

# Tables of the statistical tests considering the imbalanced databases contained in the Bin2.

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## Abstract

In this document we show supplementary material for the paper entitled “Effect of Class Imbalance on Quality Measures for Contrast Patterns: An Experimental Study” submitted to the journal Information Science since March, 2016.

## 1 Average rankings of Friedman test

Average ranks obtained by applying the Friedman procedure

Algorithm	Ranking
ACC	24.8125
Brins	12.125
Cconf	28.5
Cole	12.125
ColStr	14.3438
Conf	12.125
Cos	7.9688
Cover	6.875
Dep	28.5
ExCex	12.125
Gain	16.2812
GR	12.125
InfGain	28.5
Jacc	7.5625
Klos	23.5625
Lap	13.375
Lever	32
Lift	28.5
MDisc	12.125
MultInf	12.3125

NetConf	25.4688
OddsR	12.125
Pearson	19.6875
RelRisk	25.5312
SeBag	12.125
Spec	25.4375
Streng	7.3438
Sup	13.3125
SupDif	8.0938
WRACC	8.0938
X2	12.8125
Zhang	12.125

Table 1: Average Rankings of the algorithms

Friedman statistic considering reduction performance (distributed according to chi-square with 31 degrees of freedom: 342.865057.

P-value computed by Friedman Test: 1.5667755981496612E-10.

## 2 Post hoc comparisons

Results achieved on post hoc comparisons for  $\alpha = 0.05$ ,  $\alpha = 0.10$  and adjusted p-values.

### 2.1 P-values for $\alpha = 0.05$

$i$	algorithms	$z = (R_0 - R_i)/SE$	$p$	Shaffer
496	Cover vs. Lever	7.575473	0	0.000101
495	Lever vs. Streng	7.434139	0	0.000108
494	Jacc vs. Lever	7.368183	0	0.000108
493	Cos vs. Lever	7.245694	0	0.000108
492	Lever vs. SupDif	7.208006	0	0.000108
491	Lever vs. WRACC	7.208006	0	0.000108
490	Cconf vs. Cover	6.520183	0	0.000108
489	Cover vs. Dep	6.520183	0	0.000108
488	Cover vs. InfGain	6.520183	0	0.000108
487	Cover vs. Lift	6.520183	0	0.000108
486	Cconf vs. Streng	6.378849	0	0.000108
485	Dep vs. Streng	6.378849	0	0.000108
484	InfGain vs. Streng	6.378849	0	0.000108
483	Lift vs. Streng	6.378849	0	0.000108
482	Cconf vs. Jacc	6.312894	0	0.000108
481	Dep vs. Jacc	6.312894	0	0.000108
480	InfGain vs. Jacc	6.312894	0	0.000108
479	Jacc vs. Lift	6.312894	0	0.000108
478	Cconf vs. Cos	6.190405	0	0.000108
477	Cos vs. Dep	6.190405	0	0.000108
476	Cos vs. InfGain	6.190405	0	0.000108
475	Cos vs. Lift	6.190405	0	0.000108
474	Cconf vs. SupDif	6.152716	0	0.000108
473	Cconf vs. WRACC	6.152716	0	0.000108
472	Dep vs. SupDif	6.152716	0	0.000108
471	Dep vs. WRACC	6.152716	0	0.000108
470	InfGain vs. SupDif	6.152716	0	0.000108
469	InfGain vs. WRACC	6.152716	0	0.000108
468	Lift vs. SupDif	6.152716	0	0.000108
467	Lift vs. WRACC	6.152716	0	0.000108
466	Brins vs. Lever	5.992538	0	0.000108
465	Cole vs. Lever	5.992538	0	0.000108
464	Conf vs. Lever	5.992538	0	0.000115
463	ExCex vs. Lever	5.992538	0	0.000115
462	GR vs. Lever	5.992538	0	0.000115
461	Lever vs. MDisc	5.992538	0	0.000115
460	Lever vs. OddsR	5.992538	0	0.000115
459	Lever vs. SeBag	5.992538	0	0.000115
458	Lever vs. Zhang	5.992538	0	0.000115
457	Lever vs. MultInf	5.936005	0	0.000115
456	Lever vs. X2	5.785249	0	0.000115

455	Lever vs. Sup	5.634493	0	0.000115
454	Cover vs. RelRisk	5.625071	0	0.000115
453	Lap vs. Lever	5.615649	0	0.000115
452	Cover vs. NetConf	5.606227	0	0.000115
451	Cover vs. Spec	5.596804	0	0.000115
450	RelRisk vs. Streng	5.483738	0	0.000115
449	NetConf vs. Streng	5.464893	0	0.000115
448	Spec vs. Streng	5.455471	0	0.000115
447	Jacc vs. RelRisk	5.417782	0	0.000115
446	ACC vs. Cover	5.40836	0	0.000115
445	Jacc vs. NetConf	5.398938	0	0.000115
444	Jacc vs. Spec	5.389515	0	0.000115
443	ColStr vs. Lever	5.32356	0	0.000115
442	Cos vs. RelRisk	5.295293	0	0.000115
441	Cos vs. NetConf	5.276449	0	0.000115
440	ACC vs. Streng	5.267026	0	0.000115
439	Cos vs. Spec	5.267026	0	0.000115
438	RelRisk vs. SupDif	5.257604	0	0.000115
437	RelRisk vs. WRACC	5.257604	0	0.000115
436	NetConf vs. SupDif	5.23876	0	0.000115
435	NetConf vs. WRACC	5.23876	0	0.000115
434	Spec vs. SupDif	5.229337	0	0.000122
433	Spec vs. WRACC	5.229337	0	0.000122
432	ACC vs. Jacc	5.201071	0	0.000122
431	ACC vs. Cos	5.078582	0	0.000122
430	ACC vs. SupDif	5.040893	0	0.000122
429	ACC vs. WRACC	5.040893	0	0.000122
428	Cover vs. Klos	5.031471	0	0.000122
427	Brins vs. Cconf	4.937248	0.000001	0.000122
426	Brins vs. Dep	4.937248	0.000001	0.000122
425	Brins vs. InfGain	4.937248	0.000001	0.000122
424	Brins vs. Lift	4.937248	0.000001	0.000122
423	Cconf vs. Cole	4.937248	0.000001	0.000122
422	Cconf vs. Conf	4.937248	0.000001	0.000122
421	Cconf vs. ExCex	4.937248	0.000001	0.000122
420	Cconf vs. GR	4.937248	0.000001	0.000122
419	Cconf vs. MDisc	4.937248	0.000001	0.000122
418	Cconf vs. OddsR	4.937248	0.000001	0.000122
417	Cconf vs. SeBag	4.937248	0.000001	0.000122
416	Cconf vs. Zhang	4.937248	0.000001	0.000122
415	Cole vs. Dep	4.937248	0.000001	0.000122
414	Cole vs. InfGain	4.937248	0.000001	0.000122
413	Cole vs. Lift	4.937248	0.000001	0.000122
412	Conf vs. Dep	4.937248	0.000001	0.000122
411	Conf vs. InfGain	4.937248	0.000001	0.000122
410	Conf vs. Lift	4.937248	0.000001	0.000122
409	Dep vs. ExCex	4.937248	0.000001	0.000122
408	Dep vs. GR	4.937248	0.000001	0.000123
407	Dep vs. MDisc	4.937248	0.000001	0.000123
406	Dep vs. OddsR	4.937248	0.000001	0.000123

405	Dep vs. SeBag	4.937248	0.000001	0.00013
404	Dep vs. Zhang	4.937248	0.000001	0.00013
403	ExCex vs. InfGain	4.937248	0.000001	0.00013
402	ExCex vs. Lift	4.937248	0.000001	0.00013
401	GR vs. InfGain	4.937248	0.000001	0.00013
400	GR vs. Lift	4.937248	0.000001	0.00013
399	InfGain vs. MDisc	4.937248	0.000001	0.00013
398	InfGain vs. OddsR	4.937248	0.000001	0.00013
397	InfGain vs. SeBag	4.937248	0.000001	0.00013
396	InfGain vs. Zhang	4.937248	0.000001	0.00013
395	Lift vs. MDisc	4.937248	0.000001	0.00013
394	Lift vs. OddsR	4.937248	0.000001	0.00013
393	Lift vs. SeBag	4.937248	0.000001	0.00013
392	Lift vs. Zhang	4.937248	0.000001	0.00013
391	Klos vs. Streng	4.890137	0.000001	0.00013
390	Cconf vs. MultInf	4.880715	0.000001	0.00013
389	Dep vs. MultInf	4.880715	0.000001	0.00013
388	InfGain vs. MultInf	4.880715	0.000001	0.00013
387	Lift vs. MultInf	4.880715	0.000001	0.00013
386	Jacc vs. Klos	4.824182	0.000001	0.00013
385	Gain vs. Lever	4.739381	0.000002	0.00013
384	Cconf vs. X2	4.729959	0.000002	0.00013
383	Dep vs. X2	4.729959	0.000002	0.000131
382	InfGain vs. X2	4.729959	0.000002	0.000131
381	Lift vs. X2	4.729959	0.000002	0.000131
380	Cos vs. Klos	4.701693	0.000003	0.000132
379	Klos vs. SupDif	4.664004	0.000003	0.000132
378	Klos vs. WRACC	4.664004	0.000003	0.000132
377	Cconf vs. Sup	4.579204	0.000005	0.000139
376	Dep vs. Sup	4.579204	0.000005	0.000139
375	InfGain vs. Sup	4.579204	0.000005	0.000139
374	Lift vs. Sup	4.579204	0.000005	0.000139
373	Cconf vs. Lap	4.560359	0.000005	0.000139
372	Dep vs. Lap	4.560359	0.000005	0.000139
371	InfGain vs. Lap	4.560359	0.000005	0.000139
370	Lap vs. Lift	4.560359	0.000005	0.000139
369	Cconf vs. ColStr	4.26827	0.00002	0.000139
368	ColStr vs. Dep	4.26827	0.00002	0.000139
367	ColStr vs. InfGain	4.26827	0.00002	0.000139
366	ColStr vs. Lift	4.26827	0.00002	0.000139
365	Brins vs. RelRisk	4.042136	0.000053	0.000139
364	Cole vs. RelRisk	4.042136	0.000053	0.000139
363	Conf vs. RelRisk	4.042136	0.000053	0.000139
362	ExCex vs. RelRisk	4.042136	0.000053	0.000139
361	GR vs. RelRisk	4.042136	0.000053	0.000139
360	MDisc vs. RelRisk	4.042136	0.000053	0.00014
359	OddsR vs. RelRisk	4.042136	0.000053	0.00014
358	RelRisk vs. SeBag	4.042136	0.000053	0.00014
357	RelRisk vs. Zhang	4.042136	0.000053	0.00014
356	Brins vs. NetConf	4.023292	0.000057	0.000141

