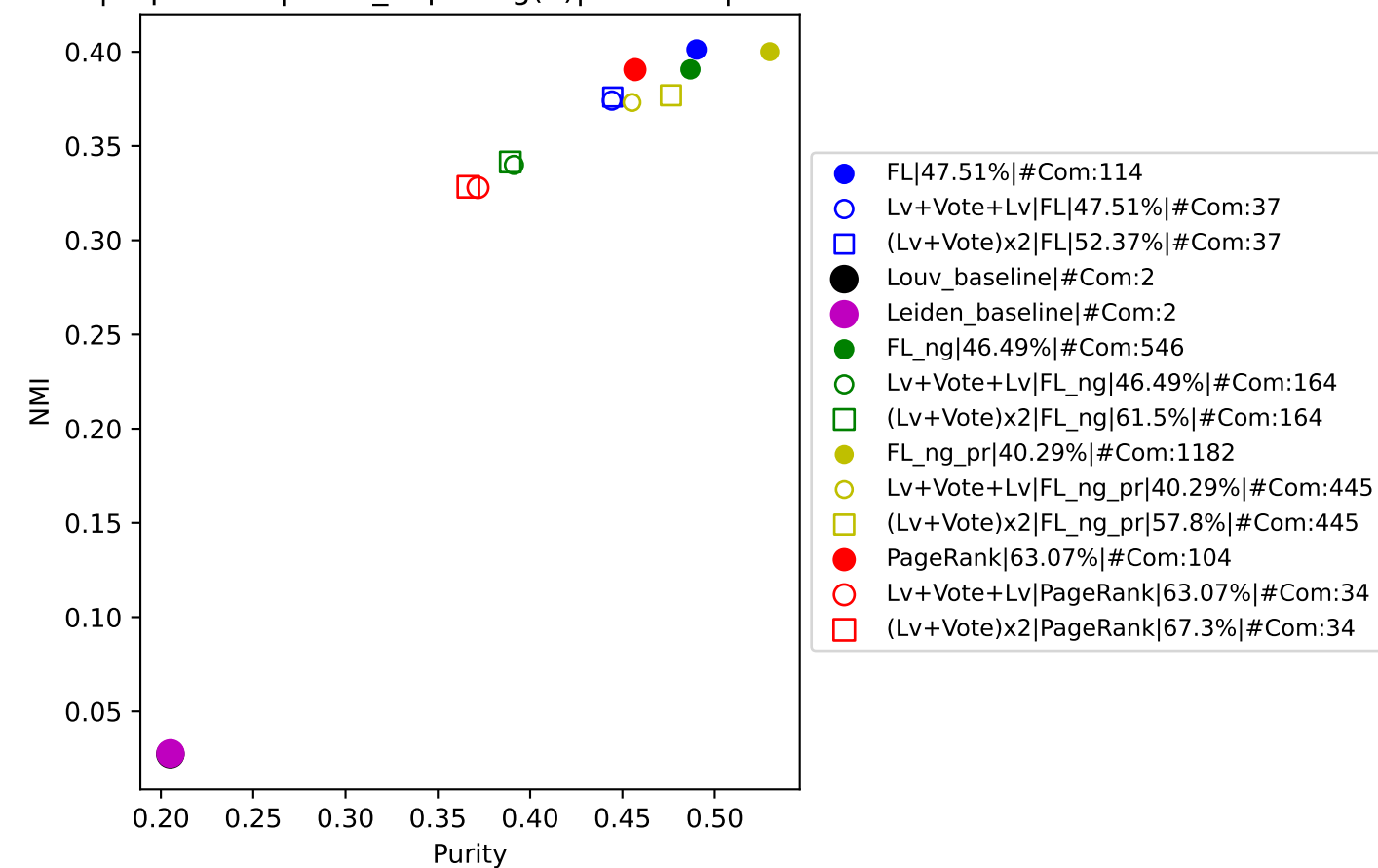
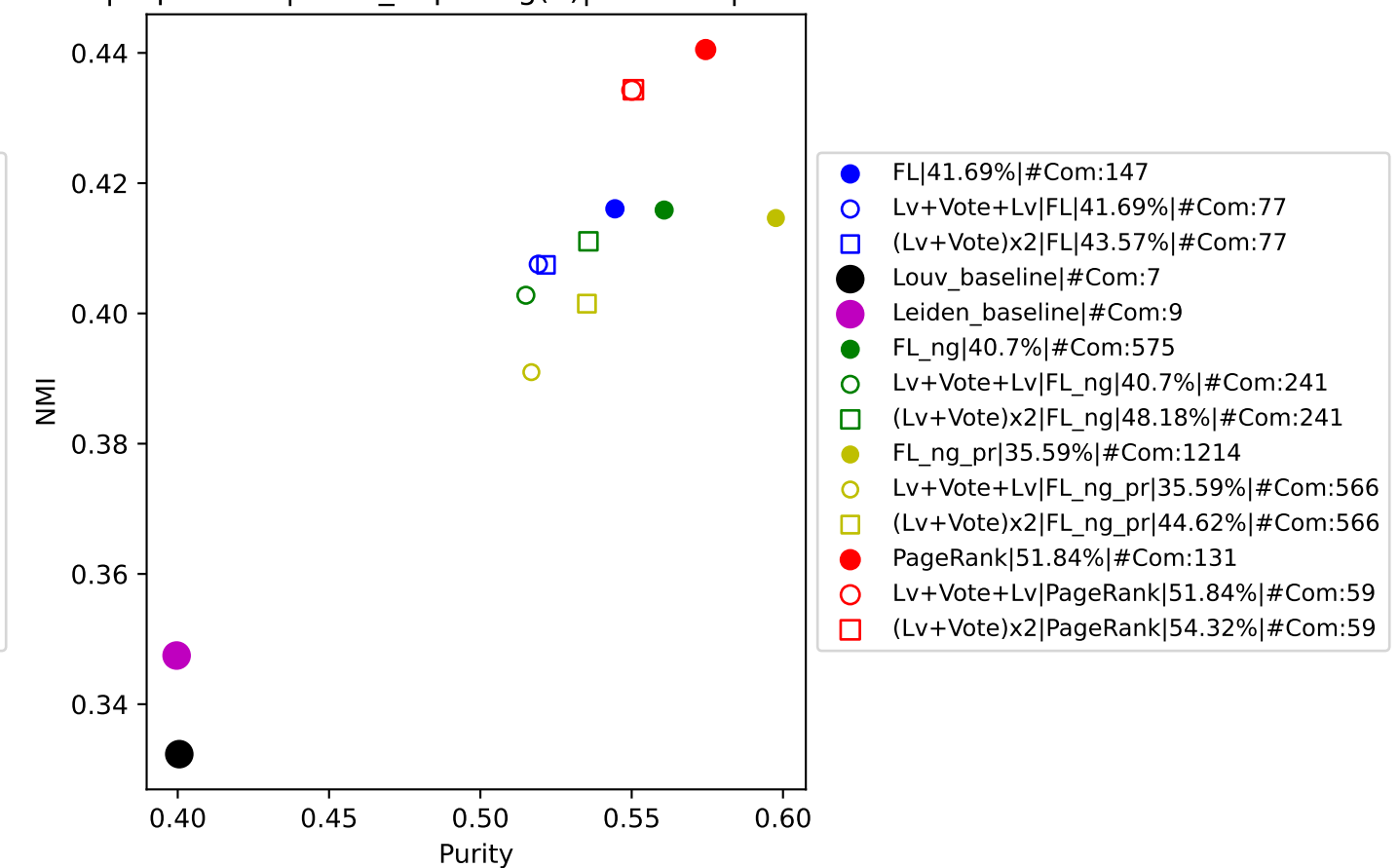


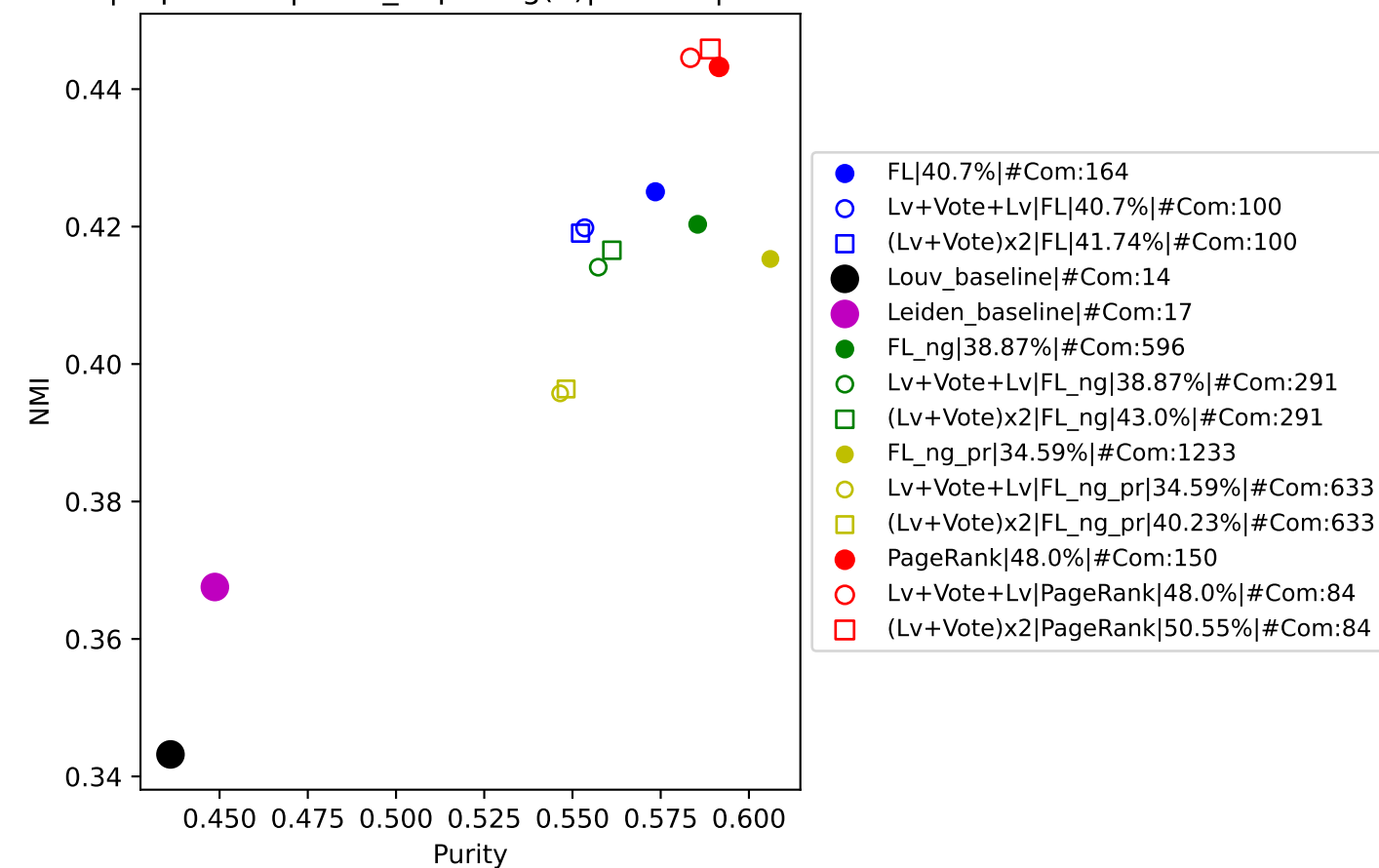
piorxiv | top 20.0%| Num_hops: log(n)|res: 0.05|#OfComm: 26



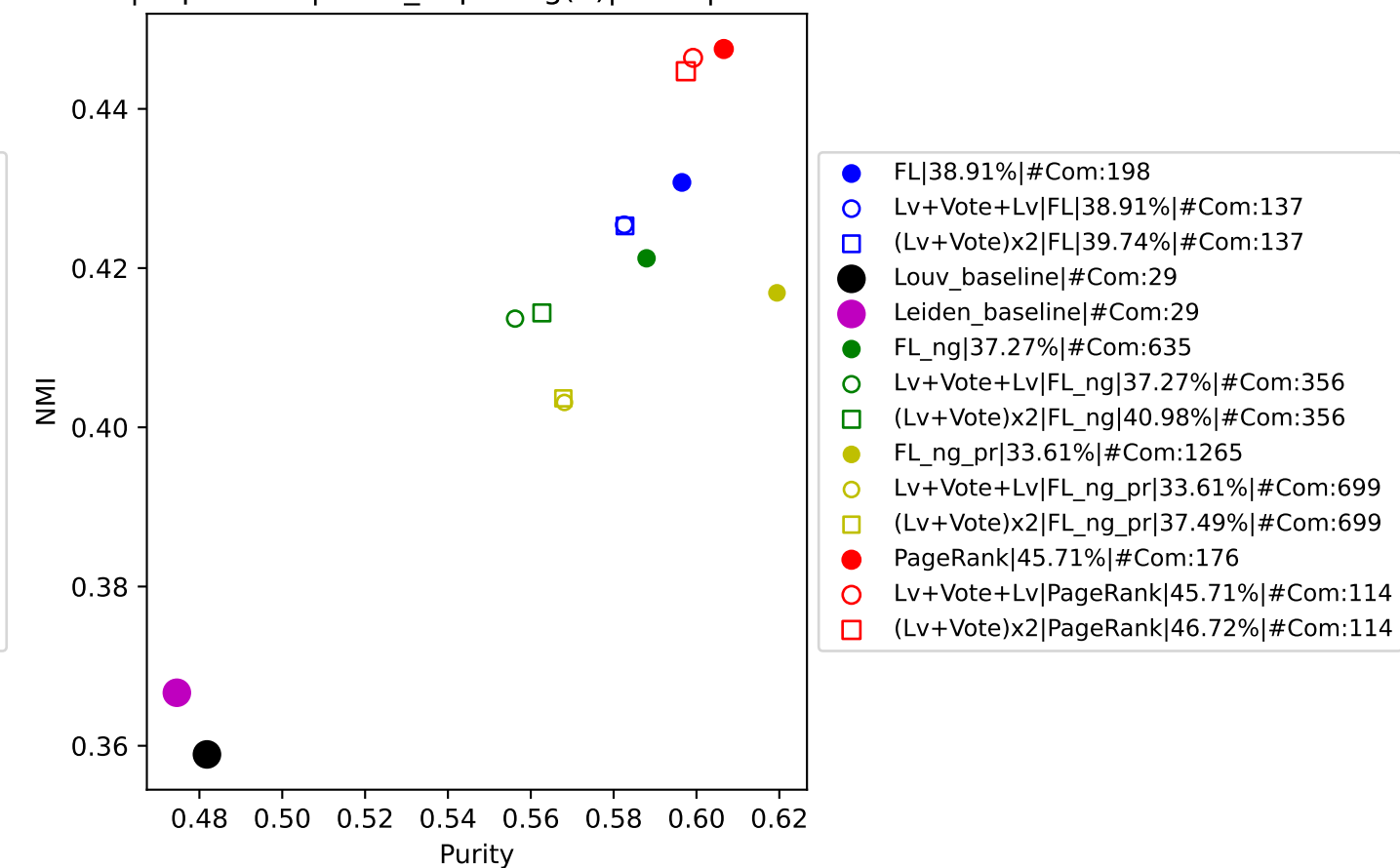
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.25|#OfComm: 26



