

## Supplementary Online Content

Golledge J, Pinchbeck J, Tomee SM, et al. Efficacy of telmisartan to slow growth of small abdominal aortic aneurysms: a randomized clinical trial. *JAMA Cardiol*. Published online August 26, 2020. doi:10.1001/jamacardio.2020.3524

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

**eTable 1. Adherence to allocated medication**

Time since randomization	Telmisartan		Placebo	
	Number assessed (%)	Taking $\geq$ 80% tablets (%)	Number assessed (%)	Taking $\geq$ 80% tablets (%)
3 Months	83 (78)	77 / 83 (93)	78 (77)	72 / 78 (92)
6 Months	79 (75)	72 / 79 (91)	79 (78)	77 / 79 (97)
One Year	72 (68)	66 / 72 (92)	73 (72)	69 / 73 (95)
18 Months	67 (63)	61 / 67 (91)	63 (62)	58 / 63 (92)
Two Years	76 (72)	68 / 76 (89)	68 (67)	62 / 68 (91)

Treatment adherence assessed by pill counting. Table shows the number of participants who had capsules counted, and the proportion who were taking  $\geq$ 80% of the study medications.

**eTable 2. Effect of telmisartan on health-related quality of life at the end of the treatment period**

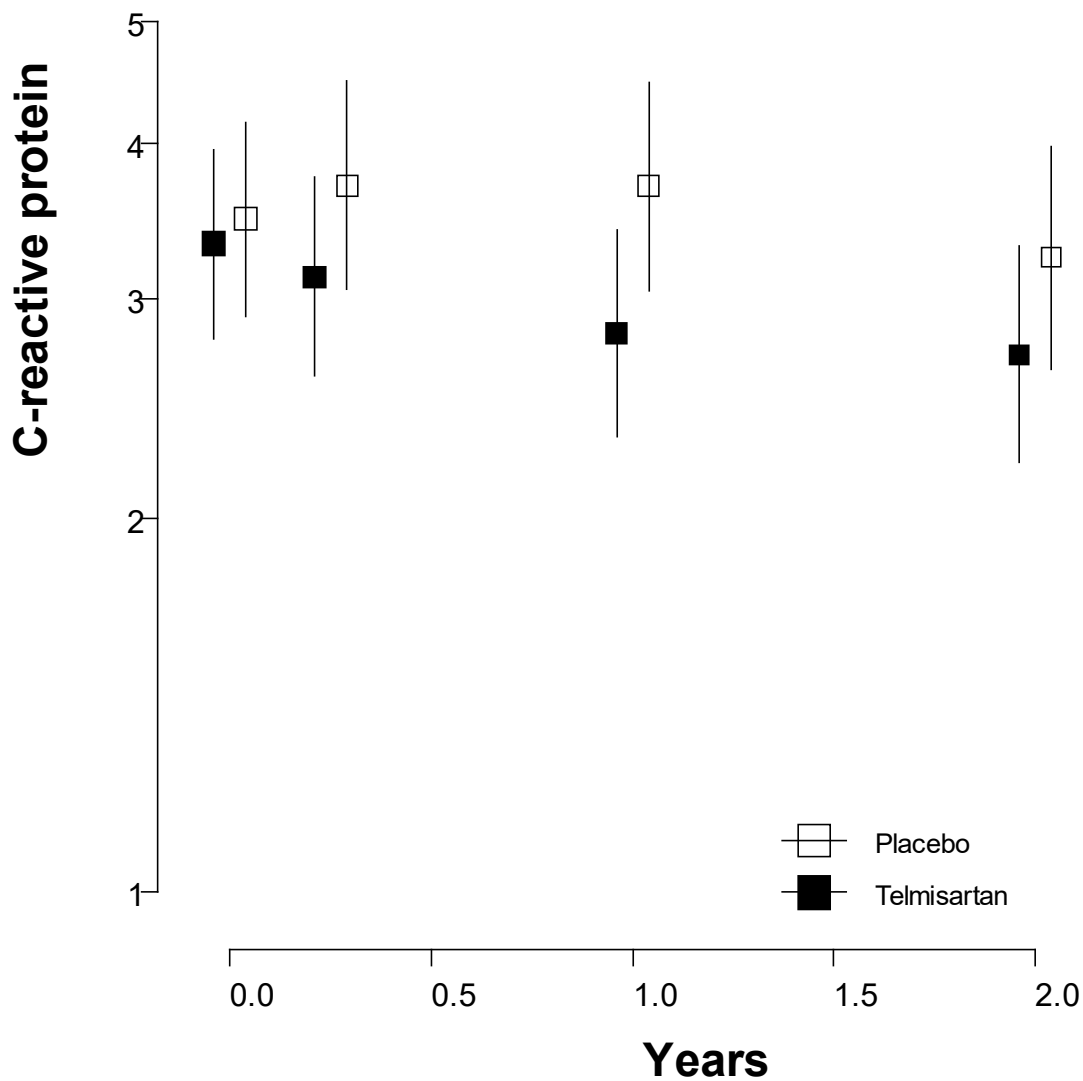
<b>SF-36 outcome</b>	<b>Telmisartan (n=106)</b>	<b>Placebo (n=101)</b>	<b>Mean difference (95% CI)</b>	<b>p-value*</b>
Physical functioning	66.1 (2.7)	64.8 (2.8)	-1.3 (-1.3 to -1.3)	0.731
Role physical	74.1 (3.0)	75.6 (2.7)	1.5 (1.5 to 1.5)	0.708
Bodily pain	72.8 (2.7)	74.6 (2.6)	1.8 (1.8 to 1.8)	0.630
General health	61.5 (2.1)	64.5 (2.1)	2.9 (2.9 to 2.9)	0.329
Vitality	60.3 (2.0)	62.7 (2.0)	2.4 (2.4 to 2.4)	0.392
Social functioning	84.4 (2.1)	84.5 (2.2)	0.1 (0.1 to 0.1)	0.975
Role emotional	75.6 (2.6)	74.4 (2.6)	-1.1 (-1.1 to -1.1)	0.758
Mental health	80.4 (1.4)	81.0 (1.6)	0.6 (0.6 to 0.6)	0.782
Physical component score†	43.9 (1.0)	44.2 (1.0)	0.4 (0.4 to 0.4)	0.802
Mental component score†	51.9 (0.8)	52.3 (0.9)	0.4 (0.4 to 0.4)	0.732