355	Cole vs. NetConf	4.023292	0.000057	0.000141
354	Conf vs. NetConf	4.023292	0.000057	0.000141
353	ExCex vs. NetConf	4.023292	0.000057	0.000142
352	GR vs. NetConf	4.023292	0.000057	0.000142
351	MDisc vs. NetConf	4.023292	0.000057	0.000142
350	NetConf vs. OddsR	4.023292	0.000057	0.000147
349	NetConf vs. SeBag	4.023292	0.000057	0.000147
348	NetConf vs. Zhang	4.023292	0.000057	0.000147
347	Brins vs. Spec	4.01387	0.00006	0.000147
346	Cole vs. Spec	4.01387	0.00006	0.000147
345	Conf vs. Spec	4.01387	0.00006	0.000147
344	ExCex vs. Spec	4.01387	0.00006	0.000147
343	GR vs. Spec	4.01387	0.00006	0.000147
342	MDisc vs. Spec	4.01387	0.00006	0.000147
341	OddsR vs. Spec	4.01387	0.00006	0.000147
340	SeBag vs. Spec	4.01387	0.00006	0.000147
339	Spec vs. Zhang	4.01387	0.00006	0.000149
338	MultInf vs. RelRisk	3.985603	0.000067	0.000149
337	MultInf vs. NetConf	3.966759	0.000073	0.000149
336	MultInf vs. Spec	3.957336	0.000076	0.000149
335	Cover vs. Pearson	3.863114	0.000112	0.000149
334	RelRisk vs. X2	3.834847	0.000126	0.000151
333	ACC vs. Brins	3.825425	0.000131	0.000151
332	ACC vs. Cole	3.825425	0.000131	0.000151
331	ACC vs. Conf	3.825425	0.000131	0.000151
330	ACC vs. ExCex	3.825425	0.000131	0.000152
329	ACC vs. GR	3.825425	0.000131	0.000152
328	ACC vs. MDisc	3.825425	0.000131	0.000152
327	ACC vs. OddsR	3.825425	0.000131	0.000153
326	ACC vs. SeBag	3.825425	0.000131	0.000153
325	ACC vs. Zhang	3.825425	0.000131	0.000154
324	NetConf vs. X2	3.816003	0.000136	0.000156
323	Spec vs. X2	3.806581	0.000141	0.000156
322	ACC vs. MultInf	3.768892	0.000164	0.000156
321	Pearson vs. Streng	3.721781	0.000198	0.000156
320	Lever vs. Pearson	3.712358	0.000205	0.000156
319	Cconf vs. Gain	3.684092	0.00023	0.000157
318	Dep vs. Gain	3.684092	0.00023	0.000157
317	Gain vs. InfGain	3.684092	0.00023	0.000158
316	Gain vs. Lift	3.684092	0.00023	0.000158
315	RelRisk vs. Sup	3.684092	0.00023	0.000159
314	Lap vs. RelRisk	3.665247	0.000247	0.000159
313	NetConf vs. Sup	3.665247	0.000247	0.00016
312	Jacc vs. Pearson	3.655825	0.000256	0.00016
311	Spec vs. Sup	3.655825	0.000256	0.000161
310	Lap vs. NetConf	3.646403	0.000266	0.000161
309	Lap vs. Spec	3.636981	0.000276	0.000162
308	ACC vs. X2	3.618136	0.000297	0.000162
307	Cos vs. Pearson	3.533336	0.00041	0.000163
306	Pearson vs. SupDif	3.495647	0.000473	0.000163

305	Pearson vs. WRACC	3.495647	0.000473	0.000164
304	ACC vs. Sup	3.46738	0.000526	0.000164
303	ACC vs. Lap	3.448536	0.000564	0.000165
302	Brins vs. Klos	3.448536	0.000564	0.000166
301	Cole vs. Klos	3.448536	0.000564	0.000166
300	Conf vs. Klos	3.448536	0.000564	0.000167
299	ExCex vs. Klos	3.448536	0.000564	0.000167
298	GR vs. Klos	3.448536	0.000564	0.000168
297	Klos vs. MDisc	3.448536	0.000564	0.000168
296	Klos vs. OddsR	3.448536	0.000564	0.000169
295	Klos vs. SeBag	3.448536	0.000564	0.000169
294	Klos vs. Zhang	3.448536	0.000564	0.00017
293	Klos vs. MultInf	3.392003	0.000694	0.000171
292	ColStr vs. RelRisk	3.373158	0.000743	0.000171
291	ColStr vs. NetConf	3.354314	0.000796	0.000172
290	ColStr vs. Spec	3.344891	0.000823	0.000172
289	Klos vs. X2	3.241247	0.00119	0.000173
288	ACC vs. ColStr	3.156447	0.001597	0.000174
287	Klos vs. Sup	3.090491	0.001998	0.000174
286	Klos vs. Lap	3.071647	0.002129	0.000175
285	Cover vs. Gain	2.836091	0.004567	0.000175
284	Gain vs. RelRisk	2.78898	0.005287	0.000176
283	ColStr vs. Klos	2.779558	0.005443	0.000177
282	Gain vs. NetConf	2.770135	0.005603	0.000177
281	Gain vs. Spec	2.760713	0.005768	0.000178
280	Gain vs. Streng	2.694758	0.007044	0.000179
279	Cconf vs. Pearson	2.657069	0.007882	0.000179
278	Dep vs. Pearson	2.657069	0.007882	0.00018
277	InfGain vs. Pearson	2.657069	0.007882	0.000181
276	Lift vs. Pearson	2.657069	0.007882	0.000181
275	Gain vs. Jacc	2.628802	0.008569	0.000182
274	ACC vs. Gain	2.572269	0.010103	0.000182
273	Klos vs. Lever	2.544002	0.010959	0.000183
272	Cos vs. Gain	2.506313	0.0122	0.000184
271	Gain vs. SupDif	2.468624	0.013563	0.000185
270	Gain vs. WRACC	2.468624	0.013563	0.000185
269	Brins vs. Pearson	2.28018	0.022597	0.000186
268	Cole vs. Pearson	2.28018	0.022597	0.000187
267	Conf vs. Pearson	2.28018	0.022597	0.000187
266	ExCex vs. Pearson	2.28018	0.022597	0.000188
265	GR vs. Pearson	2.28018	0.022597	0.000189
264	MDisc vs. Pearson	2.28018	0.022597	0.000189
263	OddsR vs. Pearson	2.28018	0.022597	0.00019
262	Pearson vs. SeBag	2.28018	0.022597	0.000191
261	Pearson vs. Zhang	2.28018	0.022597	0.000192
260	ColStr vs. Cover	2.251913	0.024328	0.000192
259	MultInf vs. Pearson	2.223646	0.026172	0.000193
258	Gain vs. Klos	2.195379	0.028136	0.000194
257	ACC vs. Lever	2.167113	0.030226	0.000195
256	ColStr vs. Streng	2.110579	0.034808	0.000195

255	Pearson vs. X2	2.07289	0.038182	0.000196
254	ColStr vs. Jacc	2.044624	0.040892	0.000197
253	Lever vs. Spec	1.978668	0.047853	0.000198
252	Lever vs. NetConf	1.969246	0.048925	0.000198
251	Cover vs. Lap	1.959824	0.050016	0.000199
250	Lever vs. RelRisk	1.950402	0.051128	0.0002
249	Cover vs. Sup	1.940979	0.052261	0.000201
248	ColStr vs. Cos	1.922135	0.054589	0.000202
247	Pearson vs. Sup	1.922135	0.054589	0.000202
246	Lap vs. Pearson	1.90329	0.057003	0.000203
245	ColStr vs. SupDif	1.884446	0.059505	0.000204
244	ColStr vs. WRACC	1.884446	0.059505	0.000205
243	Lap vs. Streng	1.81849	0.068989	0.000206
242	Streng vs. Sup	1.799646	0.071917	0.000207
241	Cover vs. X2	1.790224	0.073418	0.000207
240	Pearson vs. RelRisk	1.761957	0.078077	0.000208
239	Jacc vs. Lap	1.752535	0.079682	0.000209
238	NetConf vs. Pearson	1.743112	0.081314	0.00021
237	Jacc vs. Sup	1.73369	0.082973	0.000211
236	Pearson vs. Spec	1.73369	0.082973	0.000212
235	Streng vs. X2	1.64889	0.09917	0.000213
234	Cover vs. MultInf	1.639468	0.101116	0.000214
233	Cos vs. Lap	1.630046	0.103092	0.000215
232	ColStr vs. Pearson	1.611201	0.107136	0.000216
231	Cos vs. Sup	1.611201	0.107136	0.000216
230	Lap vs. SupDif	1.592357	0.111305	0.000217
229	Lap vs. WRACC	1.592357	0.111305	0.000218
228	Brins vs. Cover	1.582935	0.113436	0.000219
227	Cole vs. Cover	1.582935	0.113436	0.00022
226	Conf vs. Cover	1.582935	0.113436	0.000221
225	Cover vs. ExCex	1.582935	0.113436	0.000222
224	Cover vs. GR	1.582935	0.113436	0.000223
223	Cover vs. MDisc	1.582935	0.113436	0.000224
222	Cover vs. OddsR	1.582935	0.113436	0.000225
221	Cover vs. SeBag	1.582935	0.113436	0.000226
220	Cover vs. Zhang	1.582935	0.113436	0.000227
219	Jacc vs. X2	1.582935	0.113436	0.000228
218	Sup vs. SupDif	1.573512	0.1156	0.000229
217	Sup vs. WRACC	1.573512	0.1156	0.00023
216	ACC vs. Pearson	1.545246	0.122287	0.000231
215	MultInf vs. Streng	1.498134	0.134098	0.000233
214	Cconf vs. Klos	1.488712	0.136563	0.000234
213	Dep vs. Klos	1.488712	0.136563	0.000235
212	InfGain vs. Klos	1.488712	0.136563	0.000236
211	Klos vs. Lift	1.488712	0.136563	0.000237
210	Cos vs. X2	1.460446	0.144168	0.000238
209	Brins vs. Streng	1.441601	0.149415	0.000239
208	Cole vs. Streng	1.441601	0.149415	0.00024
207	Conf vs. Streng	1.441601	0.149415	0.000242
206	ExCex vs. Streng	1.441601	0.149415	0.000243



205	GR vs. Streng	1.441601	0.149415	0.000244
204	MDisc vs. Streng	1.441601	0.149415	0.000245
203	OddsR vs. Streng	1.441601	0.149415	0.000246
202	SeBag vs. Streng	1.441601	0.149415	0.000248
201	Streng vs. Zhang	1.441601	0.149415	0.000249
200	Jacc vs. MultInf	1.432179	0.152093	0.00025
199	SupDif vs. X2	1.422757	0.154807	0.000251
198	WRACC vs. X2	1.422757	0.154807	0.000253
197	Brins vs. Jacc	1.375646	0.168931	0.000254
196	Cole vs. Jacc	1.375646	0.168931	0.000255
195	Conf vs. Jacc	1.375646	0.168931	0.000256
194	ExCex vs. Jacc	1.375646	0.168931	0.000258
193	GR vs. Jacc	1.375646	0.168931	0.000259
192	Jacc vs. MDisc	1.375646	0.168931	0.00026
191	Jacc vs. OddsR	1.375646	0.168931	0.000262
190	Jacc vs. SeBag	1.375646	0.168931	0.000263
189	Jacc vs. Zhang	1.375646	0.168931	0.000265
188	Cos vs. MultInf	1.30969	0.190301	0.000266
187	MultInf vs. SupDif	1.272001	0.203373	0.000267
186	MultInf vs. WRACC	1.272001	0.203373	0.000269
185	Brins vs. Cos	1.253157	0.210149	0.00027
184	Brins vs. Gain	1.253157	0.210149	0.000272
183	Cole vs. Cos	1.253157	0.210149	0.000273
182	Cole vs. Gain	1.253157	0.210149	0.000275
181	Conf vs. Cos	1.253157	0.210149	0.000276
180	Conf vs. Gain	1.253157	0.210149	0.000278
179	Cos vs. ExCex	1.253157	0.210149	0.000279
178	Cos vs. GR	1.253157	0.210149	0.000281
177	Cos vs. MDisc	1.253157	0.210149	0.000282
176	Cos vs. OddsR	1.253157	0.210149	0.000284
175	Cos vs. SeBag	1.253157	0.210149	0.000286
174	Cos vs. Zhang	1.253157	0.210149	0.000287
173	ExCex vs. Gain	1.253157	0.210149	0.000289
172	Gain vs. GR	1.253157	0.210149	0.000291
171	Gain vs. MDisc	1.253157	0.210149	0.000292
170	Gain vs. OddsR	1.253157	0.210149	0.000294
169	Gain vs. SeBag	1.253157	0.210149	0.000296
168	Gain vs. Zhang	1.253157	0.210149	0.000298
167	Brins vs. SupDif	1.215468	0.224188	0.000299
166	Brins vs. WRACC	1.215468	0.224188	0.000301
165	Cole vs. SupDif	1.215468	0.224188	0.000303
164	Cole vs. WRACC	1.215468	0.224188	0.000305
163	Conf vs. SupDif	1.215468	0.224188	0.000307
162	Conf vs. WRACC	1.215468	0.224188	0.000309
161	ExCex vs. SupDif	1.215468	0.224188	0.000311
160	ExCex vs. WRACC	1.215468	0.224188	0.000312
159	GR vs. SupDif	1.215468	0.224188	0.000314
158	GR vs. WRACC	1.215468	0.224188	0.000316
157	MDisc vs. SupDif	1.215468	0.224188	0.000318
156	MDisc vs. WRACC	1.215468	0.224188	0.000321

