

# THE LANCET

## Global Health

### Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: SPRINT INDIA trial collaborators. Secondary prevention with a structured semi-interactive stroke prevention package in INDIA (SPRINT INDIA): a multicentre, randomised controlled trial. *Lancet Glob Health* 2023; **11**: e425–35.

**SUPPLEMENTARY FILE****CONTENTS****Page No**

1. Table 1 shows medication history of the patients between the two groups at baseline-1
2. Table 2 shows baseline demographic characteristics, risk factors and stroke characteristics between the two groups who had completed 1 year follow up - 2 to 3
3. Table 3 shows median time of event - 4
4. Table 4 shows analysis of Serious Adverse Events (SAE)- 5
5. Table 5 shows number of events - 6
6. Table 6 shows the secondary outcomes at 6 months - 7
7. Table 7 shows baseline demographic characteristics, risk factors and stroke characteristics between the two groups who did not complete 1 year follow up – 8 to 9
8. Figure 1 shows intervention material content - 10
9. Figure 2 shows process of intervention and standard of care - 11
10. Figure 3 shows recruitment trend from April-2018 to Nov-2021 - 12
11. Figure 4 shows median time to event - 13
12. Figure 5 shows forest plot for sub-group analysis – 14
13. Medication adherence questionnaire - 15
14. List of collaborators - 16 to 18
15. Data sharing - 19

**SUPPLEMENTARY FILE**

**Table 1 shows medication history of the patients between the two groups at baseline**

	<b>Intervention (N=2148)</b>	<b>Control (N=2150)</b>	<b>p-value</b>
Anti-platelets	1580 (73.6)	1587 (73.8)	0.949
Anti-coagulants	241 (11.2)	260 (12.1)	0.387
Lipid lowering medications	1627 (75.7)	1650 (76.7)	0.508
Diabetic medications	774 (36.0)	772 (35.9)	0.922
Antihypertensive medications	1470 (68.4)	1414 (65.8)	0.068

## SUPPLEMENTARY FILE

**Table 2 shows baseline demographic characteristics, risk factors and stroke characteristics between the two groups who had completed 1 year follow up**

	<b>Intervention (N=1502)</b>	<b>Control (N=1538)</b>	<b>p-value</b>
<b>Sex</b>			
Male	1075 (71.6)	1130 (73.6)	0.217
Female	427 (28.4)	406 (26.4)	
<b>Age (years)</b>			
Mean±SD	56±12.6	55±12.9	0.558
<b>Highest level of education completed</b>			
No schooling	156 (7.3)	121 (5.6)	0.664
Below high school	1178 (54.8)	1172 (54.5)	
High school and above	794 (37.0)	830 (38.6)	
<b>Region</b>			
Urban	790 (52.6)	830 (54.0)	0.426
Rural	712 (47.4)	706 (46.0)	
<b>Medical history</b>			
Hypertension	1036 (69.0)	1029 (67.0)	0.242
Diabetes Mellitus	619 (41.2)	636 (41.4)	0.913
Previous TIA	48 (3.2)	31 (2.0)	0.041
Coronary artery disease	148 (9.9)	162 (10.5)	0.528
Dyslipidaemia	292 (19.4)	290 (18.9)	0.695
Non valvular atrial fibrillation	31 (2.1)	33 (2.1)	0.871
Valvular heart disease	34 (2.3)	33 (2.1)	0.829
Symptomatic Intracranial Atherosclerosis	35 (2.3)	37 (2.4)	0.887
Symptomatic Extra cranial Atherosclerosis	16 (1.1)	24 (1.6)	0.229
Obesity	105 (7.0)	115 (7.5)	0.598
Others	81 (5.4)	71 (4.6)	0.330
<b>Stroke type</b>			
Ischaemic	1265 (84.2)	1286 (83.7)	0.709
Haemorrhagic	237 (15.8)	250 (16.3)	
<b>NIHSS score</b>			
Mean ± S.D.	4±3.7	4±3.8	0.107
Median (Q1-Q3)	3 (1-5)	3 (1-5)	
<5	1013 (67.4)	999 (65.0)	0.239
5-10	385 (25.6)	429 (27.9)	
11-15	88 (5.9)	83 (5.4)	

