# Heritability, genetic variation, and the number of risk SNPs effect on deep learning and polygenic risk scores AUC

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### **ACM Reference Format:**

# 1 Supplementary Material

This document contains the supplementary material referenced in the original manuscript.

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### References

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Number of risk SNPs	Heritability	Genetic Variation	totalSNPeffect	deep learning AUC	PRSice AUC	Plink AUC	Lasso AUC
5	0.05263158	0.9	0.047368422	0.656	0.412	0.498	0.466
5	0.10526316	0.9	0.094736844	0.646	0.414	0.508	0.454
5	0.15789474	0.9	0.142105266	0.63	0.424	0.5	0.484
5	0.21052632	0.9	0.189473688	0.62	0.424	0.512	0.484
5	0.26315789	0.9	0.236842101	0.612	0.438	0.5	0.488
5	0.31578947	0.9	0.284210523	0.608	0.44	0.512	0.492
5	0.36842105	0.9	0.331578945	0.604	0.448	0.51	0.49
5	0.42105263	0.9	0.378947367	0.588	0.448	0.514	0.502
5	0.47368421	0.9	0.426315789	0.584	0.45399999999999996	0.502	0.5
5	0.52631579	0.9	0.473684211	0.572	0.454	0.498	0.488
5	0.57894737	0.9	0.521052633	0.566	0.446	0.498	0.496
5	0.63157895	0.9	0.568421055	0.56	0.458	0.502	0.492
5	0.68421053 0.73684211	0.9	0.615789477 0.663157899	0.566 0.548	0.45 0.474	0.506	0.494 0.498
5	0.78947368	0.9	0.710526312	0.54	0.474	0.508 0.51	0.496
5	0.84210526	0.9	0.757894734	0.54	0.4679999999999999	0.494	0.490
5	0.89473684	0.9	0.805263156	0.528	0.49	0.51	0.5
5	0.94736842	0.9	0.852631578	0.522	0.504	0.51	0.498
5	1.0	0.9	0.9	0.502	0.512	0.502	0.518
10	0.05263158	0.9	0.047368422	0.6839999999999999	0.412	0.496	0.464
10	0.10526316	0.9	0.094736844	0.672	0.39	0.496	0.47
10	0.15789474	0.9	0.142105266	0.656	0.40	0.514	0.47
10	0.21052632	0.9	0.189473688	0.65	0.422	0.514	0.478
10	0.26315789	0.9	0.236842101	0.638	0.422	0.516	0.47
10	0.31578947	0.9	0.284210523	0.626	0.418	0.512	0.474
10	0.36842105	0.9	0.331578945	0.62	0.424	0.5	0.474
10	0.42105263	0.9	0.378947367	0.606	0.434	0.502	0.474
10	0.47368421	0.9	0.426315789	0.6	0.436	0.5	0.478
10	0.52631579	0.9	0.473684211	0.592	0.45	0.506	0.488
10	0.57894737	0.9	0.521052633	0.578	0.444	0.506	0.49
10	0.63157895	0.9	0.568421055	0.572	0.456	0.496	0.488
10	0.68421053 0.73684211	0.9	0.615789477 0.663157899	0.565 0.554	0.4425 0.46799999999999999	0.5025 0.51	0.5025 0.504
10	0.78947368	0.9	0.710526312	0.53750000000000001	0.477500000000000004	0.51	0.504
10	0.78947368	0.9	0.710526312	0.534	0.47/5000000000000000000000000000000000000	0.508	0.515
10	0.89473684	0.9	0.805263156	0.516	0.474	0.506	0.492
10	0.94736842	0.9	0.852631578	0.526	0.486	0.504	0.5
10	1.0	0.9	0.9	0.525	0.48	0.505	0.50750000000000001
20	0.05263158	0.9	0.047368422	0.65	0.426	0.494	0.4679999999999999
20	0.10526316	0.9	0.094736844	0.636	0.438	0.5	0.476
20	0.15789474	0.9	0.142105266	0.62	0.432	0.5	0.482
20	0.21052632	0.9	0.189473688	0.606	0.43	0.506	0.49
20	0.26315789	0.9	0.236842101	0.606	0.432	0.51	0.47
20	0.31578947	0.9	0.284210523	0.596	0.44	0.51	0.472
20	0.36842105	0.9	0.331578945	0.588	0.45	0.512	0.484
20	0.42105263	0.9	0.378947367	0.578	0.456	0.512	0.472
20	0.47368421	0.9	0.426315789	0.572	0.458	0.506	0.484
20	0.52631579	0.9	0.473684211	0.556	0.458	0.514	0.484
20	0.57894737	0.9	0.521052633	0.554	0.442	0.514	0.508
20	0.63157895	0.9	0.568421055	0.554	0.458	0.514	0.502
20	0.68421053	0.9	0.615789477	0.55	0.452	0.51	0.48
20	0.73684211 0.78947368	0.9	0.663157899 0.710526312	0.544 0.534	0.48	0.5 0.522	0.494 0.502
20	0.78947368	0.9	0.710526312	0.534	0.47 0.4775	0.522	0.502
20	0.89473684	0.9	0.805263156	0.525	0.4773	0.502	0.504
20	0.94736842	0.9	0.852631578	0.514	0.472	0.51	0.504
20	1.0	0.9	0.9	0.506	0.5	0.52	0.52
50	0.05263158	0.9	0.047368422	0.65	0.4175	0.495	0.4725
50	0.10526316	0.9	0.094736844	0.628	0.45	0.5	0.482
50	0.15789474	0.9	0.142105266	0.616	0.434	0.498	0.472
50	0.21052632	0.9	0.189473688	0.61	0.44	0.492	0.472
50	0.26315789	0.9	0.236842101	0.608	0.452	0.51	0.49
50	0.31578947	0.9	0.284210523	0.598	0.45	0.496	0.488
50	0.36842105	0.9	0.331578945	0.592	0.444	0.5	0.494
50	0.42105263	0.9	0.378947367	0.58	0.472	0.512	0.496
50	0.47368421	0.9	0.426315789	0.57	0.466	0.498	0.498
50	0.52631579	0.9	0.473684211	0.5774999999999999	0.4625	0.5025	0.4925
50	0.57894737	0.9	0.521052633	0.554	0.466	0.514	0.492
50	0.63157895	0.9	0.568421055	0.546 0.544	0.464 0.46799999999999999	0.502 0.5	0.482 0.486
50	0.68421053 0.73684211	0.9	0.615789477 0.663157899	0.544	0.4679999999999997	0.52	0.486
50	0.78947368	0.9	0.663157899	0.528	0.484	0.52	0.508
50	0.78947368	0.9	0.710526312	0.526	0.476	0.508	0.504
50	0.89473684	0.9	0.805263156	0.518	0.474	0.512	0.504
50	0.94736842	0.9	0.852631578	0.546	0.4679999999999999	0.506	0.502
50	1.0	0.9	0.9	0.526	0.478	0.508	0.496
100	0.05263158	0.9	0.047368422	0.655	0.42	0.515	0.48
100	0.10526316	0.9	0.094736844	0.62	0.434	0.52	0.486
100	0.15789474	0.9	0.142105266	0.634	0.432	0.518	0.492
100	0.21052632	0.9	0.189473688	0.624	0.44	0.51	0.48
100	0.26315789	0.9	0.236842101	0.6225	0.4375	0.51750000000000001	0.4925
100	0.31578947	0.9	0.284210523	0.622	0.428	0.518	0.484
100	0.36842105	0.9	0.331578945	0.598	0.438	0.514	0.484
100	0.42105263	0.9	0.378947367	0.594	0.44	0.516	0.472
100	0.47368421	0.9	0.426315789	0.586	0.454	0.516	0.476
100	0.52631579	0.9	0.473684211	0.576	0.46	0.512	0.5
100	0.57894737	0.9	0.521052633	0.568	0.458	0.522	0.488
100	0.63157895	0.9	0.568421055	0.562	0.462	0.518	0.482
100	0.68421053	0.9	0.615789477	0.558	0.4679999999999999	0.52	0.502
100	0.73684211	0.9	0.663157899	0.55	0.4679999999999999	0.51	0.5
100	0.78947368	0.9	0.710526312	0.55	0.456	0.514	0.49
100	0.84210526	0.9	0.757894734	0.54	0.5 0.46399999999999999	0.526 0.522	0.51
100	0.89473684		0.805263156	0.532			0.5
100	0.94736842	0.9	0.852631578	0.524 0.5225	0.494 0.4875	0.51	0.492 0.507500000000000001
100	1.0	0.9	0.9	0.3223	0.48/3	0.5125	0.30/300000000000001