155	OddsR vs. SupDif	1.215468	0.224188	0.000323
154	OddsR vs. WRACC	1.215468	0.224188	0.000325
153	SeBag vs. SupDif	1.215468	0.224188	0.000327
152	SeBag vs. WRACC	1.215468	0.224188	0.000329
151	SupDif vs. Zhang	1.215468	0.224188	0.000331
150	WRACC vs. Zhang	1.215468	0.224188	0.000333
149	Gain vs. MultInf	1.196623	0.231453	0.000336
148	Klos vs. Pearson	1.168356	0.242663	0.000338
147	ACC vs. Cconf	1.111823	0.266214	0.00034
146	ACC vs. Dep	1.111823	0.266214	0.000342
145	ACC vs. InfGain	1.111823	0.266214	0.000345
144	ACC vs. Lift	1.111823	0.266214	0.000347
143	Cconf vs. Lever	1.05529	0.291293	0.00035
142	Dep vs. Lever	1.05529	0.291293	0.000352
141	InfGain vs. Lever	1.05529	0.291293	0.000355
140	Lever vs. Lift	1.05529	0.291293	0.000357
139	Gain vs. X2	1.045867	0.295622	0.00036
138	Gain vs. Pearson	1.027023	0.30441	0.000362
137	Cconf vs. Spec	0.923378	0.35581	0.000365
136	Dep vs. Spec	0.923378	0.35581	0.000368
135	InfGain vs. Spec	0.923378	0.35581	0.00037
134	Lift vs. Spec	0.923378	0.35581	0.000373
133	Cconf vs. NetConf	0.913956	0.36074	0.000376
132	Dep vs. NetConf	0.913956	0.36074	0.000379
131	InfGain vs. NetConf	0.913956	0.36074	0.000382
130	Lift vs. NetConf	0.913956	0.36074	0.000385
129	Cconf vs. RelRisk	0.895112	0.370727	0.000388
128	Dep vs. RelRisk	0.895112	0.370727	0.000391
127	Gain vs. Sup	0.895112	0.370727	0.000394
126	InfGain vs. RelRisk	0.895112	0.370727	0.000397
125	Lift vs. RelRisk	0.895112	0.370727	0.0004
124	Gain vs. Lap	0.876267	0.380885	0.000403
123	Brins vs. ColStr	0.668978	0.503509	0.000407
122	Cole vs. ColStr	0.668978	0.503509	0.00041
121	ColStr vs. Conf	0.668978	0.503509	0.000413
120	ColStr vs. ExCex	0.668978	0.503509	0.000417
119	ColStr vs. GR	0.668978	0.503509	0.00042
118	ColStr vs. MDisc	0.668978	0.503509	0.000424
117	ColStr vs. OddsR	0.668978	0.503509	0.000427
116	ColStr vs. SeBag	0.668978	0.503509	0.000431
115	ColStr vs. Zhang	0.668978	0.503509	0.000435
114	ColStr vs. MultInf	0.612445	0.540243	0.000439
113	Klos vs. RelRisk	0.5936	0.552779	0.000442
112	ColStr vs. Gain	0.584178	0.5591	0.000446
111	Klos vs. NetConf	0.574756	0.565456	0.00045
110	Klos vs. Spec	0.565334	0.571847	0.000455
109	ColStr vs. X2	0.461689	0.644304	0.000459
108	ACC vs. Klos	0.376889	0.706256	0.000463
107	Brins vs. Lap	0.376889	0.706256	0.000467
106	Cole vs. Lap	0.376889	0.706256	0.000472

105	Conf vs. Lap	0.376889	0.706256	0.000476
104	ExCex vs. Lap	0.376889	0.706256	0.000481
103	GR vs. Lap	0.376889	0.706256	0.000485
102	Lap vs. MDisc	0.376889	0.706256	0.00049
101	Lap vs. OddsR	0.376889	0.706256	0.000495
100	Lap vs. SeBag	0.376889	0.706256	0.0005
99	Lap vs. Zhang	0.376889	0.706256	0.000505
98	Cover vs. SupDif	0.367467	0.713271	0.00051
97	Cover vs. WRACC	0.367467	0.713271	0.000515
96	Brins vs. Sup	0.358045	0.72031	0.000521
95	Cole vs. Sup	0.358045	0.72031	0.000526
94	Conf vs. Sup	0.358045	0.72031	0.000532
93	ExCex vs. Sup	0.358045	0.72031	0.000538
92	GR vs. Sup	0.358045	0.72031	0.000543
91	MDisc vs. Sup	0.358045	0.72031	0.000549
90	OddsR vs. Sup	0.358045	0.72031	0.000556
89	SeBag vs. Sup	0.358045	0.72031	0.000562
88	Sup vs. Zhang	0.358045	0.72031	0.000568
87	Cos vs. Cover	0.329778	0.741568	0.000575
86	Lap vs. MultInf	0.320356	0.748699	0.000581
85	ColStr vs. Sup	0.310934	0.755851	0.000588
84	MultInf vs. Sup	0.301511	0.763025	0.000595
83	ColStr vs. Lap	0.292089	0.770218	0.000602
82	Streng vs. SupDif	0.226134	0.821098	0.00061
81	Streng vs. WRACC	0.226134	0.821098	0.000617
80	ACC vs. RelRisk	0.216711	0.828433	0.000625
79	Brins vs. X2	0.207289	0.835784	0.000633
78	Cole vs. X2	0.207289	0.835784	0.000641
77	Conf vs. X2	0.207289	0.835784	0.000649
76	Cover vs. Jacc	0.207289	0.835784	0.000658
75	ExCex vs. X2	0.207289	0.835784	0.000667
74	GR vs. X2	0.207289	0.835784	0.000676
73	MDisc vs. X2	0.207289	0.835784	0.000685
72	OddsR vs. X2	0.207289	0.835784	0.000694
71	SeBag vs. X2	0.207289	0.835784	0.000704
70	X2 vs. Zhang	0.207289	0.835784	0.000714
69	ACC vs. NetConf	0.197867	0.843149	0.000725
68	ACC vs. Spec	0.188445	0.850528	0.000735
67	Cos vs. Streng	0.188445	0.850528	0.000746
66	Lap vs. X2	0.1696	0.865325	0.000758
65	Jacc vs. SupDif	0.160178	0.872741	0.000769
64	Jacc vs. WRACC	0.160178	0.872741	0.000781
63	MultInf vs. X2	0.150756	0.880168	0.000794
62	Sup vs. X2	0.150756	0.880168	0.000806
61	Cover vs. Streng	0.141333	0.887607	0.00082
60	Cos vs. Jacc	0.122489	0.902512	0.000833
59	Jacc vs. Streng	0.065956	0.947413	0.000847
58	Brins vs. MultInf	0.056533	0.954917	0.000862
57	Cole vs. MultInf	0.056533	0.954917	0.000877
56	Conf vs. MultInf	0.056533	0.954917	0.000893

55	ExCex vs. MultInf	0.056533	0.954917	0.000909
54	GR vs. MultInf	0.056533	0.954917	0.000926
53	MDisc vs. MultInf	0.056533	0.954917	0.000943
52	MultInf vs. OddsR	0.056533	0.954917	0.000962
51	MultInf vs. SeBag	0.056533	0.954917	0.00098
50	MultInf vs. Zhang	0.056533	0.954917	0.001
49	Cos vs. SupDif	0.037689	0.969936	0.00102
48	Cos vs. WRACC	0.037689	0.969936	0.001042
47	RelRisk vs. Spec	0.028267	0.977449	0.001064
46	Lap vs. Sup	0.018844	0.984965	0.001087
45	NetConf vs. RelRisk	0.018844	0.984965	0.001111
44	NetConf vs. Spec	0.009422	0.992482	0.001136
43	Brins vs. Cole	0	1	0.001163
42	Brins vs. Conf	0	1	0.00119
41	Brins vs. ExCex	0	1	0.00122
40	Brins vs. GR	0	1	0.00125
39	Brins vs. MDisc	0	1	0.001282
38	Brins vs. OddsR	0	1	0.001316
37	Brins vs. SeBag	0	1	0.001351
36	Brins vs. Zhang	0	1	0.001389
35	Cconf vs. Dep	0	1	0.001429
34	Cconf vs. InfGain	0	1	0.001471
33	Cconf vs. Lift	0	1	0.001515
32	Cole vs. Conf	0	1	0.001562
31	Cole vs. ExCex	0	1	0.001613
30	Cole vs. GR	0	1	0.001667
29	Cole vs. MDisc	0	1	0.001724
28	Cole vs. OddsR	0	1	0.001786
27	Cole vs. SeBag	0	1	0.001852
26	Cole vs. Zhang	0	1	0.001923
25	Conf vs. ExCex	0	1	0.002
24	Conf vs. GR	0	1	0.002083
23	Conf vs. MDisc	0	1	0.002174
22	Conf vs. OddsR	0	1	0.002273
21	Conf vs. SeBag	0	1	0.002381
20	Conf vs. Zhang	0	1	0.0025
19	Dep vs. InfGain	0	1	0.002632
18	Dep vs. Lift	0	1	0.002778
17	ExCex vs. GR	0	1	0.002941
16	ExCex vs. MDisc	0	1	0.003125
15	ExCex vs. OddsR	0	1	0.003333
14	ExCex vs. SeBag	0	1	0.003571
13	ExCex vs. Zhang	0	1	0.003846
12	GR vs. MDisc	0	1	0.004167
11	GR vs. OddsR	0	1	0.004545
10	GR vs. SeBag	0	1	0.005
9	GR vs. Zhang	0	1	0.005556
8	InfGain vs. Lift	0	1	0.00625
7	MDisc vs. OddsR	0	1	0.007143
6	MDisc vs. SeBag	0	1	0.008333

5	MDisc vs. Zhang	0	1	0.01
4	OddsR vs. SeBag	0	1	0.0125
3	OddsR vs. Zhang	0	1	0.016667
2	SeBag vs. Zhang	0	1	0.025
1	SupDif vs. WRACC	0	1	0.05

Table 2: P-values Table for  $\alpha = 0.05$

Shaffer's procedure rejects those hypotheses that have an unadjusted p-value  $\leq 0.000101$ .