## SUPPLEMENTARY FILE

≥15	16 (1.1)	25 (1.6)	
<b>TOAST Classification (n=2551)</b>			
Large Artery Atherosclerosis	135 (10.7)	156 (12.1)	0.297
Cardio Embolism	416 (32.9)	386 (30.0)	
Small Artery Occlusion	35 (2.8)	48 (3.7)	
Others	351 (27.7)	368 (28.6)	
Undetermined	328 (25.9)	328 (25.5)	
<b>OCSP Classification</b>			
Total anterior circulation syndrome	167 (13.2)	171 (13.3)	0.342
Partial anterior circulation syndrome	629 (49.7)	647 (50.3)	
Posterior circulation syndrome	278 (22.0)	304 (23.6)	
Lacunar syndrome	191 (15.1)	164 (12.8)	
<b>Revascularization therapy</b>			
Revascularization therapy given	132 (8.8)	104 (6.8)	0.038
IV tPA initiated	106 (7.1)	87 (5.7)	0.508
Endovascular thrombectomy done	34 (2.3)	26 (1.7)	0.894

TIA= Transient Ischemic Attack, NIHSS= National Institute of Health Stroke Scale, TOAST= Acute Stroke Treatment, OCSP= Oxfordshire Community Stroke Project IV= Intravenous Thrombolysis tPA= Tissue Plasminogen Activator, Q1= First Quartile, Q3= Third Quartile, SD= Standard Deviation

**SUPPLEMENTARY FILE****Table 3 shows median time of event**

	Median time (months)	95% Confidence Interval
Intervention	14.7	12.1- 17.3
Control	14.6	13.3-15.9
p-value	0.363	

**SUPPLEMENTARY FILE**

**Table 4 shows analysis of Serious Adverse Events (SAE)**

	<b>Intervention (N=2148)</b>	<b>Control (N=2150)</b>	<b>p-value</b>
<b>Serious Adverse Events (Overall)</b>	191 (8.9)	172 (8.0)	0.293
Systemic infection	8 (0.4)	6 (0.3)	0.294
Re-hospitalization	75 (3.5)	68 (3.2)	
GI Haemorrhage	3 (0.1)	5 (0.2)	
Death	89 (4.1)	68 (3.2)	
Others	16 (0.7)	25 (1.2)	

## SUPPLEMENTARY FILE

Table 5 shows number of events

	Number of events		Number of patients with one or multiple events				
	Intervention (N=2148)	Control (N=2150)	Intervention (N=2148)	Control (N=2150)	P value	Unadjusted Odds ratio (95% C.I Lower- Upper)	Adjusted Odds ratio (95% C.I Lower- Upper)
<b>Primary Outcome (Overall)</b>	128	113	119 (5.5)	106 (4.9)	0.370	1.13 (0.86-1.48)	1.12 (0.85-1.47)
High Risk transient Ischemic Attack	9	7	5 (0.2)	7 (0.3)	0.694	0.72 (0.23-2.27)	0.73 (0.23-2.31)
Ischemic Stroke	40	42	39 (1.8)	40 (1.9)		0.98 (0.63-1.53)	0.97 (0.62-1.52)
Intracerebral haemorrhage	6	2	5 (0.2)	2 (0.1)		2.52 (0.49-13.0)	2.52 (0.49-13.05)
Acute Coronary Syndrome	11	7	9 (0.4)	7 (0.3)		1.30 (0.48-3.48)	1.27 (0.47-3.43)
Death	66	55	61 (2.8)	50 (2.3)		1.23 (0.84-1.80)	1.22 (0.83-1.78)