**Table 1.** Results for genetic variation = 0.9.

5         0.05263156         0.8         0.042105264         0.662         0.408         0.508         0.486           5         0.10526316         0.8         0.084210528         0.648         0.42         0.499         0.482           5         0.15789474         0.8         0.126315792         0.64         0.406         0.504         0.484           5         0.201572632         0.8         0.126315792         0.61         0.444         0.52         0.49299999999999999999999999999999999999	Number of risk SNPs	Heritability	Genetic Variation	totalSNPeffect	deep learning AUC	PRSice AUC	Plink AUC	Lasso AUC
1								
\$ 0.03505790 0.0 0.0100000000000000000000000000000	5	0.10526316	0.8	0.084210528	0.648	0.42	0.496	0.482
\$   0.50157997   0.3	5	0.15789474	0.8	0.126315792	0.64	0.406	0.504	0.484
\$   0.115969   0.1   0.5504157   0.5   0.5504157   0.50   0.44   0.56   0.44   0.56   0.46   0.47   0.46   0.46   0.47   0.46								0.45999999999999996
1								
\$								
S								
\$   0.5261757   0.8   0.6185052   5.596   0.44   0.68   0.572   \$   0.5769477   0.8   0.6185052   0.564   0.45   0.56   0.50   \$   0.6769471   0.8   0.6769568   0.574   0.66   0.572   0.552   \$   0.6769471   0.8   0.676968   0.574   0.66   0.672   0.552   \$   0.6769471   0.8   0.676968   0.575   0.676968   0.574   0.66   0.575   \$   0.6769471   0.8   0.671968   0.575   0.676968   0.575   0.675   0.675   0.675   0.675   \$   0.6769471   0.8   0.6719694   0.555   0.675968   0.675   0.								
5         C.0.5179550         6.8         O.50525050         0.05         O.50525050         0.05         O.50525050         0.05         O.50525050         0.05         O.50525050         O.505250         O.505250 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>								
\$   0.6557505   0.6   0.9565316   0.57   0.65   0.642   0.514   \$   0.6421053   0.6   0.6754044   0.5   0.6754044   0.575   0.6075   0.6075   \$   0.7567748   0.8   0.6175947   0.532   0.6275   0.6075   0.6075   \$   0.967746   0.6   0.7575947   0.556   0.64   0.656   0.6572   \$   0.967746   0.8   0.7575947   0.556   0.64   0.656   0.502   \$   0.967746   0.8   0.7575947   0.556   0.64   0.656   0.502   \$   0.967746   0.8   0.975794   0.556   0.64   0.656   0.502   \$   0.967746   0.8   0.957597   0.556   0.64   0.656   0.502   \$   0.967746   0.8   0.967745   0.556   0.64   0.65   0.657   \$   0.967746   0.8   0.967745   0.556   0.64   0.65   0.657   \$   0.967746   0.8   0.967745   0.556   0.64   0.65   0.657   \$   0.967746   0.8   0.967745   0.652   0.64   0.65   0.657   \$   0.967746   0.8   0.967745   0.652   0.64   0.652   0.64   \$   0.967746   0.8   0.967745   0.652   0.64   0.652   0.657   \$   0.967746   0.8   0.967745   0.652   0.64   0.652   0.657   \$   0.967746   0.8   0.967745   0.658   0.64   0.652   0.657   \$   0.967746   0.8   0.957745   0.556   0.64   0.652   0.677   \$   0.967747   0.8   0.5556377   0.64   0.62   0.62   0.62   0.677   \$   0.967747   0.8   0.5556377   0.64   0.62   0.62   0.62   0.677   \$   0.967747   0.8   0.5566279   0.64   0.62   0.62   0.677   \$   0.967747   0.8   0.657650   0.658   0.64   0.62   0.678   \$   0.967747   0.8   0.657650   0.658   0.64   0.62   0.678   \$   0.967747   0.8   0.657650   0.658   0.64   0.62   0.678   \$   0.967747   0.8   0.657650   0.658   0.658   0.658   0.658   0.658   \$   0.967747   0.8   0.657650   0.658   0.658   0.658   0.658   0.658   0.658   \$   0.967747   0.8   0.657650   0.658   0.658   0.658   0.658   0.658   0.658   \$   0.967747   0.8   0.657650   0.658   0.658   0.658   0.658   0.658   0.658   \$   0.967747   0.8   0.657670   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   \$   0.967747   0.8   0.657670   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658   0.658								
\$ 0.04642103 0.8 0.05796424 0.57 0.6669999999999999999999999999999999999								
1								
\$ 0.07997288 0.8 0.031579944 0.53525 0.62800000000000000000000000000000000000								
\$ 0.44107520 0.6 0.7594298 0.5552 0.625 0.								
5         0.99779644         6.8         0.71579672         6.58         0.99         6.98         0.502           5         0.97526412         6.3         0.375726         6.58         0.90         0.502         0.502           6         1.0         0.3         0.3         0.35         0.90         0.502         0.513           10         0.1502477         0.8         0.1515722         0.662         0.686         0.688         0.6416           10         0.1507977         0.8         0.1515722         0.662         0.622         0.5575000000000         0.467999999999999999999999999999999999999								
5         0.9778-0420         0.8         0.778-04750         0.556         0.49         0.502         0.514           10         0.0055155         0.3         0.0415155         0.8         0.156         0.456         0.514           10         0.0552555         0.3         0.04151576         0.852         0.042         0.056         0.156         0.156         0.156         0.156         0.156         0.157         0.057         <						0.49		
10		0.94736842	0.8	0.757894736	0.536	0.494	0.506	0.502
10	5	1.0	0.8	0.8	0.526	0.49	0.502	0.514
10	10	0.05263158	0.8	0.042105264	0.682	0.4	0.5	0.456
10	10	0.10526316	0.8	0.084210528	0.668	0.404	0.5	0.46599999999999997
10	10		0.8		0.662	0.408		0.46799999999999997
10			0.8		0.65			
10								
10								
10         0.7384521         0.8         0.378947780         0.6         0.431050252         0.7595         0.959         0.92         0.759         0.02         0.759         10         0.02591777         0.8         0.44617502870         0.544         0.452         0.502         0.043         0.042         0.04								
10								
10								
10								
10								
10								
10         0.78472860         0.8         0.81917944         0.518         0.55         0.46         0.3491040         0.96           10         0.84270540         0.8         0.77589472         0.542         0.48         0.512         0.488           10         0.8475644         0.8         0.77589472         0.542         0.48         0.502         0.480           10         0.8         0.8         0.52         0.48         0.504         0.502           10         0.1         0.3         0.8         0.52         0.48         0.504         0.408           20         0.1052510         0.3         0.00817973         0.6         0.444         0.40         0.404           20         0.1052770         0.8         0.12527972         0.63         0.424         0.50         0.44           20         0.20157877         0.8         0.125281772         0.62         0.424         0.50         0.44           20         0.20157897         0.8         0.125281772         0.6         0.62         0.42         0.50         0.476           20         0.20157897         0.8         0.12528172         0.6         0.422         0.6         0.422								
10								
10								
10								
10         LD         0.8         0.8         0.55         0.456         0.514         0.488           20         0.0525316         0.8         0.048105283         0.636         0.414         0.498         0.486           20         0.1578947         0.8         0.048105283         0.626         0.434         0.498         0.486           20         0.1578947         0.8         0.16810556         0.628         0.428         0.504         0.448           20         0.2515759         0.8         0.15821176         0.62921179         0.42         0.508         0.478           20         0.3575947         0.8         0.25261176         0.5649999999999         0.42         0.508         0.478           20         0.3575477         0.8         0.25261176         0.5849999999999         0.45         0.497         0.447           20         0.3735777         0.8         0.25261767         0.5849999999999         0.45         0.497         0.4478           20         0.37367877         0.8         0.272677879         0.526         0.4478         0.4478           20         0.5738777         0.8         0.421578582         0.556         0.492         0.456								
20         0.05263158         0.8         0.042102644         0.488         0.418         0.486         0.4740000000000000000000000000000000000								
20         0.15528161         0.8         0.08210528         0.626         0.434         0.498         0.486           20         0.15758947         0.8         0.16841056         0.1612         0.428         0.504         0.486           20         0.231578947         0.8         0.25251576         0.58749999999999         0.435         0.4975         0.485           20         0.35178947         0.8         0.252631576         0.58749999999999         0.435         0.4975         0.485           20         0.3564210         0.8         0.252631576         0.587499999999999         0.435         0.4975         0.485           20         0.42105263         0.8         0.358642104         0.58         0.45         0.518         0.478           20         0.42105263         0.8         0.421052622         0.5600000000001         0.446         0.518         0.498           20         0.52631579         0.8         0.421052622         0.5600000000001         0.446         0.510         0.476           20         0.53177957         0.8         0.42105262         0.55600000000001         0.446         0.55600000000001         0.446         0.556000000000001         0.446         0.566000000000000000000000000								0.474000000000000003
20         0.10526322         0.8         0.168421056         0.612         0.428         0.594         0.486           20         0.21578947         0.8         0.226231157         0.5874999999999         0.435         0.4795         0.4825           20         0.15178947         0.8         0.226231157         0.58749999999999         0.435         0.4795         0.476           20         0.42105263         0.8         0.358412104         0.58         0.44         0.516         0.478           20         0.42105263         0.8         0.421052632         0.5600000000000000000000000000000000000	20		0.8		0.626	0.434		0.486
20         0.2315789         0.8         0.1026912         0.606         0.42         0.598         0.4775         0.4825           20         0.35842105         0.8         0.23731578         0.587999999999         0.43         0.506         0.476         0.476           20         0.47568421         0.8         0.37849140         0.58         0.45         0.518         0.478           20         0.47568421         0.8         0.378497364         0.57         0.454         0.512         0.478           20         0.52631797         0.8         0.42105252         0.56000000000000         0.446         0.51         0.476           20         0.537894737         0.8         0.46137599         0.5602616         0.588         0.46         0.51         0.476           20         0.54812055         0.8         0.567264824         0.544         0.4679999999999         0.512         0.488           20         0.54812055         0.8         0.547764824         0.544         0.46799999999999         0.512         0.488           20         0.548776864         0.8         0.517784747         0.528         0.542         0.467999999999999         0.512         0.488           20 </td <td>20</td> <td>0.15789474</td> <td>0.8</td> <td>0.126315792</td> <td>0.628</td> <td>0.424</td> <td>0.49</td> <td>0.494</td>	20	0.15789474	0.8	0.126315792	0.628	0.424	0.49	0.494
20         0.3545747         0.88         0.252631576         0.587499999999999         0.444         0.506         0.476           20         0.42105263         0.8         0.35842104         0.58         0.45         0.512         0.478           20         0.4256412         0.8         0.35842104         0.58         0.45         0.512         0.478           20         0.52631579         0.8         0.421052632         0.5660000000000001         0.446         0.512         0.478           20         0.5343779         0.8         0.421052632         0.566000000000001         0.446         0.512         0.478           20         0.6341053         0.8         0.450526316         0.558         0.46         0.512         0.488           20         0.6341053         0.8         0.55789424         0.544         0.466         0.516         0.492           20         0.7847368         0.8         0.54578488         0.526         0.492         0.506         0.492           20         0.7847368         0.8         0.757584218         0.544         0.446         0.51         0.504           20         0.84210526         0.8         0.757584218         0.522	20	0.21052632	0.8	0.168421056	0.612	0.428	0.504	0.486