## 2.2 P-values for $\alpha = 0.10$

$i$	algorithms	$z = (R_0 - R_i)/SE$	$p$	Shaffer
496	Cover vs. Lever	7.575473	0	0.000202
495	Lever vs. Streng	7.434139	0	0.000215
494	Jacc vs. Lever	7.368183	0	0.000215
493	Cos vs. Lever	7.245694	0	0.000215
492	Lever vs. SupDif	7.208006	0	0.000215
491	Lever vs. WRACC	7.208006	0	0.000215
490	Cconf vs. Cover	6.520183	0	0.000215
489	Cover vs. Dep	6.520183	0	0.000215
488	Cover vs. InfGain	6.520183	0	0.000215
487	Cover vs. Lift	6.520183	0	0.000215
486	Cconf vs. Streng	6.378849	0	0.000215
485	Dep vs. Streng	6.378849	0	0.000215
484	InfGain vs. Streng	6.378849	0	0.000215
483	Lift vs. Streng	6.378849	0	0.000215
482	Cconf vs. Jacc	6.312894	0	0.000215
481	Dep vs. Jacc	6.312894	0	0.000215
480	InfGain vs. Jacc	6.312894	0	0.000215
479	Jacc vs. Lift	6.312894	0	0.000215
478	Cconf vs. Cos	6.190405	0	0.000215
477	Cos vs. Dep	6.190405	0	0.000215
476	Cos vs. InfGain	6.190405	0	0.000215
475	Cos vs. Lift	6.190405	0	0.000215
474	Cconf vs. SupDif	6.152716	0	0.000215
473	Cconf vs. WRACC	6.152716	0	0.000215
472	Dep vs. SupDif	6.152716	0	0.000215
471	Dep vs. WRACC	6.152716	0	0.000215
470	InfGain vs. SupDif	6.152716	0	0.000215
469	InfGain vs. WRACC	6.152716	0	0.000215
468	Lift vs. SupDif	6.152716	0	0.000215
467	Lift vs. WRACC	6.152716	0	0.000215
466	Brins vs. Lever	5.992538	0	0.000215
465	Cole vs. Lever	5.992538	0	0.000215
464	Conf vs. Lever	5.992538	0	0.000229
463	ExCex vs. Lever	5.992538	0	0.000229
462	GR vs. Lever	5.992538	0	0.000229
461	Lever vs. MDisc	5.992538	0	0.000229
460	Lever vs. OddsR	5.992538	0	0.000229
459	Lever vs. SeBag	5.992538	0	0.000229
458	Lever vs. Zhang	5.992538	0	0.000229
457	Lever vs. MultInf	5.936005	0	0.000229
456	Lever vs. X2	5.785249	0	0.000229
455	Lever vs. Sup	5.634493	0	0.000229
454	Cover vs. RelRisk	5.625071	0	0.000229
453	Lap vs. Lever	5.615649	0	0.000229
452	Cover vs. NetConf	5.606227	0	0.000229
451	Cover vs. Spec	5.596804	0	0.000229
450	RelRisk vs. Streng	5.483738	0	0.000229

449	NetConf vs. Streng	5.464893	0	0.000229
448	Spec vs. Streng	5.455471	0	0.000229
447	Jacc vs. RelRisk	5.417782	0	0.000229
446	ACC vs. Cover	5.40836	0	0.000229
445	Jacc vs. NetConf	5.398938	0	0.000229
444	Jacc vs. Spec	5.389515	0	0.000229
443	ColStr vs. Lever	5.32356	0	0.000229
442	Cos vs. RelRisk	5.295293	0	0.000229
441	Cos vs. NetConf	5.276449	0	0.000229
440	ACC vs. Streng	5.267026	0	0.000229
439	Cos vs. Spec	5.267026	0	0.000229
438	RelRisk vs. SupDif	5.257604	0	0.000229
437	RelRisk vs. WRACC	5.257604	0	0.000229
436	NetConf vs. SupDif	5.23876	0	0.000229
435	NetConf vs. WRACC	5.23876	0	0.00023
434	Spec vs. SupDif	5.229337	0	0.000244
433	Spec vs. WRACC	5.229337	0	0.000244
432	ACC vs. Jacc	5.201071	0	0.000244
431	ACC vs. Cos	5.078582	0	0.000244
430	ACC vs. SupDif	5.040893	0	0.000244
429	ACC vs. WRACC	5.040893	0	0.000244
428	Cover vs. Klos	5.031471	0	0.000244
427	Brins vs. Cconf	4.937248	0.000001	0.000244
426	Brins vs. Dep	4.937248	0.000001	0.000244
425	Brins vs. InfGain	4.937248	0.000001	0.000244
424	Brins vs. Lift	4.937248	0.000001	0.000244
423	Cconf vs. Cole	4.937248	0.000001	0.000244
422	Cconf vs. Conf	4.937248	0.000001	0.000244
421	Cconf vs. ExCex	4.937248	0.000001	0.000244
420	Cconf vs. GR	4.937248	0.000001	0.000244
419	Cconf vs. MDisc	4.937248	0.000001	0.000244
418	Cconf vs. OddsR	4.937248	0.000001	0.000244
417	Cconf vs. SeBag	4.937248	0.000001	0.000244
416	Cconf vs. Zhang	4.937248	0.000001	0.000244
415	Cole vs. Dep	4.937248	0.000001	0.000244
414	Cole vs. InfGain	4.937248	0.000001	0.000244
413	Cole vs. Lift	4.937248	0.000001	0.000244
412	Conf vs. Dep	4.937248	0.000001	0.000244
411	Conf vs. InfGain	4.937248	0.000001	0.000244
410	Conf vs. Lift	4.937248	0.000001	0.000244
409	Dep vs. ExCex	4.937248	0.000001	0.000244
408	Dep vs. GR	4.937248	0.000001	0.000246
407	Dep vs. MDisc	4.937248	0.000001	0.000246
406	Dep vs. OddsR	4.937248	0.000001	0.000246
405	Dep vs. SeBag	4.937248	0.000001	0.00026
404	Dep vs. Zhang	4.937248	0.000001	0.00026
403	ExCex vs. InfGain	4.937248	0.000001	0.00026
402	ExCex vs. Lift	4.937248	0.000001	0.00026
401	GR vs. InfGain	4.937248	0.000001	0.00026
400	GR vs. Lift	4.937248	0.000001	0.00026

399	InfGain vs. MDisc	4.937248	0.000001	0.00026
398	InfGain vs. OddsR	4.937248	0.000001	0.00026
397	InfGain vs. SeBag	4.937248	0.000001	0.00026
396	InfGain vs. Zhang	4.937248	0.000001	0.00026
395	Lift vs. MDisc	4.937248	0.000001	0.00026
394	Lift vs. OddsR	4.937248	0.000001	0.00026
393	Lift vs. SeBag	4.937248	0.000001	0.00026
392	Lift vs. Zhang	4.937248	0.000001	0.00026
391	Klos vs. Streng	4.890137	0.000001	0.00026
390	Cconf vs. MultInf	4.880715	0.000001	0.00026
389	Dep vs. MultInf	4.880715	0.000001	0.00026
388	InfGain vs. MultInf	4.880715	0.000001	0.00026
387	Lift vs. MultInf	4.880715	0.000001	0.00026
386	Jacc vs. Klos	4.824182	0.000001	0.00026
385	Gain vs. Lever	4.739381	0.000002	0.00026
384	Cconf vs. X2	4.729959	0.000002	0.00026
383	Dep vs. X2	4.729959	0.000002	0.000262
382	InfGain vs. X2	4.729959	0.000002	0.000262
381	Lift vs. X2	4.729959	0.000002	0.000262
380	Cos vs. Klos	4.701693	0.000003	0.000263
379	Klos vs. SupDif	4.664004	0.000003	0.000264
378	Klos vs. WRACC	4.664004	0.000003	0.000265
377	Cconf vs. Sup	4.579204	0.000005	0.000277
376	Dep vs. Sup	4.579204	0.000005	0.000277
375	InfGain vs. Sup	4.579204	0.000005	0.000277
374	Lift vs. Sup	4.579204	0.000005	0.000277
373	Cconf vs. Lap	4.560359	0.000005	0.000277
372	Dep vs. Lap	4.560359	0.000005	0.000277
371	InfGain vs. Lap	4.560359	0.000005	0.000277
370	Lap vs. Lift	4.560359	0.000005	0.000277
369	Cconf vs. ColStr	4.26827	0.00002	0.000277
368	ColStr vs. Dep	4.26827	0.00002	0.000277
367	ColStr vs. InfGain	4.26827	0.00002	0.000277
366	ColStr vs. Lift	4.26827	0.00002	0.000277
365	Brins vs. RelRisk	4.042136	0.000053	0.000277
364	Cole vs. RelRisk	4.042136	0.000053	0.000277
363	Conf vs. RelRisk	4.042136	0.000053	0.000277
362	ExCex vs. RelRisk	4.042136	0.000053	0.000277
361	GR vs. RelRisk	4.042136	0.000053	0.000277
360	MDisc vs. RelRisk	4.042136	0.000053	0.00028
359	OddsR vs. RelRisk	4.042136	0.000053	0.00028
358	RelRisk vs. SeBag	4.042136	0.000053	0.00028
357	RelRisk vs. Zhang	4.042136	0.000053	0.00028
356	Brins vs. NetConf	4.023292	0.000057	0.000282
355	Cole vs. NetConf	4.023292	0.000057	0.000282
354	Conf vs. NetConf	4.023292	0.000057	0.000282
353	ExCex vs. NetConf	4.023292	0.000057	0.000283
352	GR vs. NetConf	4.023292	0.000057	0.000284
351	MDisc vs. NetConf	4.023292	0.000057	0.000285
350	NetConf vs. OddsR	4.023292	0.000057	0.000294



349	NetConf vs. SeBag	4.023292	0.000057	0.000294
348	NetConf vs. Zhang	4.023292	0.000057	0.000294
347	Brins vs. Spec	4.01387	0.00006	0.000294
346	Cole vs. Spec	4.01387	0.00006	0.000294
345	Conf vs. Spec	4.01387	0.00006	0.000294
344	ExCex vs. Spec	4.01387	0.00006	0.000294
343	GR vs. Spec	4.01387	0.00006	0.000294
342	MDisc vs. Spec	4.01387	0.00006	0.000294
341	OddsR vs. Spec	4.01387	0.00006	0.000294
340	SeBag vs. Spec	4.01387	0.00006	0.000294
339	Spec vs. Zhang	4.01387	0.00006	0.000299
338	MultInf vs. RelRisk	3.985603	0.000067	0.000299
337	MultInf vs. NetConf	3.966759	0.000073	0.000299
336	MultInf vs. Spec	3.957336	0.000076	0.000299
335	Cover vs. Pearson	3.863114	0.000112	0.000299
334	RelRisk vs. X2	3.834847	0.000126	0.000301
333	ACC vs. Brins	3.825425	0.000131	0.000301
332	ACC vs. Cole	3.825425	0.000131	0.000301
331	ACC vs. Conf	3.825425	0.000131	0.000302
330	ACC vs. ExCex	3.825425	0.000131	0.000304
329	ACC vs. GR	3.825425	0.000131	0.000304
328	ACC vs. MDisc	3.825425	0.000131	0.000305
327	ACC vs. OddsR	3.825425	0.000131	0.000306
326	ACC vs. SeBag	3.825425	0.000131	0.000307
325	ACC vs. Zhang	3.825425	0.000131	0.000308
324	NetConf vs. X2	3.816003	0.000136	0.000312
323	Spec vs. X2	3.806581	0.000141	0.000312
322	ACC vs. MultInf	3.768892	0.000164	0.000312
321	Pearson vs. Streng	3.721781	0.000198	0.000312
320	Lever vs. Pearson	3.712358	0.000205	0.000317
319	Cconf vs. Gain	3.684092	0.00023	0.000317
318	Dep vs. Gain	3.684092	0.00023	0.000317
317	Gain vs. InfGain	3.684092	0.00023	0.000317
316	Gain vs. Lift	3.684092	0.00023	0.000317
315	RelRisk vs. Sup	3.684092	0.00023	0.000317
314	Lap vs. RelRisk	3.665247	0.000247	0.000322
313	NetConf vs. Sup	3.665247	0.000247	0.000322
312	Jacc vs. Pearson	3.655825	0.000256	0.000322
311	Spec vs. Sup	3.655825	0.000256	0.000322
310	Lap vs. NetConf	3.646403	0.000266	0.000323
309	Lap vs. Spec	3.636981	0.000276	0.000324
308	ACC vs. X2	3.618136	0.000297	0.000326
307	Cos vs. Pearson	3.533336	0.00041	0.000326
306	Pearson vs. SupDif	3.495647	0.000473	0.000327
305	Pearson vs. WRACC	3.495647	0.000473	0.000328
304	ACC vs. Sup	3.46738	0.000526	0.000329
303	ACC vs. Lap	3.448536	0.000564	0.00033
302	Brins vs. Klos	3.448536	0.000564	0.000331
301	Cole vs. Klos	3.448536	0.000564	0.000332
300	Conf vs. Klos	3.448536	0.000564	0.000333

