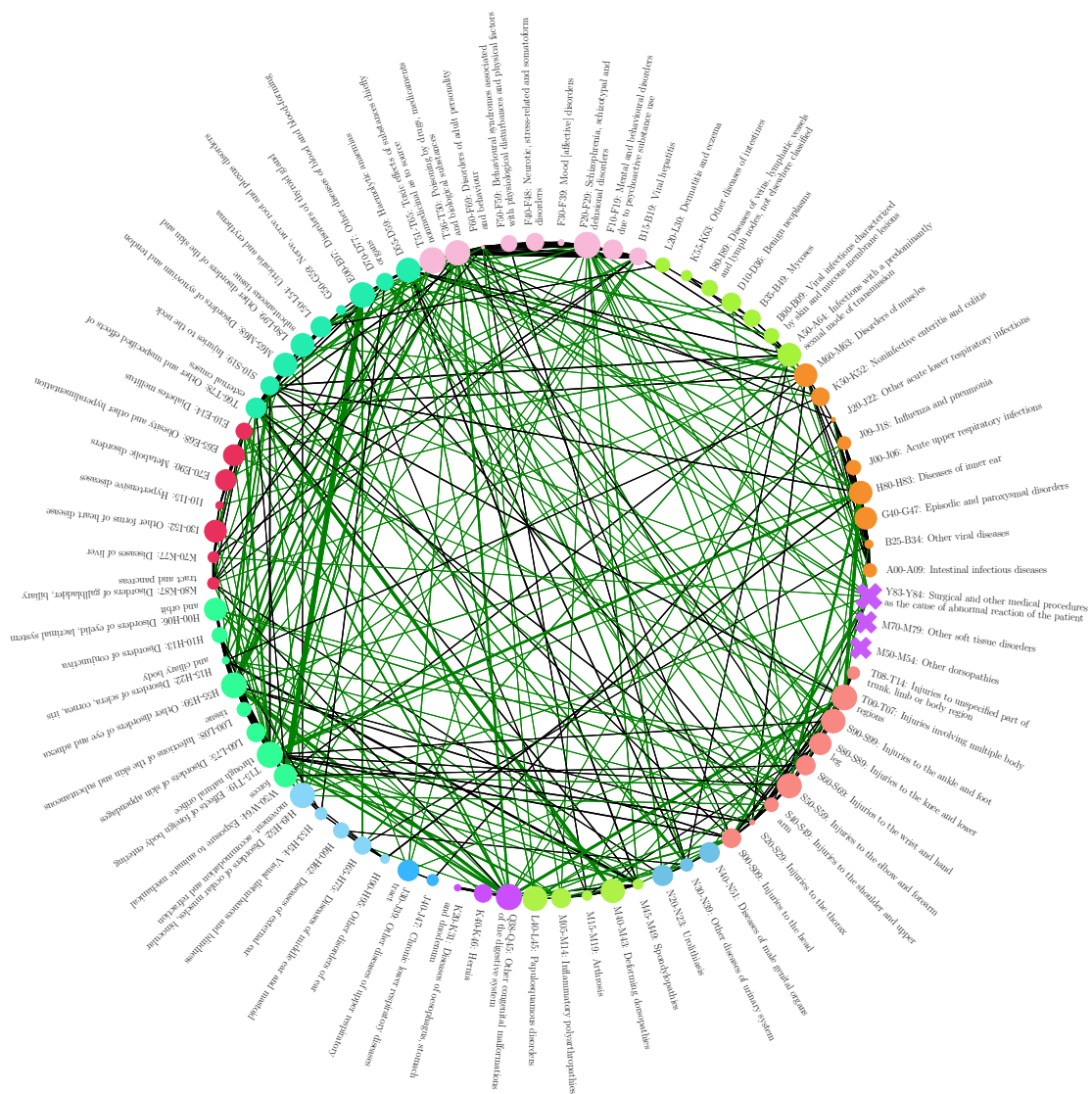