## SUPPLEMENTARY FILE

Table 6 shows the secondary outcomes at 6 months

	Month 6				
	Intervention (n=1830)	Control group (n=1848)	P-value	Unadjusted Odds ratio (95% C.I Lower- Upper)	Adjusted Odds ratio (95% C.I Lower-Upper)
<b>MRS</b>					
Good Outcome (0-2)	1534 (83.8)	1562 (84.5)	0.562	1.00	1.00
Bad outcome (3-5)	296 (16.2)	286 (15.5)		1.05 (0.88-1.26)	0.90 (0.42-1.89)
<b>SBP</b>	131±14.6	131±15.0	0.781	1.00 (0.99-1.01)	1.00 (0.98-1.01)
<b>DBP</b>	82±9.3	82±8.7	0.911	1.00 (0.99-1.01)	0.99 (0.96-1.02)
<b>BMI</b>	24.9±4.3	24.9±6.6	0.897	1.00 (0.99-1.01)	1.00 (0.99-1.01)
<b>Alcohol intake</b>	78 (4.3)	108 (5.8)	<b>0.029</b>	0.72 (0.53-0.97)*	0.744 (0.55-0.99)*
<b>Smoking</b>	72 (3.9)	107 (5.8)	<b>0.009</b>	0.67 (0.49-0.91)*	0.69 (0.50-0.94)*
<b>FBS</b>	118.6±40.5	120.4±45.3	0.248	0.99 (0.98-1.00)	1.00 (0.99-1.01)
<b>Lipid Profile</b>					
Cholesterol	151.1±39.0	152.6±40.1	0.333	1.00 (0.99-1.00)	1.00 (0.99-1.01)
Triglyceride	133.8±65.9	136.9±76.3	0.462	1.00 (0.99-1.00)	1.00 (0.99-1.00)
LDL	85.0±32.3	85.4±33.7	0.791	1.00 (0.99-1.01)	0.99 (0.98-1.01)
HDL	46.7±23.1	45.5±17.8	0.146	1.00 (0.99-1.00)	1.00 (0.99-1.01)
<b>Have you missed the medication</b>					
Yes	101 (5.5)	121 (6.5)	0.190	0.83 (0.63-1.09)	0.84 (0.64-1.11)
No	1729 (94.5)	1727 (93.5)		1.00	1.00
<b>If yes reason</b>					
Forgot	27 (26.7)	24 (19.8)	0.336	1.80 (0.82-3.94)	1.86 (0.84-4.13)
Stopped	20 (19.8)	32 (26.4)		1.33 (0.68-2.59)	1.34 (0.69-2.62)
Others	54 (53.5)	65 (53.8)		1.00	1.00
<b>Physical activity met (minutes)</b>	3360 (1330-6880)	3360 (1400-6720)	0.788	1.00 (1.00-1.00)	1.00 (1.00-1.00)

## SUPPLEMENTARY FILE

**Table 7 shows baseline demographic characteristics, risk factors and stroke characteristics between the two groups who did not complete 1 year follow up**

	<b>Intervention (N=614)</b>	<b>Control (N=646)</b>	<b>p-value</b>
<b>Sex</b>			
Male	449 (73.1)	468 (72.4)	0.786
Female	165 (26.9)	178 (27.6)	
<b>Age (years)</b>			
Mean±SD	56±12.9	56±12.9	0.541
<b>Highest level of education completed</b>			
No schooling	40 (6.5)	46 (7.1)	0.258
Below high school	359 (58.5)	348 (53.9)	
High school and above	215 (35.0)	252 (39.0)	
<b>Region</b>			
Urban	320 (52.1)	344 (53.3)	0.687
Rural	294 (47.9)	302 (46.7)	
<b>Medical history</b>			
Hypertension	359 (58.5)	421 (65.2)	0.014
Diabetes Mellitus	252 (41.0)	260 (40.2)	0.774
Previous TIA	22 (3.6)	16 (2.5)	0.251
Coronary artery disease	67 (10.9)	74 (11.5)	0.760
Dyslipidaemia	101 (16.4)	86 (13.3)	0.117
Non valvular atrial fibrillation	10 (1.6)	19 (2.9)	0.120
Valvular heart disease	23 (3.7)	27 (4.2)	0.693
Symptomatic Intracranial Atherosclerosis	19 (3.1)	20 (3.1)	0.999
Symptomatic Extra cranial Atherosclerosis	8 (1.3)	13 (2.0)	0.325
Obesity	29 (4.7)	42 (6.5)	0.171
Others	34 (5.5)	31 (4.8)	0.538
<b>Stroke type</b>			
Ischaemic	501 (81.6)	516 (79.9)	0.439
Haemorrhagic	113 (18.4)	130 (20.1)	
<b>NIHSS score</b>			
Mean ± S.D.	7±5.3	7±5.2	0.150
Median (Q1-Q3)	6 (3-10)	5 (3-9)	
<5	245 (39.9)	231 (35.8)	0.313
5-10	246 (40.1)	263 (40.7)	
11-15	85 (13.8)	100 (15.5)	

