Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Number of randomized clinical trials identified with including different study publication years

Journal Name	RCTs (2000-2015)	RCTs (2006-2015)	RCTs (2011-2015)	2006, 2009, 2012, 2015	2000, 2005, 2010, 2015
NEJM	578	407	209	170	161
JAMA	314	185	99	66	63
Lancet	396	240	119	102	123
JACC	1206	706	358	277	308
Circulation	1142	541	256	224	309
EHJ	754	487	223	235	221
Total	**4,390**	**2,566**	**1,264**	**1074**	**1185**

EHJ: European Heart Journal; JACC: Journal of American College of Cardiology; JAMA: Journal of American Medical Association; NEJM: New England Journal of Medicine; RCT: randomized clinical trial;

eTable 2. Level of pragmatism across different design domains

Design domains	N (%)	Mean (SD)
Eligibility Criteria	615	3.06 (0.98)
Very explanatory (1)	11 (1.8)	
Rather explanatory (>1 and <3)	233 (37.8)	
Equally pragmatic/ explanatory (3)	111 (18.0)	
Rather pragmatic (>3 and <5)	233 (37.8)	
Very pragmatic (5)	27 (4.4)	
Unclear	1 (0.2)	
Recruitment path	543	3.65 (1.18)
Very explanatory	31 (5.0)	
Rather explanatory	90 (14.6)	
Equally pragmatic/ explanatory	55 (8.9)	
Rather pragmatic	248 (40.3)	
Very pragmatic	119 (19.3)	
Unclear	73 (11.9)	
Setting	616	3.40 (1.10)
Very explanatory	20 (3.2)	
Rather explanatory	146 (23.7)	
Equally pragmatic/ explanatory	93 (15.1)	
Rather pragmatic	289 (46.9)	
Very pragmatic	68 (11.0)	
Organizational intervention	613	3.26 (1.02)
Very explanatory	15 (2.4)	
Rather explanatory	176 (28.6)	
Equally pragmatic/ explanatory	106 (17.2)	
Rather pragmatic	277 (45.0)	
Very pragmatic	39 (6.3)	
Unclear	3 (0.5)	
Flexibility of Intervention-Delivery	614	3.10 (0.99)
Very explanatory	15 (2.4)	
Rather explanatory	209 (33.9)	
Equally pragmatic/ explanatory	114 (18.5)	
Rather pragmatic	255 (41.4)	
Very pragmatic	21 (3.4)	
Unclear	2 (0.3)	
Flexibility of Intervention-Adherence	358	2.99 (1.18)
Very explanatory	34 (5.5)	
Rather explanatory	119 (19.3)	
Equally pragmatic/ explanatory	61 (9.9)	
Rather pragmatic	105 (17.0)	
Very pragmatic	39 (6.3)	
Unclear or NA	258 (41.9)	
Follow-up	615	3.16 (1.00)
Very explanatory	13 (2.1)	

Rather explanatory	197 (32.0)	
Equally pragmatic/ explanatory	116 (18.8)	
Rather pragmatic	263 (42.7)	
Very pragmatic	26 (4.2)	
Unclear	1 (0.2)	
Outcome	616	2.84 (1.24)
Very explanatory	74 (12.0)	
Rather explanatory	228 (37.0)	
Equally pragmatic/ explanatory	88 (14.3)	
Rather pragmatic	174 (28.2)	
Very pragmatic	52 (8.4)	
Analysis	611	3.79 (1.03)
Very explanatory	13 (2.1)	
Rather explanatory	85 (13.8)	
Equally pragmatic/ explanatory	80 (13.0)	
Rather pragmatic	317 (51.5)	
Very pragmatic	116 (18.8)	
Unclear	5 (0.8)	
PRECIS Summary Score, mean ± SD	616	3.26±0.70

SD: standard deviation; For all domains, the very explanatory, rather explanatory, equally explanatory/pragmatic, rather pragmatic, and very pragmatic categories were defined as the PRECIS-2 score =1, >1 and <3, =3, >3 and <5, and =5, respectively.

The Cochrane Risk of Bias score

The risk of bias in each RCT was assessed using the Cochrane Risk of Bias tool which assesses trials for the sequence generation, allocation sequence concealment, blinding of participants, personnel and outcome assessors, completeness of outcome data, selective outcome reporting, etc.[1] This tool categorizes the risk of bias in each trial to one of the three categories: high, low, and unclear.

