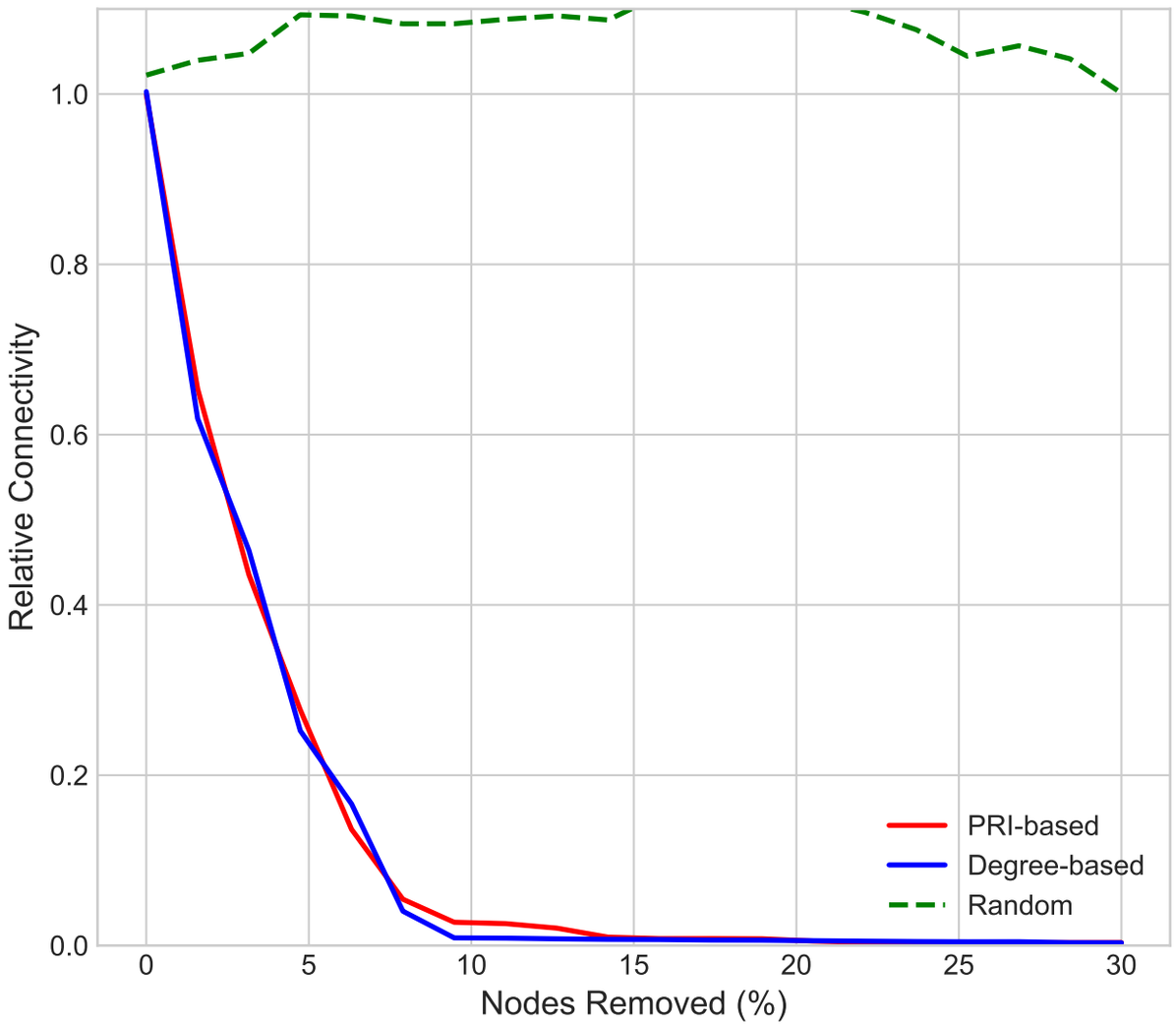
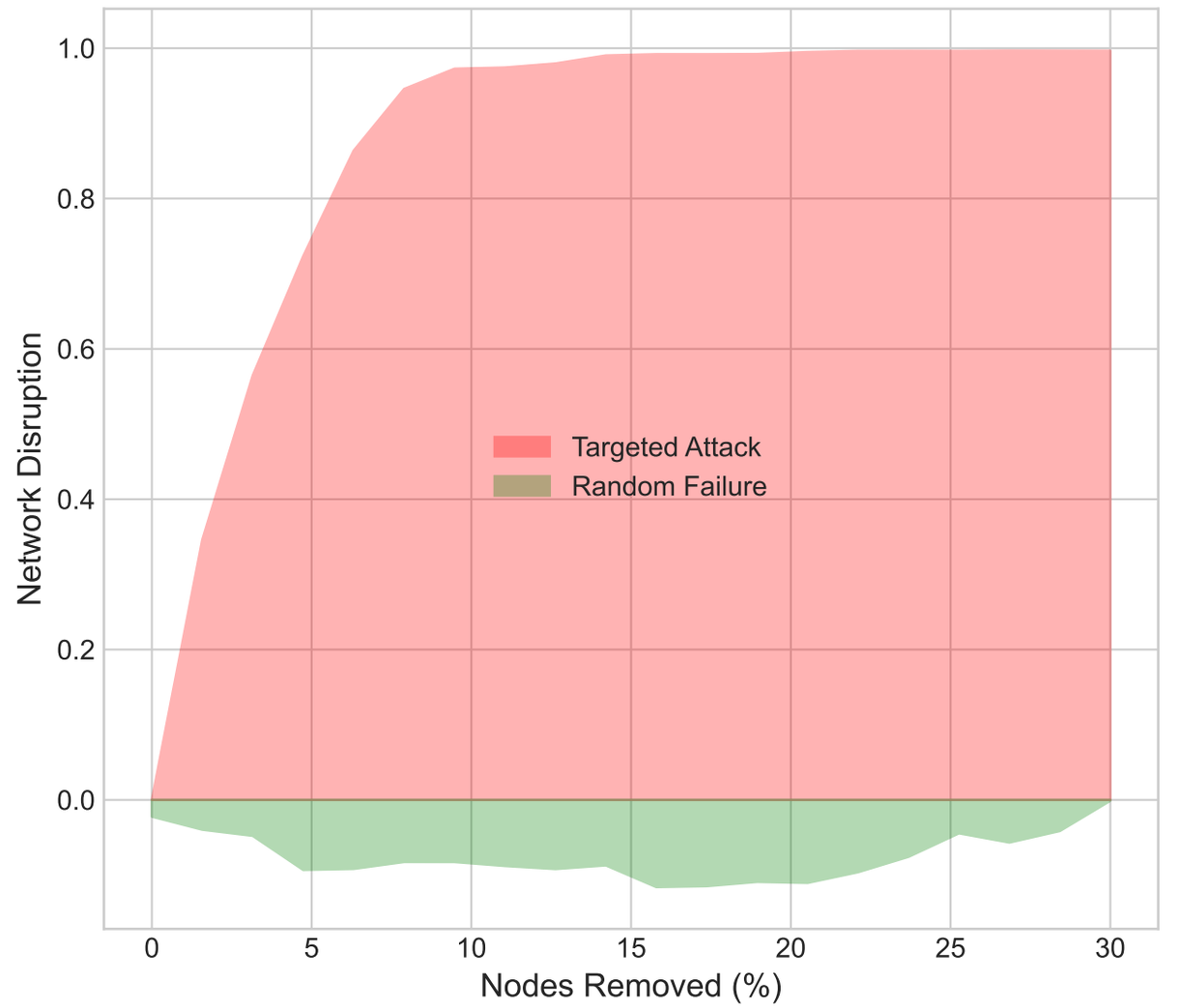
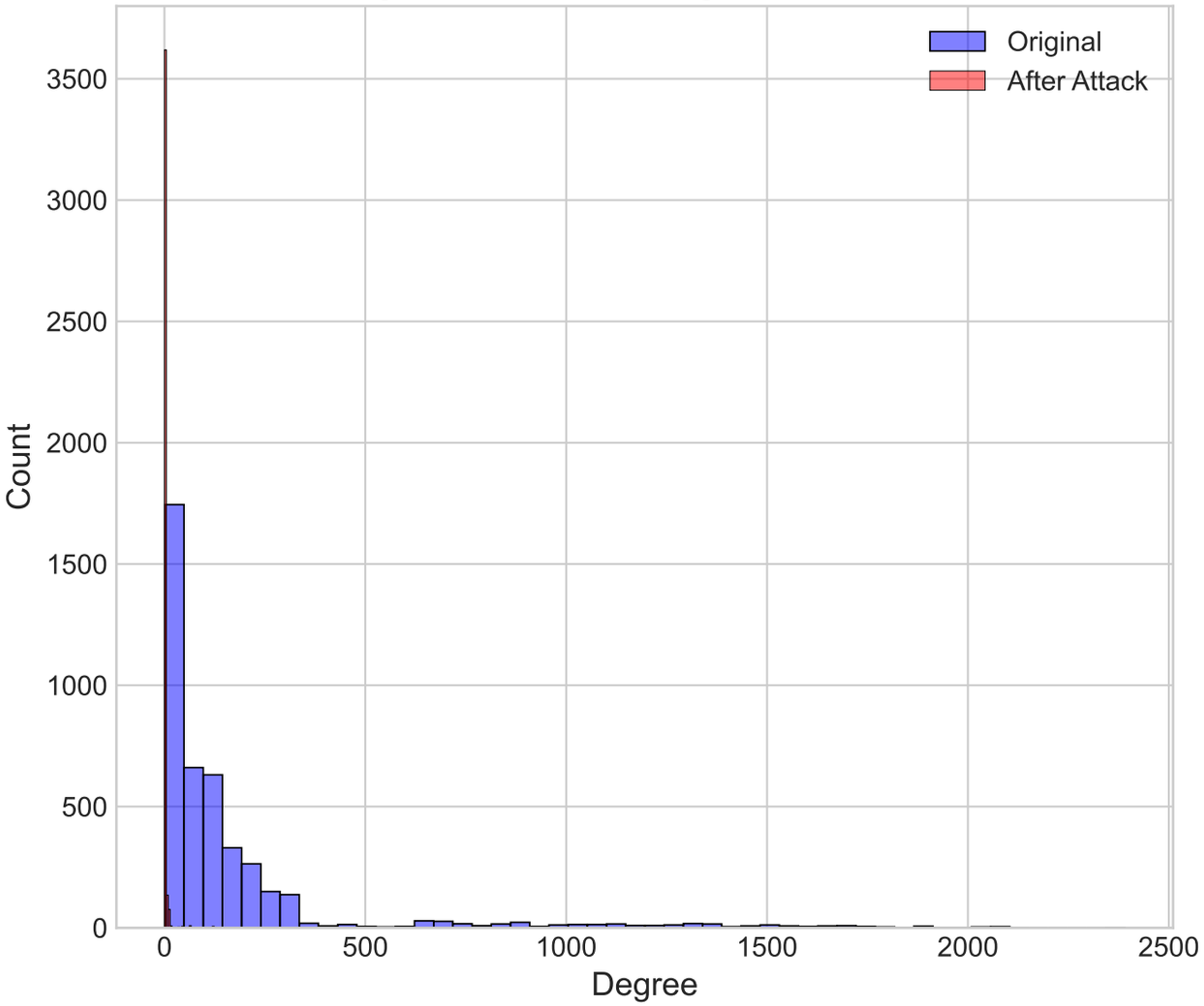
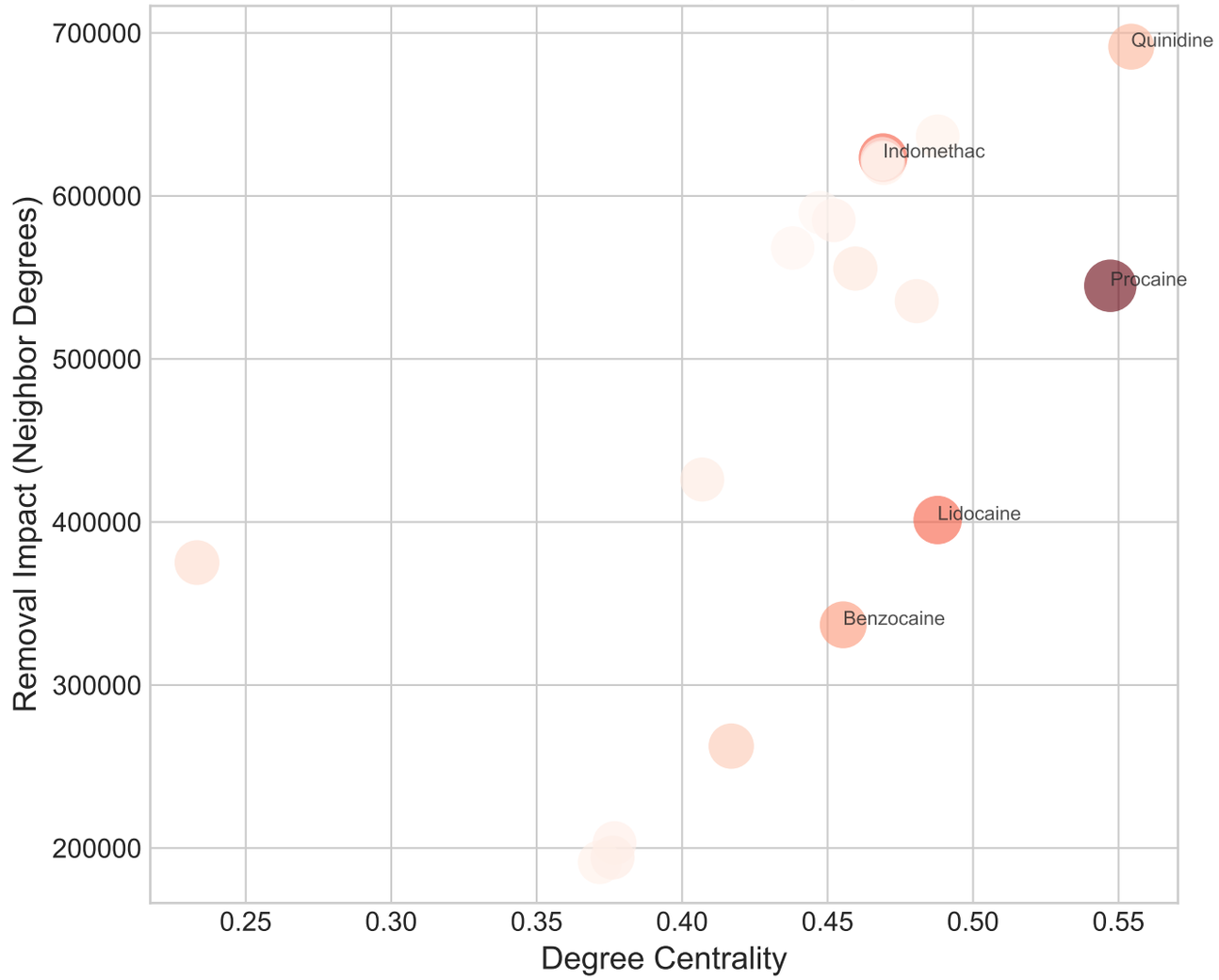

A. Network Robustness Under Node Removal
Relative Connectivity
Nodes Removed (%)
PRI-based
Degree-based
Random
0.0
0.2
0.4
0.6
0.8
1.0
0
5
10
15
20
25
30


B. Attack vs Random Failure
Network Disruption
Nodes Removed (%)
Targeted Attack
Random Failure
0.0
0.2
0.4
0.6
0.8
1.0
0
5
10
15
20
25
30


C. Degree Distribution: Original vs After Attack
Count
Degree
Original
After Attack
0
500
1000
1500
2000
2500
3000
3500


D. Critical Node Impact Analysis
Removal Impact (Neighbor Degrees)
Degree Centrality
Quinidine
Indomethac
Procaine
Lidocaine
Benzocaine
200000
300000
400000
500000
600000
700000
0.25
0.30
0.35
0.40
0.45
0.50
0.55