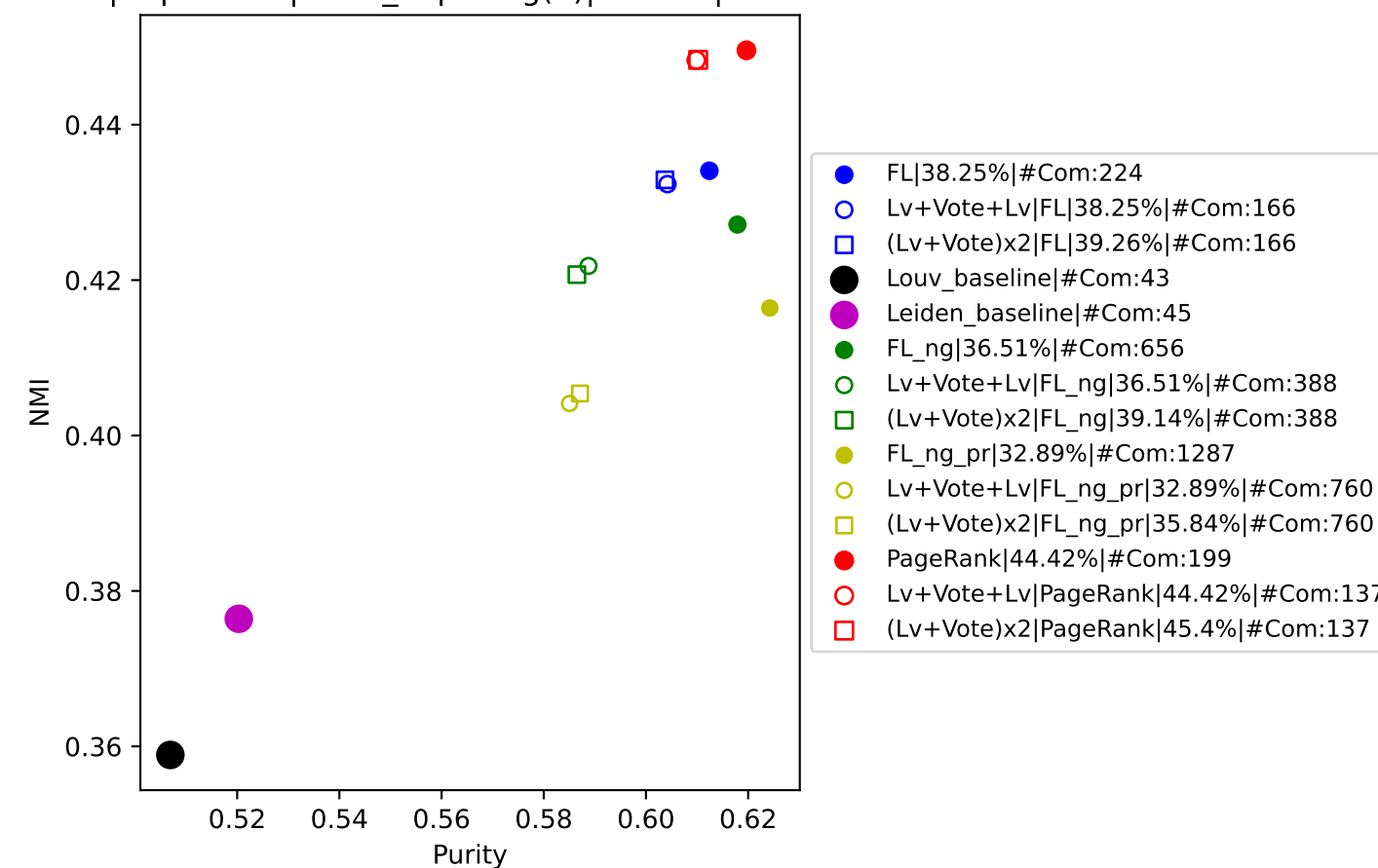
piorxiv | top 20.0%| Num_hops: log(n)|res: 0.5|#OfComm: 26



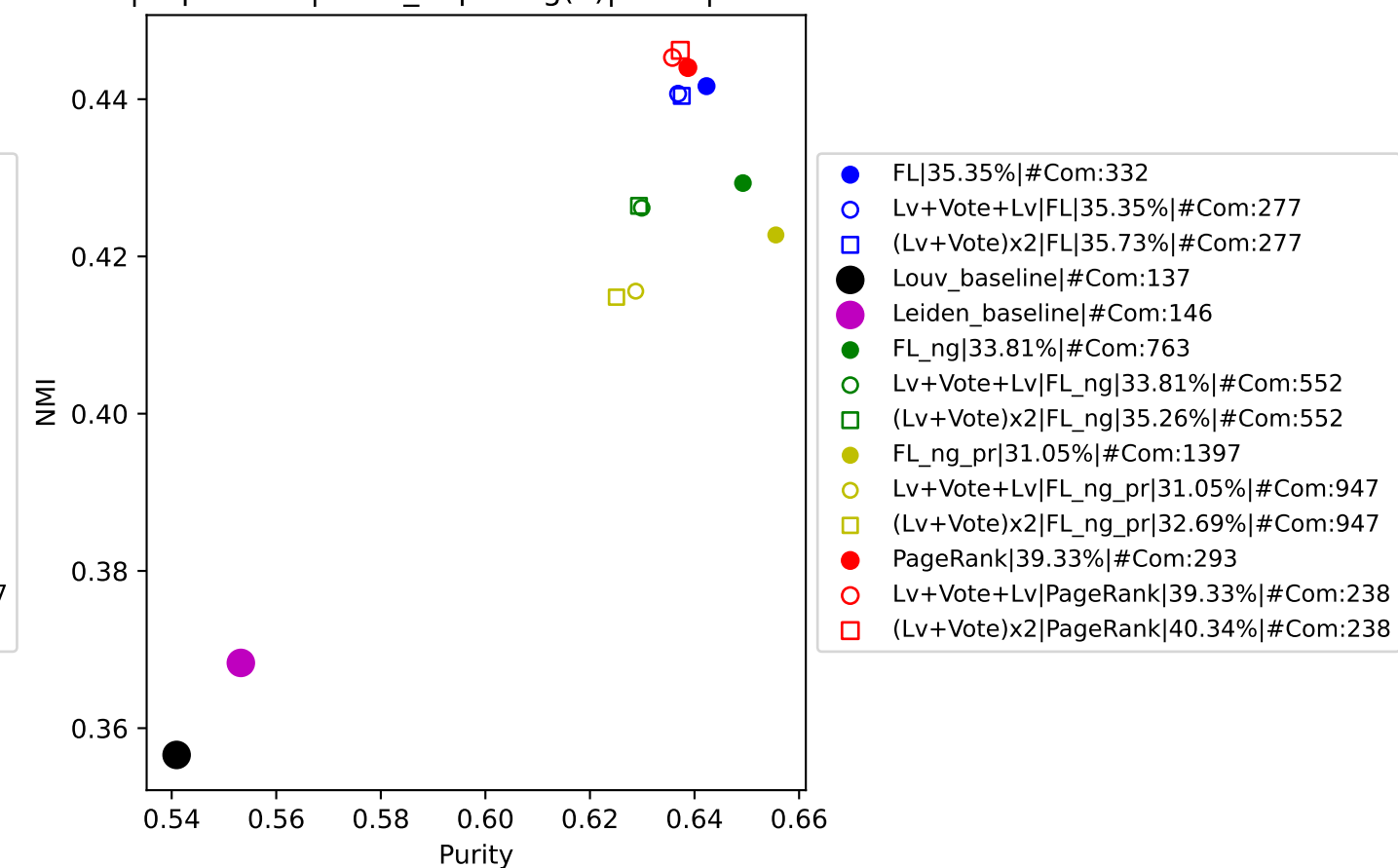
biorxiv | top 20.0%| Num_hops: log(n)|res: 1|#OfComm: 26

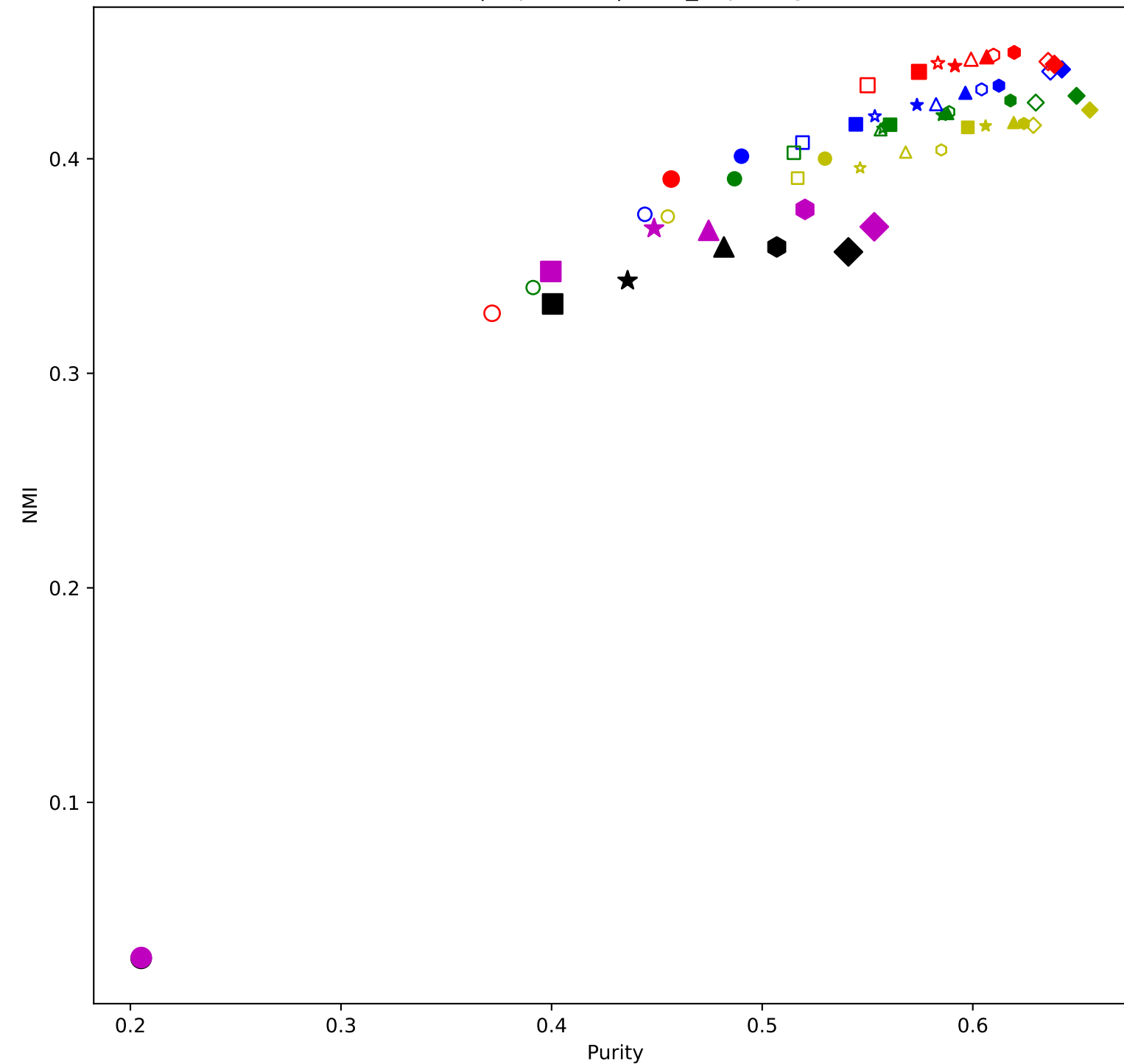


piorxiv | top 20.0%| Num_hops: log(n)|res: 1.5|#OfComm: 26



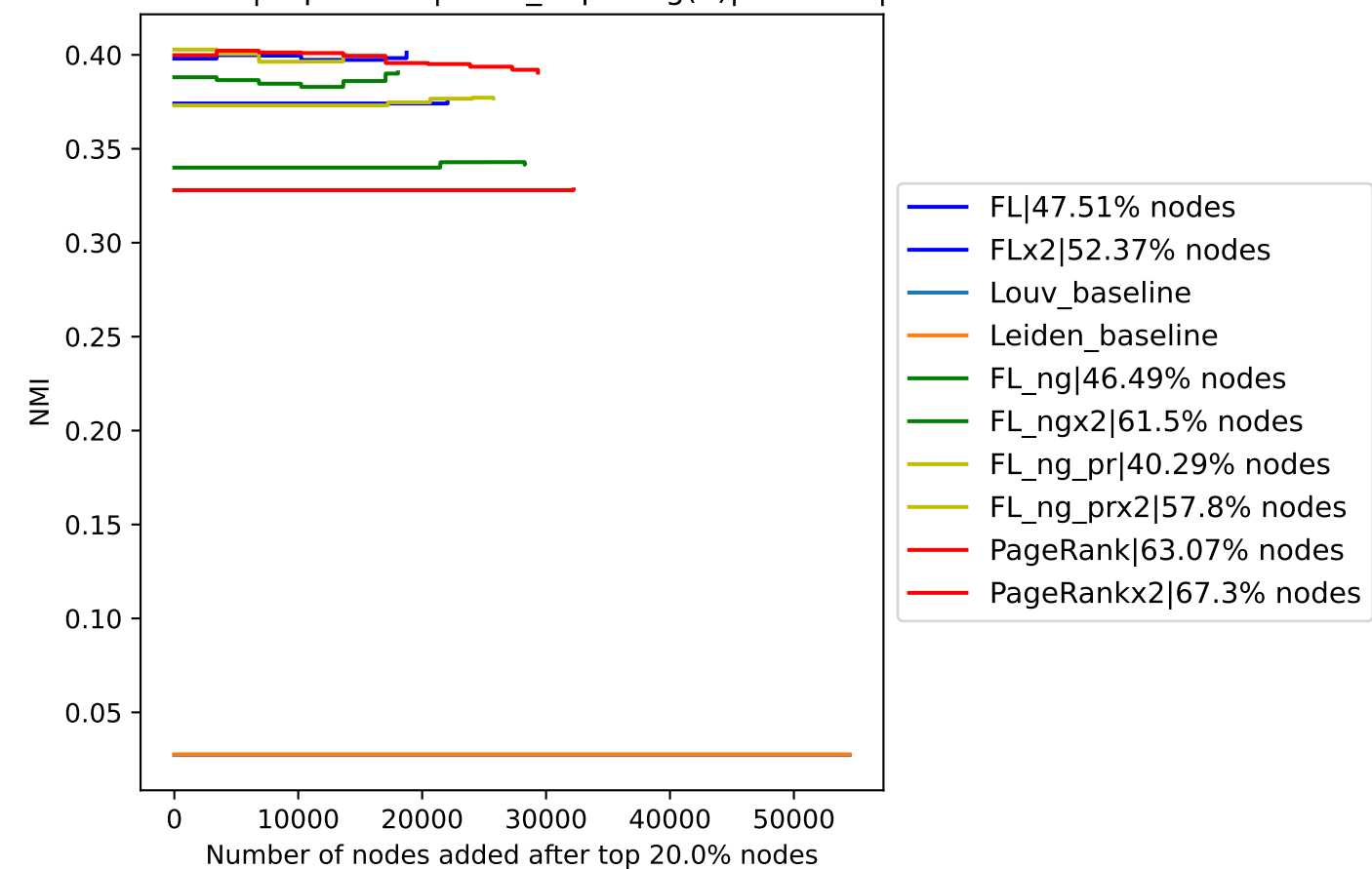
biorxiv | top 20.0%| Num_hops: log(n)|res: 5|#OfComm: 26