Shown are mean (SD) SF-36 health-related quality of life scores at the end of the trial by allocated treatment group. Missing data were imputed using the last observation carried forward method.  
 \*Calculated using t-test comparing means at 24 months.  
 †The physical- and mental- component summary scores are based on the weighted T-scores of the four physical and mental SF-36 scales, respectively. The raw SF-36 component summary scores were transformed to a norm-based T-score with a mean ( $\pm$ SD) score of 50 $\pm$ 10 in the general population (higher scores indicate a better quality of life).

**Table 3. Effect of telmisartan on safety outcomes**

<b>Assessment</b>	<b>Telmisartan (n=106)</b>	<b>Placebo (n=101)</b>	<b><i>p</i>-value<sup>a</sup></b>
Any adverse event	65 (61)	58 (57)	0·575
Hospitalization	27 (25)	33 (33)	0·285
Death	2 (2)	6 (6)	0·162
Syncope or hypotensive symptoms	28 (26)	13 (13)	<b>0·015</b>
Cough	1 (1)	5 (5)	0·112
Gastrointestinal symptoms	6 (6)	4 (4)	0·749
Angioedema	0 (0)	0 (0)	·
End-stage renal disease	0 (0)	0 (0)	·
<p>Values shown are frequency (%). Only the first adverse event for each participant was counted. Percentages may not total 100 because of rounding.</p> <p><sup>a</sup>Calculated using Fisher's exact test to account for low frequencies.</p>			