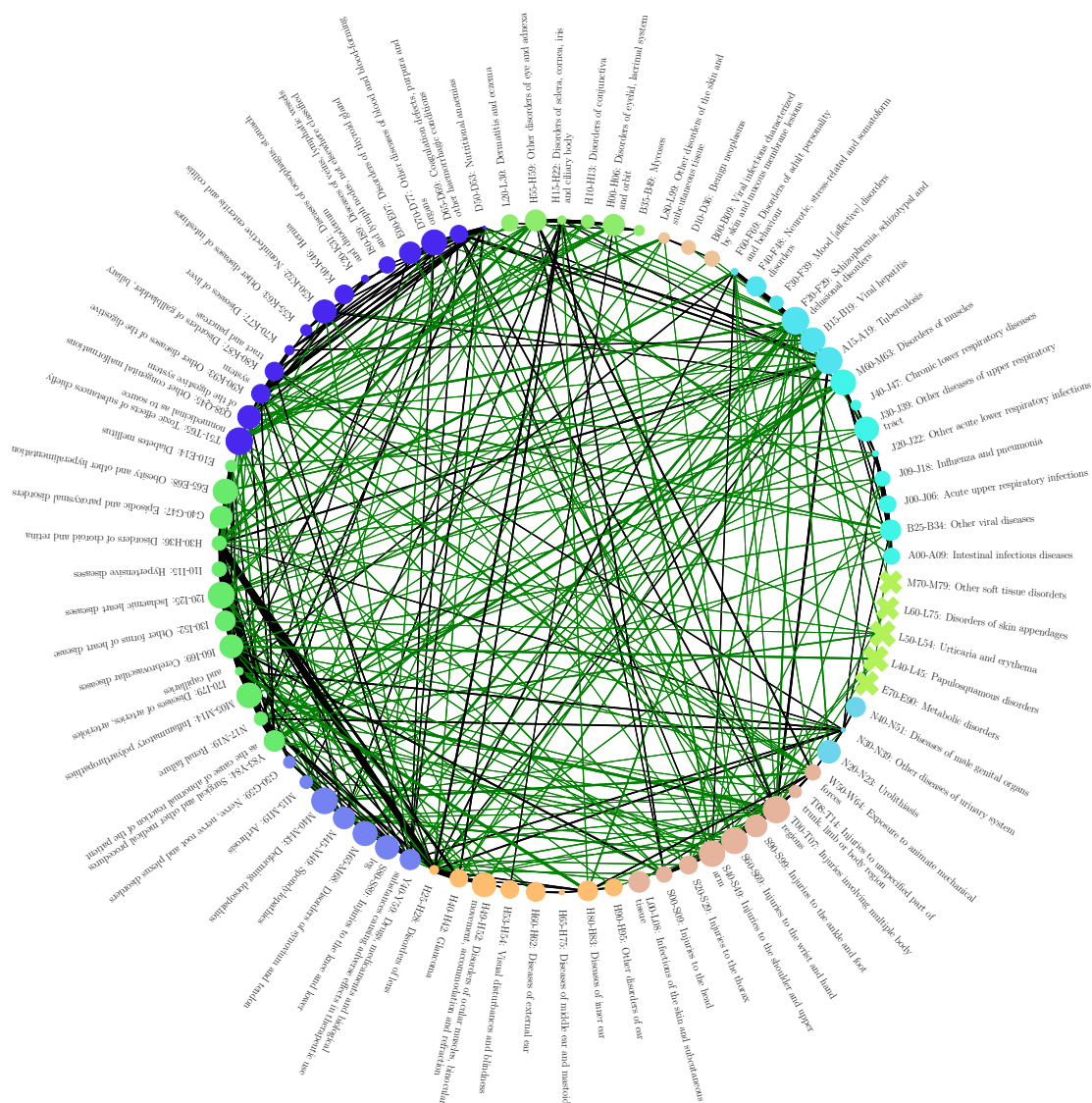


Figure 20: Men aged 40-44.