20         0.420/2505         0.8         0.29473684         0.566         0.444         0.506         0.476           20         0.47368421         0.8         0.375847588         0.57         0.454         0.512         0.478           20         0.5763777         0.8         0.42105232         0.560000000000001         0.446         0.512         0.478           20         0.57594737         0.8         0.463157896         0.560000000000001         0.446         0.512         0.487           20         0.6515739         0.8         0.4543157896         0.560000000000001         0.46         0.512         0.488           20         0.6515739         0.8         0.5547368424         0.544         0.467999999999999999999999999999999999999	20	0.26315789	0.8	0.210526312	0.606	0.42	0.508	0.478
20         0.4736341         0.8         0.338642104         0.58         0.45         0.512         0.478           20         0.4758412         0.8         0.3286427858         0.57         0.454         0.512         0.478           20         0.52841579         0.8         0.421052632         0.566000000000001         0.446         0.512         0.476           20         0.53451797         0.8         0.421052632         0.556000000000001         0.446         0.512         0.476           20         0.53451797         0.8         0.43157897         0.5500000000000000         0.448         0.504         0.122         0.488           20         0.63410326         0.8         0.537588241         0.544         0.467999999999999         0.512         0.498           20         0.794758621         0.8         0.55743888         0.522         0.466         0.516         0.516         0.492           20         0.79475862         0.8         0.51758472         0.524         0.466         0.516         0.514         0.514           20         0.847566         0.8         0.737584736         0.528         0.492         0.500         0.514         0.514         0.514 <tr< td=""><td>20</td><td>0.31578947</td><td>0.8</td><td>0.252631576</td><td>0.5874999999999999</td><td>0.435</td><td>0.4975</td><td>0.4825</td></tr<>	20	0.31578947	0.8	0.252631576	0.5874999999999999	0.435	0.4975	0.4825
20         0.7568421         0.8         0.378947588         0.57         0.446         0.512         0.478           20         0.57589737         0.8         0.421025222         0.56000000000001         0.446         0.512         0.478           20         0.57589737         0.8         0.456317596         0.56000000000001         0.48         0.5012         0.488           20         0.57589737         0.8         0.557368424         0.544         0.4679999999999999         0.512         0.488           20         0.75847368         0.8         0.5547568424         0.544         0.46799999999999999999999999999999         0.516         0.492           20         0.8410536         0.8         0.575788448         0.544         0.467999999999999999999999999999999999999			0.8	0.29473684	0.586	0.444	0.506	0.476
20         0.52631579         0.8         0.421052632         0.5600000000000001         0.446         0.51         0.94         0.978           20         0.5273777         0.8         0.45137896         0.500000000000000000000000000000000000								
20         0.5789477         0.8         0.463157896         0.54000000000000         0.48         0.512         0.488           20         0.6421053         0.8         0.5233646         0.584         0.464         0.512         0.488           20         0.75847188         0.8         0.54736814         0.544         0.466         0.516         0.492           20         0.75847188         0.8         0.631578944         0.544         0.466         0.516         0.492           20         0.84173681         0.8         0.631578944         0.544         0.467999999999999         0.566         0.392           20         0.8736842         0.8         0.75789472         0.528         0.482         0.514								
20         0.63157895         0.8         0.59326316         0.558         0.46         0.512         0.488           20         0.6321053         0.8         0.5348424         0.44         0.46799999999979         512         0.498           20         0.7384211         0.8         0.589473688         0.512         0.466         0.516         0.492           20         0.84210526         0.8         0.637584288         0.526         0.492         0.504         0.504           20         0.8471564         0.8         0.75789472         0.526         0.492         0.504         0.504           20         0.9475684         0.8         0.75789472         0.528         0.492         0.514         0.504           20         1.0         0.8         0.8         0.55         0.462         0.402         0.514           20         1.1         0.0         0.8         0.8         0.455         0.51         0.416         0.49         0.476           20         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
20         0.58421053         0.8         0.54736424         0.544         0.46799999999999         0.512         0.498           20         0.78847368         0.8         0.651578944         0.542         0.466         0.516         0.492           20         0.8247368         0.8         0.651578944         0.556         0.492         0.504         0.504           20         0.8473684         0.8         0.715789472         0.526         0.492         0.504         0.504           20         0.8473684         0.8         0.715789472         0.528         0.492         0.514         0.514           20         0.4736842         0.8         0.715789472         0.528         0.492         0.514         0.514           20         0.10523157         0.8         0.82155844         0.65         0.416         0.49         0.476           50         0.15789474         0.8         0.02155244         0.65         0.416         0.49         0.476           50         0.15789474         0.8         0.1265215792         0.622         0.44         0.49         0.476           50         0.25815789         0.8         0.12652515792         0.622         0.54 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
20         0.7384211         0.8         0.858473688         0.512         0.464         0.467999999999999999999999999999999999999								
20         0.78847368         0.8         0.631578944         0.544         0.467999999999997         0.06         0.492           20         0.849173684         0.8         0.675884278         0.526         0.492         0.504         0.504           20         0.47756842         0.8         0.757894736         0.528         0.492         0.514         0.514           20         1.0         0.8         0.8         0.545         0.51         0.514         0.514           50         0.05263158         0.8         0.042105264         0.65         0.416         0.49         0.476           50         0.105263158         0.8         0.042105284         0.632         0.422         0.5         0.476           50         0.10526316         0.8         0.18210528         0.622         0.444         0.494         0.48           50         0.15789474         0.8         0.126215792         0.622         0.444         0.494         0.48           50         0.21578947         0.8         0.210526312         0.604         0.448         0.59         0.492           50         0.31578947         0.8         0.252631576         0.604         0.452         0.50								
20         0.84210526         0.8         0.073684288         0.07368428         0.5264         0.492         0.504         0.504           20         0.94736842         0.8         0.75789472         0.528         0.492         0.514         0.514           20         1.0         0.8         0.8         0.757894736         0.528         0.492         0.514         0.514           20         1.0         0.8         0.8         0.545         0.51         0.50750000000000         0.7676           50         0.05263158         0.8         0.042105264         0.65         0.416         0.49         0.476           50         0.15789474         0.8         0.12631792         0.622         0.44         0.494         0.48           50         0.15789474         0.8         0.12631792         0.622         0.444         0.5         0.478           50         0.2635179         0.8         0.126253112         0.604         0.444         0.5         0.478           50         0.2535179         0.8         0.25263176         0.602         0.462         0.504         0.434           50         0.45261579         0.8         0.25263176         0.602         <								
20         0.89473684         0.8         0.71789472         0.528         0.4928         0.514         0.515         0.07500000000000         0.515         0.07500000000000         0.515         0.07500000000000         0.514         0.07500000000000         0.515         0.07500000000000         0.0750000000000000         0.07500000000000         0.0750000000000000         0.07500000000000000         0.075000000000000000         0.075000000000000000000         0.075000000000000000000000000000000         0.0750000000000000000000000000000000000								
20         0.94736842         0.8         0.757894736         0.528         0.492         0.514         0.514           20         1.0         0.8         0.8         0.85         0.555         0.515         0.057000000000001         0.5           50         0.10526316         0.8         0.042105264         0.63         0.416         0.49         0.476           50         0.15789474         0.8         0.16231578         0.622         0.44         0.494         0.48           50         0.20152632         0.8         0.168421056         0.624         0.444         0.5         0.478           50         0.20157891         0.8         0.210526312         0.604         0.443         0.494         0.492           50         0.35178947         0.8         0.252631576         0.604         0.443         0.494         0.492           50         0.35842105         0.8         0.222473684         0.604         0.452         0.504         0.484           50         0.43205263         0.8         0.22473684         0.602         0.522         0.502         0.522           50         0.47368421         0.8         0.23584104         0.55292         0.4625 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
20         1.0         8.8         0.8         0.454         0.51         0.50750000000000000         0.5           50         0.10526315         0.8         0.04210524         0.65         0.412         0.5         0.476           50         0.15789474         0.8         0.126315792         0.622         0.44         0.494         0.48           50         0.2152632         0.8         0.16421056         0.624         0.444         0.5         0.478           50         0.26315789         0.8         0.10523172         0.604         0.448         0.494         0.492           50         0.31578947         0.8         0.22531576         0.604         0.448         0.494         0.492           50         0.31578947         0.8         0.22531576         0.604         0.448         0.494         0.492           50         0.3584210         0.8         0.229473684         0.602         0.468         0.502         0.503           50         0.4736421         0.8         0.358947368         0.592         0.458         0.504         0.472           50         0.52631579         0.8         0.42105262         0.57         0.452         0.506								