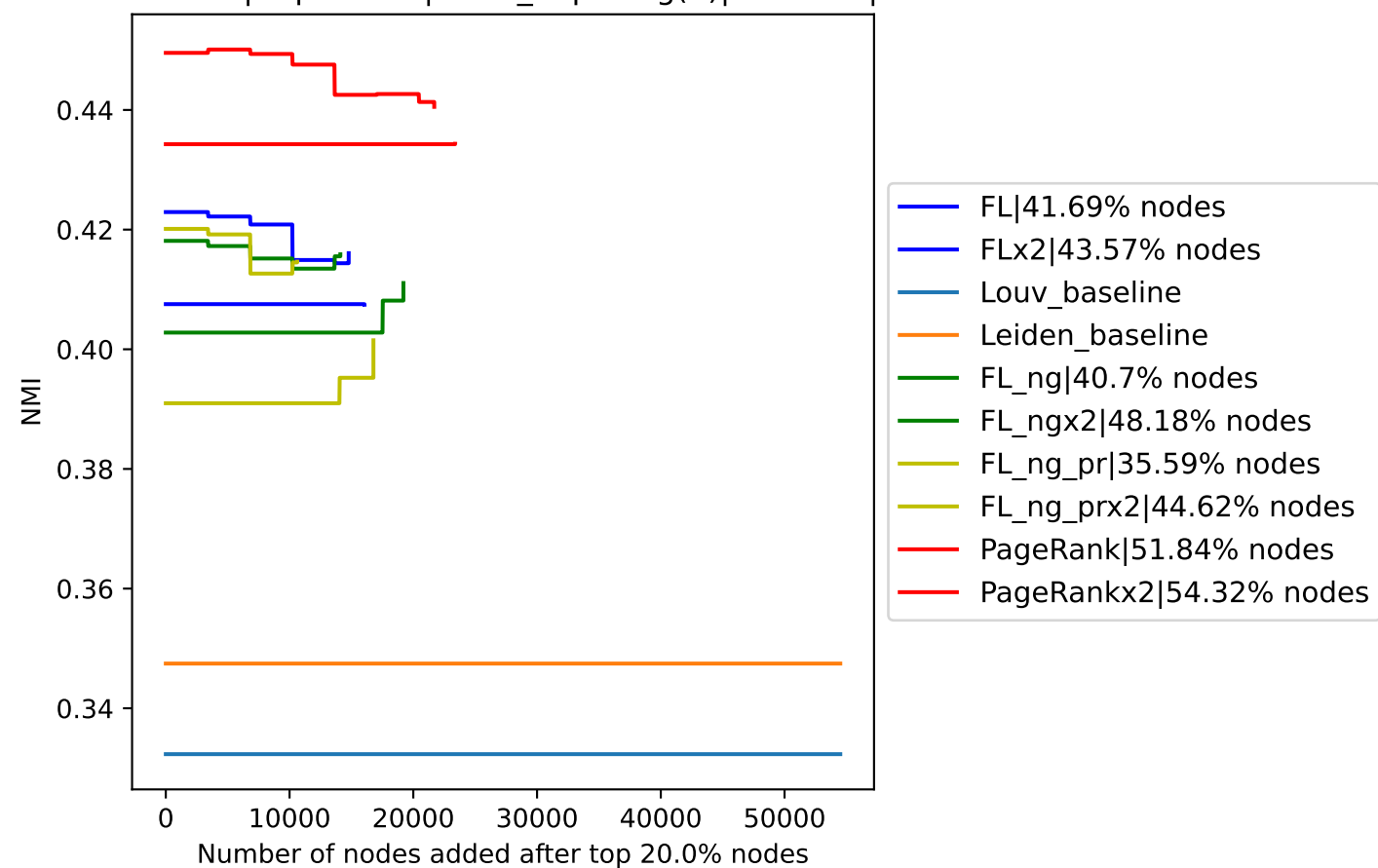


- | | |
|-----------------------------------|----------------------------------|
| ● FL 0.05 47.51% | ▲ FL 1 38.91% |
| ○ Lv+Vote+Lv FL 0.05 47.51% | △ Lv+Vote+Lv FL 1 38.91% |
| ● Louv_baseline 0.05 | ▲ Louv_baseline 1 |
| ● Leiden_baseline 0.05 | ▲ Leiden_baseline 1 |
| ● FL_ng 0.05 46.49% | ▲ FL_ng 1 37.27% |
| ○ Lv+Vote+Lv FL_ng 0.05 46.49% | △ Lv+Vote+Lv FL_ng 1 37.27% |
| ● FL_ng_pr 0.05 40.29% | ▲ FL_ng_pr 1 33.61% |
| ○ Lv+Vote+Lv FL_ng_pr 0.05 40.29% | △ Lv+Vote+Lv FL_ng_pr 1 33.61% |
| ● PageRank 0.05 63.07% | ▲ PageRank 1 45.71% |
| ○ Lv+Vote+Lv PageRank 0.05 63.07% | △ Lv+Vote+Lv PageRank 1 45.71% |
| ■ FL 0.25 41.69% | ● FL 1.5 38.25% |
| □ Lv+Vote+Lv FL 0.25 41.69% | ○ Lv+Vote+Lv FL 1.5 38.25% |
| ■ Louv_baseline 0.25 | ● Louv_baseline 1.5 |
| ■ Leiden_baseline 0.25 | ● Leiden_baseline 1.5 |
| ■ FL_ng 0.25 40.7% | ● FL_ng 1.5 36.51% |
| □ Lv+Vote+Lv FL_ng 0.25 40.7% | ○ Lv+Vote+Lv FL_ng 1.5 36.51% |
| ■ FL_ng_pr 0.25 35.59% | ● FL_ng_pr 1.5 32.89% |
| □ Lv+Vote+Lv FL_ng_pr 0.25 35.59% | ○ Lv+Vote+Lv FL_ng_pr 1.5 32.89% |
| ■ PageRank 0.25 51.84% | ● PageRank 1.5 44.42% |
| □ Lv+Vote+Lv PageRank 0.25 51.84% | ○ Lv+Vote+Lv PageRank 1.5 44.42% |
| ★ FL 0.5 40.7% | ◆ FL 5 35.35% |
| ★ Lv+Vote+Lv FL 0.5 40.7% | ◇ Lv+Vote+Lv FL 5 35.35% |
| ★ Louv_baseline 0.5 | ◆ Louv_baseline 5 |
| ★ Leiden_baseline 0.5 | ◆ Leiden_baseline 5 |
| ★ FL_ng 0.5 38.87% | ◆ FL_ng 5 33.81% |
| ★ Lv+Vote+Lv FL_ng 0.5 38.87% | ◇ Lv+Vote+Lv FL_ng 5 33.81% |
| ★ FL_ng_pr 0.5 34.59% | ◆ FL_ng_pr 5 31.05% |
| ★ Lv+Vote+Lv FL_ng_pr 0.5 34.59% | ◇ Lv+Vote+Lv FL_ng_pr 5 31.05% |
| ★ PageRank 0.5 48.0% | ◆ PageRank 5 39.33% |
| ★ Lv+Vote+Lv PageRank 0.5 48.0% | ◇ Lv+Vote+Lv PageRank 5 39.33% |

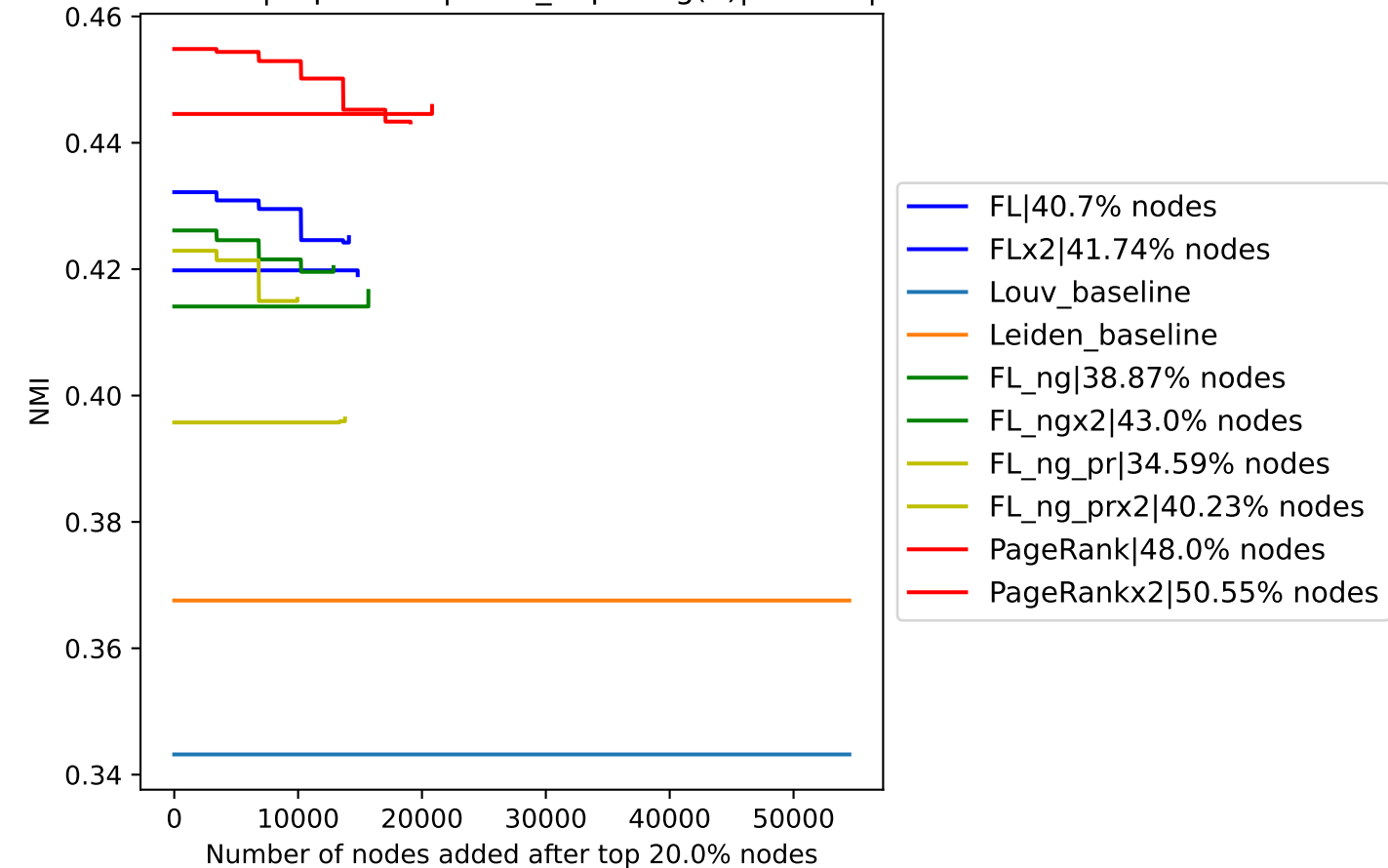
biorexiv | top 20.0%| Num_hops: log(n)|res: 0.05|



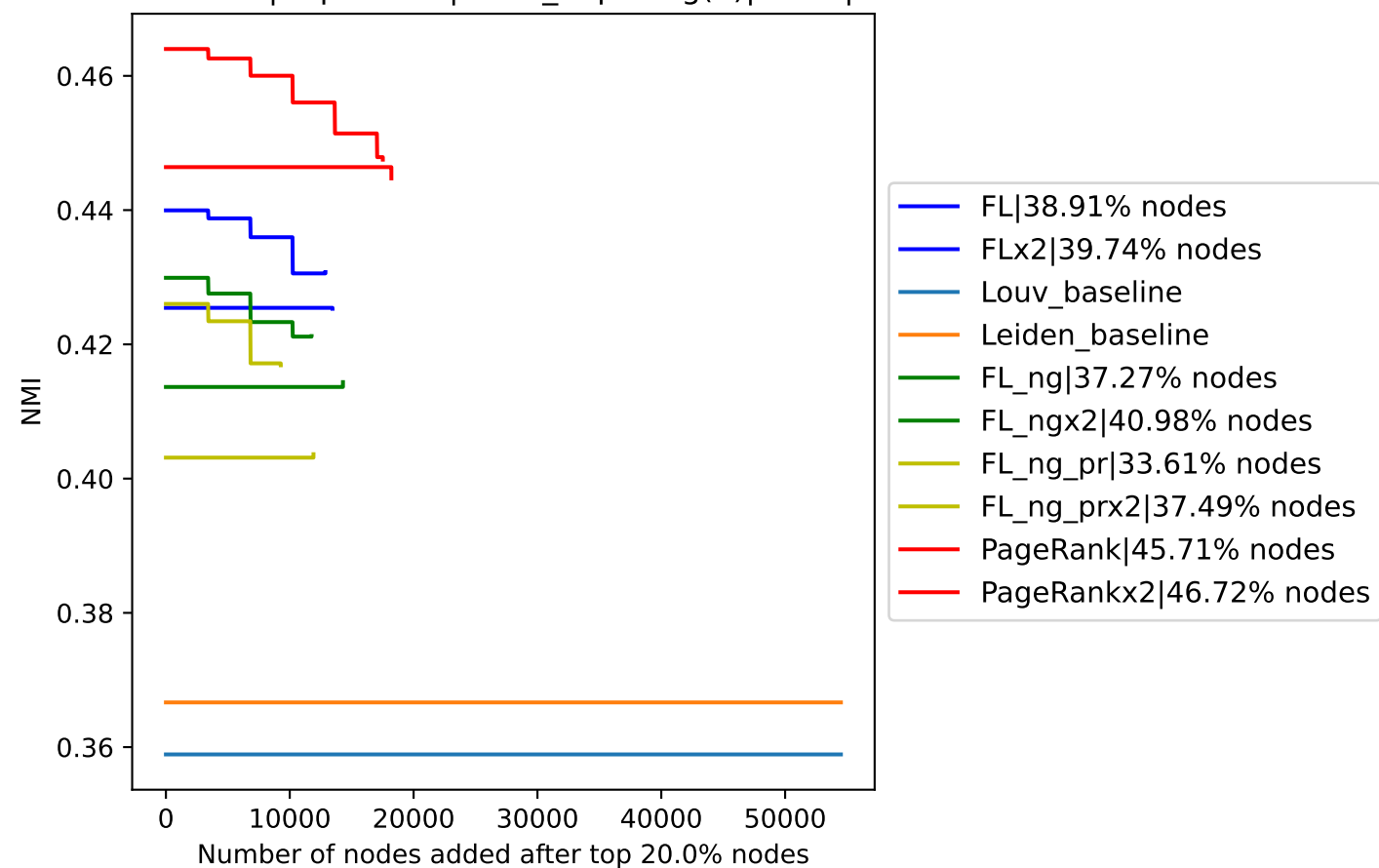
biorexiv | top 20.0%| Num_hops: log(n)|res: 0.25|



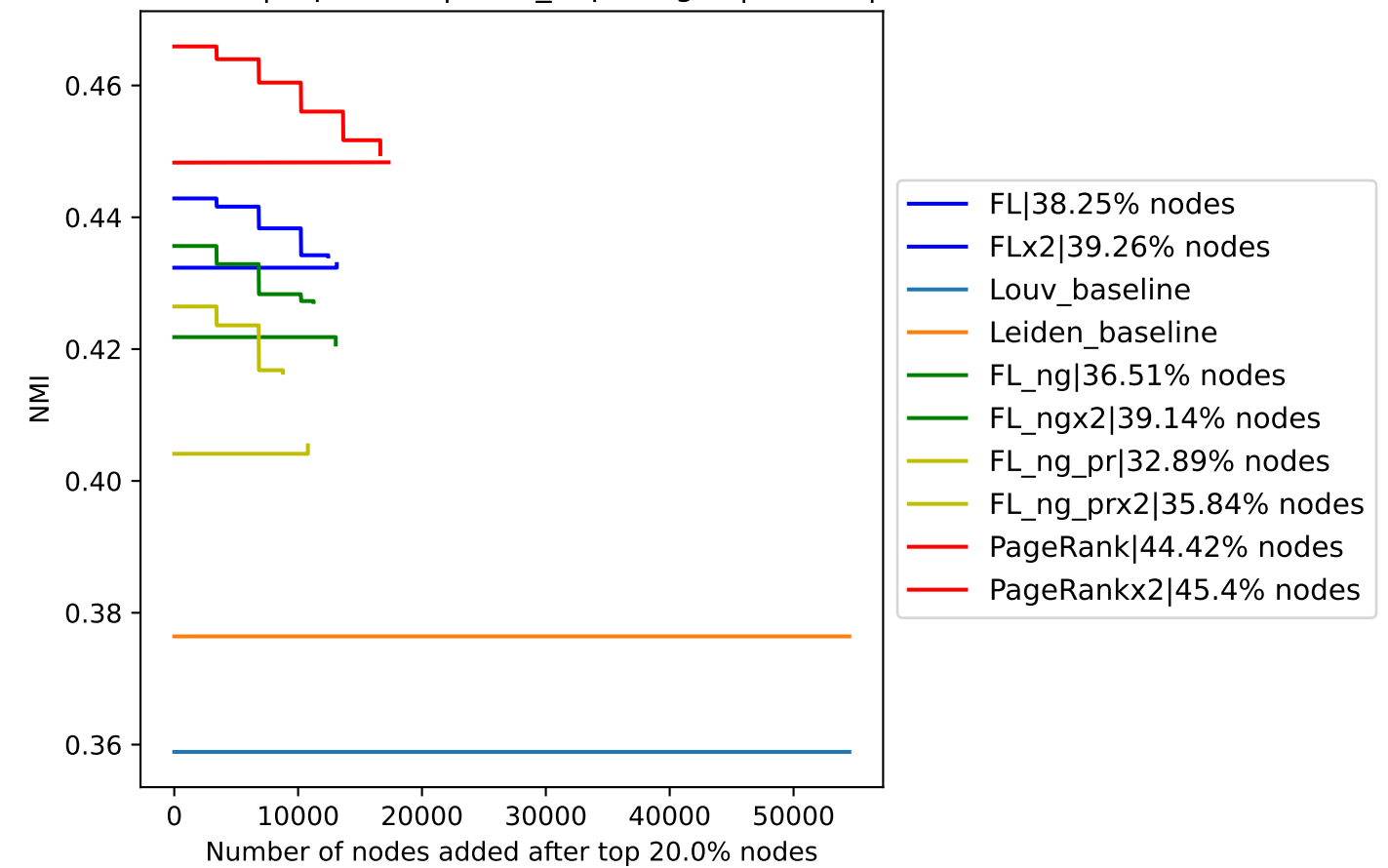
biorexiv | top 20.0%| Num_hops: log(n)|res: 0.5|