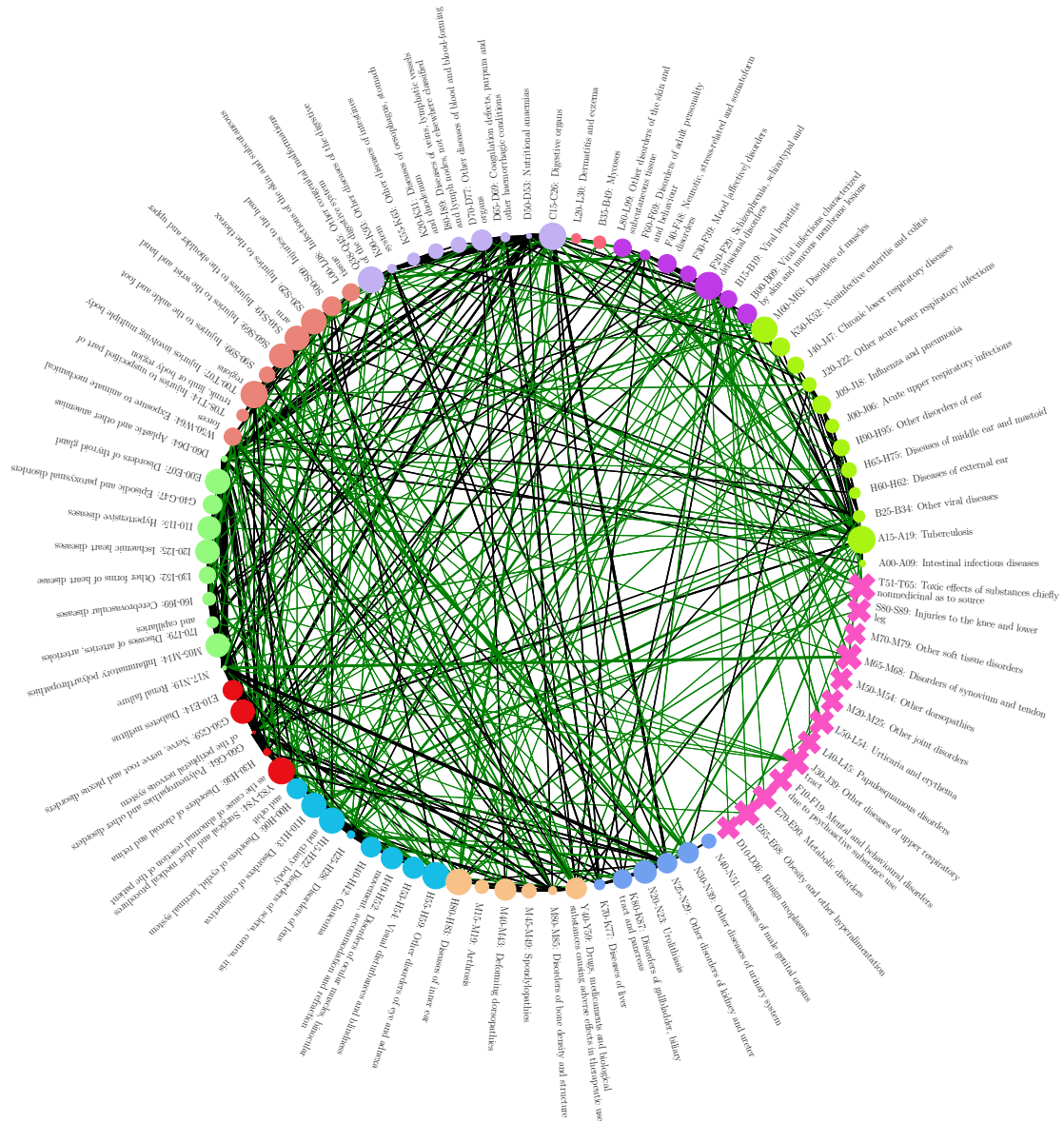


Figure 22: Men aged 50-54.