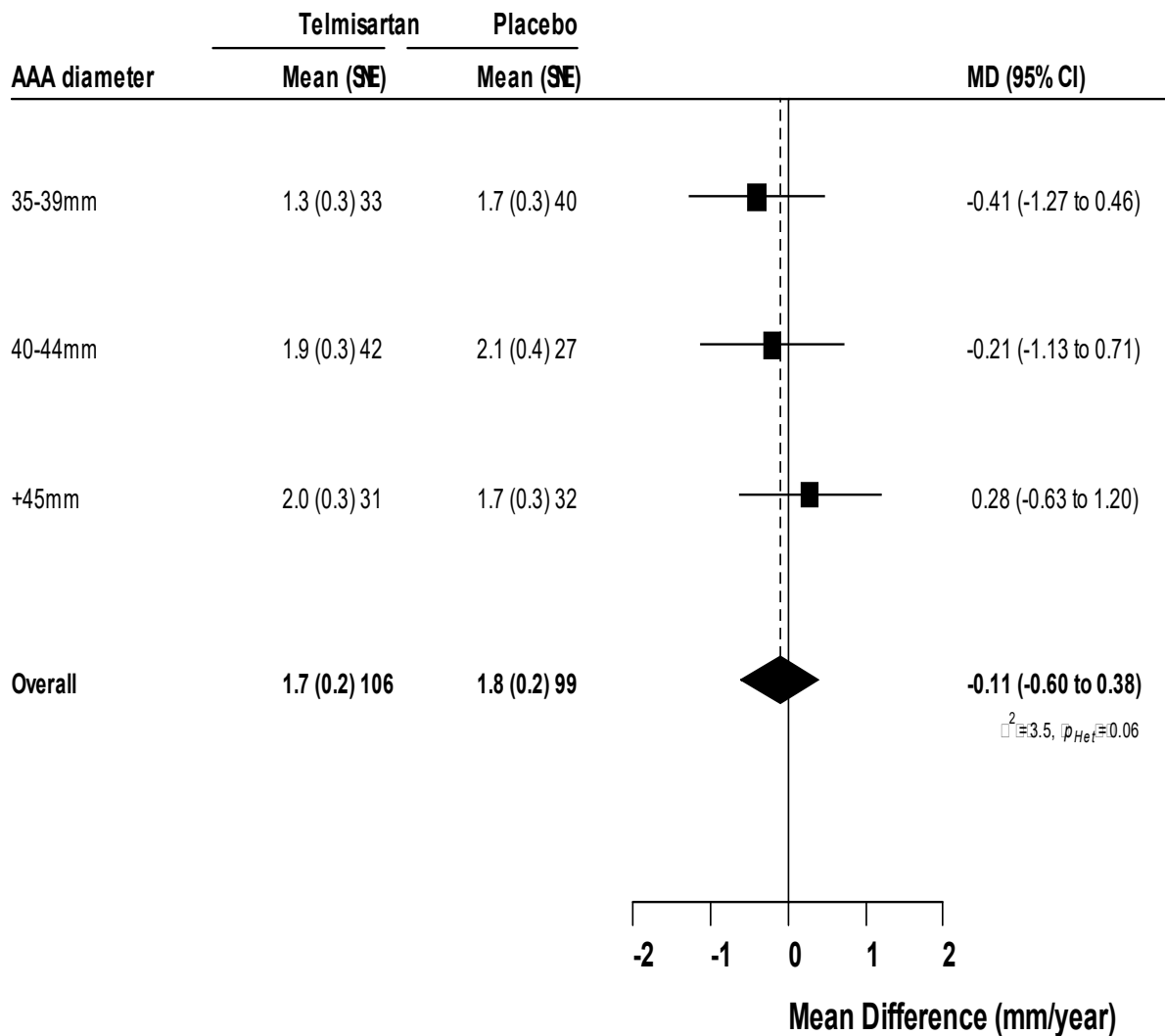
eFigure 1. Effect of telmisartan on C-reactive protein