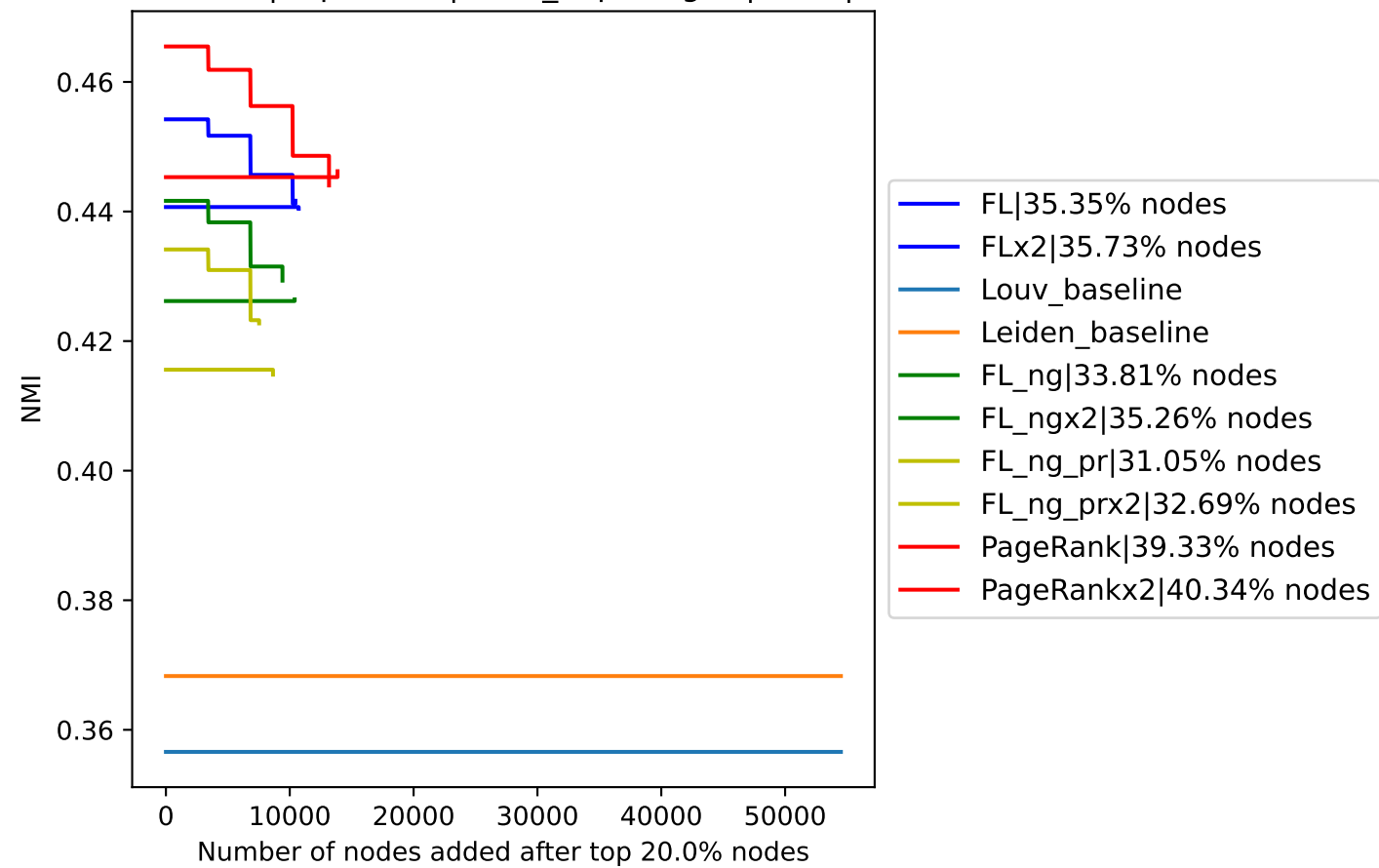
biorexiv | top 20.0%| Num_hops: log(n)|res: 1|



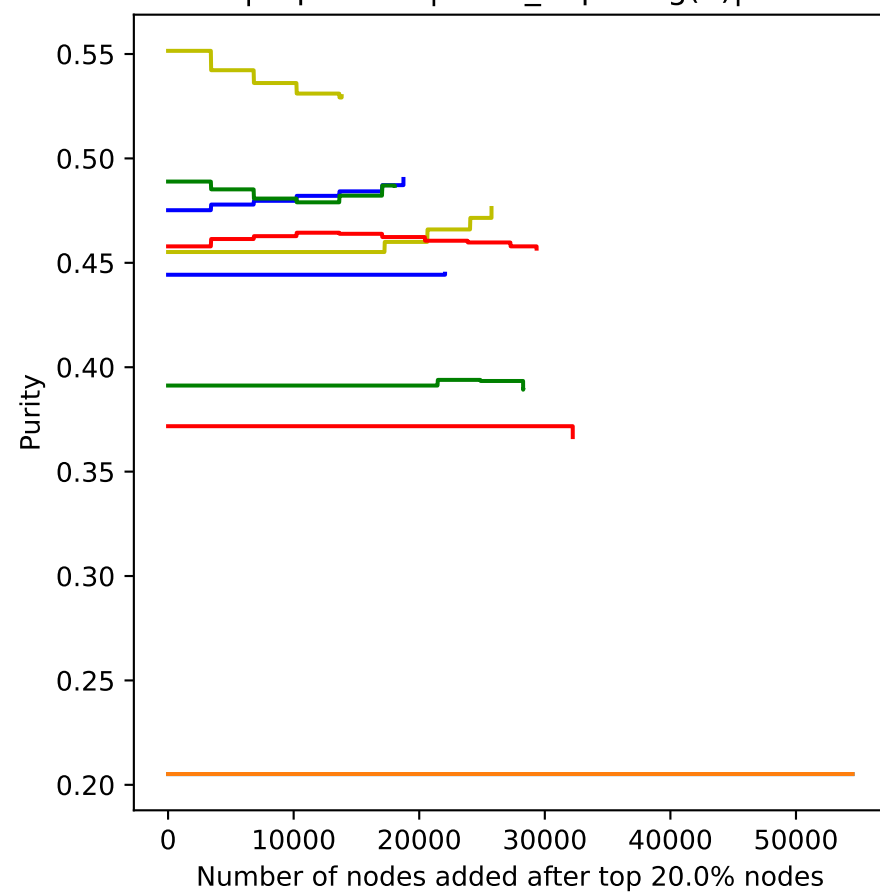
biorexiv | top 20.0%| Num_hops: log(n)|res: 1.5|



biorexiv | top 20.0%| Num_hops: log(n)|res: 5|

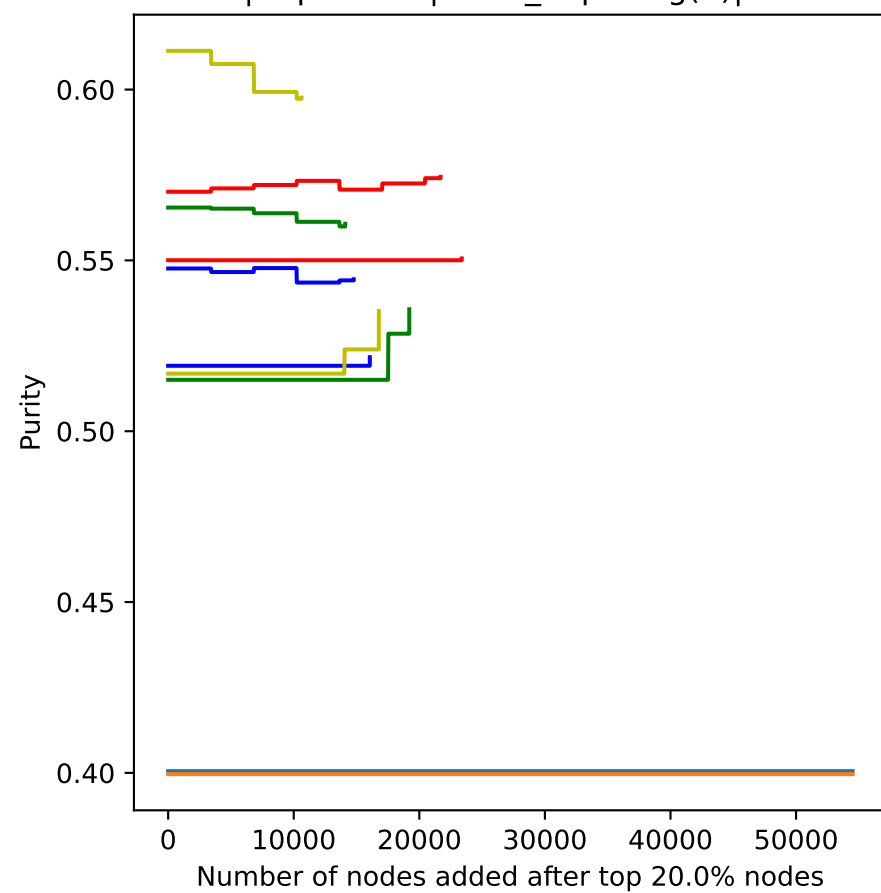


biorxiv | top 20.0%| Num_hops: log(n)|res: 0.05|



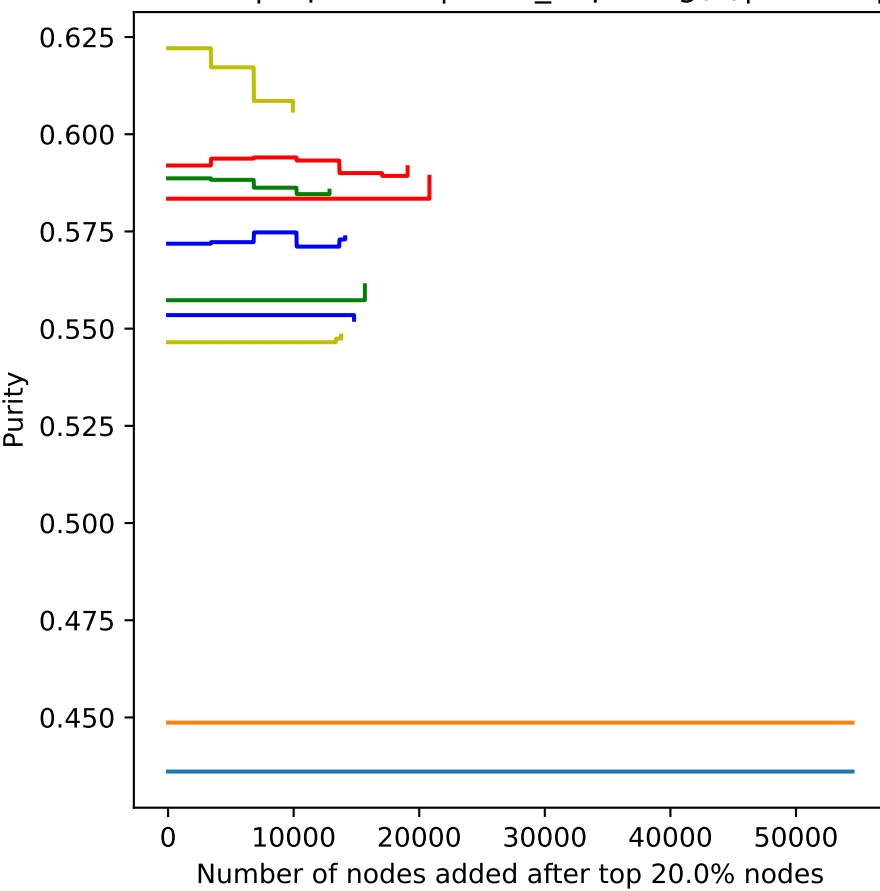
- FL|47.51% nodes
- FLx2|52.37% nodes
- Louv_baseline
- Leiden_baseline
- FL_ng|46.49% nodes
- FL_ngx2|61.5% nodes
- FL_ng_pr|40.29% nodes
- FL_ng_prx2|57.8% nodes
- PageRank|63.07% nodes
- PageRankx2|67.3% nodes

biorxiv | top 20.0%| Num_hops: log(n)|res: 0.25|



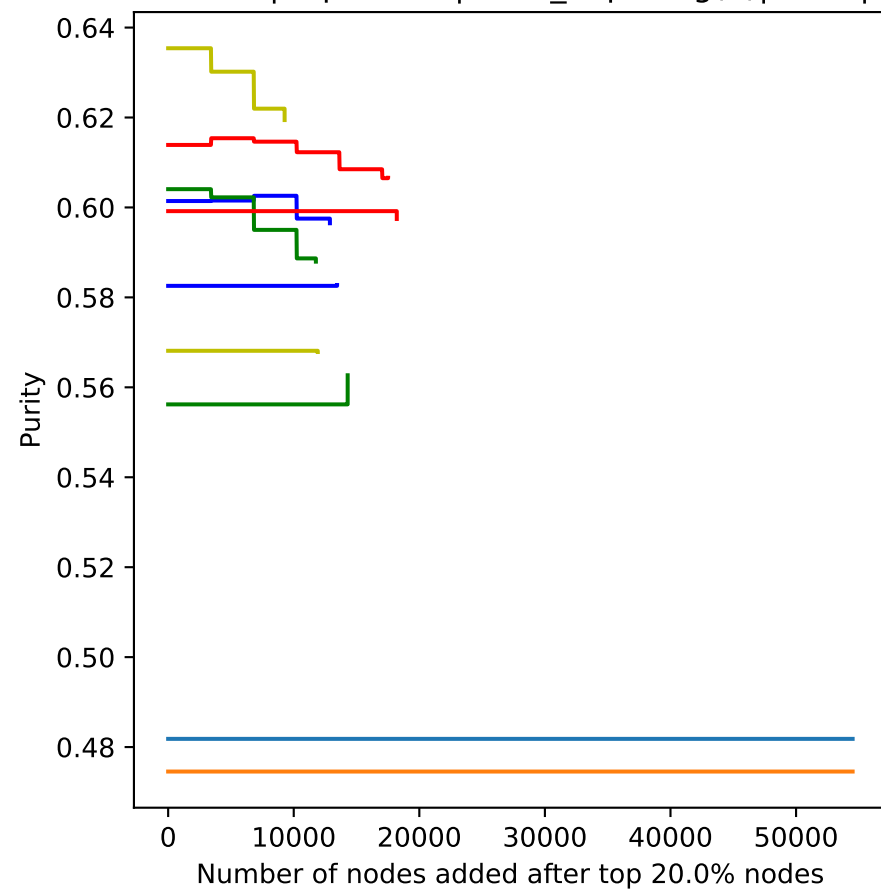
- FL|41.69% nodes
- FLx2|43.57% nodes
- Louv_baseline
- Leiden_baseline
- FL_ng|40.7% nodes
- FL_ngx2|48.18% nodes
- FL_ng_pr|35.59% nodes
- FL_ng_prx2|44.62% nodes
- PageRank|51.84% nodes
- PageRankx2|54.32% nodes