50         0.05263158         0.8         0.042105244         0.65         0.416         0.49         0.476           50         0.10526316         0.8         0.084210528         0.632         0.422         0.5         0.476           50         0.15789474         0.8         0.126315792         0.622         0.44         0.494         0.48           50         0.2015789         0.8         0.12631579         0.604         0.448         0.494         0.478           50         0.20157899         0.8         0.2025231576         0.604         0.448         0.494         0.492           50         0.30482105         0.8         0.22473684         0.602         0.468         0.502         0.502           50         0.42105263         0.8         0.22473684         0.602         0.468         0.502         0.502           50         0.42105263         0.8         0.23738410         0.584040         0.572         0.515         0.49           50         0.452631579         0.8         0.421052632         0.57         0.458         0.506         0.472           50         0.52631579         0.8         0.42052632         0.57         0.458         0.506 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.10526316         0.8         0.084210528         0.632         0.422         0.5         0.476           50         0.15789474         0.8         0.126315792         0.622         0.44         0.494         0.48           50         0.21052632         0.8         0.168421050         0.624         0.444         0.5         0.478           50         0.2515789         0.8         0.252631576         0.604         0.448         0.494         0.492           50         0.35157897         0.8         0.252631576         0.604         0.448         0.504         0.418           50         0.35842105         0.8         0.237368421         0.602         0.468         0.502         0.502           50         0.42102623         0.8         0.336842104         0.602         0.468         0.502         0.502         0.502           50         0.4316263         0.8         0.34736842         0.502         0.456         0.504         0.4422           50         0.57847377         0.8         0.463157896         0.57         0.458         0.506         0.472           50         0.63157894         0.8         0.547368424         0.559         0.540 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.15789474         0.8         0.12615792         0.622         0.444         0.494         0.48           50         0.20152632         0.8         0.168421056         0.624         0.444         0.5         0.478           50         0.26315789         0.8         0.210526312         0.604         0.448         0.494         0.492           50         0.35178947         0.8         0.252631576         0.604         0.452         0.504         0.484           50         0.3542105         0.8         0.252631576         0.604         0.452         0.504         0.484           50         0.342105263         0.8         0.23473684         0.602         0.468         0.502         0.502           50         0.42105263         0.8         0.37847368         0.502         0.458         0.506         0.472           50         0.57894737         0.8         0.421052632         0.57         0.458         0.506         0.472           50         0.578947387         0.8         0.45137896         0.57         0.462         0.506         0.492           50         0.53157897         0.8         0.4523682         0.572         0.462         0.506 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.21052632         0.8         0.168421056         0.604         0.448         0.494         0.478           50         0.261578947         0.8         0.210526312         0.604         0.448         0.494         0.492           50         0.31578947         0.8         0.252631576         0.604         0.452         0.504         0.484           50         0.36842105         0.8         0.29473684         0.602         0.468         0.502         0.502           50         0.42105263         0.8         0.336842104         0.58749999999999         0.4625         0.5125         0.49           50         0.47368421         0.8         0.378947368         0.592         0.456         0.506         0.472           50         0.52631579         0.8         0.421052632         0.57         0.488         0.506         0.472           50         0.53847378         0.8         0.453157896         0.57         0.482         0.506         0.472           50         0.5315789743         0.8         0.453157896         0.57         0.462         0.50         0.449           50         0.6315789473         0.8         0.543588424         0.559         0.462 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.31578947         0.8         0.252631576         0.604         0.452         0.504         0.484           50         0.3504105263         0.8         0.29473684         0.602         0.466         0.502         0.502           50         0.42105263         0.8         0.336842104         0.587499999999999         0.4625         0.5125         0.49           50         0.47368421         0.8         0.378947368         0.592         0.456         0.504         0.492           50         0.52631579         0.8         0.421052632         0.57         0.458         0.506         0.472           50         0.57894737         0.8         0.46157896         0.57         0.462         0.506         0.49           50         0.63157895         0.8         0.50526316         0.56400000000000001         0.47000000000000000000         0.498         0.496           50         0.68421053         0.8         0.54736842         0.55999999999999         0.462         0.5         0.492           50         0.78437368         0.8         0.54736842         0.55999999999999         0.504         0.494           50         0.89473684         0.8         0.757884736         0.538 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.31578947         0.8         0.252631576         0.604         0.452         0.504         0.484           50         0.36842105         0.8         0.29473684         0.602         0.4668         0.502         0.502           50         0.42105263         0.8         0.336842104         0.587499999999999         0.4625         0.5125         0.49           50         0.47368421         0.8         0.375847368         0.592         0.456         0.504         0.492           50         0.5231379         0.8         0.42105232         0.57         0.458         0.506         0.472           50         0.53137995         0.8         0.462322         0.57         0.462         0.506         0.49           50         0.63157895         0.8         0.456736842         0.5599999999999         0.462         0.506         0.49           50         0.68421053         0.8         0.587436842         0.55999999999999         0.462         0.50         0.482           50         0.78473684         0.8         0.584376884         0.552         0.462999999999999         0.504         0.494           50         0.89473684         0.8         0.715789472         0.528 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.36842105         0.8         0.29473684         0.602         0.468         0.502         0.502           50         0.472105263         0.8         0.335842104         0.58749999999999999999999999999999         0.4625         0.5125         0.49           50         0.47368421         0.8         0.378947368         0.592         0.456         0.504         0.492           50         0.52631579         0.8         0.421052632         0.57         0.462         0.506         0.472           50         0.63137895         0.8         0.463157896         0.57         0.462         0.506         0.49           50         0.63137895         0.8         0.463157896         0.57         0.462         0.506         0.49           50         0.63137895         0.8         0.463157894         0.5590999999999999999999999999999999999	50		0.8			0.452	0.504	
50         0.47368421         0.8         0.378947368         0.592         0.456         0.504         0.492           50         0.52631579         0.8         0.421052632         0.57         0.458         0.506         0.472           50         0.57894737         0.8         0.463157896         0.57         0.462         0.506         0.49           50         0.63157895         0.8         0.50326316         0.564000000000001         0.470000000000003         0.498         0.496           50         0.63421053         0.8         0.589473688         0.552         0.462999999999999         0.462         0.5         0.482           50         0.73684211         0.8         0.589473688         0.552         0.46799999999999         0.504         0.494           50         0.73684211         0.8         0.589473688         0.552         0.467999999999999         0.504         0.494           50         0.84210526         0.8         0.631578944         0.55         0.508         0.512         0.506           50         0.84210526         0.8         0.67368428         0.570000000000000         0.46499999999999         0.53         0.492           50         0.84210526 <t< td=""><td>50</td><td>0.36842105</td><td>0.8</td><td>0.29473684</td><td>0.602</td><td>0.468</td><td>0.502</td><td>0.502</td></t<>	50	0.36842105	0.8	0.29473684	0.602	0.468	0.502	0.502
50         0.52631579         0.8         0.421052632         0.57         0.458         0.506         0.472           50         0.57894737         0.8         0.463157896         0.57         0.462         0.506         0.496           50         0.63157895         0.8         0.50526316         0.5400000000000001         0.470000000000000003         0.498         0.496           50         0.68421053         0.8         0.547368424         0.559999999999999         0.462         0.5         0.482           50         0.73684211         0.8         0.589473688         0.552         0.46799999999997         0.504         0.494           50         0.84210526         0.8         0.6315878944         0.55         0.508         0.512         0.506           50         0.84210526         0.8         0.673684208         0.570000000000000         0.464999999999999         0.53         0.49           50         0.89473684         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.89473684         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.10         0.05263158         0.8 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.57894737         0.8         0.463157896         0.57         0.462         0.506         0.494           50         0.63157895         0.8         0.50526316         0.564000000000000         0.4700000000000         0.498         0.496           50         0.68421053         0.8         0.54368424         0.55999999999999         0.462         0.5         0.482           50         0.73684211         0.8         0.589473688         0.552         0.46799999999999         0.504         0.494           50         0.78947368         0.8         0.631578944         0.55         0.467999999999999         0.504         0.494           50         0.84210526         0.8         0.631578944         0.55         0.508         0.512         0.506           50         0.84210526         0.8         0.67589472         0.528         0.474         0.51         0.492           50         0.94736842         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.94736842         0.8         0.757894736         0.538         0.484         0.50         0.482           50         1.0         0.8         0.8         0.538								
50         0.63157895         0.8         0.50526316         0.56400000000000001         0.47000000000000003         0.498         0.496           50         0.68421053         0.8         0.547368424         0.5599999999999999999999999999999999999								
50         0.68421053         0.8         0.547368424         0.559999999999999         0.462         0.5         0.482           50         0.73684211         0.8         0.589473688         0.552         0.46799999999999999999         0.504         0.494           50         0.78947368         0.8         0.63178944         0.55         0.508         0.512         0.506           50         0.84210526         0.8         0.673684208         0.5700000000000001         0.46499999999999999         0.53         0.49           50         0.89473684         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.94736842         0.8         0.75879472         0.528         0.474         0.51         0.492           50         1.0         0.8         0.8         0.75879472         0.528         0.474         0.51         0.492           50         1.0         0.8         0.8         0.7588472         0.528         0.474         0.51         0.492           50         1.0         0.8         0.784210524         0.66         0.418         0.514         0.492           100         0.15263158         0.8         0.04261052								