299	ExCex vs. Klos	3.448536	0.000564	0.000334
298	GR vs. Klos	3.448536	0.000564	0.000336
297	Klos vs. MDisc	3.448536	0.000564	0.000337
296	Klos vs. OddsR	3.448536	0.000564	0.000338
295	Klos vs. SeBag	3.448536	0.000564	0.000339
294	Klos vs. Zhang	3.448536	0.000564	0.00034
293	Klos vs. MultInf	3.392003	0.000694	0.000341
292	ColStr vs. RelRisk	3.373158	0.000743	0.000342
291	ColStr vs. NetConf	3.354314	0.000796	0.000344
290	ColStr vs. Spec	3.344891	0.000823	0.000345
289	Klos vs. X2	3.241247	0.00119	0.000346
288	ACC vs. ColStr	3.156447	0.001597	0.000347
287	Klos vs. Sup	3.090491	0.001998	0.000348
286	Klos vs. Lap	3.071647	0.002129	0.00035
285	Cover vs. Gain	2.836091	0.004567	0.000351
284	Gain vs. RelRisk	2.78898	0.005287	0.000352
283	ColStr vs. Klos	2.779558	0.005443	0.000353
282	Gain vs. NetConf	2.770135	0.005603	0.000355
281	Gain vs. Spec	2.760713	0.005768	0.000356
280	Gain vs. Streng	2.694758	0.007044	0.000357
279	Cconf vs. Pearson	2.657069	0.007882	0.000358
278	Dep vs. Pearson	2.657069	0.007882	0.00036
277	InfGain vs. Pearson	2.657069	0.007882	0.000361
276	Lift vs. Pearson	2.657069	0.007882	0.000362
275	Gain vs. Jacc	2.628802	0.008569	0.000364
274	ACC vs. Gain	2.572269	0.010103	0.000365
273	Klos vs. Lever	2.544002	0.010959	0.000366
272	Cos vs. Gain	2.506313	0.0122	0.000368
271	Gain vs. SupDif	2.468624	0.013563	0.000369
270	Gain vs. WRACC	2.468624	0.013563	0.00037
269	Brins vs. Pearson	2.28018	0.022597	0.000372
268	Cole vs. Pearson	2.28018	0.022597	0.000373
267	Conf vs. Pearson	2.28018	0.022597	0.000375
266	ExCex vs. Pearson	2.28018	0.022597	0.000376
265	GR vs. Pearson	2.28018	0.022597	0.000377
264	MDisc vs. Pearson	2.28018	0.022597	0.000379
263	OddsR vs. Pearson	2.28018	0.022597	0.00038
262	Pearson vs. SeBag	2.28018	0.022597	0.000382
261	Pearson vs. Zhang	2.28018	0.022597	0.000383
260	ColStr vs. Cover	2.251913	0.024328	0.000385
259	MultInf vs. Pearson	2.223646	0.026172	0.000386
258	Gain vs. Klos	2.195379	0.028136	0.000388
257	ACC vs. Lever	2.167113	0.030226	0.000389
256	ColStr vs. Streng	2.110579	0.034808	0.000391
255	Pearson vs. X2	2.07289	0.038182	0.000392
254	ColStr vs. Jacc	2.044624	0.040892	0.000394
253	Lever vs. Spec	1.978668	0.047853	0.000395
252	Lever vs. NetConf	1.969246	0.048925	0.000397
251	Cover vs. Lap	1.959824	0.050016	0.000398
250	Lever vs. RelRisk	1.950402	0.051128	0.0004

249	Cover vs. Sup	1.940979	0.052261	0.000402
248	ColStr vs. Cos	1.922135	0.054589	0.000403
247	Pearson vs. Sup	1.922135	0.054589	0.000405
246	Lap vs. Pearson	1.90329	0.057003	0.000407
245	ColStr vs. SupDif	1.884446	0.059505	0.000408
244	ColStr vs. WRACC	1.884446	0.059505	0.00041
243	Lap vs. Streng	1.81849	0.068989	0.000412
242	Streng vs. Sup	1.799646	0.071917	0.000413
241	Cover vs. X2	1.790224	0.073418	0.000415
240	Pearson vs. RelRisk	1.761957	0.078077	0.000417
239	Jacc vs. Lap	1.752535	0.079682	0.000418
238	NetConf vs. Pearson	1.743112	0.081314	0.00042
237	Jacc vs. Sup	1.73369	0.082973	0.000422
236	Pearson vs. Spec	1.73369	0.082973	0.000424
235	Streng vs. X2	1.64889	0.09917	0.000426
234	Cover vs. MultInf	1.639468	0.101116	0.000427
233	Cos vs. Lap	1.630046	0.103092	0.000429
232	ColStr vs. Pearson	1.611201	0.107136	0.000431
231	Cos vs. Sup	1.611201	0.107136	0.000433
230	Lap vs. SupDif	1.592357	0.111305	0.000435
229	Lap vs. WRACC	1.592357	0.111305	0.000437
228	Brins vs. Cover	1.582935	0.113436	0.000439
227	Cole vs. Cover	1.582935	0.113436	0.000441
226	Conf vs. Cover	1.582935	0.113436	0.000442
225	Cover vs. ExCex	1.582935	0.113436	0.000444
224	Cover vs. GR	1.582935	0.113436	0.000446
223	Cover vs. MDisc	1.582935	0.113436	0.000448
222	Cover vs. OddsR	1.582935	0.113436	0.00045
221	Cover vs. SeBag	1.582935	0.113436	0.000452
220	Cover vs. Zhang	1.582935	0.113436	0.000455
219	Jacc vs. X2	1.582935	0.113436	0.000457
218	Sup vs. SupDif	1.573512	0.1156	0.000459
217	Sup vs. WRACC	1.573512	0.1156	0.000461
216	ACC vs. Pearson	1.545246	0.122287	0.000463
215	MultInf vs. Streng	1.498134	0.134098	0.000465
214	Cconf vs. Klos	1.488712	0.136563	0.000467
213	Dep vs. Klos	1.488712	0.136563	0.000469
212	InfGain vs. Klos	1.488712	0.136563	0.000472
211	Klos vs. Lift	1.488712	0.136563	0.000474
210	Cos vs. X2	1.460446	0.144168	0.000476
209	Brins vs. Streng	1.441601	0.149415	0.000478
208	Cole vs. Streng	1.441601	0.149415	0.000481
207	Conf vs. Streng	1.441601	0.149415	0.000483
206	ExCex vs. Streng	1.441601	0.149415	0.000485
205	GR vs. Streng	1.441601	0.149415	0.000488
204	MDisc vs. Streng	1.441601	0.149415	0.00049
203	OddsR vs. Streng	1.441601	0.149415	0.000493
202	SeBag vs. Streng	1.441601	0.149415	0.000495
201	Streng vs. Zhang	1.441601	0.149415	0.000498
200	Jacc vs. MultInf	1.432179	0.152093	0.0005

199	SupDif vs. X2	1.422757	0.154807	0.000503
198	WRACC vs. X2	1.422757	0.154807	0.000505
197	Brins vs. Jacc	1.375646	0.168931	0.000508
196	Cole vs. Jacc	1.375646	0.168931	0.00051
195	Conf vs. Jacc	1.375646	0.168931	0.000513
194	ExCex vs. Jacc	1.375646	0.168931	0.000515
193	GR vs. Jacc	1.375646	0.168931	0.000518
192	Jacc vs. MDisc	1.375646	0.168931	0.000521
191	Jacc vs. OddsR	1.375646	0.168931	0.000524
190	Jacc vs. SeBag	1.375646	0.168931	0.000526
189	Jacc vs. Zhang	1.375646	0.168931	0.000529
188	Cos vs. MultInf	1.30969	0.190301	0.000532
187	MultInf vs. SupDif	1.272001	0.203373	0.000535
186	MultInf vs. WRACC	1.272001	0.203373	0.000538
185	Brins vs. Cos	1.253157	0.210149	0.000541
184	Brins vs. Gain	1.253157	0.210149	0.000543
183	Cole vs. Cos	1.253157	0.210149	0.000546
182	Cole vs. Gain	1.253157	0.210149	0.000549
181	Conf vs. Cos	1.253157	0.210149	0.000552
180	Conf vs. Gain	1.253157	0.210149	0.000556
179	Cos vs. ExCex	1.253157	0.210149	0.000559
178	Cos vs. GR	1.253157	0.210149	0.000562
177	Cos vs. MDisc	1.253157	0.210149	0.000565
176	Cos vs. OddsR	1.253157	0.210149	0.000568
175	Cos vs. SeBag	1.253157	0.210149	0.000571
174	Cos vs. Zhang	1.253157	0.210149	0.000575
173	ExCex vs. Gain	1.253157	0.210149	0.000578
172	Gain vs. GR	1.253157	0.210149	0.000581
171	Gain vs. MDisc	1.253157	0.210149	0.000585
170	Gain vs. OddsR	1.253157	0.210149	0.000588
169	Gain vs. SeBag	1.253157	0.210149	0.000592
168	Gain vs. Zhang	1.253157	0.210149	0.000595
167	Brins vs. SupDif	1.215468	0.224188	0.000599
166	Brins vs. WRACC	1.215468	0.224188	0.000602
165	Cole vs. SupDif	1.215468	0.224188	0.000606
164	Cole vs. WRACC	1.215468	0.224188	0.00061
163	Conf vs. SupDif	1.215468	0.224188	0.000613
162	Conf vs. WRACC	1.215468	0.224188	0.000617
161	ExCex vs. SupDif	1.215468	0.224188	0.000621
160	ExCex vs. WRACC	1.215468	0.224188	0.000625
159	GR vs. SupDif	1.215468	0.224188	0.000629
158	GR vs. WRACC	1.215468	0.224188	0.000633
157	MDisc vs. SupDif	1.215468	0.224188	0.000637
156	MDisc vs. WRACC	1.215468	0.224188	0.000641
155	OddsR vs. SupDif	1.215468	0.224188	0.000645
154	OddsR vs. WRACC	1.215468	0.224188	0.000649
153	SeBag vs. SupDif	1.215468	0.224188	0.000654
152	SeBag vs. WRACC	1.215468	0.224188	0.000658
151	SupDif vs. Zhang	1.215468	0.224188	0.000662
150	WRACC vs. Zhang	1.215468	0.224188	0.000667

