Log Rank Stability Interval Report
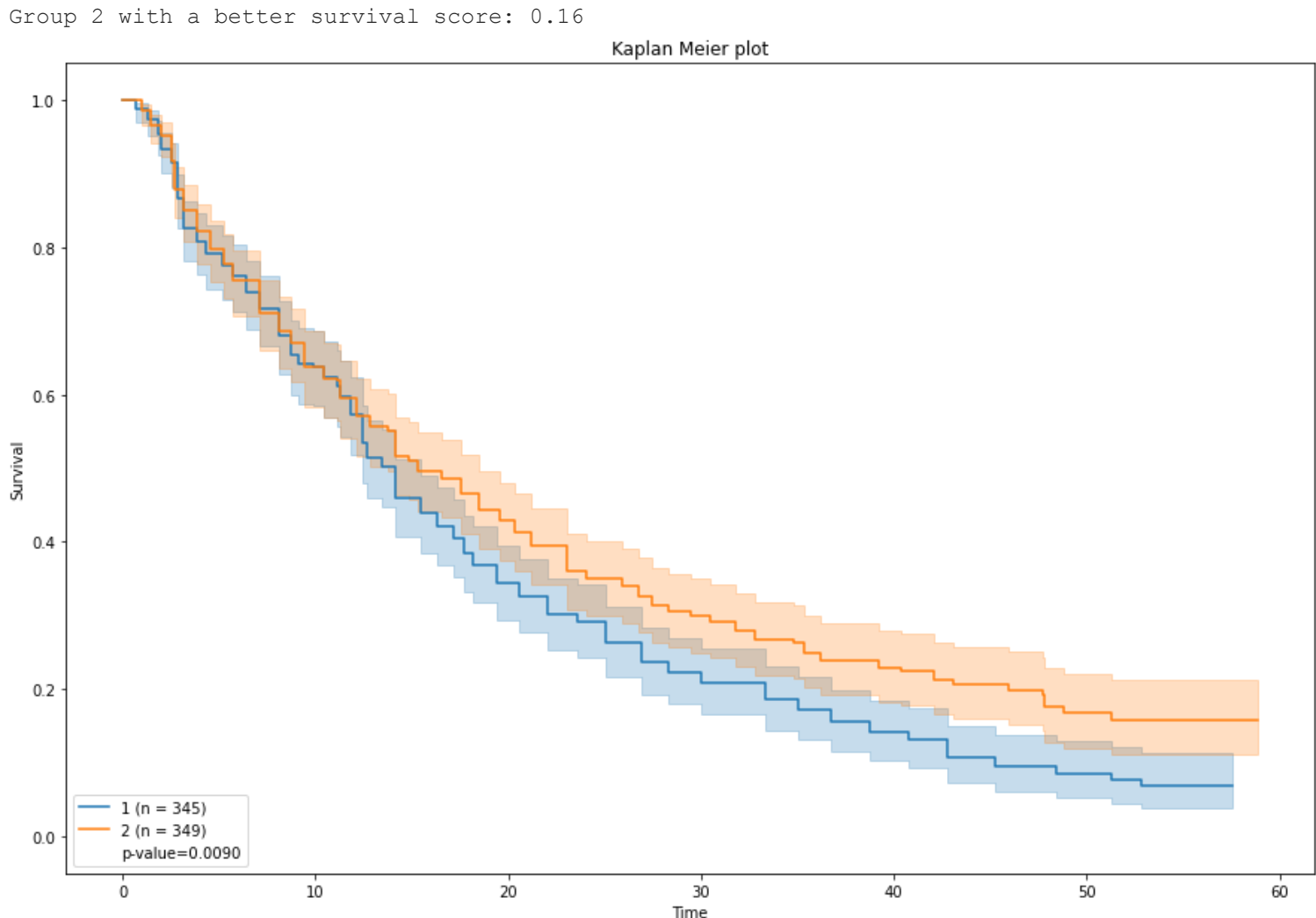
Article: Long-Term Outcomes of Patent Foramen Ovale Closure or Medical Therapy after Stroke

Link: https://www.nejm.org/doi/full/10.1056/nejmoa1201622

KM Plot

Group 2 with a better survival score: 0.16

Explore delta rejection

On number_of_changes=8 and delta0.05. The null hypothes is rejected

	Number_of_changes	MIN_pvalue	MAX_pvalue
0	1	0.006612	0.011880
1	2	0.004925	0.015349
2	3	0.003701	0.019372
3	4	0.002807	0.024288
4	5	0.002115	0.030250
5	6	0.001582	0.037429
6	7	0.001176	0.045983
7	8	0.000868	0.056091

ORIGINAL P-vlaue: 0.0090

Compare time calculation between efficient and griddy methods

The two alogrithms agree with P value MAX up to max interval N=20:
Greedy algorithm:
[604, 603, 602, 601, 0, 1, 2, 3, 4, 5, 6, 7, 8, 15, 14, 13, 9, 11, 10, 12]
Efficient algorithm:
[604, 603, 602, 601, 0, 1, 2, 3, 4, 5, 6, 7, 8, 15, 14, 13, 9, 11, 10, 12]

	Number_of_changes	Method	ORIGINAL_pvalue	MIN_pvalue	MAX_pvalue	RUNNING time
32	17	griddy	0.008953	0.000045	0.246953	1.363592
33	17	efficient	0.008953	0.000045	0.246953	4.532790
34	18	griddy	0.008953	0.000031	0.282303	1.470337
35	18	efficient	0.008953	0.000031	0.282303	5.010146
36	19	griddy	0.008953	0.000022	0.320936	1.522749
37	19	efficient	0.008953	0.000022	0.320936	5.564569
38	20	griddy	0.008953	0.000015	0.362868	1.627399
39	20	efficient	0.008953	0.000015	0.362868	6.206036