50         0.73684211         0.8         0.589473688         0.552         0.4679999999999997         0.504         0.494           50         0.78947368         0.8         0.631578944         0.55         0.508         0.512         0.506           50         0.84210526         0.8         0.67384208         0.5700000000000000         0.468999999999999         0.53         0.49           50         0.89473684         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.94736842         0.8         0.757894736         0.538         0.482         0.494         0.508           50         1.0         0.8         0.8         0.538         0.482         0.502         0.506           100         0.05263158         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.10526316         0.8         0.084210528         0.65         0.418         0.514         0.48           100         0.10526316         0.8         0.04810528         0.66         0.418         0.514         0.48           100         0.10526316         0.8         0.1263529         0.648         0.424 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.78947368         0.8         0.631578944         0.55         0.508         0.512         0.506           50         0.84210526         0.8         0.673684208         0.5700000000000000         0.46499999999999999999999999999999999999								
50         0.84210526         0.8         0.673684208         0.570000000000001         0.4649999999999999         0.53         0.49           50         0.89473684         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.94736842         0.8         0.757894736         0.538         0.482         0.494         0.508           50         1.0         0.8         0.8         0.538         0.484         0.502         0.506           100         0.05263158         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.10526316         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.10526316         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.15789474         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.21652632         0.8         0.168421056         0.636         0.426         0.512         0.494           100         0.31578947         0.8         0.252631576         0.626         0.434								
50         0.89473684         0.8         0.715789472         0.528         0.474         0.51         0.492           50         0.94736842         0.8         0.757894736         0.538         0.482         0.494         0.508           50         1.0         0.8         0.8         0.538         0.482         0.502         0.506           100         0.05263158         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.10526316         0.8         0.084210528         0.65         0.418         0.514         0.48           100         0.15789474         0.8         0.1263792         0.648         0.424         0.508         0.48           100         0.21052632         0.8         0.168421056         0.636         0.426         0.512         0.494           100         0.26315789         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.252631576         0.626         0.434         0.516         0.421           100         0.346842105         0.8         0.252631576         0.626         0.434         0.512								
50         0.94736842         0.8         0.757894736         0.538         0.482         0.494         0.508           50         1.0         0.8         0.8         0.538         0.484         0.502         0.506           100         0.05263158         0.8         0.042105244         0.66         0.418         0.514         0.482           100         0.15789474         0.8         0.084210528         0.65         0.418         0.514         0.48           100         0.15789474         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.21052632         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.26315789         0.8         0.210526312         0.636         0.426         0.512         0.494           100         0.23157897         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.252631576         0.626         0.434         0.516         0.476           100         0.421052632         0.8         0.23473684         0.608         0.444         0.516								
50         1.0         0.8         0.8         0.538         0.484         0.502         0.506           100         0.05263158         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.10526316         0.8         0.084210528         0.65         0.418         0.514         0.48           100         0.15789474         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.20315789         0.8         0.168421056         0.636         0.426         0.512         0.494           100         0.26315789         0.8         0.10526312         0.632         0.432         0.522         0.48           100         0.231578947         0.8         0.252631576         0.626         0.434         0.526         0.476           100         0.35842105         0.8         0.259473684         0.608         0.444         0.516         0.482           100         0.42105263         0.8         0.239473684         0.608         0.444         0.516         0.482           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52								
100         0.05263158         0.8         0.042105264         0.66         0.418         0.514         0.492           100         0.10526316         0.8         0.084210528         0.65         0.418         0.514         0.48           100         0.15789474         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.21052632         0.8         0.168421056         0.636         0.426         0.512         0.494           100         0.26315789         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.225631576         0.626         0.434         0.526         0.476           100         0.36842105         0.8         0.29473684         0.606         0.434         0.512         0.478           100         0.47368421         0.8         0.336842104         0.606         0.436         0.512         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.512         0.482           100         0.57894737         0.8         0.42052632         0.599         0.452								
100         0.10526316         0.8         0.084210528         0.65         0.418         0.514         0.48           100         0.15789474         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.21052632         0.8         0.168421056         0.636         0.424         0.512         0.494           100         0.26315789         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.252631576         0.626         0.434         0.526         0.476           100         0.36842105         0.8         0.252631576         0.626         0.434         0.516         0.482           100         0.42105263         0.8         0.23473684         0.608         0.444         0.516         0.482           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.57894737         0.8         0.42052632         0.59         0.4525								
100         0.15789474         0.8         0.126315792         0.648         0.424         0.508         0.48           100         0.21052632         0.8         0.168421056         0.636         0.426         0.512         0.494           100         0.26315789         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.252631576         0.626         0.434         0.526         0.476           100         0.36842105         0.8         0.29473684         0.608         0.444         0.516         0.482           100         0.42105263         0.8         0.378947368         0.598         0.456         0.52         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.52631579         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.578947379         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.578947368         0.50526316         0.58         0.454         0.524								
100         0.21052632         0.8         0.168421056         0.636         0.426         0.512         0.494           100         0.26315789         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.252631576         0.626         0.434         0.526         0.476           100         0.36842105         0.8         0.29473684         0.608         0.444         0.516         0.482           100         0.47368421         0.8         0.336842104         0.606         0.436         0.512         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.52631579         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.52631579         0.8         0.4621053632         0.592         0.4525         0.515         0.4825           100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.5400000000								
100         0.26315789         0.8         0.210526312         0.632         0.432         0.522         0.48           100         0.31578947         0.8         0.252631576         0.626         0.434         0.526         0.476           100         0.36842105         0.8         0.29473684         0.608         0.444         0.516         0.482           100         0.42105263         0.8         0.336842104         0.606         0.436         0.512         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.57894737         0.8         0.421052632         0.59         0.455         0.515         0.4825           100         0.57894737         0.8         0.421052632         0.59         0.452         0.515         0.4825           100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.63421053         0.8         0.5526316         0.58         0.474								
100         0.31578947         0.8         0.252631576         0.626         0.434         0.526         0.476           100         0.36842105         0.8         0.29473684         0.608         0.444         0.516         0.482           100         0.42105263         0.8         0.336842104         0.606         0.436         0.512         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.52631579         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.578947375         0.8         0.450157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.68421053         0.8         0.547368424         0.56400000000000001         0.456         0.512         0.494           100         0.73684211         0.8         0.589473688         0.57								
100         0.36842105         0.8         0.29473684         0.608         0.444         0.516         0.482           100         0.42105263         0.8         0.336842104         0.606         0.436         0.512         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.52631579         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.63421053         0.8         0.5586316         0.58         0.454         0.524         0.482           100         0.73684211         0.8         0.589473688         0.57         0.472         0.524         0.494           100         0.78947368         0.8         0.63157894         0.55         0.494         0.516         0.502           100         0.78947368         0.8         0.631578944         0.55         0.494 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
100         0.42105263         0.8         0.336842104         0.606         0.436         0.512         0.478           100         0.47368421         0.8         0.378947368         0.598         0.456         0.52         0.484           100         0.52631579         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.63421053         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.73684211         0.8         0.58736842         0.564000000000000         0.465         0.512         0.494           100         0.78947368         0.8         0.63157894         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.467999999999999999999999999999999999999								