**Number assessed**

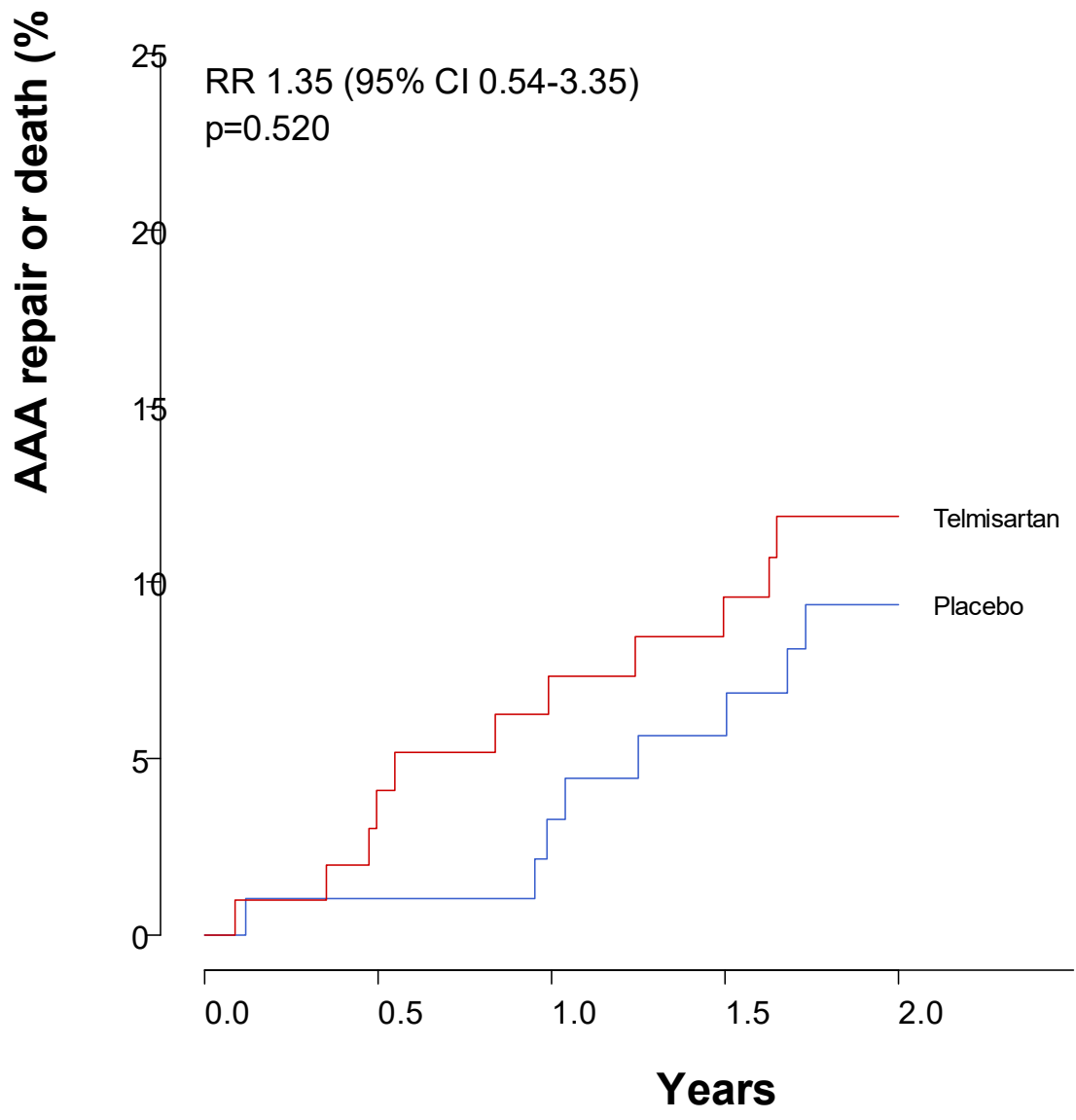
Placebo	101	83	83	73
Telmisartan	106	93	85	78

**eFigure 2: Lack of interaction between initial AAA diameter grouping and effect of telmisartan on AAA growth measured with ultrasound**



Effects of telmisartan vs placebo on AAA growth by baseline ultrasound diameter. The mean difference for each group is the average difference in annual AAA growth rates between randomly allocated groups (intention-to-treat). Box areas are inversely proportional to the variance within each group. AAA, abdominal aortic aneurysm; SE, standard error; MD, mean difference; CI, confidence interval.