Risk of bias was adjudicated to be low, high, and unclear, respectively in 178, 211, and 227 studies. The PRECIS-2 score was higher in the high-risk studies as compared to low-risk RCTs (eTable 3).

eTable 3. PRECIS-2 scores in studies with different levels of risk determined by Cochrane risk of bias tool

Factors	**N (%)**	**Mean Score (SD)**	**Effect size: Cohen's D**	**P-value**
Overall	616	3.26(0.70)		
Cochrane Risk of Bias				<.0001
Low risk	178(28.9)	3.29(0.66)	Ref	
High risk	211(34.3)	3.42(0.67)	0.19	
Unclear risk	227(36.9)	3.09(0.71)	-0.29	

SD: standard deviation;

eTable 4. Study characteristics between pragmatic and non-pragmatic randomized clinical trials

Factors	N (%)	Pragmatic	Not Pragmatic	P-value
Overall	**616**	**105**	**511**	
Year of publication				0.0898
2000	172 (27.9)	24 (22.9)	148 (29.0)	
2005	168 (27.3)	24 (22.9)	144 (28.2)	
2010	137 (22.2)	24 (22.9)	113 (22.1)	
2015	139 (22.6)	33 (31.4)	106 (20.7)	
Journal				<.0001
General Medicine: NEJM/Lancet/JAMA	224 (36.4)	64 (61.0)	160 (31.3)	
Cardiology: EHJ/JACC/Circulation	392 (63.6)	41 (39.0)	351 (68.7)	
Trial phase				<.0001
I/II	267 (44.5)	21 (20.8)	246 (49.3)	
III/IV	333 (55.5)	80 (79.2)	253 (50.7)	
Single Centre	185 (30.4)	15 (14.4)	170 (33.7)	<.0001
Multi-national	238 (38.8)	54 (51.9)	184 (36.1)	0.0025
Sample size, median (IQR)	297 (92, 922)	897 (304, 2332)	221 (66, 652)	<.0001
Follow-up duration, median (IQR)	6 (3, 16)	12 (5, 36)	6 (2, 13)	0.0011
Cross-over design				0.0169
No	568 (92.5)	103 (98.1)	465 (91.4)	
Yes	46 (7.5)	2 (1.9)	44 (8.6)	
Cluster-randomized				0.8452
No	609 (98.9)	104 (99.0)	505 (98.8)	
Yes	7 (1.1)	1 (1.0)	6 (1.2)	
Number of arms				0.5388
1-2	491 (79.7)	86 (81.9)	405 (79.3)	
≥3	125 (20.3)	19 (18.1)	106 (20.7)	
Type of Intervention				0.0031
Medicinal	343 (55.7)	43 (41.0)	300 (58.7)	
Procedure or device	193 (31.3)	42 (40.0)	151 (29.5)	
Behavioral or Health system intervention	80 (13.0)	20 (19.0)	60 (11.7)	
Placebo-controlled				0.0044
No	382 (62.0)	78 (74.3)	304 (59.5)	
Yes	234 (38.0)	27 (25.7)	207 (40.5)	
Blinding of participants and personnel				0.0269
No	312 (51.2)	63 (61.2)	249 (49.2)	
Yes	297 (48.8)	40 (38.8)	257 (50.8)	
Blinding of outcome assessors				0.9058
No	74 (12.7)	12 (12.4)	62 (12.8)	

Yes	507 (87.3)	85 (87.6)	422 (87.2)	
Primary outcome				<.0001
Mortality	27 (4.4)	14 (13.3)	13 (2.5)	
Mortality in a composite	168 (27.3)	51 (48.6)	117 (22.9)	
Other	421 (68.3)	40 (38.1)	381 (74.6)	
Trial results				0.0883
Neutral (negative)	180 (29.2)	37 (35.2)	143 (28.0)	
Negative for primary but positive for 2^o outcomes	56 (9.1)	13 (12.4)	43 (8.4)	
Positive for 1^o outcome	380 (61.7)	55 (52.4)	325 (63.6)	
Type of Funding				0.2637
Public Only	210 (39.3)	44 (45.8)	166 (37.9)	
Private Only	215 (40.3)	32 (33.3)	183 (41.8)	
Public + Private	109 (20.4)	20 (20.8)	89 (20.3)	