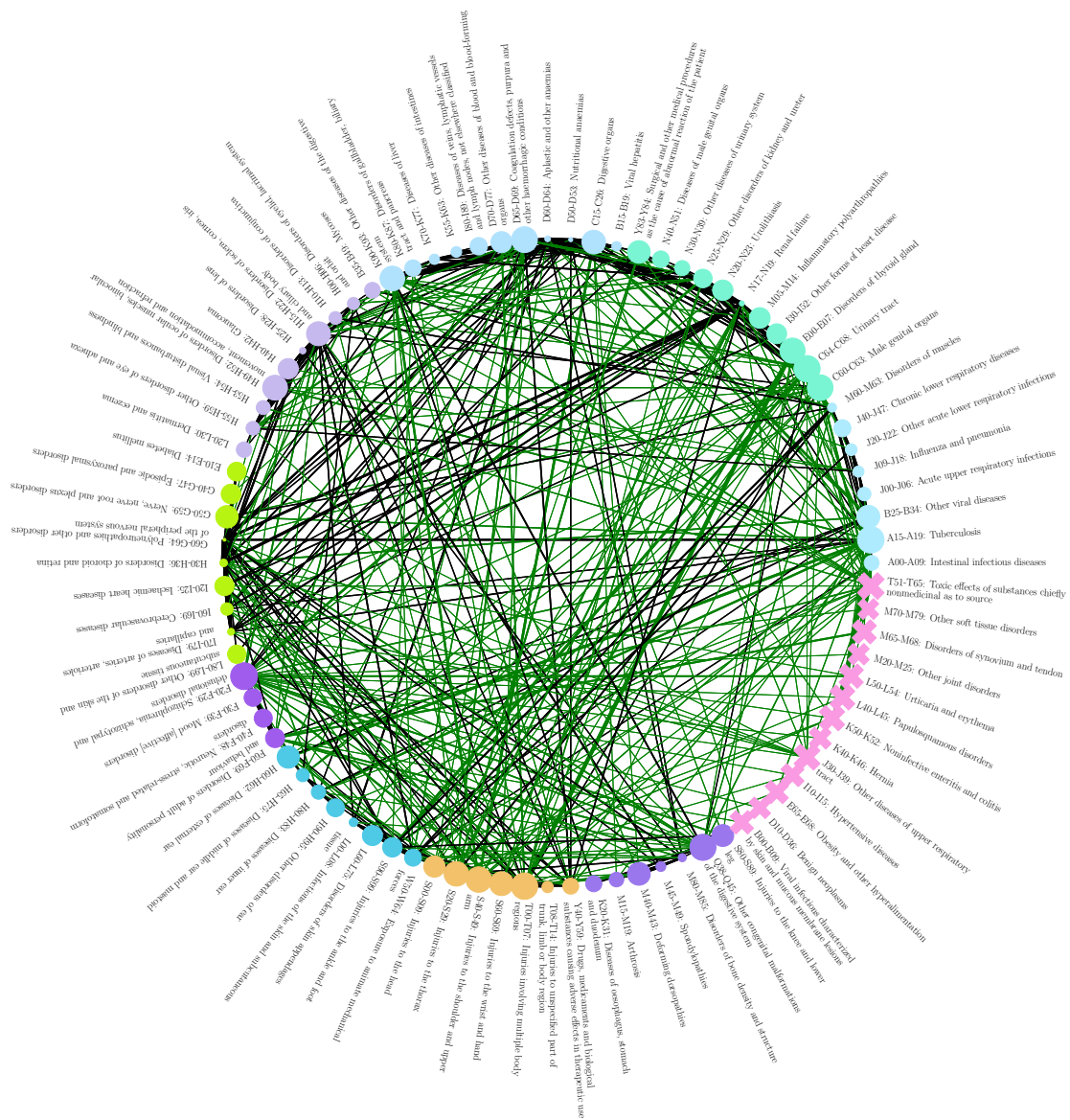


Figure 23: Men aged 55-59.

