Figure 1. The interactive tool (intervention, available at http://lse.staging.kiln.digital/statins/) shows the overall ranking of 5 statins from best to worst in terms of 3 benefit outcomes (all-cause mortality, coronary events, and cerebrovascular events) and 4 harm outcomes (muscle pain, kidney enzyme elevations, liver enzyme elevations, and discontinuations because of other adverse events). Users can specify the relative importance of different outcomes by moving the cursors from not important to very important. Different colours correspond to different outcomes, the height of the bars corresponds to the relative weight put on each outcome, and the width of the bars corresponds to the probability that statin is the best on that outcome. The data visualization is dynamic and the overall ranking of individual statins changes depending on user preferences. For example, (**A**) simvastatin ranks as the best option when the user specifies that all-cause mortality is the only important outcome; (**B**) pravastatin is the best treatment option when the user specifies kidney enzyme elevations as the only important outcome; and (**C**) simvastatin ranks best when the user considers all-cause mortality to be the most important outcome followed by coronary events and cerebrovascular events, which are in turn more important than all harm end points.

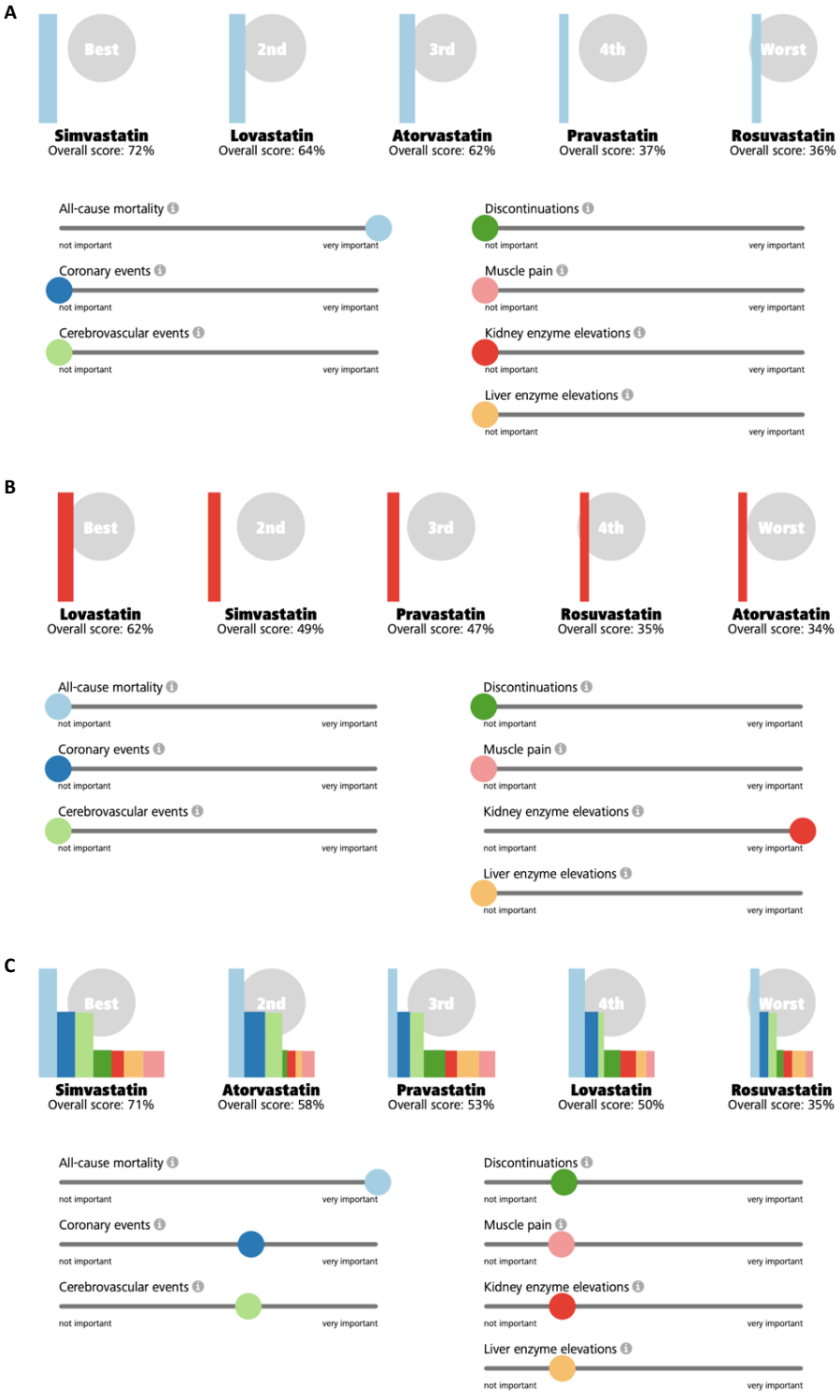

Figure 2. CONSORT Flowchart (9)