## SUPPLEMENTARY FILE

≥15	38 (6.2)	52 (8.0)	
<b>TOAST Classification (n=2551)</b>			
Large Artery Atherosclerosis	76 (15.2)	73 (14.1)	0.896
Cardio Embolism	181 (36.1)	191 (37.0)	
Small Artery Occlusion	15 (3.0)	16 (3.1)	
Others	98 (19.6)	111 (21.5)	
Undetermined	131 (26.1)	125 (24.2)	
<b>OCSP Classification</b>			
Total anterior circulation syndrome	65 (13.0)	74 (14.3)	0.600
Partial anterior circulation syndrome	246 (49.1)	267 (51.7)	
Posterior circulation syndrome	109 (21.8)	102 (19.8)	
Lacunar syndrome	81 (16.2)	73 (14.1)	
<b>Revascularization therapy</b>			
Revascularization therapy given	59 (9.6)	53 (8.2)	0.595
IV tPA initiated	52 (8.5)	45 (7.0)	0.508
Endovascular thrombectomy done	14 (2.3)	13 (2.0)	0.678

TIA= Transient Ischemic Attack, NIHSS= National Institute of Health Stroke Scale, TOAST= Acute Stroke Treatment, OCSP= Oxfordshire Community Stroke Project IV= Intravenous Thrombolysis tPA= Tissue Plasminogen Activator, Q1= First Quartile, Q3= Third Quartile, SD= Standard Deviation





























## SUPPLEMENTARY FILE

**Figure 1 shows intervention material content**

Short messaging services	
Improving physical activity	Moving every hour for 2 to 5 min improves circulation in the legs and brain. Try to keep moving throughout the daytime.
Blood pressure control	If your blood pressure is on target today, it may be because of the low salt intake and medications, congratulations and keep it up.
Diabetes control	Medications alone are not enough to lower high blood sugar, daily exercise and low sugar meals are equally important.
Video scripts (excerpts)	
India, Lets Walk ! With Gandhiji	<p>Man standing alone in a garden contemplating whether to exercise today or not. Just then Mahatma Gandhi appears from nowhere in front of him.</p> <p>Mahatma Gandhi: Hello Son, how are you?</p> <p>Man: Bapu it is you! After so many years of independence.</p> <p>Mahatma Gandhi: Son, have you really received your freedom?</p> <p>Man: Yes, I am master of my own will and I can do whatever I wish.</p> <p>Mahatma Gandhi: Okay plesase run for 2 minutes</p> <p>Man tries but huffs and puffs.</p> <p>.....</p> <p>Man: These restrictions are no less than a Satyagraha. But Bapu who will lead us in this Satyagraha ?</p> <p>Mahatma Gandhi: You have to be the leader of your life. Everybody will have to do it on their own. Only then my vision of a healthy India will be realized and you will receive your freedom in true sense.</p>
Medicines-your friends	<p>A family (including husband, wife, daughter and son-in-law) is rowing a boat together in a beautiful lake.</p> <p>Husband: Today I am very happy. My body is healthy and active. I do not want anything more from my life. But last year, I did not feel the same.</p> <p>A flashback scene of an ambulance and an emergency ward.</p> <p>.....</p> <p>Son-in-law: We purchase monthly medication one week in advance.</p> <p>Husband: Sometimes I forget to take my medicines but my children have taught me how to set reminders on my phone.</p> <p>Daughter: We just want to tell you that medicines are your friends.</p> <p>Wife: Good friends bring happiness in your life.</p> <p>Husband: In the same way, medicines help in making life happy.</p> <p>All together: Medicines are your friends.</p>

