paco_villous_density

Characteristic	Control N = 44	INSTI N = 33	PrEP N = 36
plgf_pg_ml			
Mean (SD)	3.84 (0.95)	3.53 (0.76)	3.60 (1.01)
Median (Q1, Q3)	3.96 (3.18, 4.28)	3.55 (2.95, 4.12)	3.60 (3.26, 4.07)
Min, Max	1.35, 6.21	1.78, 4.82	1.03, 5.84
Unknown	0	10	8
ang1_pg_ml			
Mean (SD)	8.18 (1.03)	8.21 (1.12)	8.20 (1.08)
Median (Q1, Q3)	8.36 (7.71, 8.72)	8.17 (7.27, 8.90)	8.33 (7.17, 9.27)
Min, Max	5.40, 9.99	6.29, 10.34	6.56, 9.78
Unknown	0	10	8
tie2_pg_ml			
Mean (SD)	8.99 (0.46)	8.94 (0.65)	8.99 (0.34)
Median (Q1, Q3)	8.91 (8.71, 9.36)	9.05 (8.83, 9.21)	9.03 (8.82, 9.21)
Min, Max	8.00, 9.79	6.50, 10.07	7.98, 9.63
Unknown	0	10	8
sflt1_pg_ml			
Mean (SD)	7.31 (0.54)	7.51 (0.55)	7.44 (0.59)
Median (Q1, Q3)	7.35 (6.94, 7.72)	7.63 (7.08, 7.81)	7.44 (6.98, 7.89)
Min, Max	6.19, 8.50	6.35, 8.38	6.28, 8.40
Unknown	0	10	8
ang2_pg_ml			
Mean (SD)	9.49 (0.54)	9.66 (0.49)	9.62 (0.68)
Median (Q1, Q3)	9.65 (9.00, 9.84)	9.77 (9.43, 9.91)	9.74 (9.22, 10.09)
Min, Max	8.00, 10.50	8.26, 10.48	7.42, 10.70
Unknown	0	10	8
seng_pg_ml			
Mean (SD)	7.44 (0.52)	7.62 (0.35)	7.45 (0.49)

(continued)

Characteristic	**Control** N = 44	**INSTI** N = 33	**PrEP** N = 36
Median (Q1, Q3)	7.50 (7.27, 7.77)	7.54 (7.38, 7.83)	7.54 (7.22, 7.81)
Min, Max	5.83, 8.81	6.95, 8.59	5.83, 8.28
Unknown	0	10	8
e2_ng_ml			
Mean (SD)	2.98 (0.56)	2.88 (0.56)	2.97 (0.59)
Median (Q1, Q3)	3.08 (2.65, 3.41)	3.07 (2.59, 3.31)	3.01 (2.54, 3.47)
Min, Max	1.54, 3.88	1.66, 3.73	1.77, 4.04
Unknown	0	10	8
be2_pg_ml			
Mean (SD)	3.41 (0.54)	3.32 (0.48)	3.37 (0.59)
Median (Q1, Q3)	3.45 (3.15, 3.80)	3.43 (2.94, 3.68)	3.34 (2.91, 3.90)
Min, Max	1.89, 4.35	2.35, 4.09	2.11, 4.47
Unknown	0	10	8
shbg_nmol_l			
Mean (SD)	10.56 (0.15)	10.55 (0.20)	10.60 (0.10)
Median (Q1, Q3)	10.58 (10.47, 10.65)	10.60 (10.53, 10.67)	10.59 (10.54, 10.66)
Min, Max	10.02, 10.89	9.81, 10.77	10.34, 10.78
Unknown	0	10	8
p4_ng_ml			
Mean (SD)	4.66 (0.51)	4.82 (0.47)	4.77 (0.45)
Median (Q1, Q3)	4.72 (4.32, 5.08)	4.71 (4.35, 5.28)	4.77 (4.42, 4.99)
Min, Max	3.38, 5.45	4.18, 5.66	4.10, 5.79
Unknown	0	10	8
vegf_pg_ml			
Mean (SD)	1.69 (0.49)	1.15 (0.65)	1.69 (0.50)
Median (Q1, Q3)	1.61 (1.51, 1.91)	1.23 (1.00, 1.64)	1.49 (1.32, 2.11)
Min, Max	0.66, 2.93	-0.25, 2.08	1.10, 2.82
Unknown	0	10	8
villous_surface_density			
Mean (SD)	13.33 (3.19)	14.53 (2.67)	13.98 (3.08)
Median (Q1, Q3)	13.86 (10.67, 15.89)	14.54 (13.39, 16.33)	14.43 (11.77, 15.54)
Min, Max	6.02, 18.55	8.54, 19.68	6.72, 19.40
Unknown	4	4	1
villous_volume			
Mean (SD)	5,856 (1,805)	5,936 (1,509)	6,029 (1,664)
Median (Q1, Q3)	5,797 (4,450, 7,076)	5,966 (5,105, 7,229)	6,187 (4,829, 6,973)