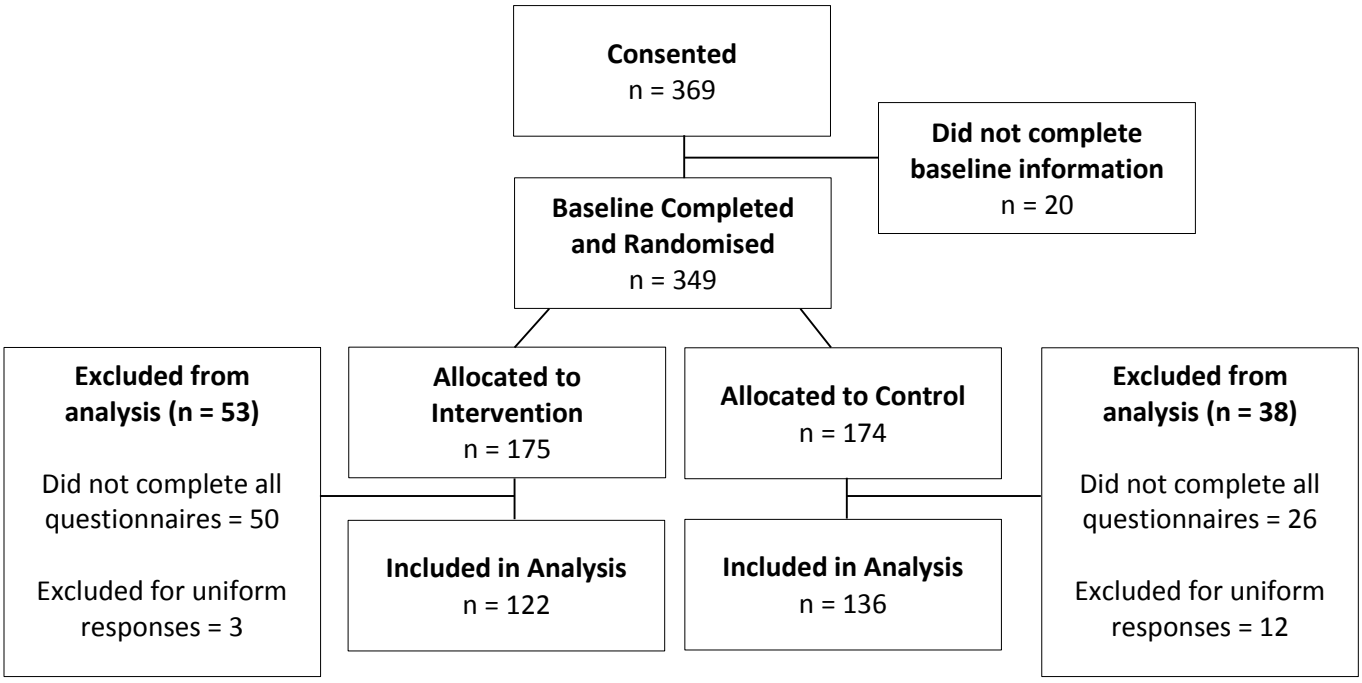

Table 1. Background Information[a]

	Intervention (n = 122)		Control (n = 136)		Total (n = 258)		p value
Age (years)[b]	32.3	(8.8)	32.62	(9.32)	32.44	(9.08)	0.754
Gender							
Male	76	(62.3)	85	(62.5)	161	(62.4)	0.792
Female	45	(36.9)	51	(37.5)	96	(37.2)	
Other	1	(0.8)	0	(0)	1	(0.4)	
Ethnicity							
White	89	(73.0)	92	(67.6)	181	(70.2)	0.326
Black or African American	6	(4.9)	13	(9.6)	19	(7.4)	
Hispanic	8	(6.6)	11	(8.1)	19	(7.4)	
Asian	15	(12.3)	19	(14.0)	34	(13.2)	
American Indian or Native Alaskan	1	(0.8)	1	(0.7)	2	(0.8)	
Other	3	(2.5)	0	(0)	3	(1.2)	
Education							
Less than high school	0	(0)	1	(0.7)	1	(0.4)	0.160
High school degree	31	(25.4)	38	(27.9)	69	(26.7)	
Associate degree	19	(15.6)	33	(24.3)	52	(20.2)	
Bachelor degree	63	(51.6)	52	(38.2)	115	(44.6)	
Graduate degree	9	(7.4)	12	(8.8)	21	(8.1)	
Income ($)							
Less than 20,000	25	(20.5)	26	(19.1)	51	(19.8)	0.611
20,000 to 34,999	33	(27.0)	33	(24.3)	66	(25.6)	
35,000 to 49,999	32	(26.2)	29	(21.3)	61	(23.6)	
50,000 to 74,999	20	(16.4)	31	(22.8)	51	(19.8)	
75,000 to 99,999	7	(5.7)	13	(9.6)	20	(7.8)	
100,000 to 149,999	4	(3.3)	4	(2.9)	8	(3.1)	
150,000 or more	1	(0.8)	0	(0)	1	(0.4)	
Has cardiovascular disease?							
No	113	(92.6)	122	(89.7)	235	(91.1)	0.513
Yes	9	(7.4)	14	(10.3)	23	(8.9)	
At high risk for cardiovascular disease?							
No	108	(88.5)	113	(83.1)	221	(85.7)	0.286
Yes	14	(11.5)	23	(16.9)	37	(14.3)	
Talked to a doctor about statins?							
No	107	(87.7)	112	(82.4)	219	(84.9)	0.296
Yes	15	(12.3)	24	(17.6)	39	(15.1)	
Currently or previously prescribed statins?							
No	113	(92.6)	124	(91.2)	237	(91.9)	0.820
Yes	9	(7.4)	12	(8.8)	21	(8.1)	