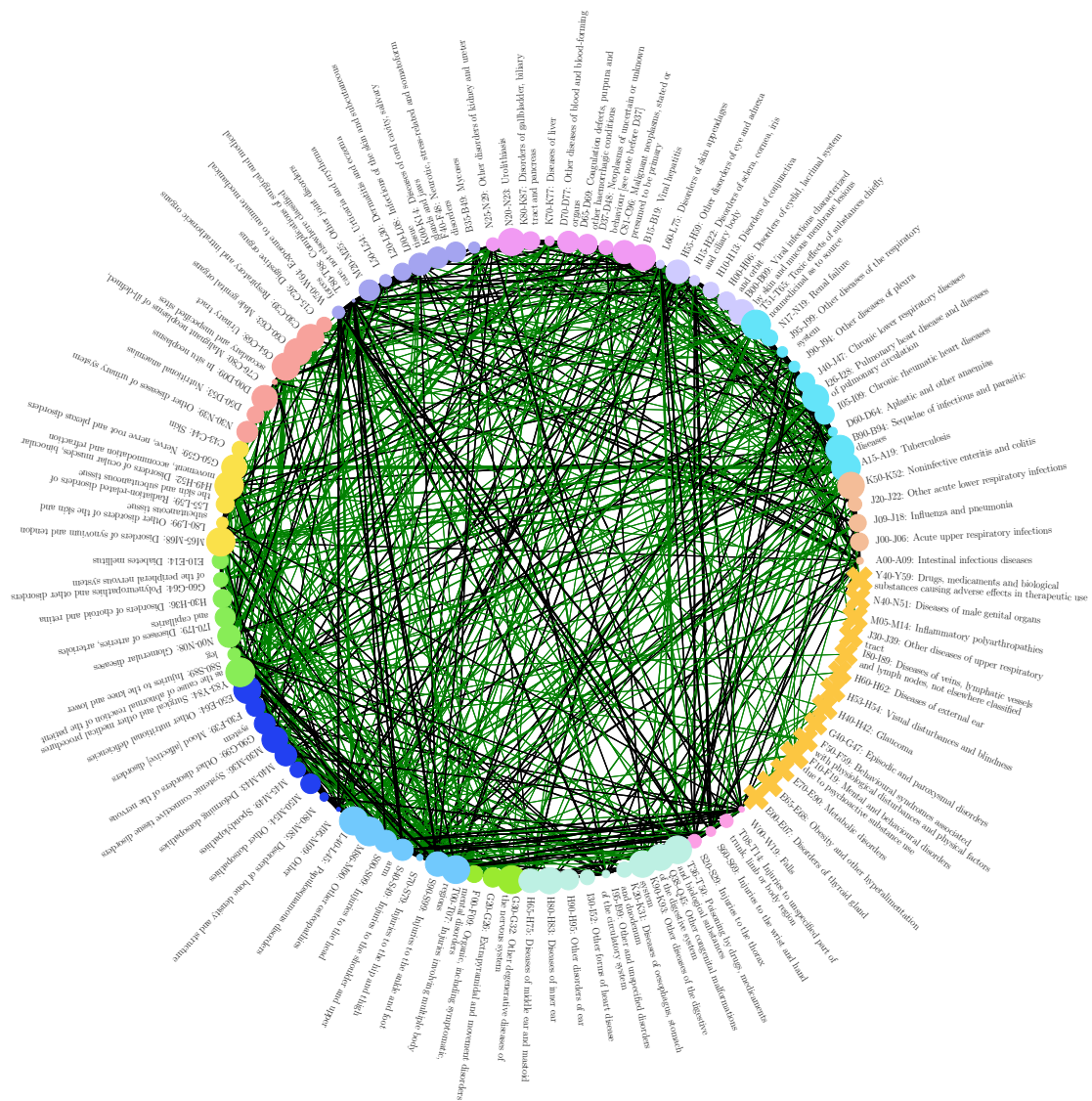


Figure 28: Men aged 80-84.