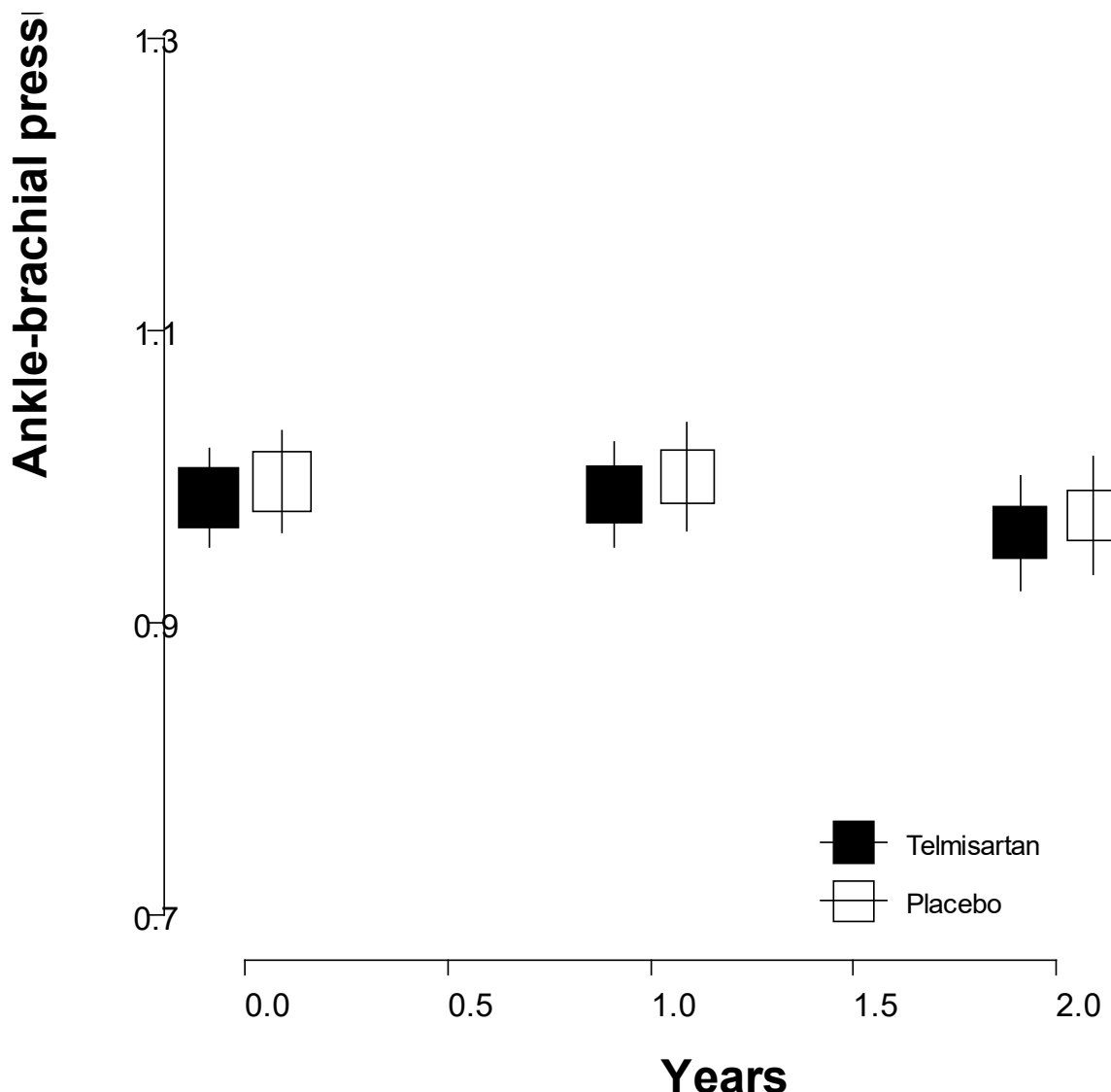
eFigure 3: Effect of telmisartan on risk of AAA repair or death from AAA rupture



At risk					
Placebo	101	93	84	77	48
Telmisartan	100	91	86	80	52

Kaplan-Meier illustration of the risk of a first AAA-related event (composite of AAA repair or AAA-related mortality) among participants allocated to telmisartan or placebo. Follow-up was continued up until two years. The number of patients at risk at the start of each six months of follow-up are shown below the graph.