biorxiv | top 20.0%| Num_hops: log(n)|res: 0.5|



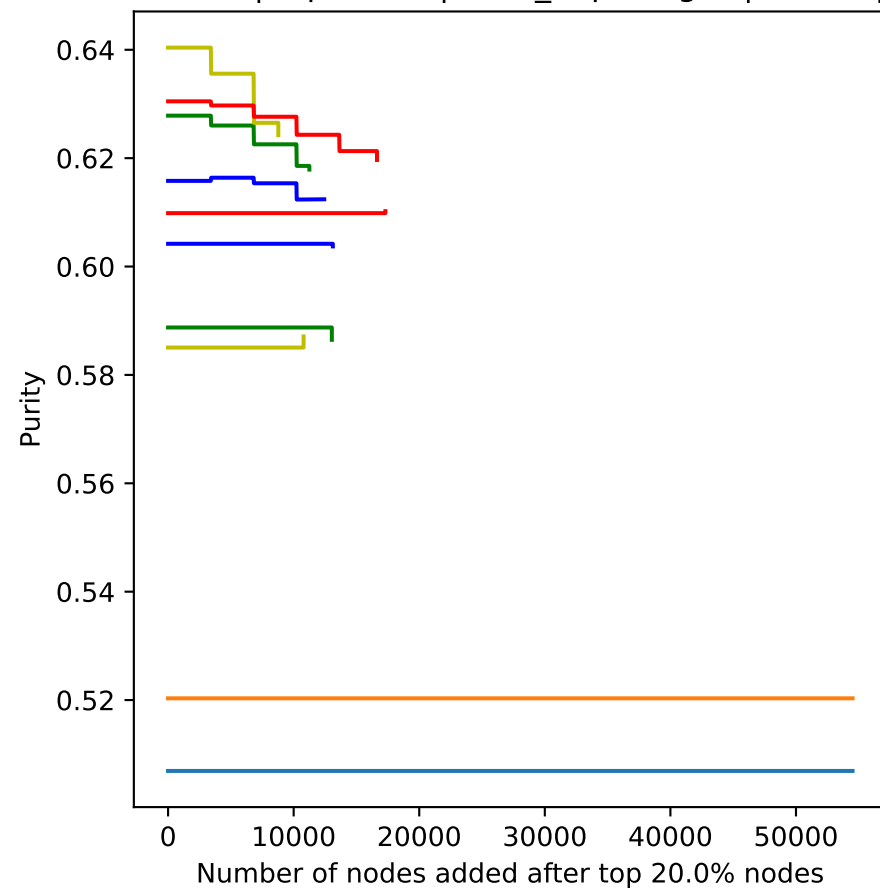
- FL|40.7% nodes
- FLx2|41.74% nodes
- Louv_baseline
- Leiden_baseline
- FL_ng|38.87% nodes
- FL_ngx2|43.0% nodes
- FL_ng_pr|34.59% nodes
- FL_ng_prx2|40.23% nodes
- PageRank|48.0% nodes
- PageRankx2|50.55% nodes

biorxiv | top 20.0%| Num_hops: log(n)|res: 1|



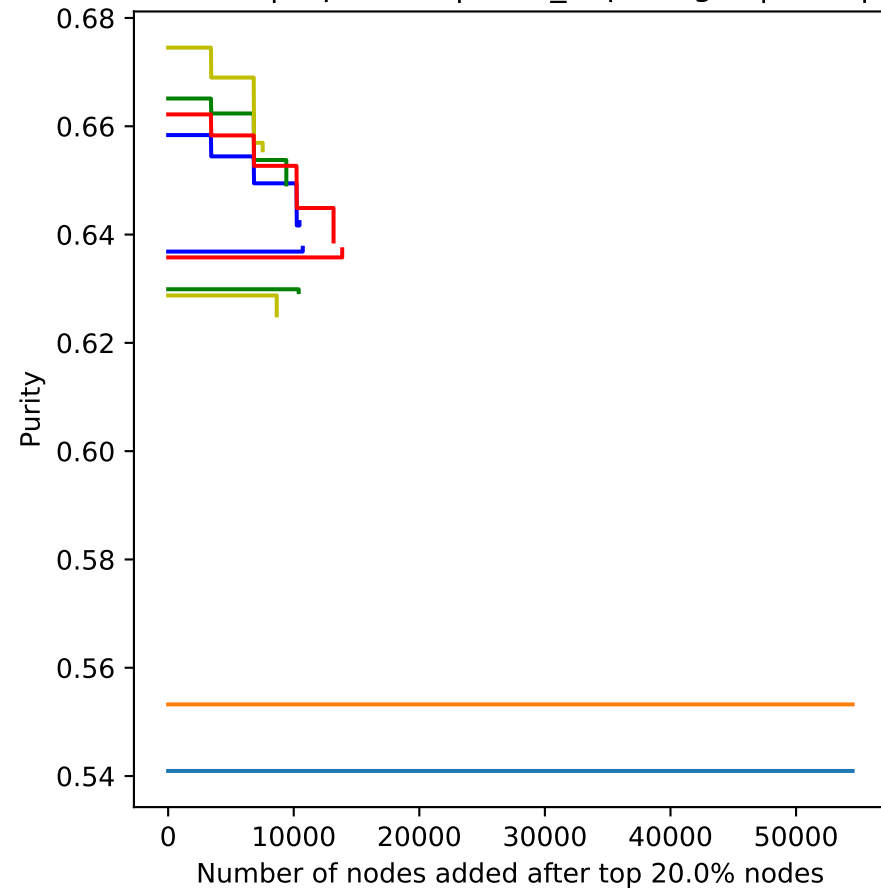
- FL|38.91% nodes
- FLx2|39.74% nodes
- Louv_baseline
- Leiden_baseline
- FL_ng|37.27% nodes
- FL_ngx2|40.98% nodes
- FL_ng_pr|33.61% nodes
- FL_ng_prx2|37.49% nodes
- PageRank|45.71% nodes
- PageRankx2|46.72% nodes

biorxiv | top 20.0%| Num_hops: log(n)|res: 1.5|



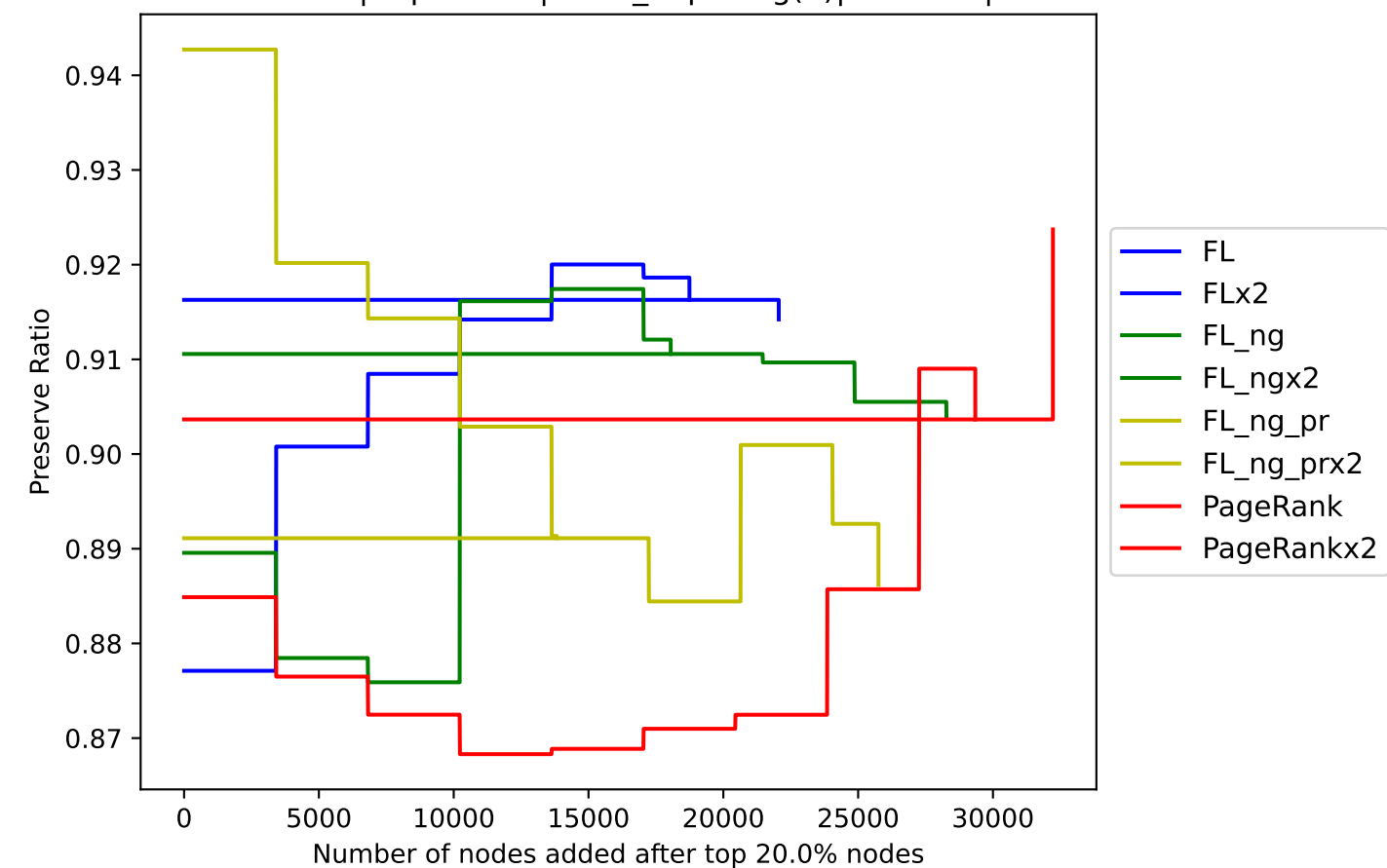
- FL|38.25% nodes
- FLx2|39.26% nodes
- Louv_baseline
- Leiden_baseline
- FL_ng|36.51% nodes
- FL_ngx2|39.14% nodes
- FL_ng_pr|32.89% nodes
- FL_ng_prx2|35.84% nodes
- PageRank|44.42% nodes
- PageRankx2|45.4% nodes

biorxiv | top 20.0%| Num_hops: log(n)|res: 5|

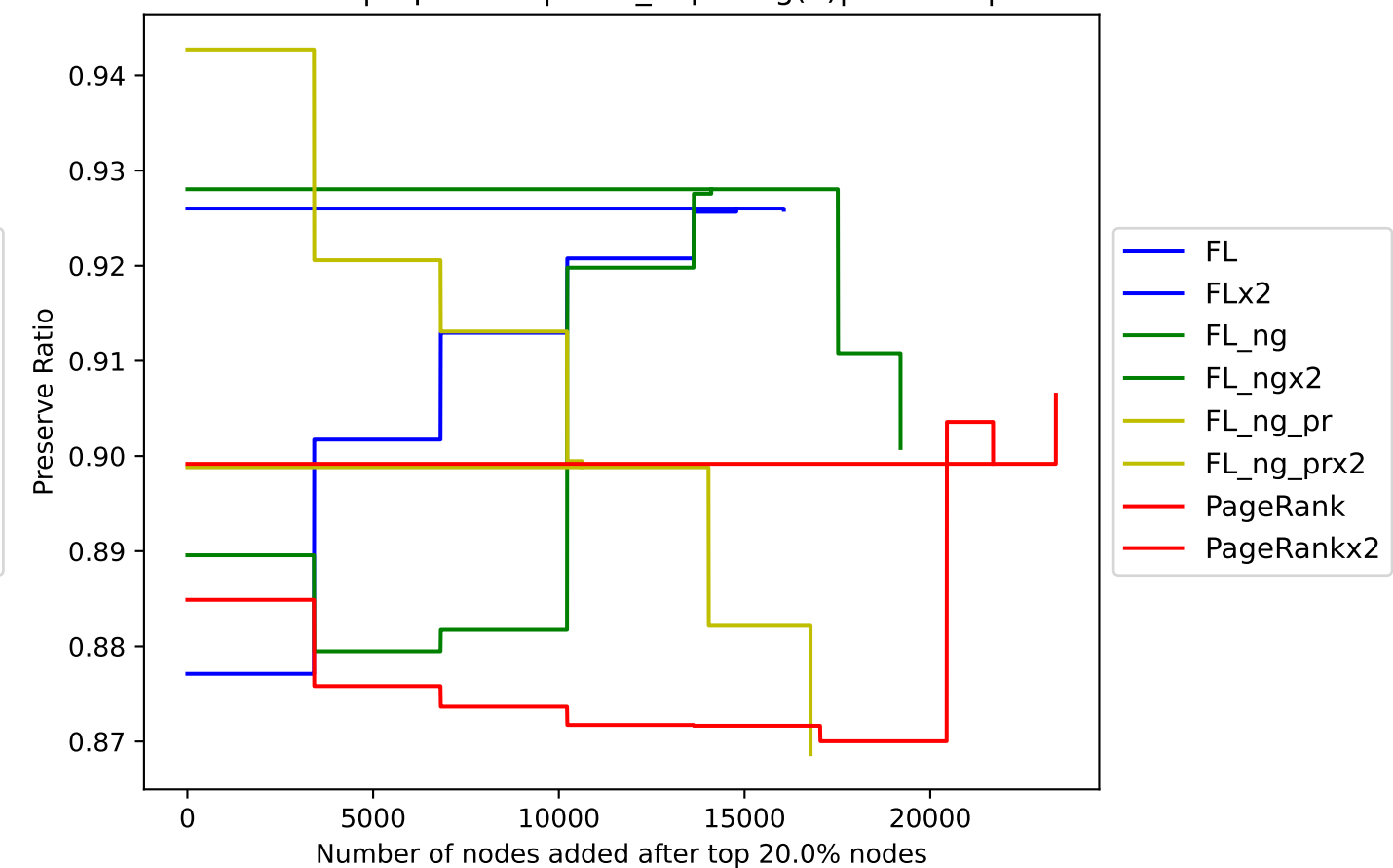


- FL|35.35% nodes
- FLx2|35.73% nodes
- Louv_baseline
- Leiden_baseline
- FL_ng|33.81% nodes
- FL_ngx2|35.26% nodes
- FL_ng_pr|31.05% nodes
- FL_ng_prx2|32.69% nodes
- PageRank|39.33% nodes
- PageRankx2|40.34% nodes

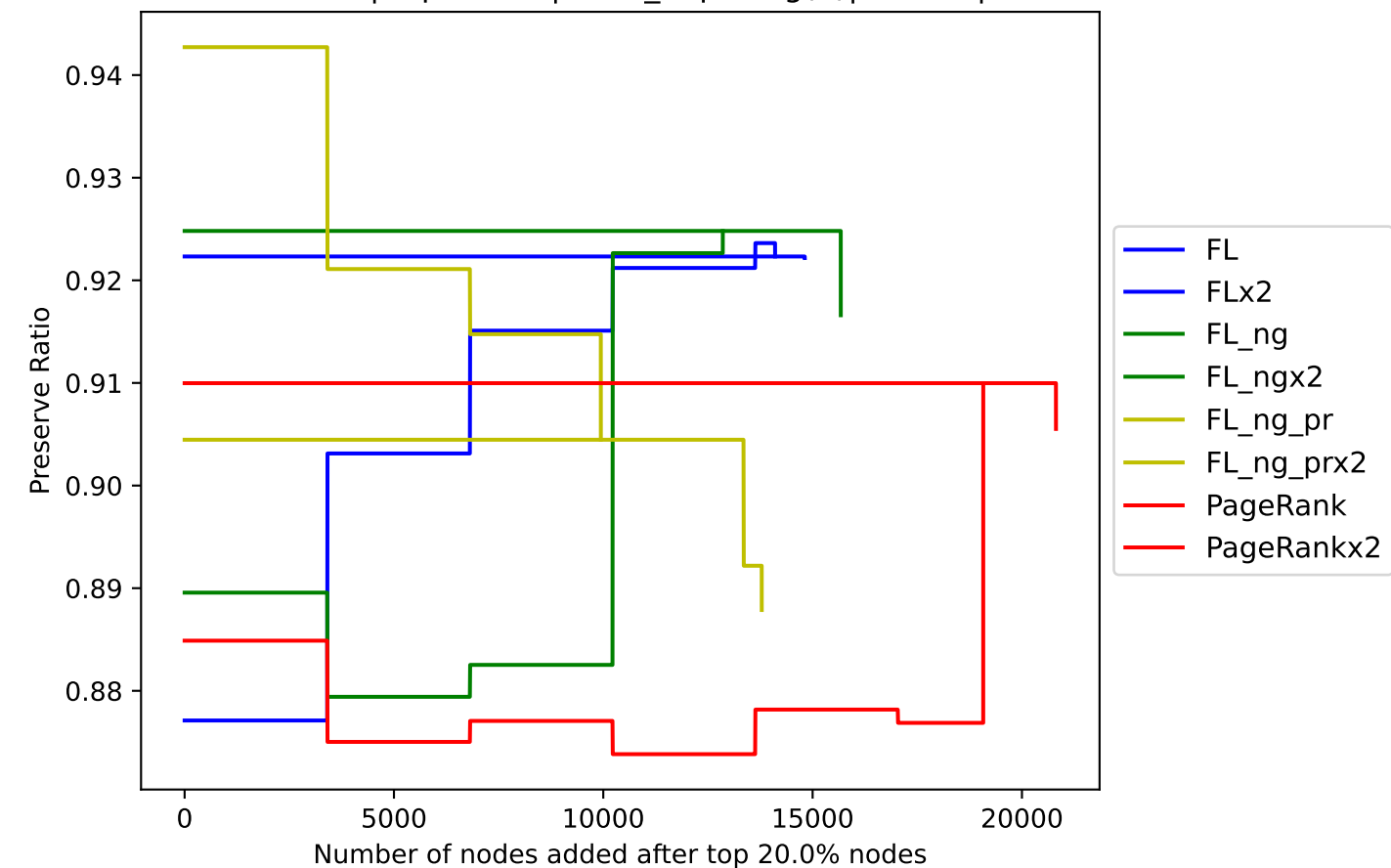
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.05|