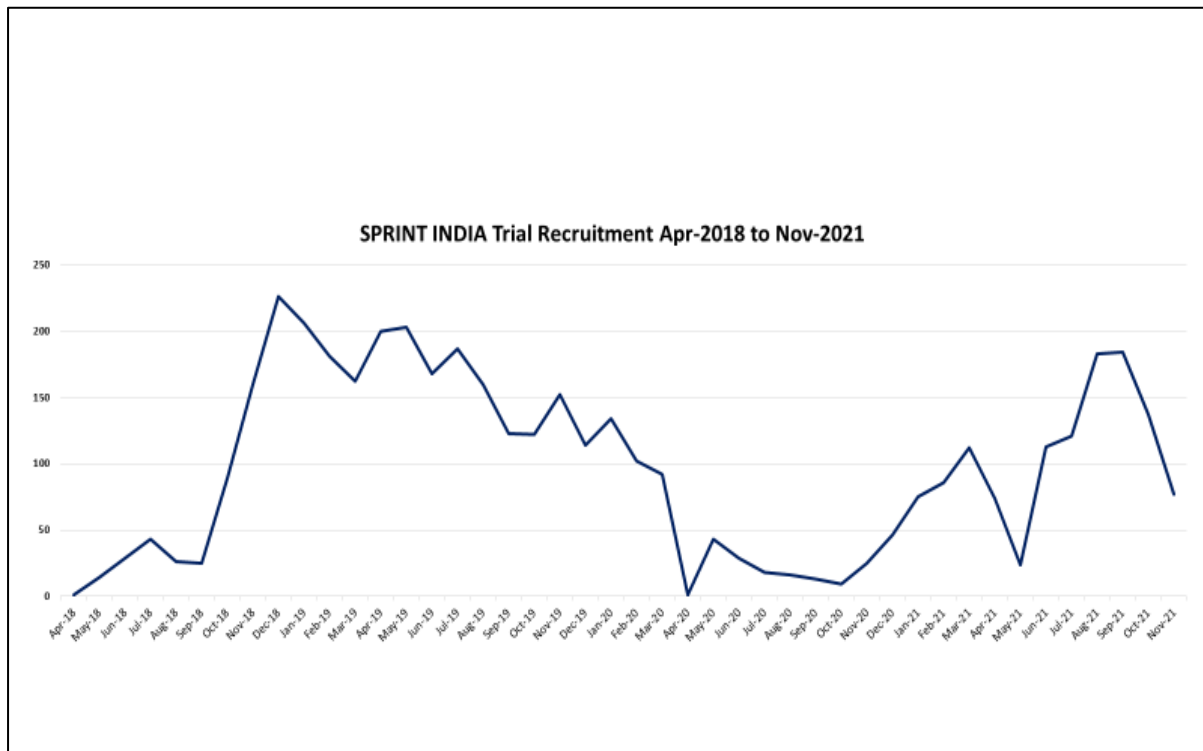
## SUPPLEMENTARY FILE

Figure 2 shows process of intervention and standard of care

Time Line	Structured Semi-interactive Stroke Prevention Package	Control Treatment
Randomization		
Baseline (time 0)	   	
0-6 weeks	   	
6 weeks to 6 months	   	
6 months to 1 year	   	
1 Year	Measurement of Outcome	
	Receive daily short messages for first 6 weeks, reminders about medication and motivation	
	Receive twice weekly short messages for first 6 months, reminders about medication and motivation	
	Receive once weekly short messages from 6 months to 1 year, reminders about medication and motivation	
	Read and perform activities in Work Book completing weekly task for each week for first 6 weeks	
	Monthly revision of the work book concepts From 6 weeks to 1 year	
	Receive stroke prevention videos weekly for the first six weeks	
	Receive stroke prevention videos monthly from 6 weeks to 1 year	
	All patients in both groups will receive antiplatelet/anticoagulant therapy and risk factor management	