Figure 4. Effect of telmisartan on ankle brachial pressure index

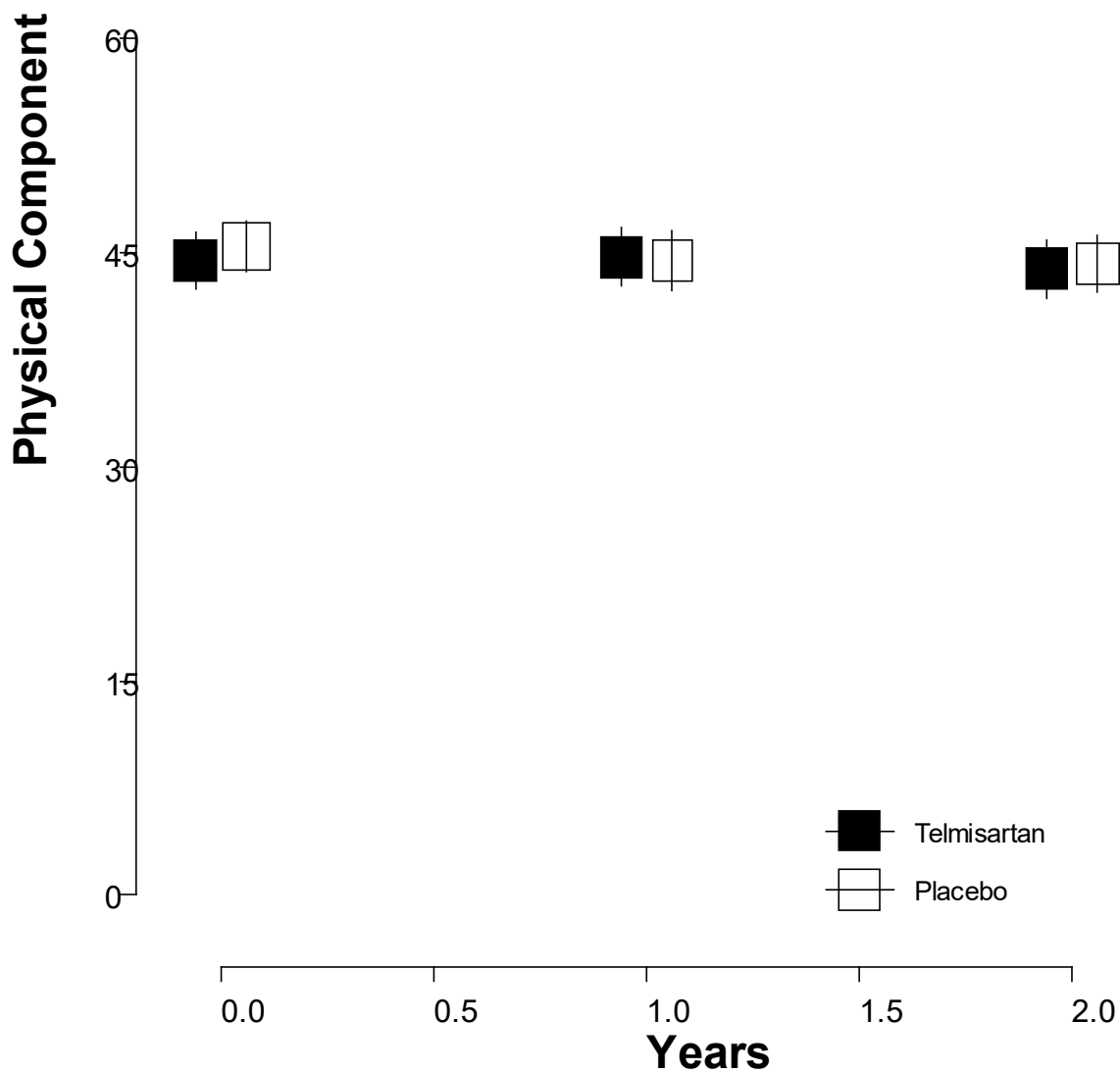


Number assessed			
Telmisartan	105	85	77
Placebo	97	79	70

Ankle brachial pressure index (ABI) calculated as the highest of the dorsalis pedis or posterior tibial artery Doppler pressure divided by the brachial artery Doppler pressure. Representative ABI taken as the lowest ABI of both lower limbs. Incompressible ABIs (>1.4) not included. I bars represent 95% CI. No significant difference in rate of change of ABI (p = 0.959).