149	Gain vs. MultInf	1.196623	0.231453	0.000671
148	Klos vs. Pearson	1.168356	0.242663	0.000676
147	ACC vs. Cconf	1.111823	0.266214	0.00068
146	ACC vs. Dep	1.111823	0.266214	0.000685
145	ACC vs. InfGain	1.111823	0.266214	0.00069
144	ACC vs. Lift	1.111823	0.266214	0.000694
143	Cconf vs. Lever	1.05529	0.291293	0.000699
142	Dep vs. Lever	1.05529	0.291293	0.000704
141	InfGain vs. Lever	1.05529	0.291293	0.000709
140	Lever vs. Lift	1.05529	0.291293	0.000714
139	Gain vs. X2	1.045867	0.295622	0.000719
138	Gain vs. Pearson	1.027023	0.30441	0.000725
137	Cconf vs. Spec	0.923378	0.35581	0.00073
136	Dep vs. Spec	0.923378	0.35581	0.000735
135	InfGain vs. Spec	0.923378	0.35581	0.000741
134	Lift vs. Spec	0.923378	0.35581	0.000746
133	Cconf vs. NetConf	0.913956	0.36074	0.000752
132	Dep vs. NetConf	0.913956	0.36074	0.000758
131	InfGain vs. NetConf	0.913956	0.36074	0.000763
130	Lift vs. NetConf	0.913956	0.36074	0.000769
129	Cconf vs. RelRisk	0.895112	0.370727	0.000775
128	Dep vs. RelRisk	0.895112	0.370727	0.000781
127	Gain vs. Sup	0.895112	0.370727	0.000787
126	InfGain vs. RelRisk	0.895112	0.370727	0.000794
125	Lift vs. RelRisk	0.895112	0.370727	0.0008
124	Gain vs. Lap	0.876267	0.380885	0.000806
123	Brins vs. ColStr	0.668978	0.503509	0.000813
122	Cole vs. ColStr	0.668978	0.503509	0.00082
121	ColStr vs. Conf	0.668978	0.503509	0.000826
120	ColStr vs. ExCex	0.668978	0.503509	0.000833
119	ColStr vs. GR	0.668978	0.503509	0.00084
118	ColStr vs. MDisc	0.668978	0.503509	0.000847
117	ColStr vs. OddsR	0.668978	0.503509	0.000855
116	ColStr vs. SeBag	0.668978	0.503509	0.000862
115	ColStr vs. Zhang	0.668978	0.503509	0.00087
114	ColStr vs. MultInf	0.612445	0.540243	0.000877
113	Klos vs. RelRisk	0.5936	0.552779	0.000885
112	ColStr vs. Gain	0.584178	0.5591	0.000893
111	Klos vs. NetConf	0.574756	0.565456	0.000901
110	Klos vs. Spec	0.565334	0.571847	0.000909
109	ColStr vs. X2	0.461689	0.644304	0.000917
108	ACC vs. Klos	0.376889	0.706256	0.000926
107	Brins vs. Lap	0.376889	0.706256	0.000935
106	Cole vs. Lap	0.376889	0.706256	0.000943
105	Conf vs. Lap	0.376889	0.706256	0.000952
104	ExCex vs. Lap	0.376889	0.706256	0.000962
103	GR vs. Lap	0.376889	0.706256	0.000971
102	Lap vs. MDisc	0.376889	0.706256	0.00098
101	Lap vs. OddsR	0.376889	0.706256	0.00099
100	Lap vs. SeBag	0.376889	0.706256	0.001

99	Lap vs. Zhang	0.376889	0.706256	0.00101
98	Cover vs. SupDif	0.367467	0.713271	0.00102
97	Cover vs. WRACC	0.367467	0.713271	0.001031
96	Brins vs. Sup	0.358045	0.72031	0.001042
95	Cole vs. Sup	0.358045	0.72031	0.001053
94	Conf vs. Sup	0.358045	0.72031	0.001064
93	ExCex vs. Sup	0.358045	0.72031	0.001075
92	GR vs. Sup	0.358045	0.72031	0.001087
91	MDisc vs. Sup	0.358045	0.72031	0.001099
90	OddsR vs. Sup	0.358045	0.72031	0.001111
89	SeBag vs. Sup	0.358045	0.72031	0.001124
88	Sup vs. Zhang	0.358045	0.72031	0.001136
87	Cos vs. Cover	0.329778	0.741568	0.001149
86	Lap vs. MultInf	0.320356	0.748699	0.001163
85	ColStr vs. Sup	0.310934	0.755851	0.001176
84	MultInf vs. Sup	0.301511	0.763025	0.00119
83	ColStr vs. Lap	0.292089	0.770218	0.001205
82	Streng vs. SupDif	0.226134	0.821098	0.00122
81	Streng vs. WRACC	0.226134	0.821098	0.001235
80	ACC vs. RelRisk	0.216711	0.828433	0.00125
79	Brins vs. X2	0.207289	0.835784	0.001266
78	Cole vs. X2	0.207289	0.835784	0.001282
77	Conf vs. X2	0.207289	0.835784	0.001299
76	Cover vs. Jacc	0.207289	0.835784	0.001316
75	ExCex vs. X2	0.207289	0.835784	0.001333
74	GR vs. X2	0.207289	0.835784	0.001351
73	MDisc vs. X2	0.207289	0.835784	0.00137
72	OddsR vs. X2	0.207289	0.835784	0.001389
71	SeBag vs. X2	0.207289	0.835784	0.001408
70	X2 vs. Zhang	0.207289	0.835784	0.001429
69	ACC vs. NetConf	0.197867	0.843149	0.001449
68	ACC vs. Spec	0.188445	0.850528	0.001471
67	Cos vs. Streng	0.188445	0.850528	0.001493
66	Lap vs. X2	0.1696	0.865325	0.001515
65	Jacc vs. SupDif	0.160178	0.872741	0.001538
64	Jacc vs. WRACC	0.160178	0.872741	0.001562
63	MultInf vs. X2	0.150756	0.880168	0.001587
62	Sup vs. X2	0.150756	0.880168	0.001613
61	Cover vs. Streng	0.141333	0.887607	0.001639
60	Cos vs. Jacc	0.122489	0.902512	0.001667
59	Jacc vs. Streng	0.065956	0.947413	0.001695
58	Brins vs. MultInf	0.056533	0.954917	0.001724
57	Cole vs. MultInf	0.056533	0.954917	0.001754
56	Conf vs. MultInf	0.056533	0.954917	0.001786
55	ExCex vs. MultInf	0.056533	0.954917	0.001818
54	GR vs. MultInf	0.056533	0.954917	0.001852
53	MDisc vs. MultInf	0.056533	0.954917	0.001887
52	MultInf vs. OddsR	0.056533	0.954917	0.001923
51	MultInf vs. SeBag	0.056533	0.954917	0.001961
50	MultInf vs. Zhang	0.056533	0.954917	0.002

49	Cos vs. SupDif	0.037689	0.969936	0.002041
48	Cos vs. WRACC	0.037689	0.969936	0.002083
47	RelRisk vs. Spec	0.028267	0.977449	0.002128
46	Lap vs. Sup	0.018844	0.984965	0.002174
45	NetConf vs. RelRisk	0.018844	0.984965	0.002222
44	NetConf vs. Spec	0.009422	0.992482	0.002273
43	Brins vs. Cole	0	1	0.002326
42	Brins vs. Conf	0	1	0.002381
41	Brins vs. ExCex	0	1	0.002439
40	Brins vs. GR	0	1	0.0025
39	Brins vs. MDisc	0	1	0.002564
38	Brins vs. OddsR	0	1	0.002632
37	Brins vs. SeBag	0	1	0.002703
36	Brins vs. Zhang	0	1	0.002778
35	Cconf vs. Dep	0	1	0.002857
34	Cconf vs. InfGain	0	1	0.002941
33	Cconf vs. Lift	0	1	0.00303
32	Cole vs. Conf	0	1	0.003125
31	Cole vs. ExCex	0	1	0.003226
30	Cole vs. GR	0	1	0.003333
29	Cole vs. MDisc	0	1	0.003448
28	Cole vs. OddsR	0	1	0.003571
27	Cole vs. SeBag	0	1	0.003704
26	Cole vs. Zhang	0	1	0.003846
25	Conf vs. ExCex	0	1	0.004
24	Conf vs. GR	0	1	0.004167
23	Conf vs. MDisc	0	1	0.004348
22	Conf vs. OddsR	0	1	0.004545
21	Conf vs. SeBag	0	1	0.004762
20	Conf vs. Zhang	0	1	0.005
19	Dep vs. InfGain	0	1	0.005263
18	Dep vs. Lift	0	1	0.005556
17	ExCex vs. GR	0	1	0.005882
16	ExCex vs. MDisc	0	1	0.00625
15	ExCex vs. OddsR	0	1	0.006667
14	ExCex vs. SeBag	0	1	0.007143
13	ExCex vs. Zhang	0	1	0.007692
12	GR vs. MDisc	0	1	0.008333
11	GR vs. OddsR	0	1	0.009091
10	GR vs. SeBag	0	1	0.01
9	GR vs. Zhang	0	1	0.011111
8	InfGain vs. Lift	0	1	0.0125
7	MDisc vs. OddsR	0	1	0.014286
6	MDisc vs. SeBag	0	1	0.016667
5	MDisc vs. Zhang	0	1	0.02
4	OddsR vs. SeBag	0	1	0.025
3	OddsR vs. Zhang	0	1	0.033333
2	SeBag vs. Zhang	0	1	0.05
1	SupDif vs. WRACC	0	1	0.1

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Table 3: P-values Table for  $\alpha = 0.10$

Shaffer's procedure rejects those hypotheses that have an unadjusted p-value  $\leq 0.000202$ .



### 2.3 Adjusted p-values

i	hypothesis	unadjusted $p$	$p_{Shaf}$
1	Cover vs .Lever	0	0
2	Lever vs .Streng	0	0
3	Jacc vs .Lever	0	0
4	Cos vs .Lever	0	0
5	Lever vs .SupDif	0	0
6	Lever vs .WRACC	0	0
7	Cconf vs .Cover	0	0
8	Cover vs .Dep	0	0
9	Cover vs .InfGain	0	0
10	Cover vs .Lift	0	0
11	Cconf vs .Streng	0	0
12	Dep vs .Streng	0	0
13	InfGain vs .Streng	0	0
14	Lift vs .Streng	0	0
15	Cconf vs .Jacc	0	0
16	Dep vs .Jacc	0	0
17	InfGain vs .Jacc	0	0
18	Jacc vs .Lift	0	0
19	Cconf vs .Cos	0	0
20	Cos vs .Dep	0	0
21	Cos vs .InfGain	0	0
22	Cos vs .Lift	0	0
23	Cconf vs .SupDif	0	0
24	Cconf vs .WRACC	0	0
25	Dep vs .SupDif	0	0
26	Dep vs .WRACC	0	0
27	InfGain vs .SupDif	0	0
28	InfGain vs .WRACC	0	0
29	Lift vs .SupDif	0	0
30	Lift vs .WRACC	0	0
31	Brins vs .Lever	0	0.000001
32	Cole vs .Lever	0	0.000001
33	Conf vs .Lever	0	0.000001
34	ExCex vs .Lever	0	0.000001
35	GR vs .Lever	0	0.000001
36	Lever vs .MDisc	0	0.000001
37	Lever vs .OddsR	0	0.000001
38	Lever vs .SeBag	0	0.000001
39	Lever vs .Zhang	0	0.000001
40	Lever vs .MultInf	0	0.000001
41	Lever vs .X2	0	0.000003
42	Lever vs .Sup	0	0.000008
43	Cover vs .RelRisk	0	0.000008
44	Lap vs .Lever	0	0.000009
45	Cover vs .NetConf	0	0.000009
46	Cover vs .Spec	0	0.00001