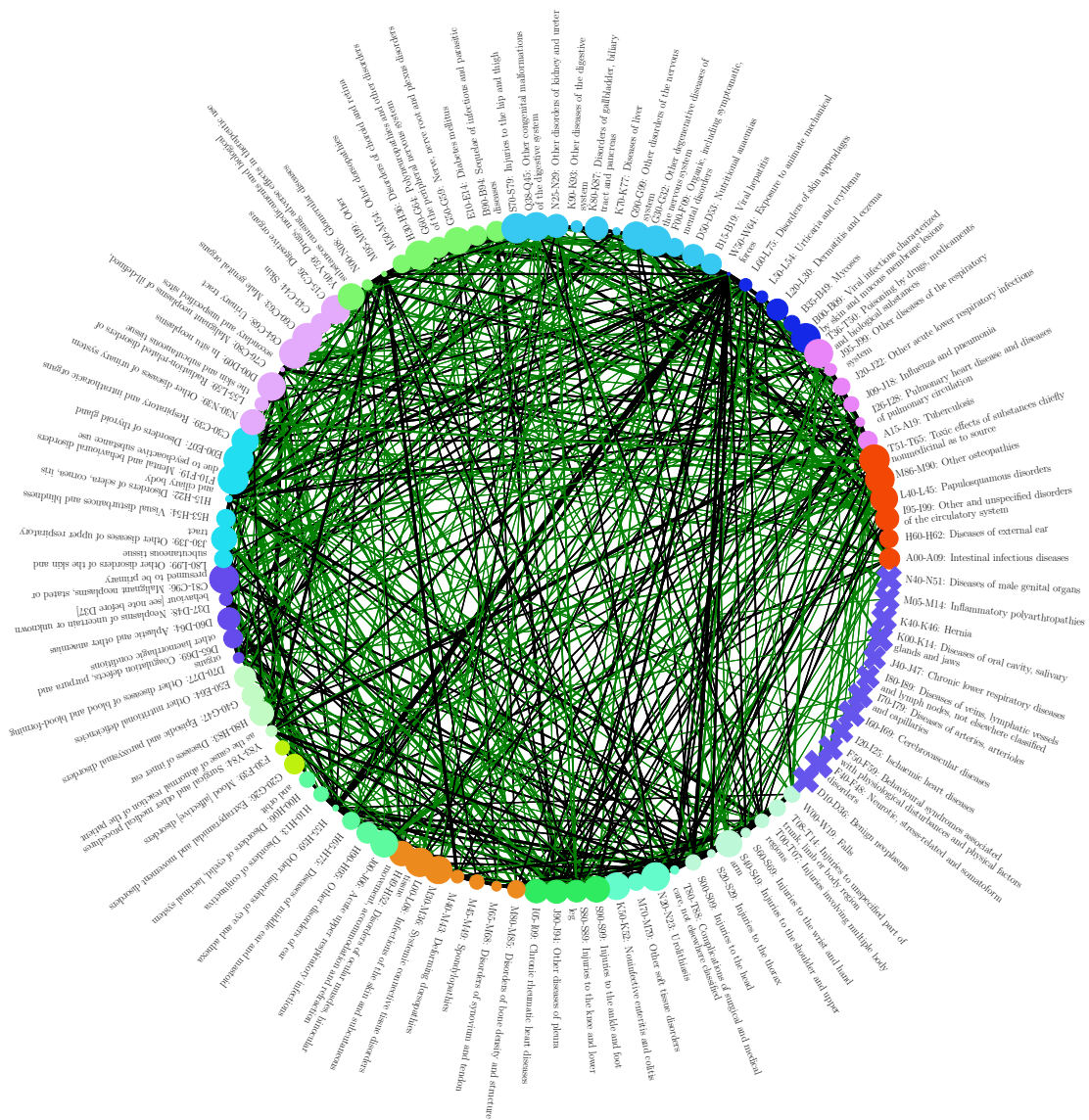


Figure 29: Men aged 85-89.