Figure 5. Effect of telmisartan on Short Form-36 physical component score

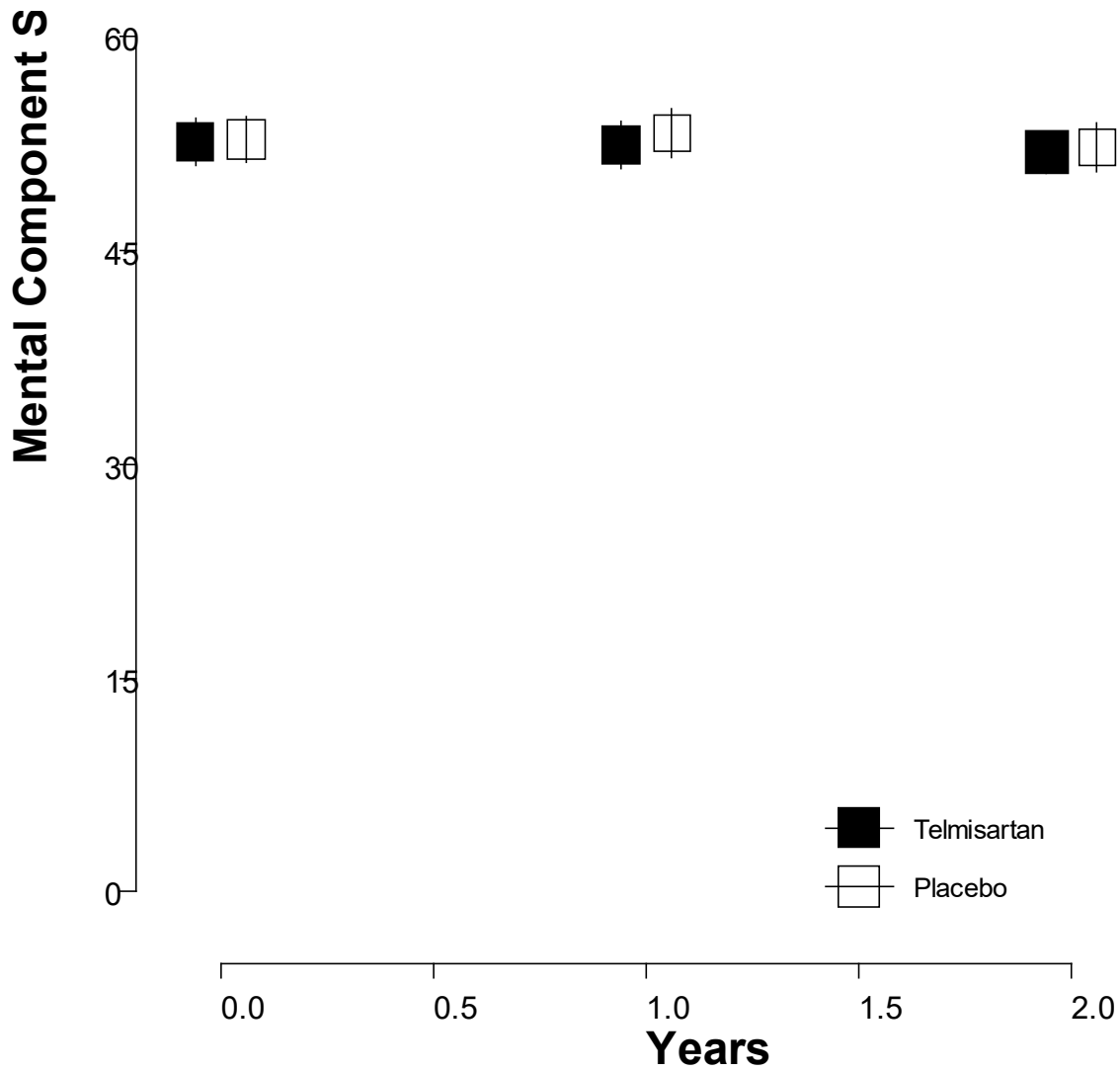


**Numbers assessed**

Telmisartan	106	85	80
Placebo	101	81	73

Shown is the mean SF-36 summary score for each randomized group at baseline and at subsequent study visits (numbers shown below graph). Missing data were imputed using the last value carried forward method.

Figure 6. Effect of telmisartan on Short Form-36 mental component score



**Numbers assessed**

Telmisartan	106	85	80
Placebo	101	81	73

Shown is the mean SF-36 summary score for each randomized group at baseline and at subsequent study visits (numbers shown below graph). Missing data were imputed using the last value carried forward method.

## **eAppendix. TEDY Team, Collaborating Sites and Investigators**

### **Independent trial randomisation**

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### **Data and safety monitoring board**

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### **Recruitment sites**

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