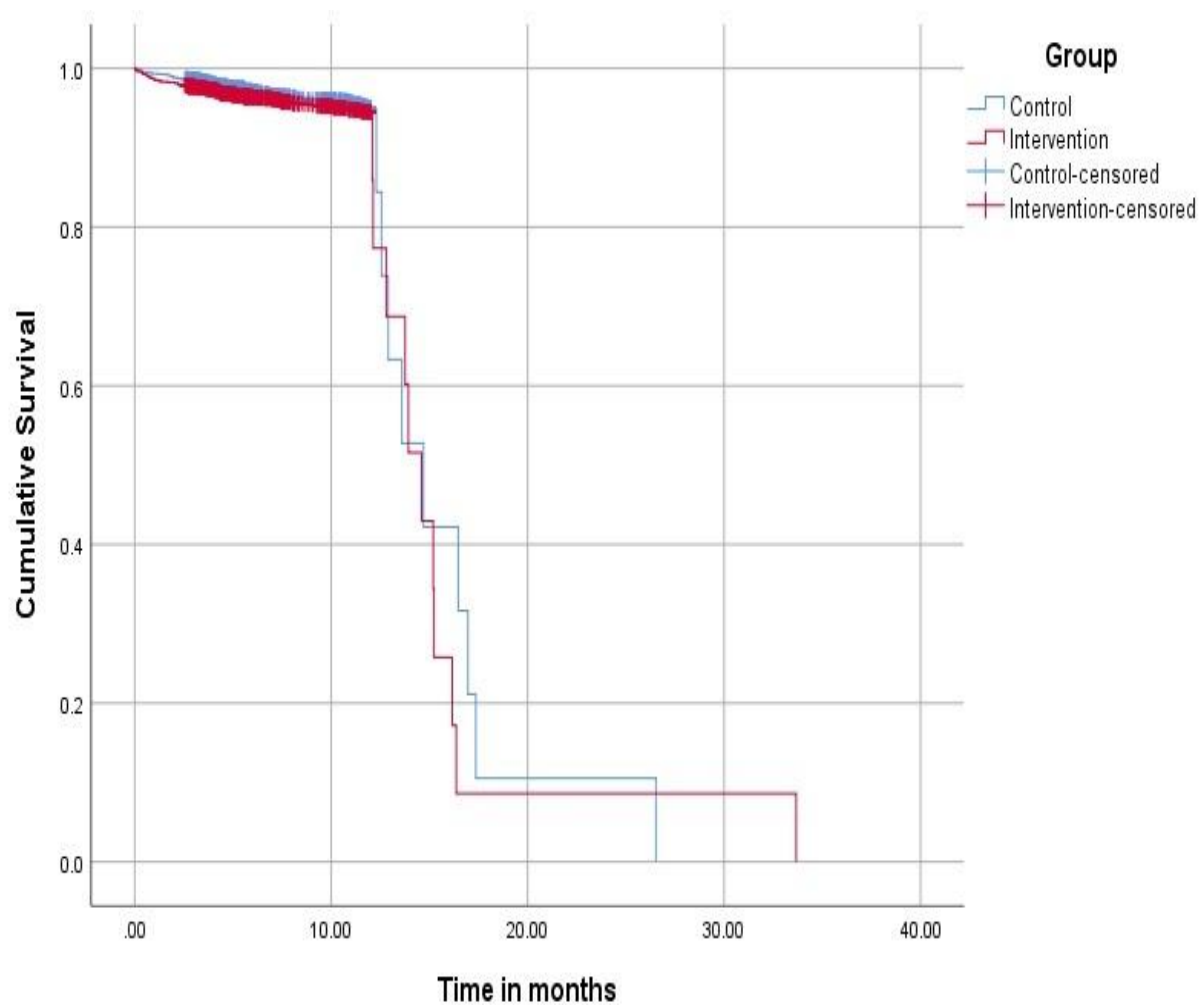
### SUPPLEMENTARY FILE

Figure 3 shows recruitment trend from April-2018 to Nov-2021



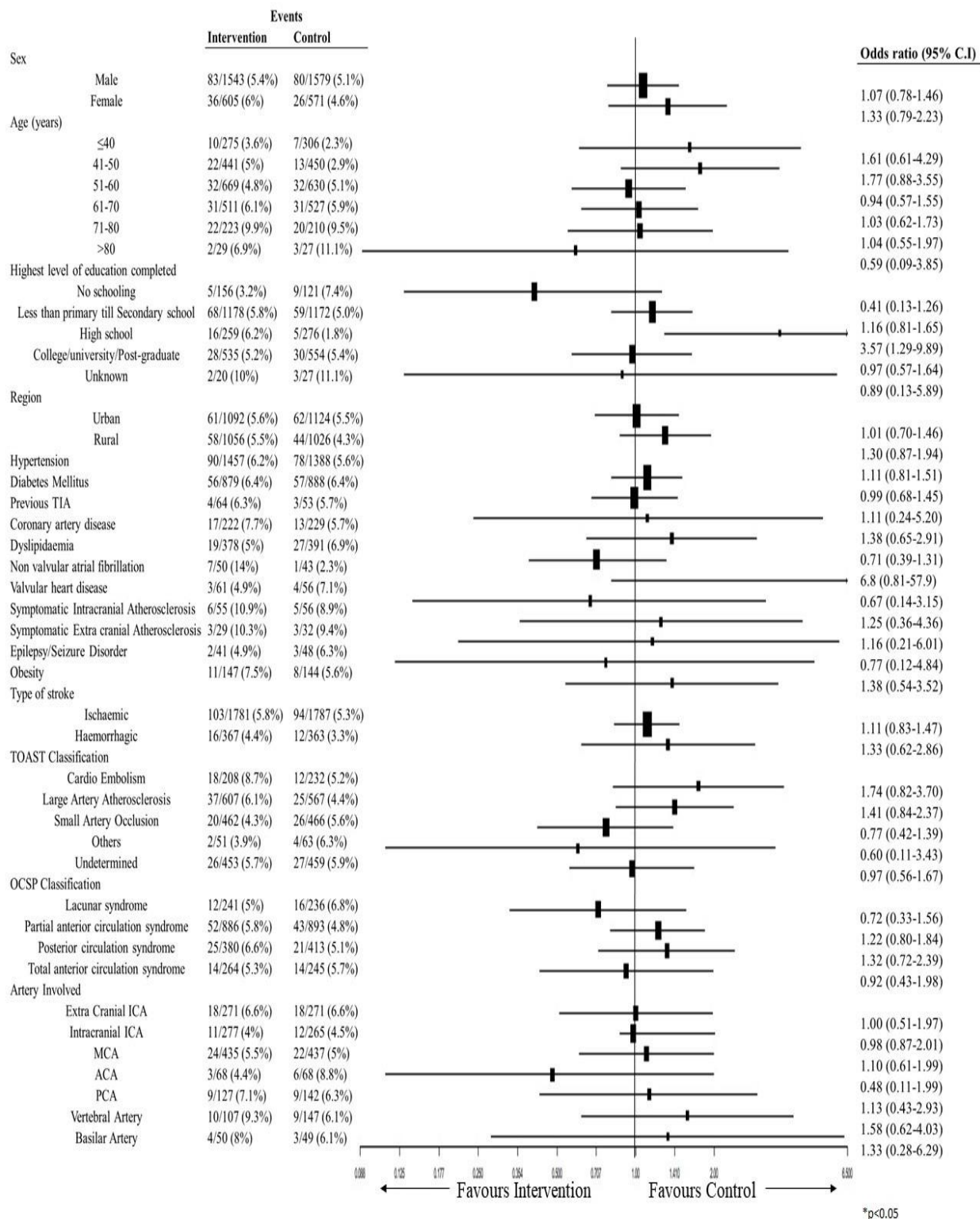
## SUPPLEMENTARY FILE

Figure 4 shows median time to event



SUPPLEMENTARY FILE

Figure 5 shows forest plot for sub-group analysis





**SUPPLEMENTARY FILE**

**Medication adherence questionnaire**

Is the patient taking the same medications as at the time of discharge?	Yes		No																	
Change in medications compared to discharge	Yes		No																	
If Yes, it is																				
<table border="1"> <thead> <tr> <th data-bbox="624 512 831 573">Medication</th> <th data-bbox="836 512 999 573">Dosage</th> <th data-bbox="1003 512 1190 573">Frequency</th> <th data-bbox="1195 512 1406 573">Comments</th> </tr> </thead> <tbody> <tr> <td data-bbox="624 580 831 707"></td> <td data-bbox="836 580 999 707"></td> <td data-bbox="1003 580 1190 707"></td> <td data-bbox="1195 580 1406 707"></td> </tr> <tr> <td data-bbox="624 714 831 842"></td> <td data-bbox="836 714 999 842"></td> <td data-bbox="1003 714 1190 842"></td> <td data-bbox="1195 714 