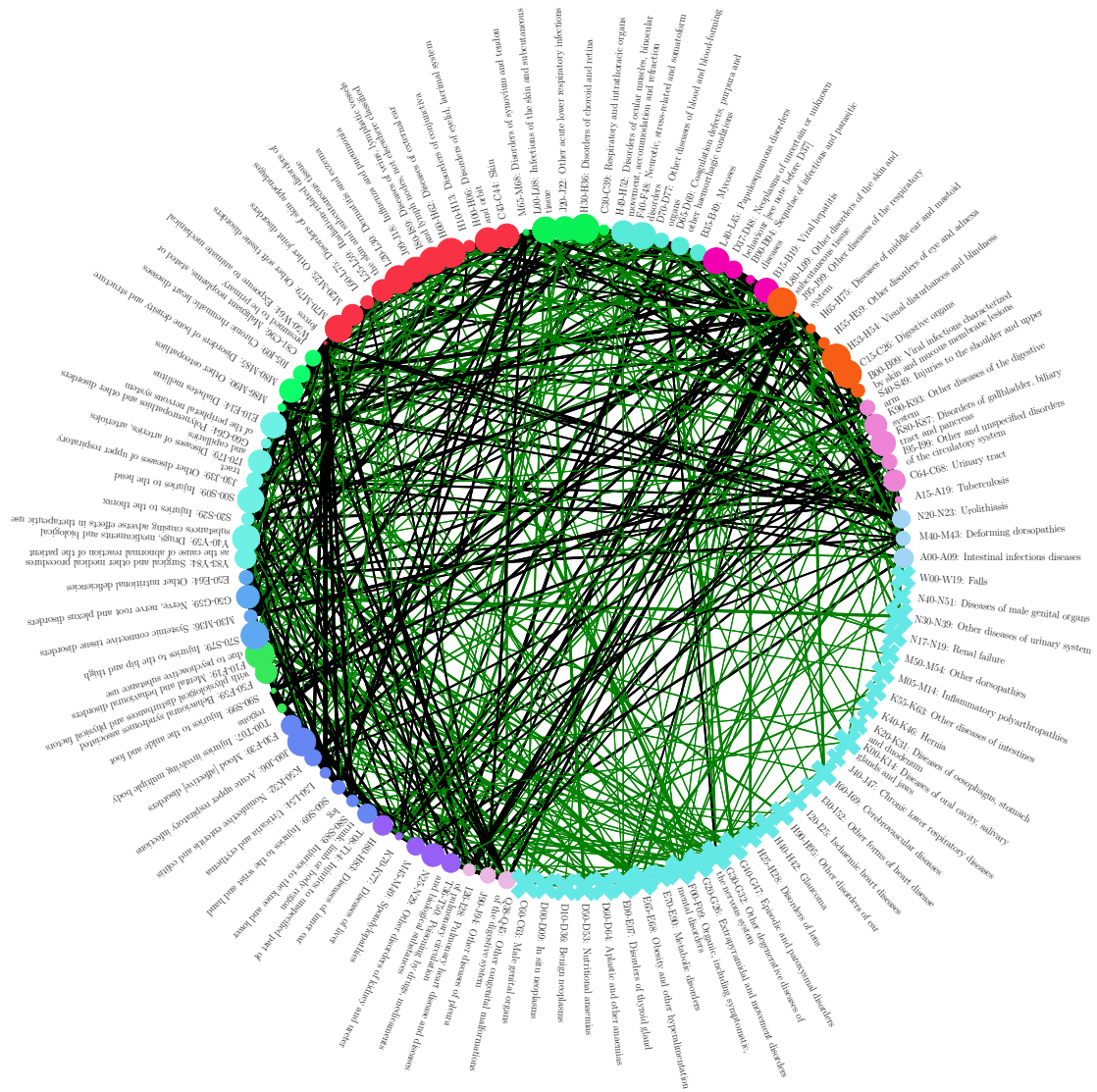


Figure 30: Men aged ≥ 90 .