[a] Values are presented as number and proportions unless stated

[b] Mean and standard deviation reported

Figure 3. Participants ratings of the importance of each of the benefits and harms associated with statins. The differences in ratings across the outcomes indicate that participants have differing preferences for the possible outcomes.

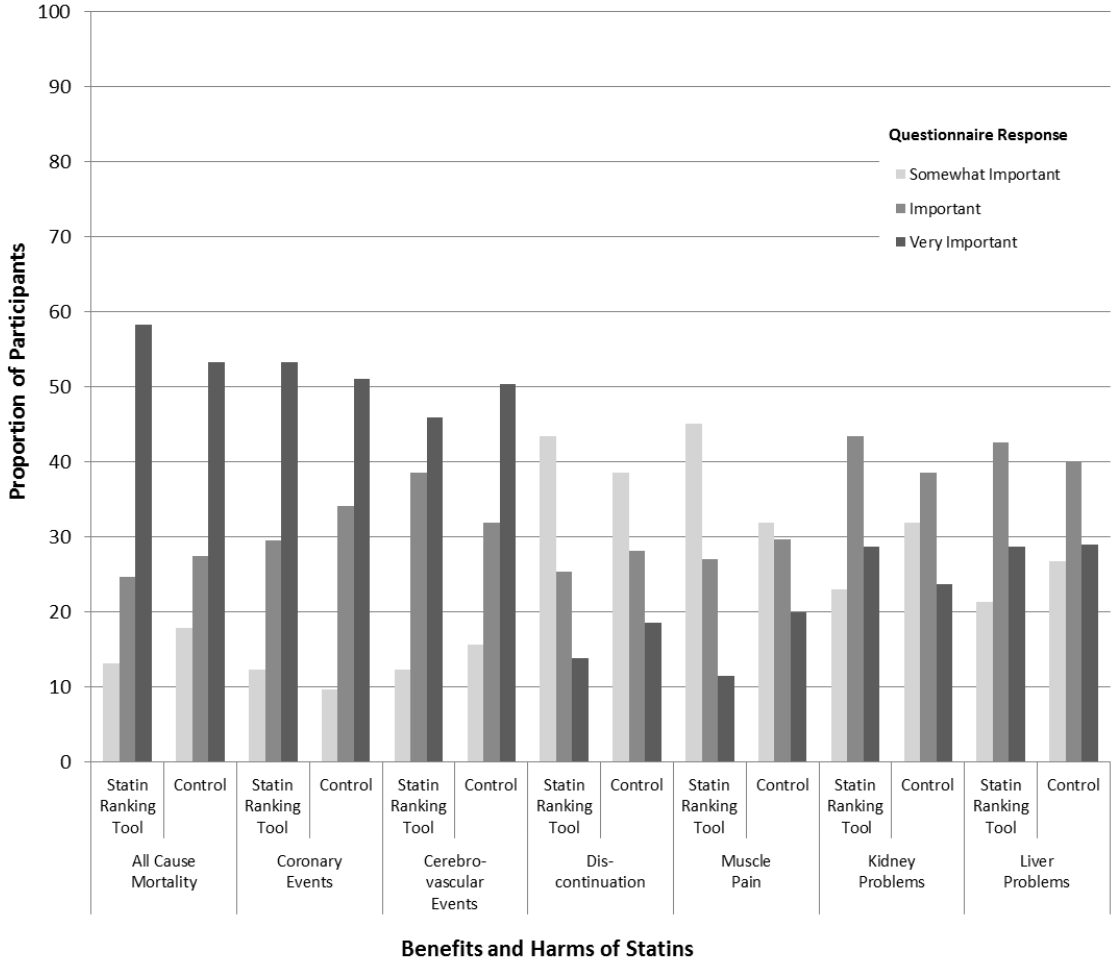

Table 2. Self-reported decision conflict, decision self-efficacy, and preparation for decision making[a]