(continued)

Characteristic	Control N = 44	INSTI N = 33	PrEP N = 36
Min, Max	2,573, 11,597	2,886, 8,113	2,914, 9,533
Unknown	4	4	2
bwc			
Mean (SD)	46 (29)	47 (31)	41 (32)
Median (Q1, Q3)	50 (17, 67)	42 (25, 73)	31 (14, 69)
Min, Max	0, 99	2, 100	2, 100
Unknown	4	3	5
bw_pw_ratio			
Mean (SD)	6.75 (1.28)	7.27 (1.65)	7.12 (1.36)
Median (Q1, Q3)	6.71 (5.65, 7.67)	7.62 (5.43, 8.53)	7.04 (5.97, 8.29)
Min, Max	4.53, 9.32	4.88, 10.20	4.91, 10.29
Unknown	2	2	6
bw_pw_less_65	19 (43%)	11 (33%)	11 (31%)
Unknown	0	0	1
pw_less_365	6 (14%)	9 (27%)	6 (17%)
Unknown	0	0	1
pw_more_550	6 (14%)	8 (24%)	2 (5.7%)
Unknown	0	0	1
pw_centile_25_less	16 (36%)	20 (61%)	19 (56%)
Unknown	0	0	2
pw_centile_categories			
1	13 (30%)	12 (36%)	14 (41%)
2	3 (7.0%)	8 (24%)	5 (15%)
3	14 (33%)	1 (3.0%)	8 (24%)
4	7 (16%)	2 (6.1%)	4 (12%)
5	4 (9.3%)	6 (18%)	1 (2.9%)
6	2 (4.7%)	4 (12%)	2 (5.9%)
Unknown	1	0	2
sex_code			
Female	19 (45%)	15 (50%)	15 (48%)
Male	23 (55%)	15 (50%)	16 (52%)
Unknown	2	3	5
hiv	0 (0%)	33 (100%)	0 (0%)
parity			
Mean (SD)	2.57 (1.66)	3.45 (1.79)	2.44 (1.65)
Median (Q1, Q3)	2.00 (1.00, 3.50)	3.00 (2.00, 4.00)	2.00 (1.00, 3.00)

(continued)

Characteristic	**Control** N = 44	**INSTI** N = 33	**PrEP** N = 36
Min, Max	1.00, 7.00	1.00, 9.00	0.00, 9.00
age_final			
Mean (SD)	27.7 (5.6)	31.7 (5.4)	26.1 (5.7)
Median (Q1, Q3)	27.0 (24.0, 31.0)	32.0 (27.0, 36.0)	25.0 (21.0, 32.0)
Min, Max	18.0, 40.0	23.0, 42.0	19.0, 39.0
Unknown	1	2	5
bmi			
Mean (SD)	25.1 (4.0)	24.1 (5.2)	25.1 (2.8)
Median (Q1, Q3)	24.7 (22.2, 27.1)	22.9 (20.1, 26.6)	24.6 (23.5, 27.3)
Min, Max	17.9, 35.1	17.1, 39.1	21.0, 34.0
Unknown	3	0	4
mat_anemia_code	0 (0%)	5 (15%)	2 (5.6%)
babywt1_kg			
Mean (SD)	3.16 (0.43)	3.06 (0.41)	3.18 (0.57)
Median (Q1, Q3)	3.25 (2.80, 3.50)	3.00 (2.80, 3.30)	3.10 (2.80, 3.60)
Min, Max	2.00, 3.90	2.00, 4.10	2.20, 4.60
Unknown	2	2	5
placenta_weight_kg			
Mean (SD)	0.47 (0.09)	0.45 (0.11)	0.45 (0.07)
Median (Q1, Q3)	0.47 (0.43, 0.53)	0.44 (0.36, 0.54)	0.45 (0.40, 0.51)
Min, Max	0.32, 0.72	0.29, 0.70	0.33, 0.61
Unknown	0	0	1