EHJ: European Heart Journal; IQR: interquartile range; JACC: Journal of American College of Cardiology; JAMA: Journal of American Medical Association; NEJM: New England Journal of Medicine; ref: reference; SD: standard deviation; In the type of funding, the private category includes both private and industry types of funding.

eTable 5. Self-identified pragmatic and explanatory trials

Self-identified pragmatism	N (%)	PRECIS-2 score Mean (SD)	Effect size; Cohen's D	P-value
Not reported	574 (93.2)	3.25 (0.68)	-ref-	<.0001
Self-identified explanatory	19 (3.08)	2.92 (0.69)	0.49	
Self-identified pragmatic	23 (3.73)	3.83 (0.78)	0.84	

SD: standard deviation; N: number;

eTable 6. PRECIS-2 score across different domains of trial design in self-identified pragmatic or explanatory randomized clinical trials and others

Domain	Self-identified Pragmatic	Self-identified Explanatory	Not reported	Δ PRECIS-2 between self-identified pragmatic group vs others
1. Eligibility	3.67	2.55	3.05	0.62
2. Recruitment	4.24	2.50	3.67	0.57
3. Setting	4.15	3.18	3.38	0.78
4. Organization	3.73	2.87	3.26	0.47
5. Intervention delivery	3.43	3.00	3.09	0.35
6. Intervention adherence	3.18	3.00	2.98	0.20
7. Follow-up	3.85	2.76	3.15	0.70
8. Primary outcome	3.63	2.71	2.81	0.82
9. Analysis	4.11	3.66	3.79	0.32

eTable 7. Trial phase, placebo use and number of sites in self-identified pragmatic and explanatory trials compared to others

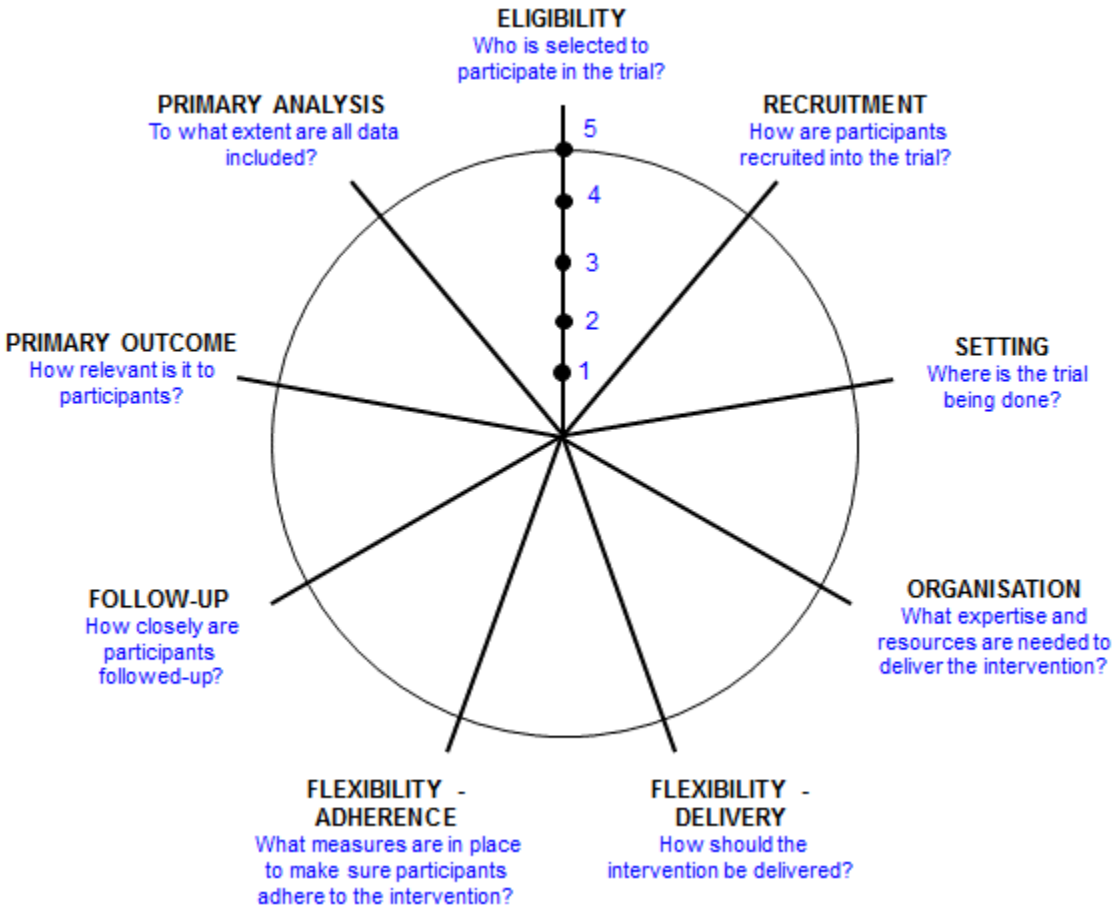
	Total	**Self-identified pragmatic**	**Self-identified explanatory**	**Not reported**	**P-value**
Total N	616	23	19	574	
Trial phase					0.0811
I/II	267 (44.5)	5 (21.7)	8 (44.4)	254 (45.4)	
III/IV	333 (55.5)	18 (78.3)	10 (55.6)	305 (54.6)	
Single site, n(%)	185 (30.4)	8 (36.4)	5 (29.4)	172 (30.2)	0.8248
Placebo controlled, n(%)	234 (38.0)	6 (26.1)	10 (52.6)	218 (38.0)	0.2109