	Intervention (n = 122)		Control (n = 136)		Mean Difference (95% CI)	p value
Decisional Conflict Scale	14.59	(15.04)	23.13	(20.34)	-8.53 (-12.96, -4.11)	**0.001**
Decision Self-Efficacy Scale	82.86	(10.56)	82.4	(9.96)	0.46 (-2.06, 2.98)	0.360
Preparation for Decision Making Scale	96.11	(18.07)	91.91	(18.04)	4.19 (-0.24, 8.63)	**0.031**

[a] Values are presented as means and standard deviations

Figure 4. Comparison of first ranked statins with charts and subsequent ranking with the interactive tool in participants randomized to the intervention group (n = 122). Ranking with the charts is shown on the left and ranking with the interactive tool on the right (Diagram created using SankeyMATIC).

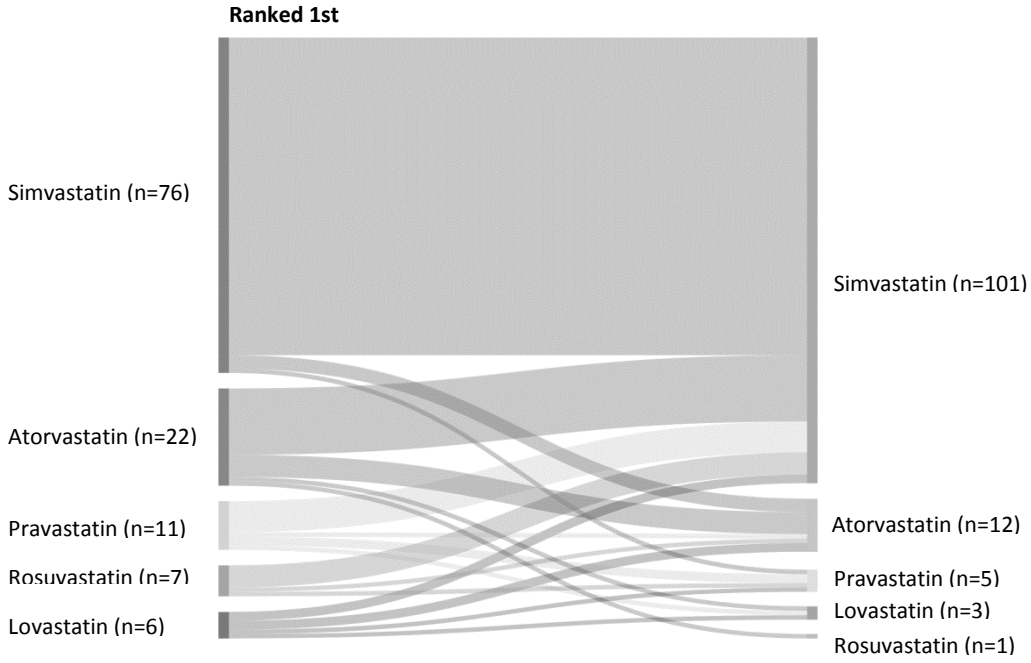

Table 3. Acceptability of the interactive tool[a]

	Total (n = 258)									
Presentation of information on …	**Very poor**		**Poor**		**Neutral**		**Good**		**Very Good**	
How to use the tool	2	(0.8)	15	(5.8)	23	(8.9)	122	(47.3)	96	(37.2)
The possible benefits and harms	4	(1.6)	15	(5.8)	47	(18.2)	114	(44.2)	78	(30.2)
The range of statins available	3	(1.2)	10	(3.9)	37	(14.3)	114	(44.2)	94	(36.4)
The benefits and harms of each statin	4	(1.6)	26	(10.1)	35	(13.6)	120	(46.5)	73	(28.3)
How the statins compare to each other	0	(0)	8	(3.1)	23	(8.9)	104	(40.3)	123	(47.7)

The tool presented …		
Too much information	59	(22.9)
The right amount of information	184	(71.3)
Not enough information	15	(5.8)
The information is …		
Biased toward the benefits of statins	19	(7.4)
Balanced	196	(76.0)
Biased towards the harms of statins	43	(16.7)
How likely would you be to use the tool if it was freely available?		
Very unlikely	5	(1.9)
Unlikely	10	(3.9)
Neither	35	(13.6)
Likely	112	(43.4)
Very Likely	96	(37.2)

[a] Values are presented as number and proportion of participants