[1] n (%)

networks based on (unadjusted) correlations

overall

Only correlations > 0.10 (in absolute value) have edges retained.

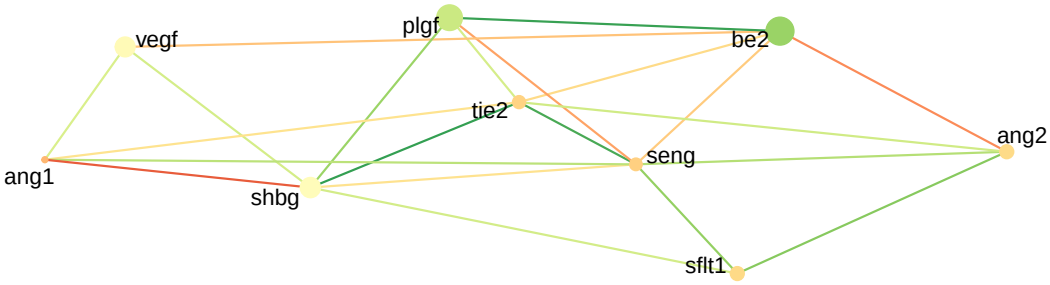
QUESTIONS:

1. reason for missing values? right now using pairwise complete obs (e.g., different n can contribute to each correlation); should we use other approach? depends on likely missingness mechanism
    - for markers: 10/33 missing in INTRI group, 8/36 missing in PrEP, and 0/44 in controls
    - for placenta measures, differs but < 5 in each group (but still $>10\%$ sometimes)
2. do you want to consider statistical significance at all? e.g. determine based on n what p-value would be stat sig (also: adjust that p-value threshold for multiple testing? probably would lose all power)

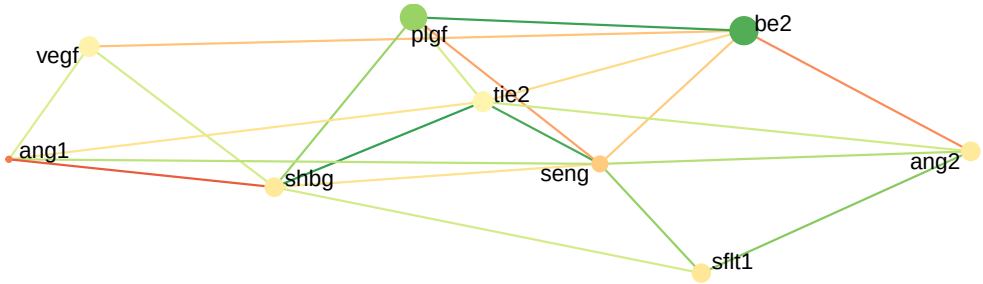
KAT need to fix:

- get biomarker placement same across groups so consistent

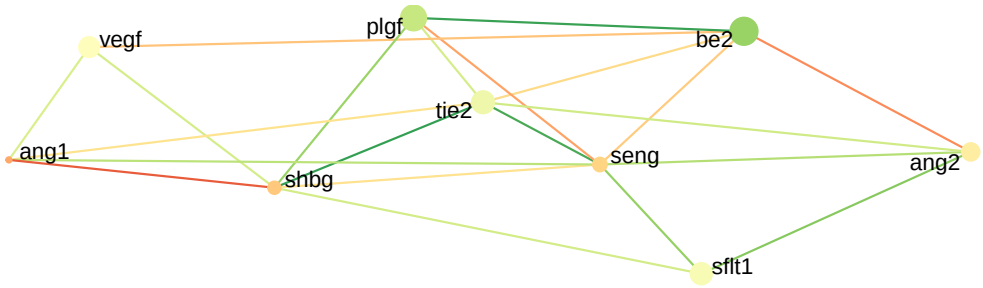
Villous Surface Density

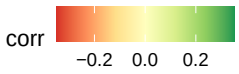


Villous Volume



Placenta Weight

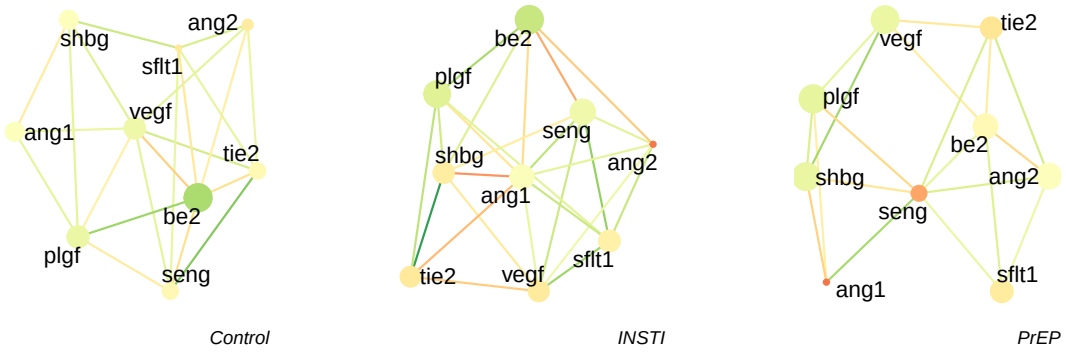




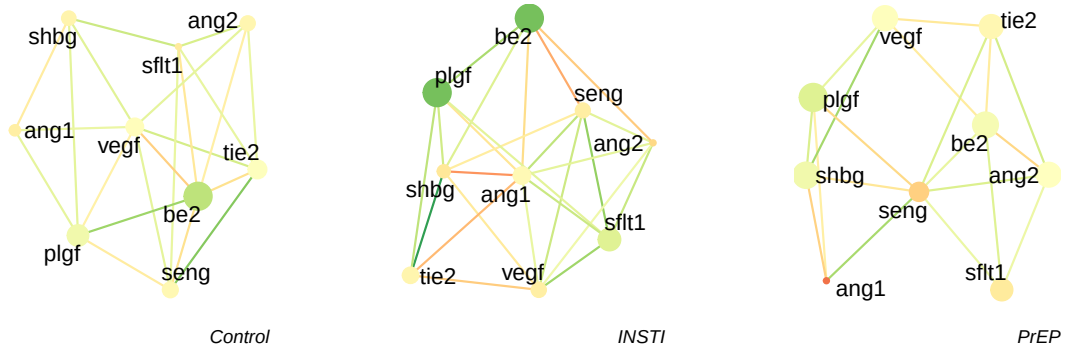
networks based on (unadjusted) correlations

by treatment group

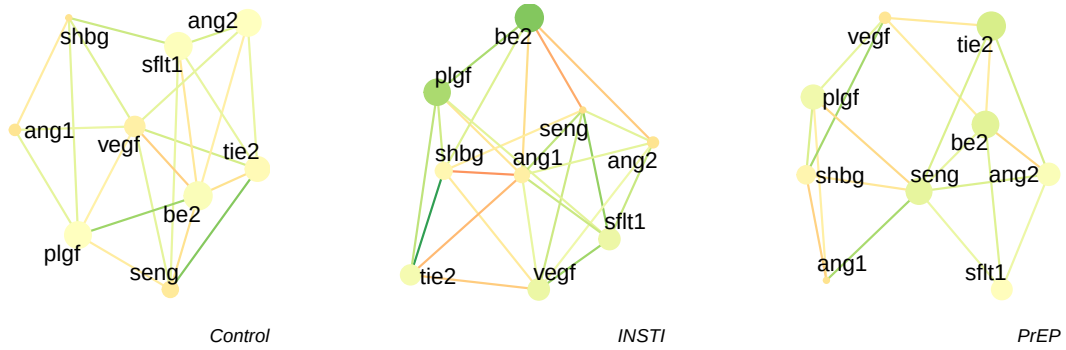
Villous Surface D

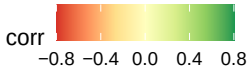


Villous Volume



Placenta Weight





graphical lasso (adjusted correlations)