eTable 8. Number of studies with ≥1, ≥2, and ≥3 difference between two adjudicators for each PRECIS-2 domain

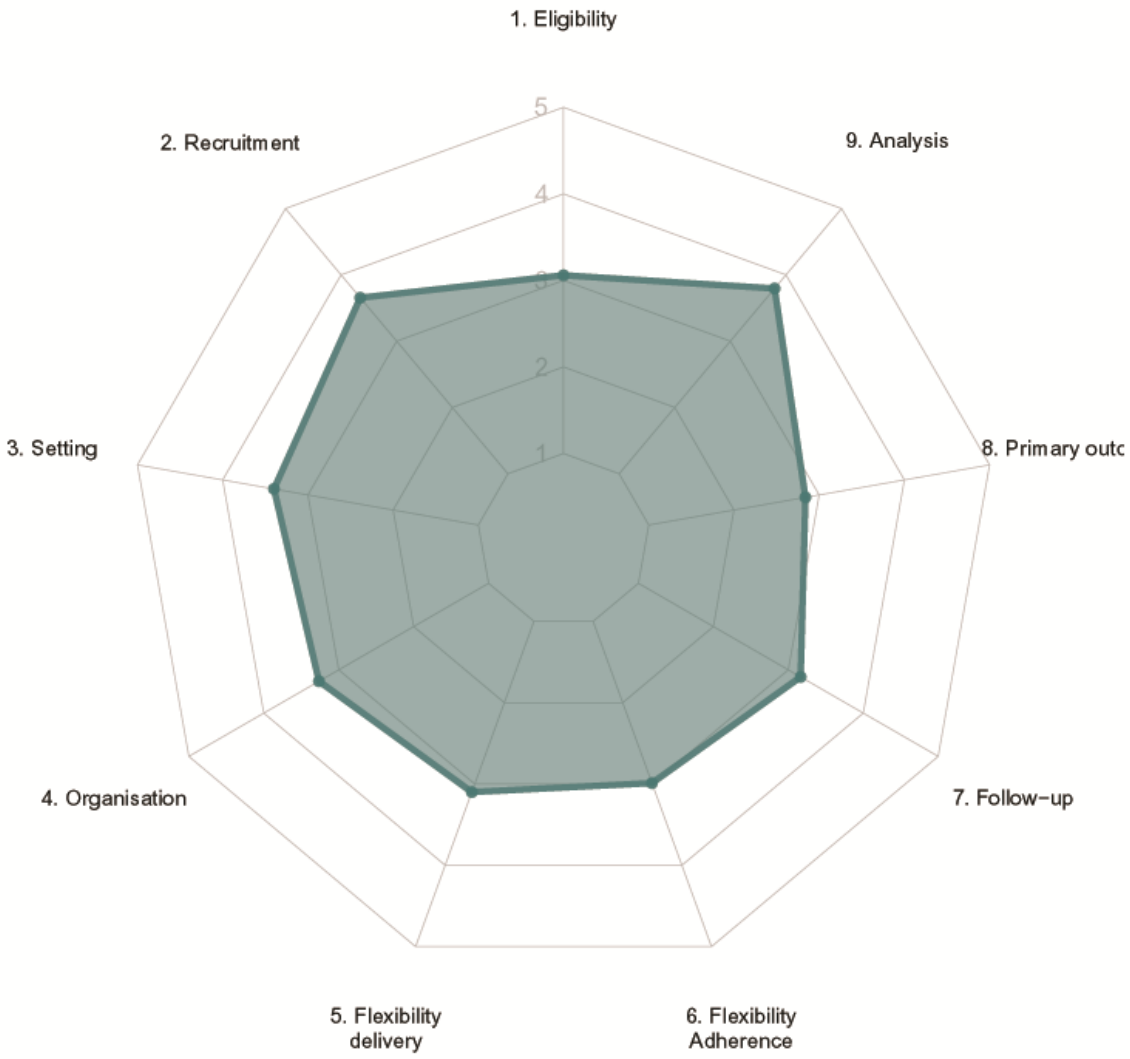
	Agreement		Difference between adjudicators			Mean (SD) difference
PRECIS domains	**Equal score**	**Both unclear**	**≥ 1**	**≥ 2**	**≥ 3**	
Eligibility Criteria	186 (30.2)	1 (0.2)	429 (69.6)	226 (36.7)	107 (17.4)	1.27 (1.34)
Recruitment path	350 (56.8)	73 (11.9)	193 (31.3)	97 (15.7)	44 (7.1)	0.62 (1.0)
Setting	218 (35.4)	-	398 (64.6)	197 (32.0)	82 (13.3)	1.13 (1.10)
Organizational intervention	212 (34.4)	3 (0.5)	401 (65.1)	205 (33.3)	87 (14.1)	1.15 (1.1)
Flexibility of Intervention-Delivery	220 (35.7)	2 (0.3)	394 (64.0)	178 (28.9)	57 (9.3)	1.03 (0.98)
Flexibility of Intervention-Adherence	230 (37.3)	258 (41.9)	128 (20.8)	73 (11.9)	35 (5.7)	0.68 (1.06)
Follow-up	218 (35.4)	1 (0.2)	397 (64.4)	177 (28.7)	56 (9.1)	1.04 (1.0)
Outcome	196 (31.8)	-	420 (68.2)	234 (38.0)	121 (19.6)	1.31 (1.20)
Analysis	237 (38.5)	5 (0.8)	374 (60.7)	175 (28.4)	65 (10.6)	1.04 (1.08)