47	RelRisk vs .Streng	0	0.000018
48	NetConf vs .Streng	0	0.00002
49	Spec vs .Streng	0	0.000021
50	Jacc vs .RelRisk	0	0.000026
51	ACC vs .Cover	0	0.000028
52	Jacc vs .NetConf	0	0.000029
53	Jacc vs .Spec	0	0.000031
54	ColStr vs .Lever	0	0.000044
55	Cos vs .RelRisk	0	0.000052
56	Cos vs .NetConf	0	0.000057
57	ACC vs .Streng	0	0.00006
58	Cos vs .Spec	0	0.00006
59	RelRisk vs .SupDif	0	0.000064
60	RelRisk vs .WRACC	0	0.000064
61	NetConf vs .SupDif	0	0.00007
62	NetConf vs .WRACC	0	0.00007
63	Spec vs .SupDif	0	0.00007
64	Spec vs .WRACC	0	0.00007
65	ACC vs .Jacc	0	0.000081
66	ACC vs .Cos	0	0.000156
67	ACC vs .SupDif	0	0.00019
68	ACC vs .WRACC	0	0.00019
69	Cover vs .Klos	0	0.000199
70	Brins vs .Cconf	0.000001	0.000324
71	Brins vs .Dep	0.000001	0.000324
72	Brins vs .InfGain	0.000001	0.000324
73	Brins vs .Lift	0.000001	0.000324
74	Cconf vs .Cole	0.000001	0.000324
75	Cconf vs .Conf	0.000001	0.000324
76	Cconf vs .ExCex	0.000001	0.000324
77	Cconf vs .GR	0.000001	0.000324
78	Cconf vs .MDisc	0.000001	0.000324
79	Cconf vs .OddsR	0.000001	0.000324
80	Cconf vs .SeBag	0.000001	0.000324
81	Cconf vs .Zhang	0.000001	0.000324
82	Cole vs .Dep	0.000001	0.000324
83	Cole vs .InfGain	0.000001	0.000324
84	Cole vs .Lift	0.000001	0.000324
85	Conf vs .Dep	0.000001	0.000324
86	Conf vs .InfGain	0.000001	0.000324
87	Conf vs .Lift	0.000001	0.000324
88	Dep vs .ExCex	0.000001	0.000324
89	Dep vs .GR	0.000001	0.000324
90	Dep vs .MDisc	0.000001	0.000324
91	Dep vs .OddsR	0.000001	0.000324
92	Dep vs .SeBag	0.000001	0.000324
93	Dep vs .Zhang	0.000001	0.000324
94	ExCex vs .InfGain	0.000001	0.000324
95	ExCex vs .Lift	0.000001	0.000324
96	GR vs .InfGain	0.000001	0.000324

97	GR vs .Lift	0.000001	0.000324
98	InfGain vs .MDisc	0.000001	0.000324
99	InfGain vs .OddsR	0.000001	0.000324
100	InfGain vs .SeBag	0.000001	0.000324
101	InfGain vs .Zhang	0.000001	0.000324
102	Lift vs .MDisc	0.000001	0.000324
103	Lift vs .OddsR	0.000001	0.000324
104	Lift vs .SeBag	0.000001	0.000324
105	Lift vs .Zhang	0.000001	0.000324
106	Klos vs .Streng	0.000001	0.000387
107	Cconf vs .MultInf	0.000001	0.000406
108	Dep vs .MultInf	0.000001	0.000406
109	InfGain vs .MultInf	0.000001	0.000406
110	Lift vs .MultInf	0.000001	0.000406
111	Jacc vs .Klos	0.000001	0.00054
112	Gain vs .Lever	0.000002	0.000823
113	Cconf vs .X2	0.000002	0.000862
114	Dep vs .X2	0.000002	0.000862
115	InfGain vs .X2	0.000002	0.000862
116	Lift vs .X2	0.000002	0.000862
117	Cos vs .Klos	0.000003	0.00098
118	Klos vs .SupDif	0.000003	0.001175
119	Klos vs .WRACC	0.000003	0.001175
120	Cconf vs .Sup	0.000005	0.001685
121	Dep vs .Sup	0.000005	0.001685
122	InfGain vs .Sup	0.000005	0.001685
123	Lift vs .Sup	0.000005	0.001685
124	Cconf vs .Lap	0.000005	0.001843
125	Dep vs .Lap	0.000005	0.001843
126	InfGain vs .Lap	0.000005	0.001843
127	Lap vs .Lift	0.000005	0.001843
128	Cconf vs .ColStr	0.000002	0.007112
129	ColStr vs .Dep	0.000002	0.007112
130	ColStr vs .InfGain	0.000002	0.007112
131	ColStr vs .Lift	0.000002	0.007112
132	Brins vs .RelRisk	0.000053	0.019121
133	Cole vs .RelRisk	0.000053	0.019121
134	Conf vs .RelRisk	0.000053	0.019121
135	ExCex vs .RelRisk	0.000053	0.019121
136	GR vs .RelRisk	0.000053	0.019121
137	MDisc vs .RelRisk	0.000053	0.019121
138	OddsR vs .RelRisk	0.000053	0.019121
139	RelRisk vs .SeBag	0.000053	0.019121
140	RelRisk vs .Zhang	0.000053	0.019121
141	Brins vs .NetConf	0.000057	0.020374
142	Cole vs .NetConf	0.000057	0.020374
143	Conf vs .NetConf	0.000057	0.020374
144	ExCex vs .NetConf	0.000057	0.020374
145	GR vs .NetConf	0.000057	0.020374
146	MDisc vs .NetConf	0.000057	0.020374

147	NetConf vs .OddsR	0.000057	0.020374
148	NetConf vs .SeBag	0.000057	0.020374
149	NetConf vs .Zhang	0.000057	0.020374
150	Brins vs .Spec	0.00006	0.020374
151	Cole vs .Spec	0.00006	0.020374
152	Conf vs .Spec	0.00006	0.020374
153	ExCex vs .Spec	0.00006	0.020374
154	GR vs .Spec	0.00006	0.020374
155	MDisc vs .Spec	0.00006	0.020374
156	OddsR vs .Spec	0.00006	0.020374
157	SeBag vs .Spec	0.00006	0.020374
158	Spec vs .Zhang	0.00006	0.020374
159	MultInf vs .RelRisk	0.000067	0.022548
160	MultInf vs .NetConf	0.000073	0.024407
161	MultInf vs .Spec	0.000076	0.02539
162	Cover vs .Pearson	0.000112	0.037503
163	RelRisk vs .X2	0.000126	0.041713
164	ACC vs .Brins	0.000131	0.043341
165	ACC vs .Cole	0.000131	0.043341
166	ACC vs .Conf	0.000131	0.043341
167	ACC vs .ExCex	0.000131	0.043341
168	ACC vs .GR	0.000131	0.043341
169	ACC vs .MDisc	0.000131	0.043341
170	ACC vs .OddsR	0.000131	0.043341
171	ACC vs .SeBag	0.000131	0.043341
172	ACC vs .Zhang	0.000131	0.043341
173	NetConf vs .X2	0.000136	0.043538
174	Spec vs .X2	0.000141	0.045229
175	ACC vs .MultInf	0.000164	0.052636
176	Pearson vs .Streng	0.000198	0.063501
177	Lever vs .Pearson	0.000205	0.064681
178	Cconf vs .Gain	0.00023	0.072299
179	Dep vs .Gain	0.00023	0.072299
180	Gain vs .InfGain	0.00023	0.072299
181	Gain vs .Lift	0.00023	0.072299
182	RelRisk vs .Sup	0.00023	0.072299
183	Lap vs .RelRisk	0.000247	0.076848
184	NetConf vs .Sup	0.000247	0.076848
185	Jacc vs .Pearson	0.000256	0.079727
186	Spec vs .Sup	0.000256	0.079727
187	Lap vs .NetConf	0.000266	0.08244
188	Lap vs .Spec	0.000276	0.085238
189	ACC vs .X2	0.000297	0.091097
190	Cos vs .Pearson	0.00041	0.125978
191	Pearson vs .SupDif	0.000473	0.144712
192	Pearson vs .WRACC	0.000473	0.144712
193	ACC vs .Sup	0.000526	0.159769
194	ACC vs .Lap	0.000564	0.170781
195	Brins vs .Klos	0.000564	0.170781
196	Cole vs .Klos	0.000564	0.170781

197	Conf vs .Klos	0.000564	0.170781
198	ExCex vs .Klos	0.000564	0.170781
199	GR vs .Klos	0.000564	0.170781
200	Klos vs .MDisc	0.000564	0.170781
201	Klos vs .OddsR	0.000564	0.170781
202	Klos vs .SeBag	0.000564	0.170781
203	Klos vs .Zhang	0.000564	0.170781
204	Klos vs .MultInf	0.000694	0.202601
205	ColStr vs .RelRisk	0.000743	0.216989
206	ColStr vs .NetConf	0.000796	0.231526
207	ColStr vs .Spec	0.000823	0.23789
208	Klos vs .X2	0.00119	0.343933
209	ACC vs .ColStr	0.001597	0.459947
210	Klos vs .Sup	0.001998	0.5735
211	Klos vs .Lap	0.002129	0.608841
212	Cover vs .Gain	0.004567	1.301578
213	Gain vs .RelRisk	0.005287	1.501631
214	ColStr vs .Klos	0.005443	1.540453
215	Gain vs .NetConf	0.005603	1.58013
216	Gain vs .Spec	0.005768	1.620676
217	Gain vs .Streng	0.007044	1.972316
218	Cconf vs .Pearson	0.007882	2.199172
219	Dep vs .Pearson	0.007882	2.199172
220	InfGain vs .Pearson	0.007882	2.199172
221	Lift vs .Pearson	0.007882	2.199172
222	Gain vs .Jacc	0.008569	2.356371
223	ACC vs .Gain	0.010103	2.768344
224	Klos vs .Lever	0.010959	2.969902
225	Cos vs .Gain	0.0122	3.306134
226	Gain vs .SupDif	0.013563	3.675671
227	Gain vs .WRACC	0.013563	3.675671
228	Brins vs .Pearson	0.022597	6.078604
229	Cole vs .Pearson	0.022597	6.078604
230	Conf vs .Pearson	0.022597	6.078604
231	ExCex vs .Pearson	0.022597	6.078604
232	GR vs .Pearson	0.022597	6.078604
233	MDisc vs .Pearson	0.022597	6.078604
234	OddsR vs .Pearson	0.022597	6.078604
235	Pearson vs .SeBag	0.022597	6.078604
236	Pearson vs .Zhang	0.022597	6.078604
237	ColStr vs .Cover	0.024328	6.325223
238	MultInf vs .Pearson	0.026172	6.778615
239	Gain vs .Klos	0.028136	7.259188
240	ACC vs .Lever	0.030226	7.768148
241	ColStr vs .Streng	0.034808	8.910971
242	Pearson vs .X2	0.038182	9.73653
243	ColStr vs .Jacc	0.040892	10.386558
244	Lever vs .Spec	0.047853	12.106904
245	Lever vs .NetConf	0.048925	12.329063
246	Cover vs .Lap	0.050016	12.554115

247	Lever vs .RelRisk	0.051128	12.730942
248	Cover vs .Sup	0.052261	13.012937
249	ColStr vs .Cos	0.054589	13.538021
250	Pearson vs .Sup	0.054589	13.538021
251	Lap vs .Pearson	0.057003	14.022656
252	ColStr vs .SupDif	0.059505	14.578648
253	ColStr vs .WRACC	0.059505	14.578648
254	Lap vs .Streng	0.068989	16.764383
255	Streng vs .Sup	0.071917	17.403812
256	Cover vs .X2	0.073418	17.693731
257	Pearson vs .RelRisk	0.078077	18.738378
258	Jacc vs .Lap	0.079682	19.043977
259	NetConf vs .Pearson	0.081314	19.352725
260	Jacc vs .Sup	0.082973	19.664615
261	Pearson vs .Spec	0.082973	19.664615
262	Streng vs .X2	0.09917	23.304982
263	Cover vs .MultInf	0.101116	23.661107
264	Cos vs .Lap	0.103092	24.020398
265	ColStr vs .Pearson	0.107136	24.855521
266	Cos vs .Sup	0.107136	24.855521
267	Lap vs .SupDif	0.111305	25.600049
268	Lap vs .WRACC	0.111305	25.600049
269	Brins vs .Cover	0.113436	25.863495
270	Cole vs .Cover	0.113436	25.863495
271	Conf vs .Cover	0.113436	25.863495
272	Cover vs .ExCex	0.113436	25.863495
273	Cover vs .GR	0.113436	25.863495
274	Cover vs .MDisc	0.113436	25.863495
275	Cover vs .OddsR	0.113436	25.863495
276	Cover vs .SeBag	0.113436	25.863495
277	Cover vs .Zhang	0.113436	25.863495
278	Jacc vs .X2	0.113436	25.863495
279	Sup vs .SupDif	0.1156	25.863495
280	Sup vs .WRACC	0.1156	25.863495
281	ACC vs .Pearson	0.122287	26.413961
282	MultInf vs .Streng	0.134098	28.831137
283	Cconf vs .Klos	0.136563	29.224515
284	Dep vs .Klos	0.136563	29.224515
285	InfGain vs .Klos	0.136563	29.224515
286	Klos vs .Lift	0.136563	29.224515
287	Cos vs .X2	0.144168	30.275208
288	Brins vs .Streng	0.149415	31.227721
289	Cole vs .Streng	0.149415	31.227721
290	Conf vs .Streng	0.149415	31.227721
291	ExCex vs .Streng	0.149415	31.227721
292	GR vs .Streng	0.149415	31.227721
293	MDisc vs .Streng	0.149415	31.227721
294	OddsR vs .Streng	0.149415	31.227721
295	SeBag vs .Streng	0.149415	31.227721
296	Streng vs .Zhang	0.149415	31.227721