1406 842"></td> </tr> <tr> <td data-bbox="624 848 831 969"></td> <td data-bbox="836 848 999 969"></td> <td data-bbox="1003 848 1190 969"></td> <td data-bbox="1195 848 1406 969"></td> </tr> </tbody> </table>					Medication	Dosage	Frequency	Comments												
Medication	Dosage	Frequency	Comments																	
Concomitant medications	Yes		No																	
If Yes, it is																				
<table border="1"> <thead> <tr> <th data-bbox="624 1077 831 1137">Medication</th> <th data-bbox="836 1077 999 1137">Dosage</th> <th data-bbox="1003 1077 1190 1137">Frequency</th> <th data-bbox="1195 1077 1406 1137">Comments</th> </tr> </thead> <tbody> <tr> <td data-bbox="624 1144 831 1272"></td> <td data-bbox="836 1144 999 1272"></td> <td data-bbox="1003 1144 1190 1272"></td> <td data-bbox="1195 1144 1406 1272"></td> </tr> <tr> <td data-bbox="624 1279 831 1406"></td> <td data-bbox="836 1279 999 1406"></td> <td data-bbox="1003 1279 1190 1406"></td> <td data-bbox="1195 1279 1406 1406"></td> </tr> </tbody> </table>					Medication	Dosage	Frequency	Comments												
Medication	Dosage	Frequency	Comments																	