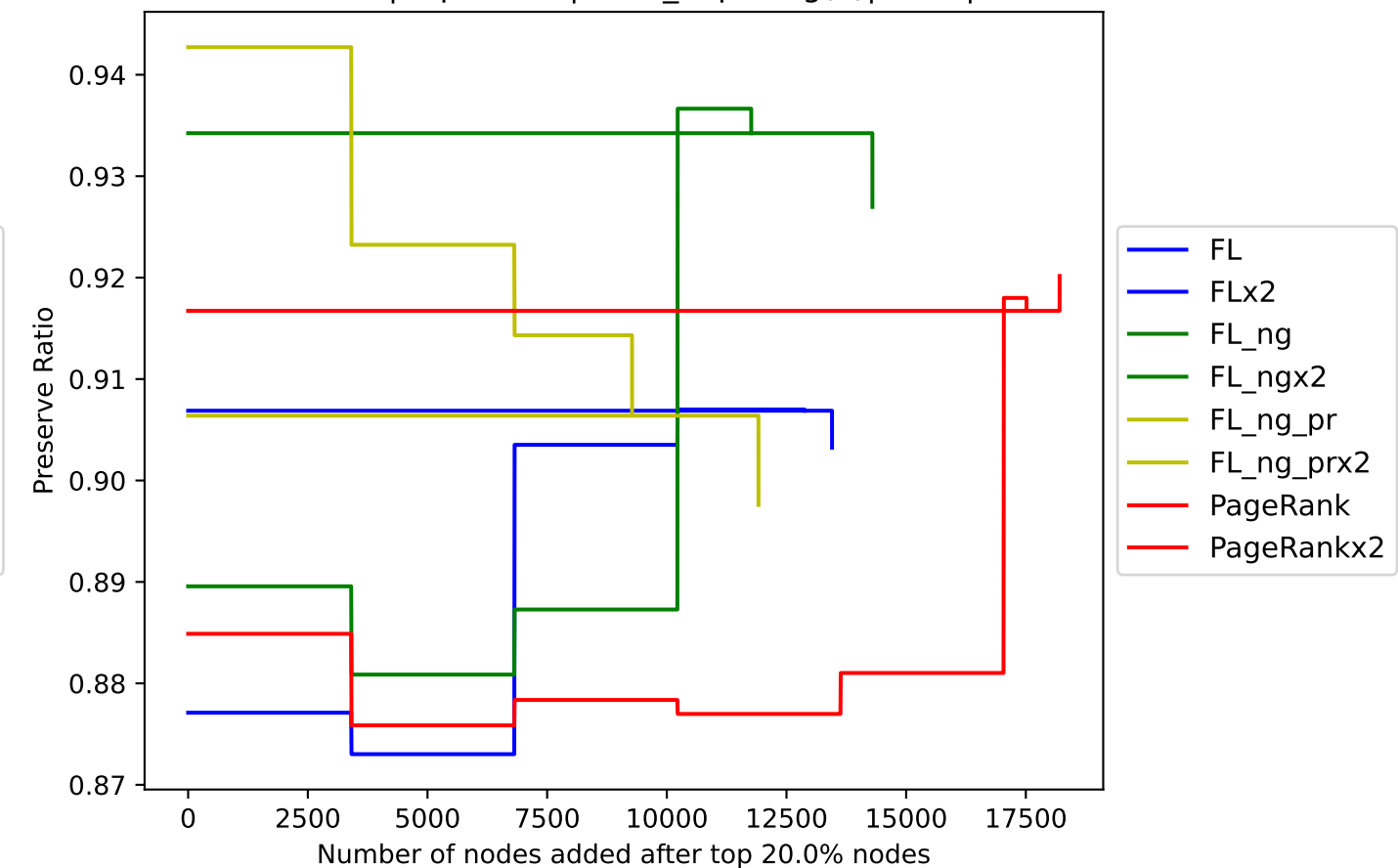
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.25|



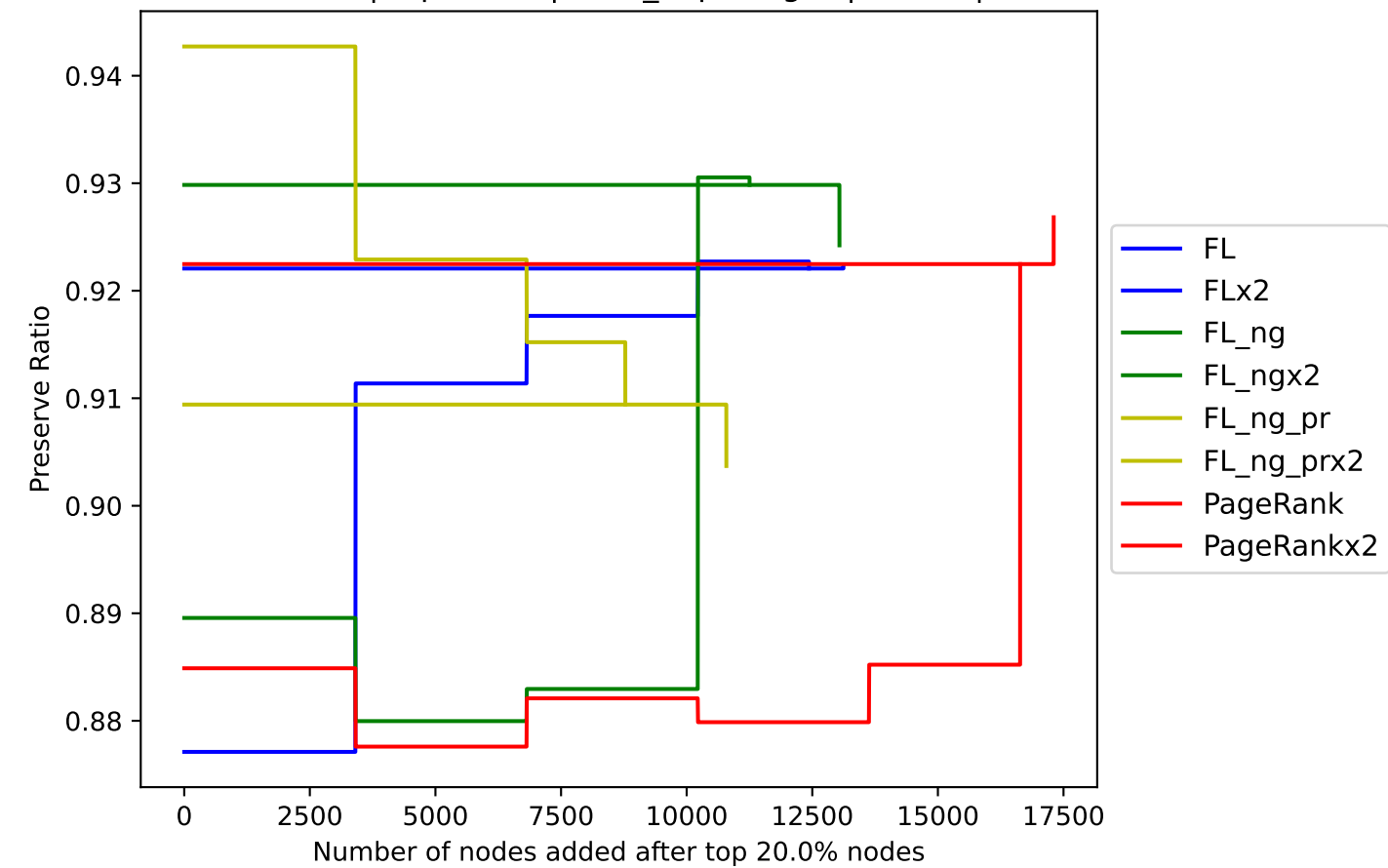
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.5|



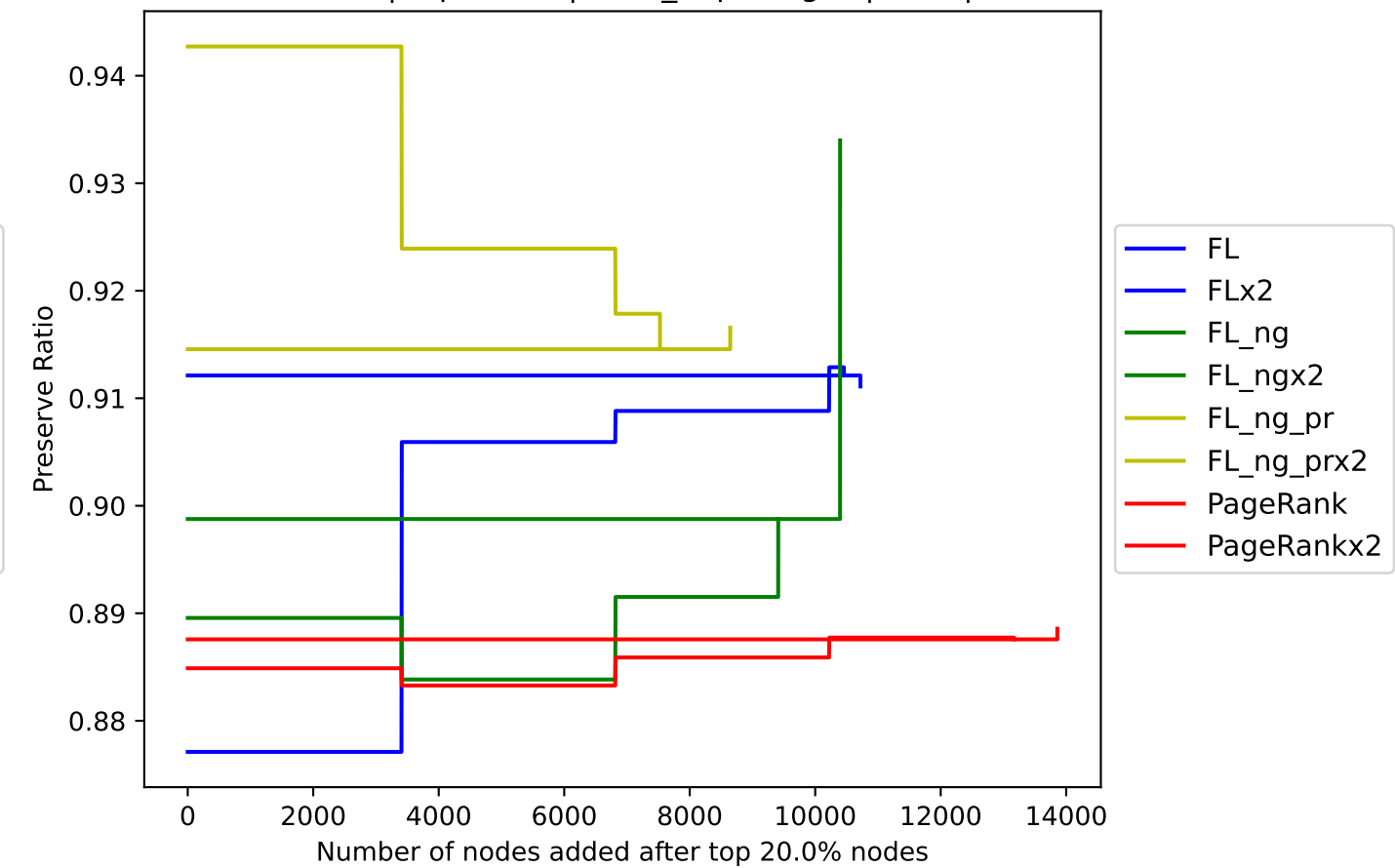
biorxiv | top 20.0%| Num_hops: log(n)|res: 1|



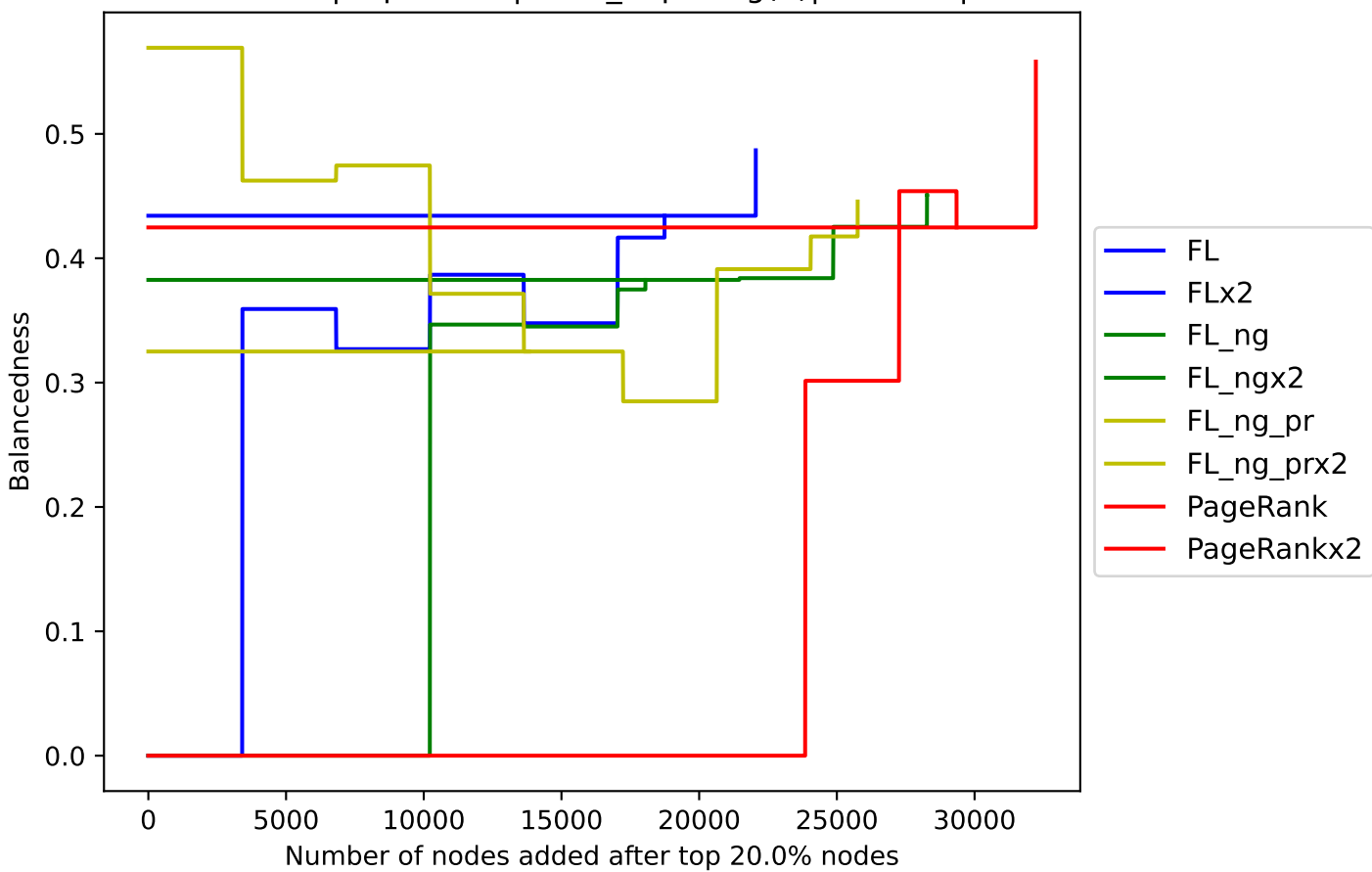
biorxiv | top 20.0%| Num_hops: log(n)|res: 1.5|