overall

```
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 [2,] -0.017830520  1.13974658 -0.062178223  0.031479322  0.052008485
 [3,]  0.066770176 -0.06217822  0.228749881  0.004522366  0.028337127
 [4,]  0.028024643  0.03147932  0.004522366  0.308484780  0.072528569
 [5,] -0.005391287  0.05200848  0.028337127  0.072528569  0.331352870
 [6,] -0.100920317  0.07646205  0.063093129  0.057752730  0.041372782
 [7,]  0.185736668 -0.03383195 -0.021971895 -0.009249813 -0.079554795
 [8,]  0.030617045  0.04504129 -0.021405974 -0.003155158  0.016543898
 [9,]  0.033757466 -0.05314216  0.026048827  0.011530958  0.005741258
[10,]  0.428397837 -0.59287895 -0.204331993 -0.219145914 -0.225130075
              [,6]         [,7]         [,8]         [,9]        [,10]
 [1,] -0.10092032  0.185736668  0.030617045  0.033757466  0.428397837
 [2,]  0.07646205 -0.033831953  0.045041291 -0.053142161 -0.592878954
 [3,]  0.06309313 -0.021971895 -0.021405974  0.026048827 -0.204331993
 [4,]  0.05775273 -0.009249813 -0.003155158  0.011530958 -0.219145914
 [5,]  0.04137278 -0.079554795  0.016543898  0.005741258 -0.225130075
 [6,]  0.22827683 -0.035068595  0.015004728 -0.011097723 -0.211706966
 [7,] -0.03506859  0.301473509 -0.052851319  0.002085988  0.379277453
 [8,]  0.01500473 -0.052851319  0.294262247  0.013087947 -0.031754143
 [9,] -0.01109772  0.002085988  0.013087947  0.024636117 -0.005252857
[10,] -0.21170697  0.379277453 -0.031754143 -0.005252857 10.012839010

$wi
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 [2,] -0.12401714  1.05906764  0.1717182 -0.07355956 -0.12282816 -0.22731126
 [3,] -0.72259121  0.17172063  6.5031097  0.87060232 -0.13155240 -2.60916067
 [4,] -0.25146408 -0.07355858  0.8705988  3.82470199 -0.66101229 -1.29200234
 [5,] -0.15646032 -0.12282551 -0.1315414 -0.66100871  3.47444768 -0.33007275
 [6,]  0.77805347 -0.22731275 -2.6091488 -1.29199892 -0.33007211  6.17297827
 [7,] -0.91576764  0.01425126  0.7507662  0.01204770  0.91892285 -0.29145555
 [8,] -0.35433702 -0.21466429  1.1616259  0.39403698  0.03600617 -0.82586979
 [9,] -0.71668188  2.35963345 -7.7257919 -3.14926699 -0.65352782  5.12938732
[10,] -0.04312267  0.06235927  0.1059149  0.06484040  0.01837334  0.00593828
              [,7]         [,8]        [,9]        [,10]
 [1,] -0.91576161 -0.354338389 -0.71676856 -0.043123356
```

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 [3,]  0.75075490  1.161632968 -7.72574457  0.105915108
 [4,]  0.01204344  0.394039420 -3.14928390  0.064840314
 [5,]  0.91892123  0.036007307 -0.65346220  0.018373658
 [6,] -0.29144746 -0.825870934  5.12936358  0.005938279
 [7,]  4.43476172  0.930605745 -0.74951416 -0.095319116
 [8,]  0.93060274  3.938674705 -3.94325801 -0.006701663
 [9,] -0.74957604 -3.943272999 60.94516130  0.085419534
[10,] -0.09531956 -0.006701488  0.08541948  0.113162596

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$errflag
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$approx
[1] FALSE

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$niter
[1] 1
```

graphical lasso (adjusted correlations)

by treatment group