100         0.52631579         0.8         0.421052632         0.59         0.4525         0.515         0.4825           100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.444         0.524         0.482           100         0.63421053         0.8         0.547368424         0.564000000000001         0.456         0.512         0.494           100         0.73684211         0.8         0.589473688         0.57         0.472         0.524         0.494           100         0.78947368         0.8         0.631578944         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.467999999999999999999999999999999999999								
100         0.57894737         0.8         0.463157896         0.592         0.452         0.518         0.488           100         0.63157895         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.68421053         0.8         0.547368424         0.564000000000001         0.456         0.512         0.494           100         0.73684211         0.8         0.589473688         0.57         0.472         0.524         0.494           100         0.78947368         0.8         0.631578944         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.467999999999999999999999999999999999999	100							
100         0.63157895         0.8         0.50526316         0.58         0.454         0.524         0.482           100         0.68421053         0.8         0.547368424         0.56400000000000         0.456         0.512         0.494           100         0.73684211         0.8         0.889473688         0.57         0.472         0.524         0.494           100         0.78947368         0.8         0.631578944         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.4679999999999999         0.514         0.502           100         0.89473684         0.8         0.715789472         0.538         0.474         0.514         0.5           100         0.94736842         0.8         0.757894736         0.528         0.474         0.514         0.5								
100         0.68421053         0.8         0.547368424         0.564000000000001         0.456         0.512         0.494           100         0.73684211         0.8         0.589473688         0.57         0.472         0.524         0.494           100         0.78947368         0.8         0.631578944         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.467999999999997         0.514         0.502           100         0.89473684         0.8         0.715789472         0.538         0.47         0.538         0.506           100         0.94736842         0.8         0.757894736         0.528         0.474         0.514         0.5	100	0.57894737	0.8	0.463157896	0.592	0.452	0.518	0.488
100         0.73684211         0.8         0.589473688         0.57         0.472         0.524         0.494           100         0.78947368         0.8         0.631578944         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.4679999999999999 0.514         0.502           100         0.89473684         0.8         0.715789472         0.538         0.47         0.538         0.506           100         0.94736842         0.8         0.757894736         0.528         0.474         0.514         0.5		0.63157895		0.50526316		0.454	0.524	0.482
100         0.78947368         0.8         0.631578944         0.55         0.494         0.516         0.502           100         0.84210526         0.8         0.673684208         0.542         0.467999999999999999999999999999999999999								
100         0.84210526         0.8         0.673684208         0.542         0.467999999999999         0.514         0.502           100         0.89473684         0.8         0.715789472         0.538         0.47         0.538         0.506           100         0.94736842         0.8         0.757894736         0.528         0.474         0.514         0.5								
100         0.89473684         0.8         0.715789472         0.538         0.47         0.538         0.506           100         0.94736842         0.8         0.757894736         0.528         0.474         0.514         0.5								
100         0.94736842         0.8         0.757894736         0.528         0.474         0.514         0.5								
<b>100</b>   1.0   0.8   0.8   0.52   0.506   0.51   0.514								
	100	1.0	0.8	0.8	0.522	0.506	0.51	0.514

**Table 2.** Results for genetic variation = 0.8.

	Number of risk SNPs	Heritability	Genetic Variation	totalSNPeffect	deep learning AUC	PRSice AUC	Plink AUC	Lasso AUC
S								
3         0.21055020         27         0.14810250         0.040         0.040         0.040         0.040         0.050								
S								
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\$   0.5786421   0.7	5						0.502	
\$ 0.00013790   0.0000013790   0.000013790   0.000013790   0.0000013790   0.0000013790   0.0000013790   0.00000000000   0.00000000000000000								
\$   0.5799737   0.7								
\$ 0.04179950   0.7								
\$   0.64511653   0.7   0.647967271   0.5925   0.6625   0.6625   0.6675   0.6625   0.675   0.6825   0.7046714   0.7   0.53574177   0.578   0.666   0.042   0.662   0.672   0.662   0.67								
\$ 0.75862110 0.7 0.55759977 0.578 0.656 0.656 0.056 0.058 0.								
BASENSON   0.7								
\$\$   0.999***CMAH   0.7		0.78947368	0.7	0.552631576	0.566	0.456	0.502	0.492
5								
10								
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10								0.4659999999999999
10	10	0.15789474	0.7	0.110526318	0.658	0.402		0.476000000000000003
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20	20	0.42105263	0.7	0.294736841	0.596	0.456	0.506	0.486
20								
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10								
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10	20	0.84210526	0.7	0.589473682	0.546	0.4639999999999999	0.5	0.49
1.0								
100								
50         0.10526316         0.7         0.073684212         0.65         0.418         0.492         0.478           50         0.15789474         0.7         0.110526318         0.64         0.446         0.504         0.46           50         0.21052632         0.7         0.147368424         0.634         0.442         0.496         0.484           50         0.26315789         0.7         0.184210523         0.624         0.442         0.5         0.48           50         0.31578947         0.7         0.221052629         0.618         0.45         0.5         0.48           50         0.36842105         0.7         0.257894735         0.6         0.442         0.50         0.474           50         0.43768421         0.7         0.234736841         0.604         0.462         0.496         0.492           50         0.437868421         0.7         0.3315789477         0.6         0.455         0.498         0.494           50         0.52631579         0.7         0.368421053         0.58         0.454         0.506         0.488           50         0.5784473         0.7         0.48263159         0.59         0.454         0.502								
100								
50								
50         0.31578947         0.7         0.221052629         0.618         0.45         0.5         0.474           50         0.36842105         0.7         0.257894735         0.6         0.442         0.508         0.492           50         0.42105263         0.7         0.224736841         0.604         0.462         0.496         0.492           50         0.47368421         0.7         0.331578947         0.6         0.456         0.498         0.494           50         0.52631579         0.7         0.368421053         0.584         0.454         0.502         0.506           50         0.57894737         0.7         0.405263159         0.59         0.454         0.502         0.506           50         0.634157895         0.7         0.478947371         0.568         0.452         0.502         0.506           50         0.63421053         0.7         0.478947371         0.568         0.4679999999999999         0.5         0.5           50         0.73684211         0.7         0.515789477         0.552         0.486         0.504         0.488           50         0.78947368         0.7         0.52631576         0.556         0.47 <t< td=""><td>50</td><td>0.21052632</td><td>0.7</td><td>0.147368424</td><td>0.634</td><td>0.442</td><td>0.496</td><td>0.484</td></t<>	50	0.21052632	0.7	0.147368424	0.634	0.442	0.496	0.484
50         0.36842105         0.7         0.257894735         0.6         0.442         0.508         0.492           50         0.42105263         0.7         0.294736841         0.604         0.462         0.496         0.492           50         0.47368421         0.7         0.31878947         0.6         0.456         0.498         0.494           50         0.52631579         0.7         0.368421053         0.594         0.454         0.506         0.488           50         0.57894737         0.7         0.405263159         0.59         0.454         0.502         0.506           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.63421053         0.7         0.478947371         0.568         0.4679999999999999         0.5         0.5           50         0.7394736842         0.7         0.5589473682         0.542         0.434								
50         0.42105263         0.7         0.294736841         0.604         0.462         0.496         0.492           50         0.47368421         0.7         0.331578947         0.6         0.456         0.498         0.494           50         0.52631579         0.7         0.368421033         0.584         0.454         0.506         0.488           50         0.57894737         0.7         0.405263159         0.59         0.454         0.502         0.506           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.506           50         0.68421053         0.7         0.478947371         0.568         0.467999999999999999999999999999999999999								
50         0.47368421         0.7         0.331578947         0.6         0.456         0.498         0.494           50         0.52631579         0.7         0.368421053         0.584         0.454         0.506         0.488           50         0.57894737         0.7         0.40263159         0.59         0.454         0.502         0.506           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.63421033         0.7         0.478947371         0.568         0.467999999999999999999999999999999999999								
50         0.52631579         0.7         0.368421053         0.584         0.454         0.506         0.488           50         0.57894737         0.7         0.405263159         0.59         0.454         0.502         0.502           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.68421053         0.7         0.478947371         0.568         0.46799999999999999         0.5         0.5           50         0.73684211         0.7         0.515789477         0.552         0.486         0.504         0.488           50         0.73864211         0.7         0.552631576         0.556         0.47         0.506         0.492           50         0.84210526         0.7         0.589473682         0.542         0.454         0.496         0.494           50         0.8473684         0.7         0.663157884         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.467999999999999         0.506         0.492           50         1.0         0.7         0.663157894         0.544         0.4679999								
50         0.57894737         0.7         0.405263159         0.59         0.454         0.502         0.506           50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.68421053         0.7         0.478947371         0.568         0.4679999999999999         0.5         0.5           50         0.73684211         0.7         0.515789477         0.552         0.486         0.504         0.488           50         0.73947368         0.7         0.552631576         0.556         0.47         0.506         0.492           50         0.84210526         0.7         0.589473682         0.542         0.454         0.496         0.494           50         0.89473684         0.7         0.626315788         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.4679999999999999         0.506         0.492           50         1.0         0.7         0.7         0.566000000000000         0.466         0.502         0.492           50         1.0         0.7         0.7         0.566000000000000         0.464 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