297	Jacc vs .MultInf	0.152093	31.227721
298	SupDif vs .X2	0.154807	31.227721
299	WRACC vs .X2	0.154807	31.227721
300	Brins vs .Jacc	0.168931	33.279488
301	Cole vs .Jacc	0.168931	33.279488
302	Conf vs .Jacc	0.168931	33.279488
303	ExCex vs .Jacc	0.168931	33.279488
304	GR vs .Jacc	0.168931	33.279488
305	Jacc vs .MDisc	0.168931	33.279488
306	Jacc vs .OddsR	0.168931	33.279488
307	Jacc vs .SeBag	0.168931	33.279488
308	Jacc vs .Zhang	0.168931	33.279488
309	Cos vs .MultInf	0.190301	35.776543
310	MultInf vs .SupDif	0.203373	38.030708
311	MultInf vs .WRACC	0.203373	38.030708
312	Brins vs .Cos	0.210149	38.877518
313	Brins vs .Gain	0.210149	38.877518
314	Cole vs .Cos	0.210149	38.877518
315	Cole vs .Gain	0.210149	38.877518
316	Conf vs .Cos	0.210149	38.877518
317	Conf vs .Gain	0.210149	38.877518
318	Cos vs .ExCex	0.210149	38.877518
319	Cos vs .GR	0.210149	38.877518
320	Cos vs .MDisc	0.210149	38.877518
321	Cos vs .OddsR	0.210149	38.877518
322	Cos vs .SeBag	0.210149	38.877518
323	Cos vs .Zhang	0.210149	38.877518
324	ExCex vs .Gain	0.210149	38.877518
325	Gain vs .GR	0.210149	38.877518
326	Gain vs .MDisc	0.210149	38.877518
327	Gain vs .OddsR	0.210149	38.877518
328	Gain vs .SeBag	0.210149	38.877518
329	Gain vs .Zhang	0.210149	38.877518
330	Brins vs .SupDif	0.224188	38.877518
331	Brins vs .WRACC	0.224188	38.877518
332	Cole vs .SupDif	0.224188	38.877518
333	Cole vs .WRACC	0.224188	38.877518
334	Conf vs .SupDif	0.224188	38.877518
335	Conf vs .WRACC	0.224188	38.877518
336	ExCex vs .SupDif	0.224188	38.877518
337	ExCex vs .WRACC	0.224188	38.877518
338	GR vs .SupDif	0.224188	38.877518
339	GR vs .WRACC	0.224188	38.877518
340	MDisc vs .SupDif	0.224188	38.877518
341	MDisc vs .WRACC	0.224188	38.877518
342	OddsR vs .SupDif	0.224188	38.877518
343	OddsR vs .WRACC	0.224188	38.877518
344	SeBag vs .SupDif	0.224188	38.877518
345	SeBag vs .WRACC	0.224188	38.877518
346	SupDif vs .Zhang	0.224188	38.877518

347	WRACC vs .Zhang	0.224188	38.877518
348	Gain vs .MultInf	0.231453	38.877518
349	Klos vs .Pearson	0.242663	38.877518
350	ACC vs .Cconf	0.266214	39.133491
351	ACC vs .Dep	0.266214	39.133491
352	ACC vs .InfGain	0.266214	39.133491
353	ACC vs .Lift	0.266214	39.133491
354	Cconf vs .Lever	0.291293	41.654877
355	Dep vs .Lever	0.291293	41.654877
356	InfGain vs .Lever	0.291293	41.654877
357	Lever vs .Lift	0.291293	41.654877
358	Gain vs .X2	0.295622	41.654877
359	Gain vs .Pearson	0.30441	42.008528
360	Cconf vs .Spec	0.35581	48.745969
361	Dep vs .Spec	0.35581	48.745969
362	InfGain vs .Spec	0.35581	48.745969
363	Lift vs .Spec	0.35581	48.745969
364	Cconf vs .NetConf	0.36074	48.745969
365	Dep vs .NetConf	0.36074	48.745969
366	InfGain vs .NetConf	0.36074	48.745969
367	Lift vs .NetConf	0.36074	48.745969
368	Cconf vs .RelRisk	0.370727	48.745969
369	Dep vs .RelRisk	0.370727	48.745969
370	Gain vs .Sup	0.370727	48.745969
371	InfGain vs .RelRisk	0.370727	48.745969
372	Lift vs .RelRisk	0.370727	48.745969
373	Gain vs .Lap	0.380885	48.745969
374	Brins vs .ColStr	0.503509	61.931647
375	Cole vs .ColStr	0.503509	61.931647
376	ColStr vs .Conf	0.503509	61.931647
377	ColStr vs .ExCex	0.503509	61.931647
378	ColStr vs .GR	0.503509	61.931647
379	ColStr vs .MDisc	0.503509	61.931647
380	ColStr vs .OddsR	0.503509	61.931647
381	ColStr vs .SeBag	0.503509	61.931647
382	ColStr vs .Zhang	0.503509	61.931647
383	ColStr vs .MultInf	0.540243	61.931647
384	Klos vs .RelRisk	0.552779	62.464069
385	ColStr vs .Gain	0.5591	62.619246
386	Klos vs .NetConf	0.565456	62.765652
387	Klos vs .Spec	0.571847	62.903144
388	ColStr vs .X2	0.644304	70.229156
389	ACC vs .Klos	0.706256	76.275644
390	Brins vs .Lap	0.706256	76.275644
391	Cole vs .Lap	0.706256	76.275644
392	Conf vs .Lap	0.706256	76.275644
393	ExCex vs .Lap	0.706256	76.275644
394	GR vs .Lap	0.706256	76.275644
395	Lap vs .MDisc	0.706256	76.275644
396	Lap vs .OddsR	0.706256	76.275644



397	Lap vs .SeBag	0.706256	76.275644
398	Lap vs .Zhang	0.706256	76.275644
399	Cover vs .SupDif	0.713271	76.275644
400	Cover vs .WRACC	0.713271	76.275644
401	Brins vs .Sup	0.72031	76.275644
402	Cole vs .Sup	0.72031	76.275644
403	Conf vs .Sup	0.72031	76.275644
404	ExCex vs .Sup	0.72031	76.275644
405	GR vs .Sup	0.72031	76.275644
406	MDisc vs .Sup	0.72031	76.275644
407	OddsR vs .Sup	0.72031	76.275644
408	SeBag vs .Sup	0.72031	76.275644
409	Sup vs .Zhang	0.72031	76.275644
410	Cos vs .Cover	0.741568	76.275644
411	Lap vs .MultInf	0.748699	76.275644
412	ColStr vs .Sup	0.755851	76.275644
413	MultInf vs .Sup	0.763025	76.275644
414	ColStr vs .Lap	0.770218	76.275644
415	Streng vs .SupDif	0.821098	76.275644
416	Streng vs .WRACC	0.821098	76.275644
417	ACC vs .RelRisk	0.828433	76.275644
418	Brins vs .X2	0.835784	76.275644
419	Cole vs .X2	0.835784	76.275644
420	Conf vs .X2	0.835784	76.275644
421	Cover vs .Jacc	0.835784	76.275644
422	ExCex vs .X2	0.835784	76.275644
423	GR vs .X2	0.835784	76.275644
424	MDisc vs .X2	0.835784	76.275644
425	OddsR vs .X2	0.835784	76.275644
426	SeBag vs .X2	0.835784	76.275644
427	X2 vs .Zhang	0.835784	76.275644
428	ACC vs .NetConf	0.843149	76.275644
429	ACC vs .Spec	0.850528	76.275644
430	Cos vs .Streng	0.850528	76.275644
431	Lap vs .X2	0.865325	76.275644
432	Jacc vs .SupDif	0.872741	76.275644
433	Jacc vs .WRACC	0.872741	76.275644
434	MultInf vs .X2	0.880168	76.275644
435	Sup vs .X2	0.880168	76.275644
436	Cover vs .Streng	0.887607	76.275644
437	Cos vs .Jacc	0.902512	76.275644
438	Jacc vs .Streng	0.947413	76.275644
439	Brins vs .MultInf	0.954917	76.275644
440	Cole vs .MultInf	0.954917	76.275644
441	Conf vs .MultInf	0.954917	76.275644
442	ExCex vs .MultInf	0.954917	76.275644
443	GR vs .MultInf	0.954917	76.275644
444	MDisc vs .MultInf	0.954917	76.275644
445	MultInf vs .OddsR	0.954917	76.275644
446	MultInf vs .SeBag	0.954917	76.275644

447	MultInf vs .Zhang	0.954917	76.275644
448	Cos vs .SupDif	0.969936	76.275644
449	Cos vs .WRACC	0.969936	76.275644
450	RelRisk vs .Spec	0.977449	76.275644
451	Lap vs .Sup	0.984965	76.275644
452	NetConf vs .RelRisk	0.984965	76.275644
453	NetConf vs .Spec	0.992482	76.275644
454	Brins vs .Cole	1	76.275644
455	Brins vs .Conf	1	76.275644
456	Brins vs .ExCex	1	76.275644
457	Brins vs .GR	1	76.275644
458	Brins vs .MDisc	1	76.275644
459	Brins vs .OddsR	1	76.275644
460	Brins vs .SeBag	1	76.275644
461	Brins vs .Zhang	1	76.275644
462	Cconf vs .Dep	1	76.275644
463	Cconf vs .InfGain	1	76.275644
464	Cconf vs .Lift	1	76.275644
465	Cole vs .Conf	1	76.275644
466	Cole vs .ExCex	1	76.275644
467	Cole vs .GR	1	76.275644
468	Cole vs .MDisc	1	76.275644
469	Cole vs .OddsR	1	76.275644
470	Cole vs .SeBag	1	76.275644
471	Cole vs .Zhang	1	76.275644
472	Conf vs .ExCex	1	76.275644
473	Conf vs .GR	1	76.275644
474	Conf vs .MDisc	1	76.275644
475	Conf vs .OddsR	1	76.275644
476	Conf vs .SeBag	1	76.275644
477	Conf vs .Zhang	1	76.275644
478	Dep vs .InfGain	1	76.275644
479	Dep vs .Lift	1	76.275644
480	ExCex vs .GR	1	76.275644
481	ExCex vs .MDisc	1	76.275644
482	ExCex vs .OddsR	1	76.275644
483	ExCex vs .SeBag	1	76.275644
484	ExCex vs .Zhang	1	76.275644
485	GR vs .MDisc	1	76.275644
486	GR vs .OddsR	1	76.275644
487	GR vs .SeBag	1	76.275644
488	GR vs .Zhang	1	76.275644
489	InfGain vs .Lift	1	76.275644
490	MDisc vs .OddsR	1	76.275644
491	MDisc vs .SeBag	1	76.275644
492	MDisc vs .Zhang	1	76.275644
493	OddsR vs .SeBag	1	76.275644
494	OddsR vs .Zhang	1	76.275644
495	SeBag vs .Zhang	1	76.275644

496	SupDif vs .WRACC	1	76.275644
Table 4: Adjusted $p$ -values			