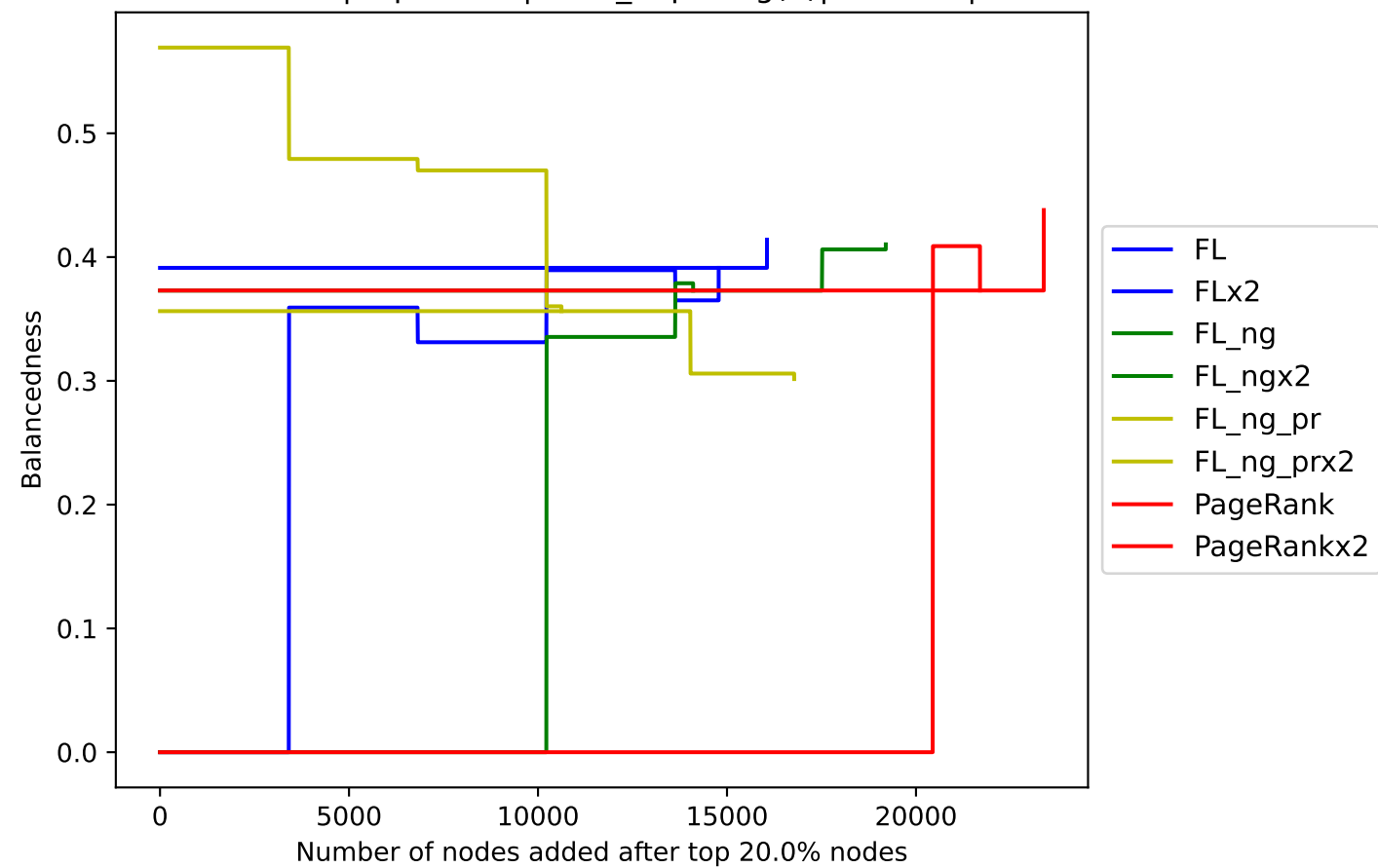
biorxiv | top 20.0%| Num_hops: log(n)|res: 5|



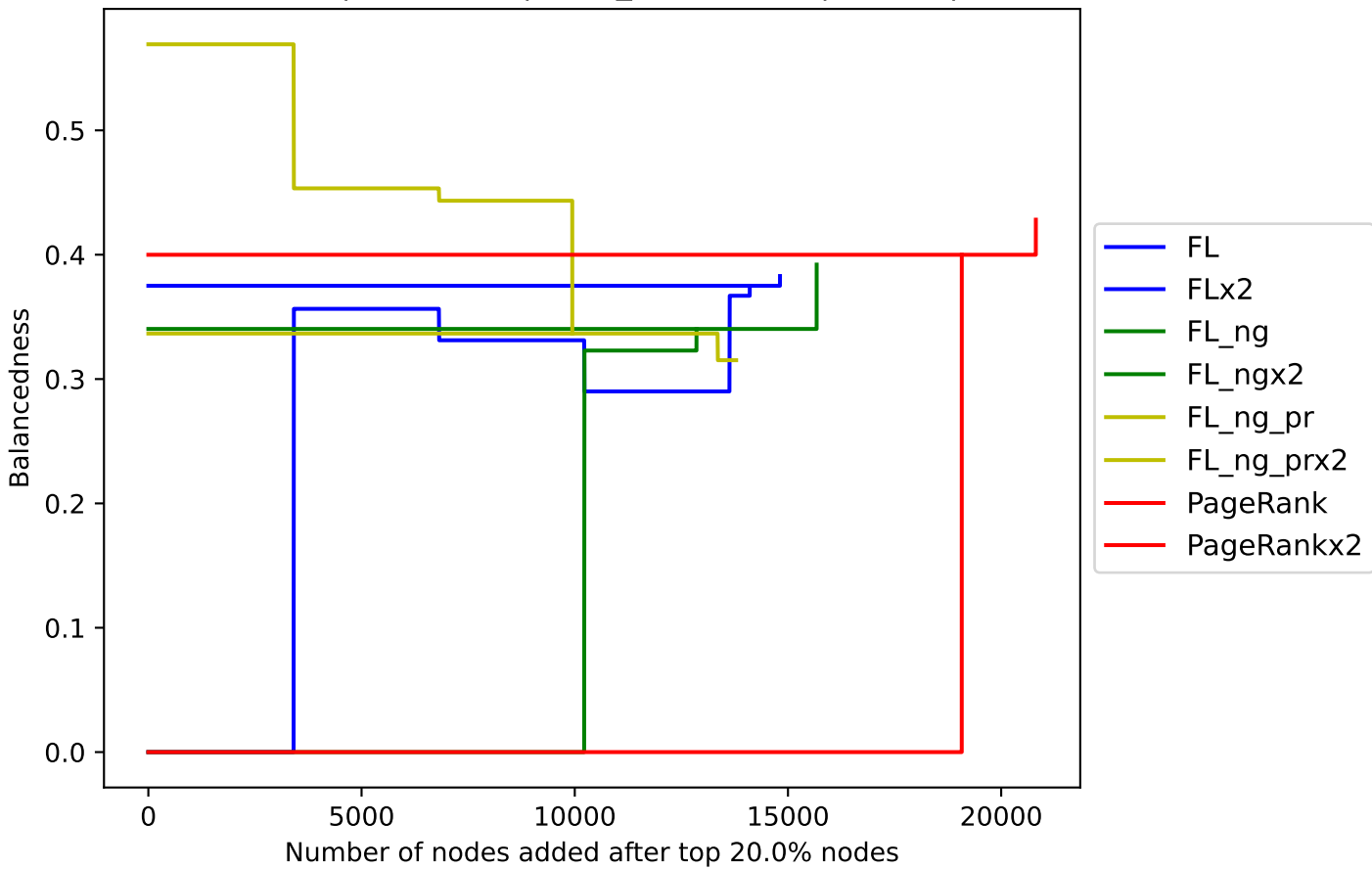
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.05|



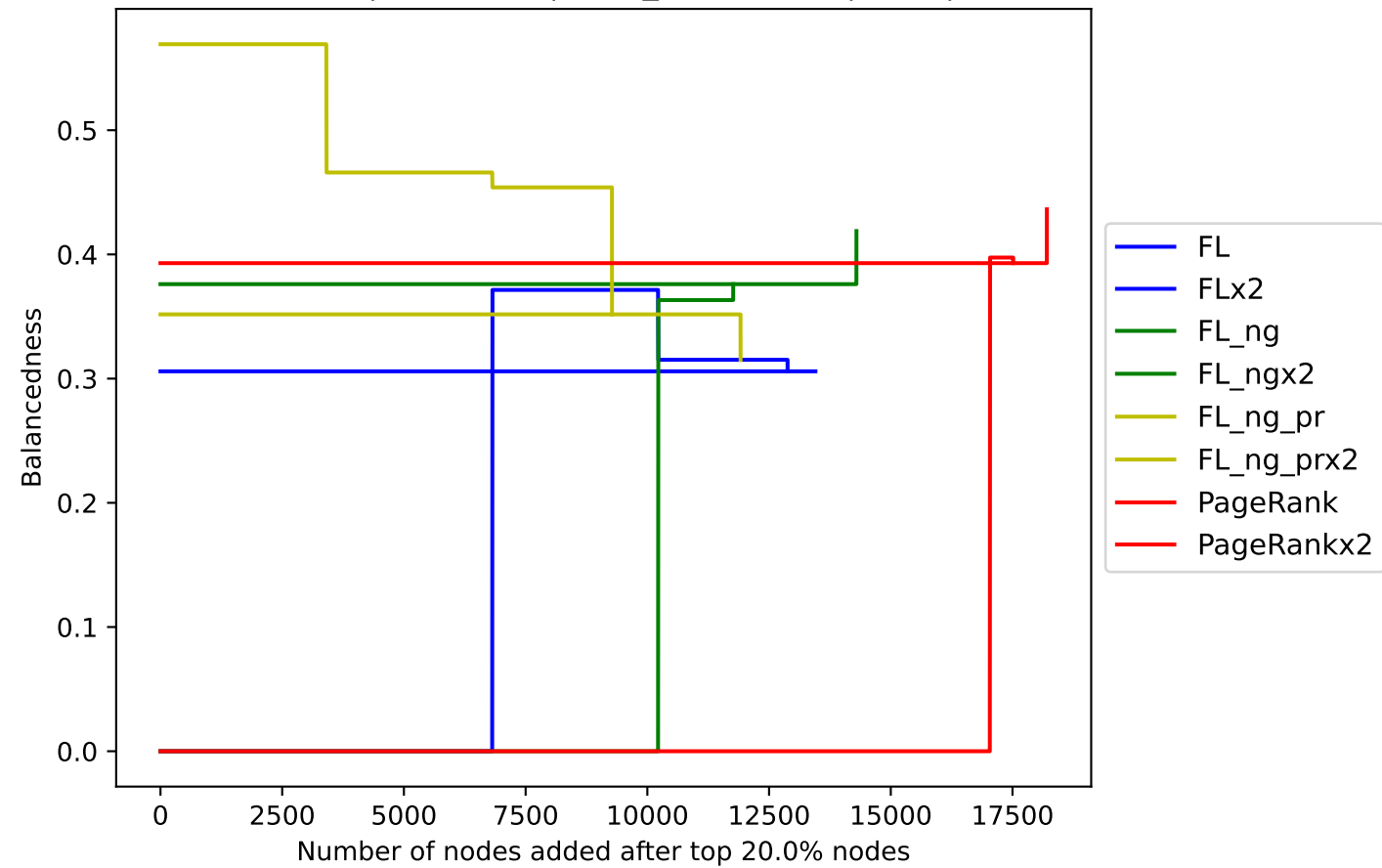
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.25|



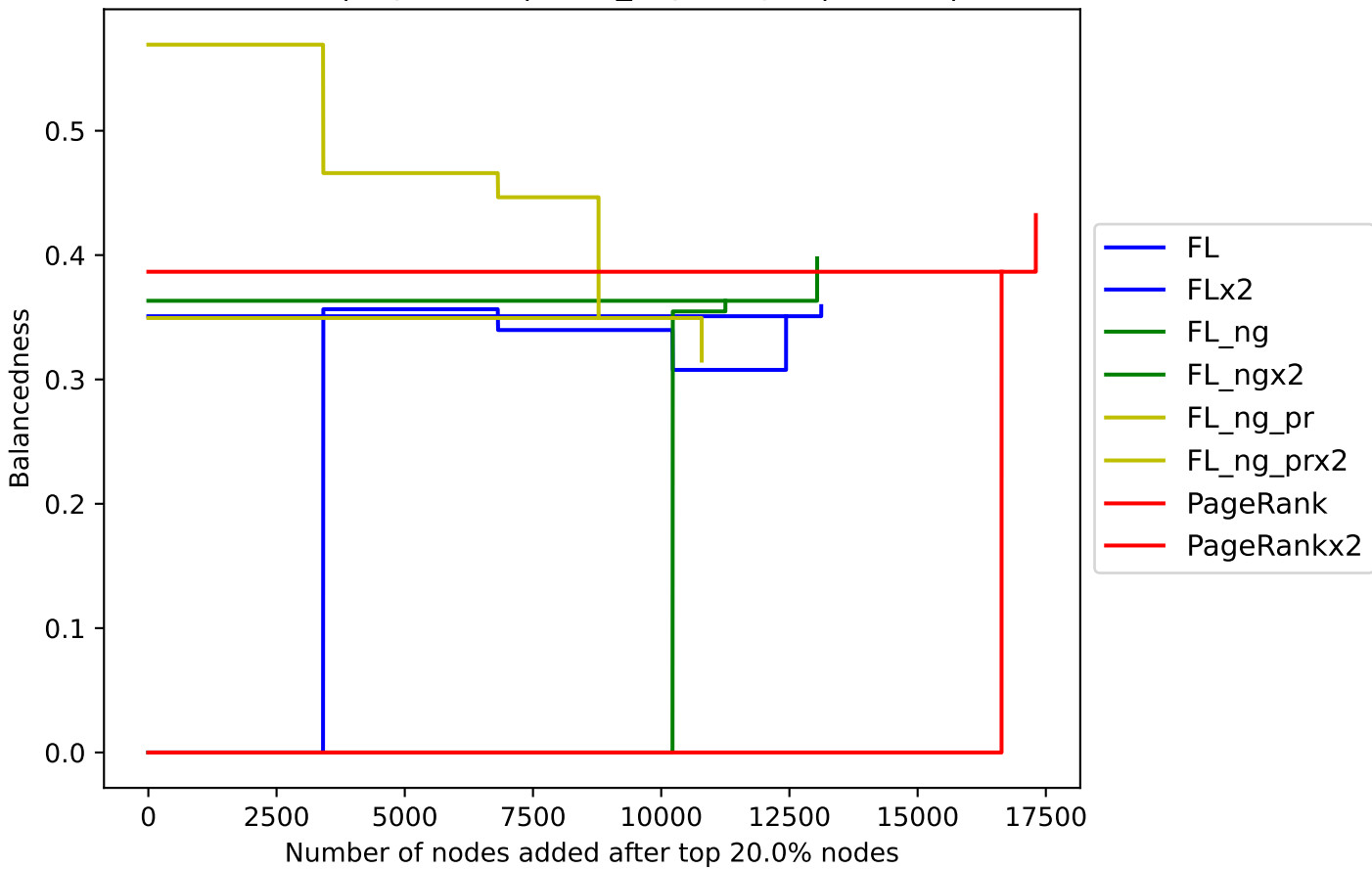
biorxiv | top 20.0%| Num_hops: log(n)|res: 0.5|