50         0.63157895         0.7         0.442105265         0.584         0.452         0.502         0.492           50         0.68421053         0.7         0.478947371         0.568         0.4679999999999997         0.5         0.5           50         0.73684211         0.7         0.515789477         0.552         0.486         0.504         0.488           50         0.78947368         0.7         0.552631576         0.556         0.47         0.506         0.492           50         0.84210526         0.7         0.589473682         0.542         0.454         0.496         0.494           50         0.8473684         0.7         0.626315788         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.467999999999999999999999999999999999999								
50         0.73684211         0.7         0.515789477         0.552         0.486         0.504         0.488           50         0.78947368         0.7         0.552631576         0.556         0.47         0.506         0.492           50         0.84210526         0.7         0.589473682         0.542         0.454         0.496         0.494           50         0.89473684         0.7         0.626315788         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.467999999999999999999999999999999999999	50	0.63157895	0.7	0.442105265	0.584		0.502	0.492
50         0.78947368         0.7         0.552631576         0.556         0.47         0.506         0.492           50         0.84210526         0.7         0.589473682         0.542         0.454         0.496         0.494           50         0.89473684         0.7         0.66315788         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.467999999999999999999999999999999999999								
50         0.84210526         0.7         0.589473682         0.542         0.454         0.496         0.494           50         0.89473684         0.7         0.626315788         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.4679999999999997         0.506         0.492           50         1.0         0.7         0.7         0.5660000000000001         0.466         0.502         0.492           100         0.0526318         0.7         0.036842106         0.67         0.424         0.516         0.488           100         0.10526316         0.7         0.073684212         0.652         0.422         0.508         0.472           100         0.15789474         0.7         0.110526318         0.655         0.438         0.512         0.482           100         0.21052632         0.7         0.147368424         0.6525000000000001         0.44         0.515         0.4925           100         0.2315789         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.36842105         0.7         0.257894735         0.622								
50         0.89473684         0.7         0.626315788         0.552         0.478         0.498         0.514           50         0.94736842         0.7         0.663157894         0.544         0.467999999999997         0.506         0.492           50         1.0         0.7         0.7         0.566000000000001         0.466         0.502         0.492           100         0.05263158         0.7         0.036842106         0.67         0.424         0.516         0.488           100         0.10526316         0.7         0.073684212         0.652         0.422         0.508         0.472           100         0.15789474         0.7         0.110526318         0.656         0.438         0.512         0.482           100         0.21052632         0.7         0.147368424         0.65250000000000001         0.44         0.515         0.4925           100         0.26315789         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.257894735         0.622								
50         0.94736842         0.7         0.663157894         0.544         0.467999999999997         0.506         0.492           50         1.0         0.7         0.7         0.5660000000000001         0.466         0.502         0.492           100         0.05263158         0.7         0.036842106         0.67         0.424         0.516         0.488           100         0.10526316         0.7         0.073684212         0.652         0.422         0.508         0.472           100         0.15789474         0.7         0.110526318         0.656         0.438         0.512         0.482           100         0.21052632         0.7         0.147368424         0.65250000000000001         0.44         0.515         0.4925           100         0.23157894         0.7         0.221052629         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.22736841         0.61749999999999         0.4375         0.512         0.48           100         0.42705263         0.7         0.294736841         0.6								
50         1.0         0.7         0.7         0.566000000000001         0.466         0.502         0.492           100         0.05263158         0.7         0.036842106         0.67         0.424         0.516         0.488           100         0.10526316         0.7         0.073684212         0.652         0.422         0.508         0.472           100         0.15789474         0.7         0.110526318         0.655         0.438         0.512         0.482           100         0.21052632         0.7         0.147368424         0.6525000000000001         0.44         0.515         0.4925           100         0.231578947         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.61749999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.3368421053         0.602								
100         0.05263158         0.7         0.036842106         0.67         0.424         0.516         0.488           100         0.10526316         0.7         0.073684212         0.652         0.422         0.508         0.472           100         0.15789474         0.7         0.110526318         0.656         0.438         0.512         0.482           100         0.20152632         0.7         0.147368424         0.6525000000000001         0.44         0.515         0.4925           100         0.231578947         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.2257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.617499999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.331578947         0.612         0.436         0.514         0.494           100         0.57894737         0.7         0.405263159         0.602 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
100         0.15789474         0.7         0.110526318         0.656         0.438         0.512         0.482           100         0.21052632         0.7         0.147368424         0.6525000000000001         0.44         0.515         0.4925           100         0.26315789         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.6174999999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.368421053         0.602         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.631578895         0.7         0.442105265         0.59 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.516</td> <td></td>							0.516	
100         0.21052632         0.7         0.147368424         0.6525000000000001         0.44         0.515         0.4925           100         0.26315789         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.617499999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.3368421053         0.612         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105265         0.59         0.446         0.508         0.5           100         0.63421053         0.7         0.478947371         0.582								
100         0.26315789         0.7         0.184210523         0.638         0.432         0.504         0.478           100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.617499999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.331578947         0.612         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105265         0.59         0.446         0.508         0.5           100         0.63421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.63421053         0.7         0.458747771         0.552         0.46								
100         0.31578947         0.7         0.221052629         0.632         0.432         0.506         0.492           100         0.36842105         0.7         0.257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.617499999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.331578947         0.612         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105265         0.599         0.446         0.508         0.5           100         0.68421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.73684211         0.7         0.515789477         0.574         0.45								
100         0.36842105         0.7         0.257894735         0.622         0.43         0.512         0.484           100         0.42105263         0.7         0.294736841         0.617499999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.331578947         0.612         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105265         0.59         0.446         0.508         0.5           100         0.63421053         0.7         0.442105265         0.59         0.446         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.525261576         0.58         0.456 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
100         0.42105263         0.7         0.294736841         0.617499999999999         0.4375         0.5125         0.48           100         0.47368421         0.7         0.331578947         0.612         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105265         0.59         0.446         0.508         0.5           100         0.68421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.58947368         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.889473682         0.562         0.452         0.512         0.486           100         0.84210526         0.7         0.889473684         0.7         0.6263157								
100         0.47368421         0.7         0.331578947         0.612         0.436         0.514         0.494           100         0.52631579         0.7         0.368421053         0.602         0.436         0.52         0.504           100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105255         0.59         0.446         0.508         0.5           100         0.68421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.552631576         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.89473684         0.7         0.626315788         0.566         0.464								
100         0.57894737         0.7         0.405263159         0.602         0.438         0.518         0.492           100         0.63157895         0.7         0.442105265         0.59         0.446         0.508         0.5           100         0.68421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.552631576         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492								
100         0.63157895         0.7         0.442105265         0.59         0.446         0.508         0.5           100         0.68421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.552631576         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492		0.52631579	0.7	0.368421053			0.52	
100         0.68421053         0.7         0.478947371         0.582         0.46         0.514         0.492           100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.552631576         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492								
100         0.73684211         0.7         0.515789477         0.574         0.45         0.524         0.498           100         0.78947368         0.7         0.552631576         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492								
100         0.78947368         0.7         0.552631576         0.58         0.456         0.52         0.496           100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492								
100         0.84210526         0.7         0.589473682         0.562         0.452         0.512         0.486           100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492								
100         0.89473684         0.7         0.626315788         0.566         0.464         0.516         0.496           100         0.94736842         0.7         0.663157894         0.546         0.474         0.516         0.492								
<b>100</b> 0.94736842 0.7 0.663157894 0.546 0.474 0.516 0.492								
100   1.0   0.7   0.7   0.554   0.470000000000003   0.516   0.5		0.94736842		0.663157894				
	100	1.0	0.7	0.7	0.554	0.470000000000000003	0.516	0.5

Table 3. Results for genetic variation = 0.7.