In a sensitivity analysis we evaluated studies with a difference between the assigned scores for each domain by two adjudicators and 20.8-69.6%, 11.9-38.0%, and 5.7-19.6% of studies respectively had a difference between adjudicated scores equal or greater than 1, 2, and 3 across different domains of trial design (eTable 8).

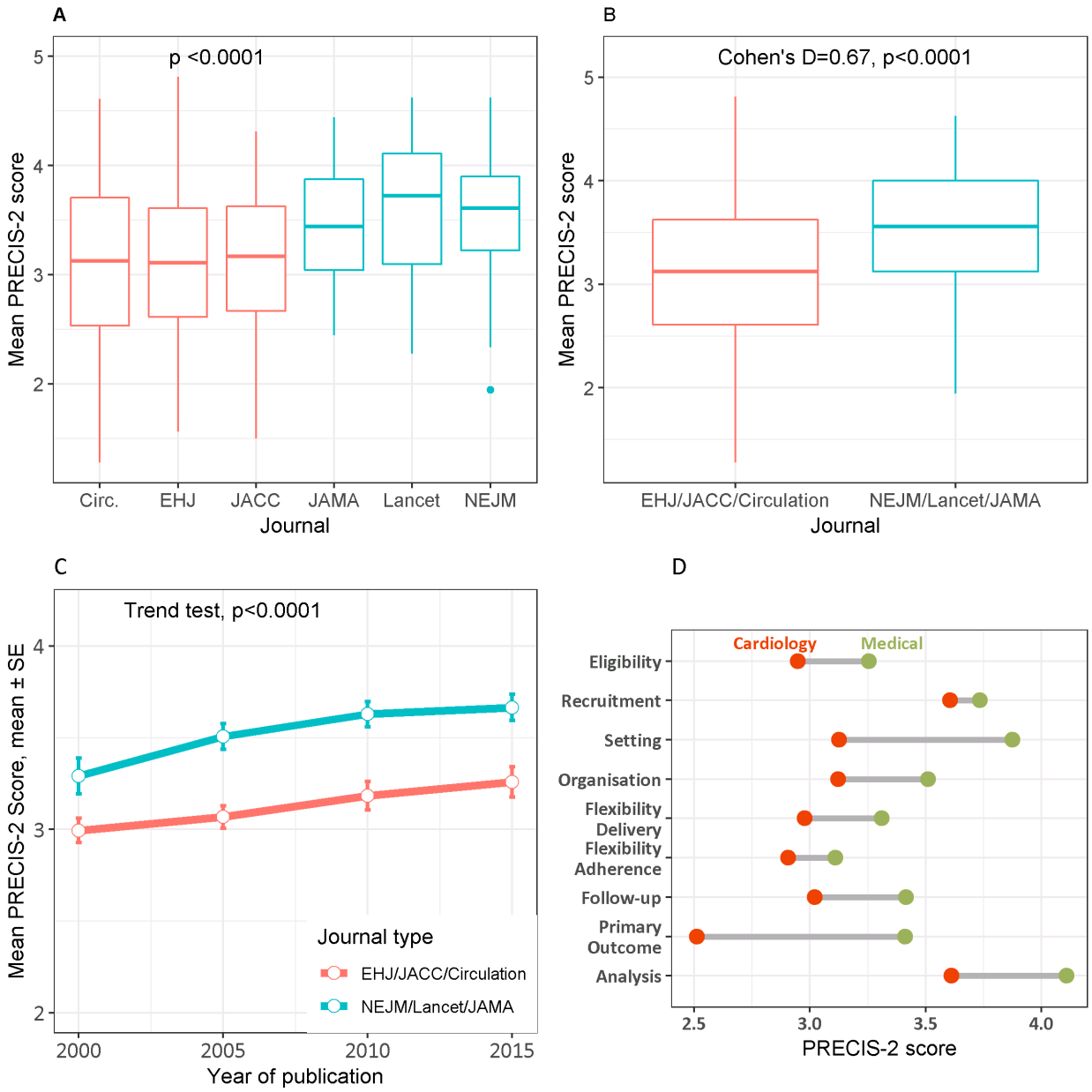
eFigure 1. The PRagmatic-Explanatory Continuum Indicator Summary 2 (PRECIS-2) wheel



eFigure 2. PRECIS-2 score across different domains of trial design

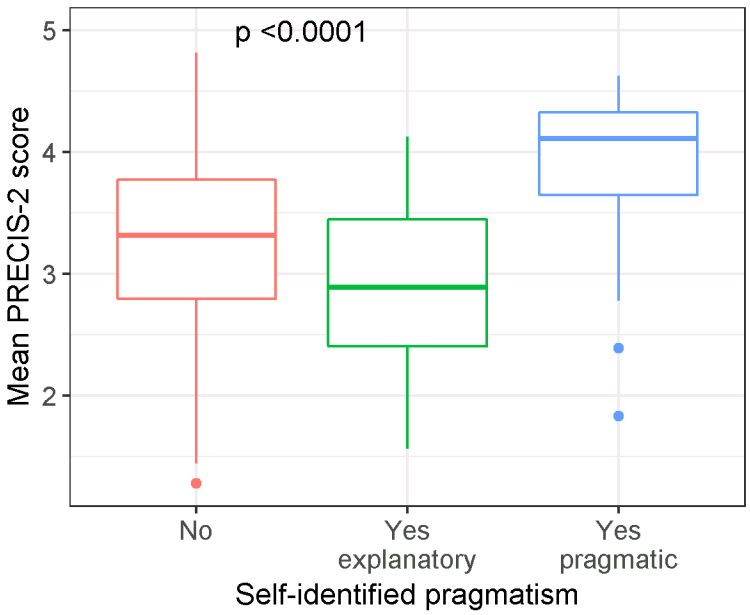


eFigure 3. The level of pragmatism between trials published in different journals (e3A) and journal categories (e3B), the trend over time of pragmatism (e3C), and PRECIS-2 scores across different domains between general medicine and cardiology journals (e3D)



EHJ: European Heart Journal; JACC: Journal of American College of Cardiology; JAMA: Journal of American Medical Association; NEJM: New England Journal of Medicine;

eFigure 4. PRECIS-2 score between self-identified pragmatic and explanatory trials compared to others



eReferences.

1. Higgins JP, Altman DG, Gotzsche PC, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *Bmj.* 2011;343:d5928.