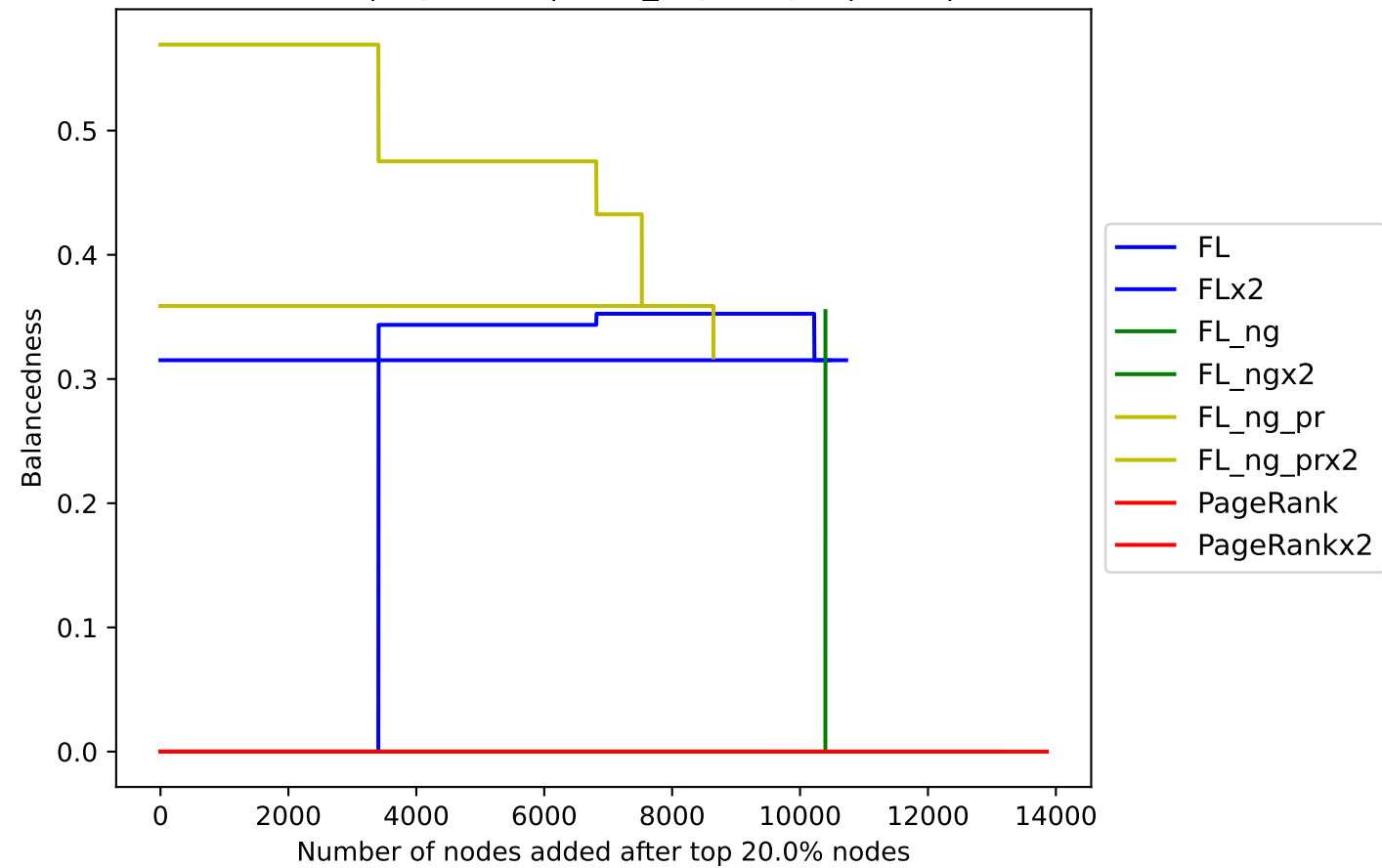
biorxiv | top 20.0%| Num_hops: log(n)|res: 1|



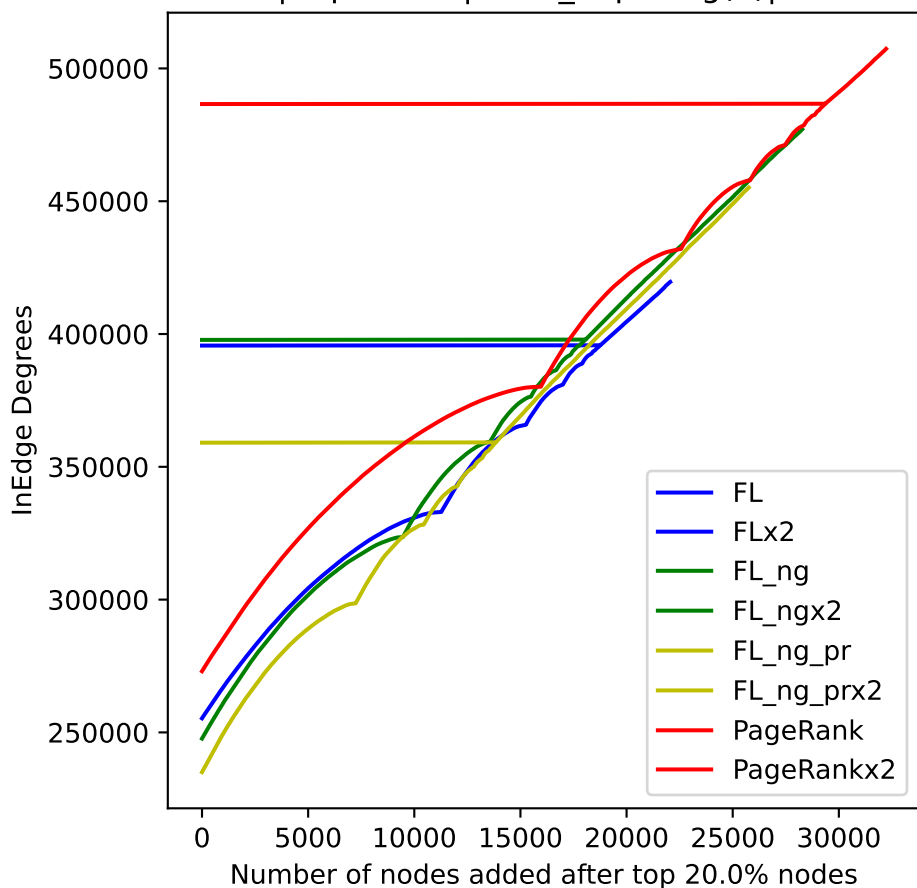
biorxiv | top 20.0%| Num_hops: log(n)|res: 1.5|



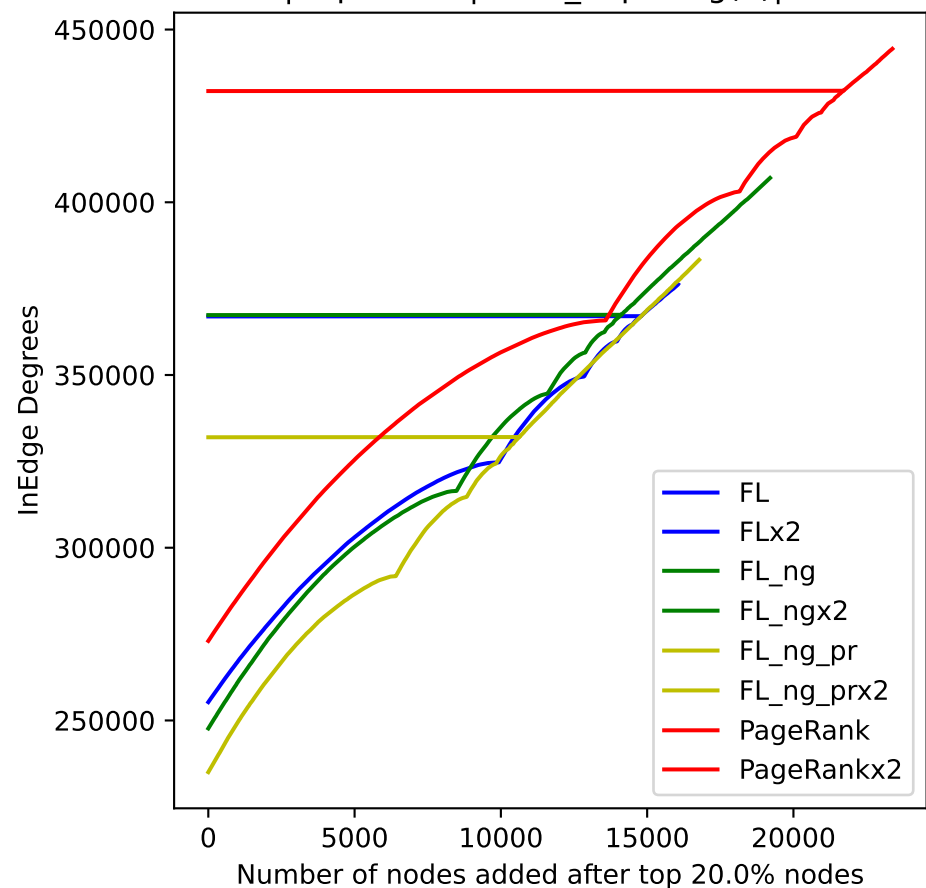
biorxiv | top 20.0%| Num_hops: log(n)|res: 5|



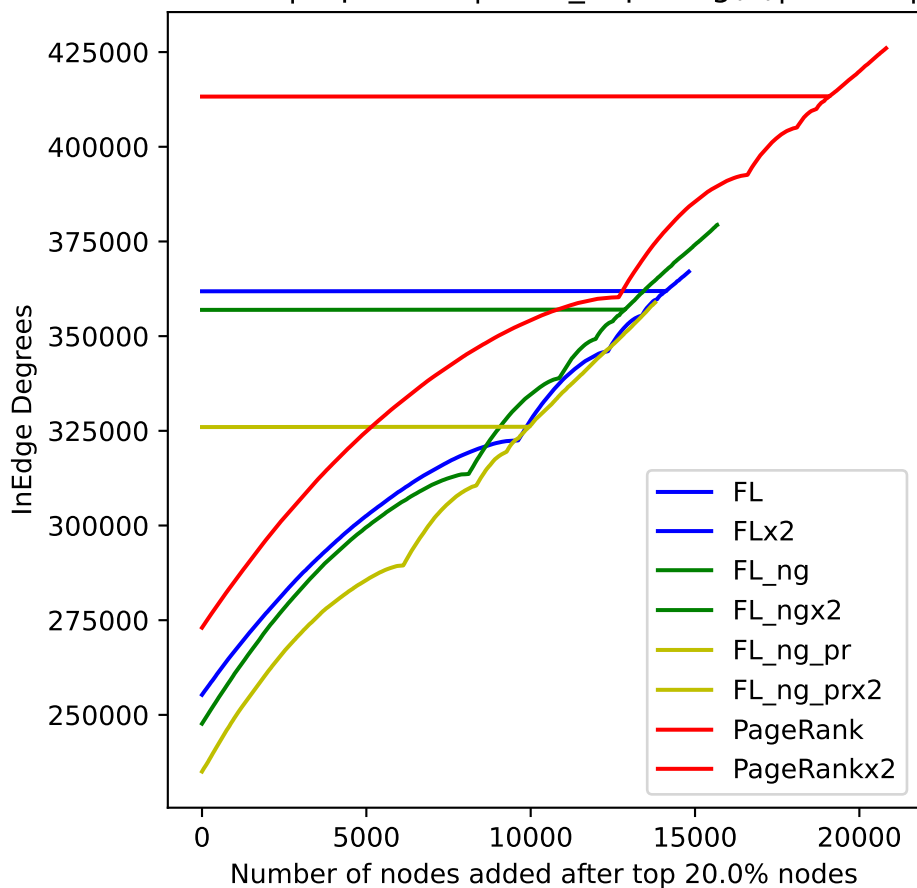
biorexiv | top 20.0%| Num_hops: log(n)|res: 0.05|



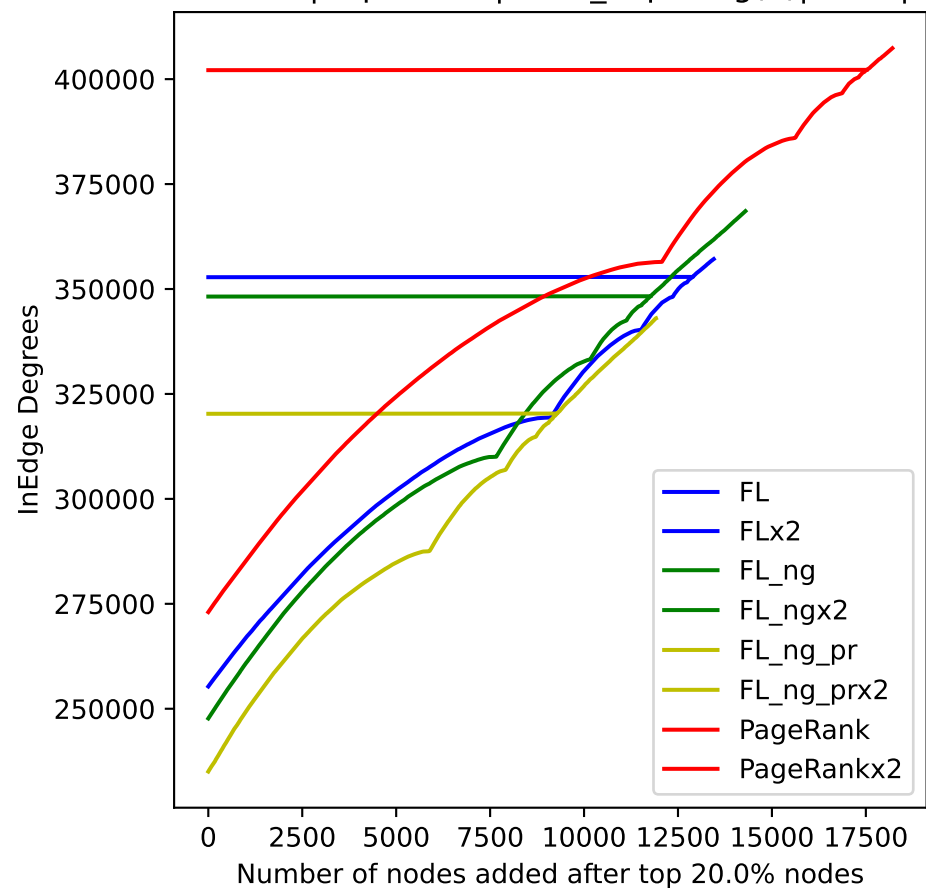
biorexiv | top 20.0%| Num_hops: log(n)|res: 0.25|



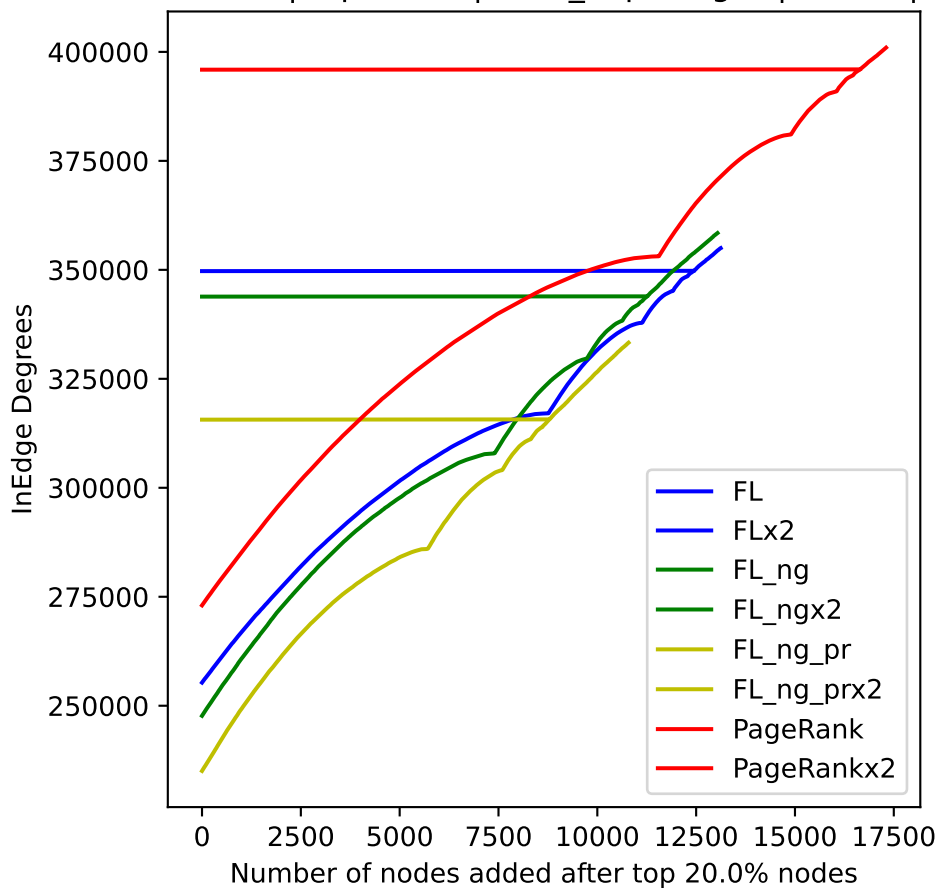
biorexiv | top 20.0%| Num_hops: log(n)|res: 0.5|



biorexiv | top 20.0%| Num_hops: log(n)|res: 1|



biorexiv | top 20.0%| Num_hops: log(n)|res: 1.5|



biorexiv | top 20.0%| Num_hops: log(n)|res: 5|