Number of risk SNPs	Heritability	Genetic Variation	totalSNPeffect	deep learning AUC	PRSice AUC	Plink AUC	Lasso AUC
5	0.05263158	0.6	0.031578948	0.656	0.426	0.508	0.492
5	0.10526316	0.6	0.063157896	0.65	0.4140000000000000003	0.492	0.4659999999999999
5	0.15789474	0.6	0.094736844	0.65	0.416	0.494	0.488
5	0.21052632	0.6	0.126315792	0.646	0.424	0.496	0.482
5	0.26315789	0.6	0.157894734	0.638	0.432	0.492	0.47
5	0.31578947	0.6	0.189473682	0.632	0.434	0.496	0.496
5	0.36842105	0.6	0.22105263	0.638	0.442	0.492	0.474
5	0.42105263	0.6	0.252631578	0.618	0.436	0.504	0.486
5	0.47368421	0.6	0.284210526	0.6225	0.445	0.505	0.4925
5	0.52631579	0.6	0.315789474	0.602	0.446	0.502	0.488
5	0.57894737	0.6	0.347368422	0.608	0.446	0.496	0.486
5	0.63157895	0.6	0.37894737	0.594	0.448	0.506	0.488
5	0.68421053	0.6	0.410526318	0.59	0.444	0.498	0.492
5	0.73684211	0.6	0.442105266	0.588	0.46	0.504	0.496
5	0.78947368	0.6	0.473684208	0.586	0.456	0.494	0.494
5	0.84210526	0.6	0.505263156	0.576	0.45	0.496	0.484
5	0.89473684	0.6	0.536842104	0.57000000000000001	0.474000000000000000	0.494	0.492
5	0.94736842 1.0	0.6	0.568421052 0.6	0.57 0.5525	0.4525 0.46	0.49 0.4925	0.49 0.50750000000000001
10	0.05263158	0.6	0.031578948	0.682	0.40	0.4923	0.46599999999999999
10	0.10526316	0.6	0.063157896	0.676	0.40199999999999999	0.512	0.4639999999999999
10	0.15789474	0.6	0.094736844	0.67	0.40199999999999999999999999999999999999	0.512	0.472
10	0.21052632	0.6	0.126315792	0.644	0.4059999999999999	0.5	0.482
10	0.26315789	0.6	0.157894734	0.642	0.42	0.506	0.482
10	0.31578947	0.6	0.189473682	0.652	0.426	0.512	0.5
10	0.36842105	0.6	0.22105263	0.626	0.434	0.5	0.48
10	0.42105263	0.6	0.252631578	0.63	0.434	0.498	0.474
10	0.47368421	0.6	0.284210526	0.622	0.424	0.504	0.486
10	0.52631579	0.6	0.315789474	0.61	0.424	0.504	0.488
10	0.57894737	0.6	0.347368422	0.62	0.432	0.494	0.488
10	0.63157895	0.6	0.37894737	0.612	0.432	0.494	0.49
10	0.68421053	0.6	0.410526318	0.608	0.442	0.486	0.47
10	0.73684211	0.6	0.442105266	0.602	0.442	0.498	0.492
10	0.78947368	0.6	0.473684208	0.594	0.444	0.498	0.498
10	0.84210526	0.6	0.505263156	0.588	0.454	0.494	0.496
10	0.89473684	0.6	0.536842104	0.585	0.455	0.50750000000000001	0.495
10	0.94736842	0.6	0.568421052	0.576	0.47	0.5	0.494
10	1.0	0.6	0.6	0.572	0.446	0.502	0.5
20	0.05263158	0.6	0.031578948	0.654	0.41	0.478	0.482
20	0.10526316	0.6	0.063157896	0.646	0.414	0.48	0.472
20	0.15789474	0.6	0.094736844	0.634	0.4039999999999999	0.49	0.488
20	0.21052632	0.6	0.126315792	0.618	0.438	0.496	0.494
20	0.26315789	0.6	0.157894734	0.62	0.425	0.4925	0.472500000000000000
20	0.31578947	0.6	0.189473682	0.604	0.43	0.502	0.48
20	0.36842105	0.6	0.22105263	0.594	0.44	0.498	0.496
20	0.42105263	0.6	0.252631578	0.586	0.448	0.504	0.484
20	0.47368421	0.6	0.284210526	0.578	0.456	0.488	0.49
20	0.52631579	0.6	0.315789474	0.57	0.456	0.51	0.474
20	0.57894737	0.6	0.347368422	0.56800000000000001	0.454	0.502	0.488
20	0.63157895	0.6	0.37894737	0.57	0.452	0.5	0.484
20	0.68421053	0.6	0.410526318	0.574	0.44	0.496	0.49
20	0.73684211	0.6	0.442105266	0.558	0.448	0.51	0.488
20	0.78947368	0.6	0.473684208	0.566	0.466	0.512	0.508
20	0.84210526	0.6	0.505263156	0.555	0.475	0.505	0.4975
20	0.89473684	0.6	0.536842104	0.556	0.462	0.506	0.494
20	0.94736842	0.6	0.568421052	0.56	0.46799999999999997	0.516	0.498
20	1.0	0.6	0.6	0.554	0.470000000000000003	0.516	0.496
50	0.05263158	0.6	0.031578948	0.658	0.426	0.498	0.484
50	0.10526316	0.6	0.063157896	0.646	0.434	0.496	0.48
50	0.15789474	0.6	0.094736844	0.646	0.42	0.49	0.478
50	0.21052632	0.6	0.126315792	0.642	0.436	0.5	0.48
50	0.26315789	0.6	0.157894734	0.632	0.442	0.506	0.46799999999999997
50	0.31578947	0.6	0.189473682	0.618	0.444	0.506	0.48
50	0.36842105	0.6	0.22105263	0.618	0.434	0.494	0.47
50	0.42105263	0.6	0.252631578	0.612	0.45	0.504	0.486
50	0.47368421	0.6	0.284210526	0.608	0.442	0.5	0.494
50	0.52631579	0.6	0.315789474	0.604	0.444	0.502	0.49
50	0.57894737	0.6	0.347368422	0.598	0.444	0.496	0.496
50	0.63157895	0.6	0.37894737	0.584	0.456	0.494	0.484
50	0.68421053	0.6	0.410526318	0.5825	0.45	0.4975	0.49
50	0.73684211	0.6	0.442105266	0.578	0.456	0.5	0.486
50	0.78947368	0.6	0.473684208	0.574	0.45	0.494	0.494
50	0.84210526	0.6	0.505263156	0.568	0.462 0.46499999999999999	0.51	0.492
50 50	0.89473684 0.94736842	0.6	0.536842104 0.568421052	0.5625 0.56400000000000001	0.46499999999999999	0.51	0.4975 0.484
50	1.0	0.6	0.568421052	0.56400000000000001	0.46399999999999999999	0.502 0.506	0.484
100	0.05263158	0.6	0.031578948	0.56400000000000001	0.45	0.506	0.484
100	0.10526316	0.6	0.031578948	0.666	0.42	0.512	0.498
100	0.10526516	0.6	0.063137896	0.662	0.44	0.518	0.496
100	0.15/894/4	0.6	0.126315792	0.654	0.422	0.496	0.486
100	0.26315789	0.6	0.120313792	0.636	0.416	0.51	0.488
100	0.26315789	0.6	0.189473682	0.642	0.43	0.51	0.488
100	0.36842105	0.6	0.22105263	0.622	0.434	0.504	0.494
100	0.42105263	0.6	0.252631578	0.622	0.446	0.504	0.494
100	0.42103203	0.6	0.284210526	0.615	0.4425	0.507500000000000001	0.49
100	0.52631579	0.6	0.315789474	0.618	0.4423	0.512	0.474
100	0.57894737	0.6	0.347368422	0.608	0.436	0.512	0.474
100	0.63157895	0.6	0.37894737	0.61	0.446	0.526	0.502
100	0.68421053	0.6	0.410526318	0.598	0.442	0.520	0.484
100	0.73684211	0.6	0.442105266	0.592	0.442	0.508	0.498
100	0.78947368	0.6	0.473684208	0.576	0.446	0.526	0.496
100	0.84210526	0.6	0.505263156	0.578	0.458	0.512	0.486
100	0.89473684	0.6	0.536842104	0.576	0.454	0.512	0.494
			0.568421052	0.570	0.46599999999999999	0.514	0.498
100	0.94736842						
100	0.94736842 1.0	0.6	0.6	0.555	0.48	0.505	0.505

 0.6
 0.555
 0.48
 0.505
 0.505

 **Table 4.** Results for genetic variation = 0.6.