## SUPPLEMENTARY FILE

### List of collaborators

	First and Middle name	Surname
<b>Investigators and Coinvestigators</b>	Jeyaraj Durai	Pandian
	Mahesh Pundlik	Kate
	Padmavathyamma Narayanapillai	Sylaja
	Dheeraj	Khurana
	Vijaya	Pamidimukkala
	Biman Kanti	Ray
	Vivek Keshavan	Nambiar
	Sanjith	Aaron
	Gaurav Kumar	Mittal
	Sundarachary	Nagarjunakonda
	Aparna Ramakrishna	Pai
	Sankar Prasad	Gorthi
	Somasundaram	Kumaravelu
	Yerasu Muralidhar	Reddy
	Sunil	Narayan
	Nomal Chandra	Borah
	Rupjyoti	Das
	Girish Baburao	Kulkarni
	Vikram	Huded
	Thomas	Mathew
	M Vasantha Padma	Srivastava
	Rohit	Bhatia
	Pawan Tarkeshwarnath	Ojha
	Jayanta	Roy
	Sherly Mary	Abraham
	Anand Girish	Vaishnav
	Arvind	Sharma
	Shaikh Afshan	Jabeen
	Abhishek	Pathak
	Sanjeev Kumar	Bhoi
	Sudhir	Sharma
	Sulena	Sulena
	Aralikatte Onkarappa	Saroja
	Neetu	Ramrakhiani
	Madhusudhan Byadarahalli	Kempegowda
	Sapna Erat	Sreedharan
	Gautam	Das
	Tina	George
	Ivy	Sebastian
	Rajeshwar	Sahonta

**SUPPLEMENTARY FILE**

	Shyam Krishnakumar	Jaiswal
	Lalitha	Pidaparthi
	Rajeshwari	Aghoram
	Jemin Jeyachandra	Webster
	Rakesh Hasmukhlal	Shah
	Manka	Jha
	Karkal Ravishankar	Niak
<b>Central Coordinating Team</b>	Deepti	Arora
	Shweta Jain	Verma
	Rahul	Huilgol
	Aneesh	Dhasan
	Vishnu	Renjith
<b>Statistical Analysis Team</b>	Himani	Khatner
	Prabhakaran	Sarma
<b>Site Coordinators</b>	Sadasivan Laila	Visakh
	Sukhmandeep	Kaur
	Tagallamudi Nagamalleswara	Rao
	Venkatesh	Dumpala
	Gargi	Podder
	Arindam	Biswas
	Karthika	Rani
	Nishanthini	Dhamodharan
	Shilpa	Sekhar
	Satish Kumar	Chinka
	Varsha Aroor	Prabhu
	Farhaz	Zaha
	Sarvotham	Ramanathan
	Deepika	Pabpu
	Nupur	Choudhury
	Ramya	Ramanathan
	Saji K	James
	Neha	Kuthalia
	Sakshi	Sharma
	Mayuri Ramchandra	Gaikwad
	Purbita	Sen
	Sumita	Basumatary
	Rachana Dhruvesh	Bhatt
	Dipal	Patel
	Mareena	Cyriac
	Sasmita	Swain
	Narinder	Kumar
	Amaresh	Kurubara

**SUPPLEMENTARY FILE**

	Devang	Sharma
<b>Indian Council of Medical Research, New Delhi</b>	Meenakshi	Sharma
	Rupinder	Dhaliwal
<b>Steering Committee</b>	Kurupath	Radhakrishnan
	Jagarlapudi Murali Krishna	Murthy
	Prem	Pais
	Denis	Xavier
	Parthasarathy	Satishchandra
	Subash	Kaul
	Pankaj	Seth
	Vishnubhatla	Sreenivas
	Ganesh	Karthikeyan
	Niveditha	Devasenapathy
	Trichur	Raju
<b>Data Safety and Monitoring Board</b>	Lalit	Dandona
	Dorairaj	Prabhakaran
	Pooja	Khatri
	Yoko	Palesch
	Andrew	Demchuk
	Himani	Khatler
	Prabhakaran	Sarma
<b>Event Adjudication Committee</b>	Suresh	Chandran
	Rajneesh Kumar	Calton
	Jacob	George

## SUPPLEMENTARY FILE

## Data Sharing

Will individual participant data be available (including data dictionaries)?	Yes
What data in particular will be shared?	All of the individual participant data collected during the trial, after de-identification Individual participant data that underlie the results reported in this article, after de-identification (text, tables, figures, and appendices)
What other documents will be available?	Study protocol, statistical analysis plan, informed consent form, case record form
When will data be available (start and end dates)?	Immediately following publication; no end date
With whom?	Anyone who wishes to access the data for further research in this field after signing an agreement
For what types of analyses?	Metaanalysis and observational studies
By what mechanism will data be made available?	Proposals should be directed to <a href="mailto:jeyarajpandian@hotmail.com">jeyarajpandian@hotmail.com</a> ; to gain access, data requestors will need to provide the details for the purpose of the study and analysis