## **SUPPLEMENTAL TABLE 1**

	Completed The Study	Dropped Out	
	(n=38)	(n=35)	P Value
Age	57.7±14.80	56.4±16.51	0.748
Gender (Female) %(n)	34.2%(13)	40%(14)	0.343
Body Mass Index (Kg/m²)	27.67±5.53	29.01±7.84	0.467
Diabetes Mellitus %(n)	21.1%(8)	32.1%(9)	0.391
Ischaemic Heart Disease %(n)	23.7%(9)	20%(7)	0.836
Smoking %(n)	26%(10)	34.2%(12)	0.317

Supplemental Table 1. Characteristics of participants who dropped out in comparison to those who completed the study.

Normally distributed data are presented as mean  $\pm$  standard deviation; categorical data are presented as percentage (number). Kg/m² (kilogram / square meter), n (number).

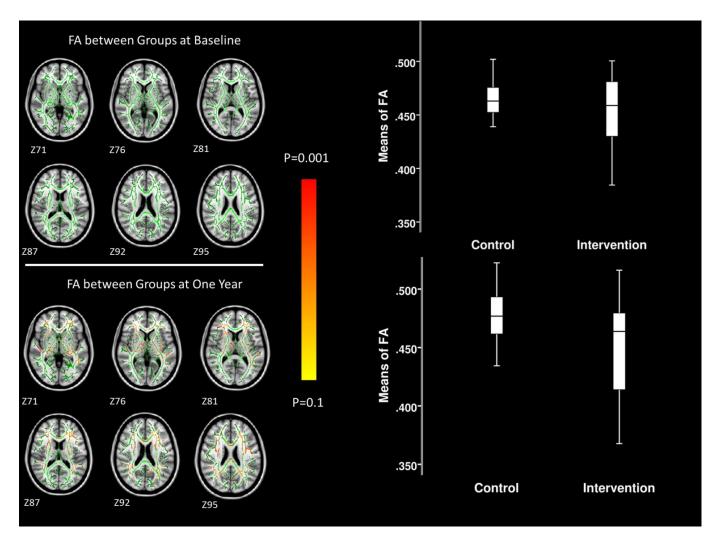
## **SUPPLEMENTAL TABLE 2**

	Mean FA at Baseline (n=38)	Mean FA at One year (n=38)	Mean FA at Baseline (Significant Voxels) (n=38)	Mean FA at One Year (Significant Voxels) (n=38)	Percentage of Significant Voxels
Anterior Thalamic Radiation- L	0.335±0.030	0.340±0.037	0.346±0.042	0.367±0.052	0.37%
Anterior Thalamic Radiation- R	0.334±0.030	0.337±0.037	0.374±0.038	0.388±0.047	0.49%
Corticospinal Tract-L	0.430±0.023	0.433±0.028	No significant voxels	No significant voxels	0%
Corticospinal Tract-R	0.417±0.022	0.422±0.026	No significant voxels	No significant voxels	0%
Cingulate Gyrus-L	0.304±0.023	0.308±0.030	0.407±0.058	0.431±0.066	0.1%
Cingulate Gyrus-R	0.302±0.024	0.305±0.029	0.445±0.094	0.467±0.10	0.03%
Hippocamups-L	0.263±0.033	0.269±0.035	0.504±0.090	0.512±0.095	0.08%
Hippocamups-R	0.280±0.035	0.285±0.039	0.441±0.059	0.455±0.052	0.16%
Forceps Major	0.337±0.025	0.340±0.030	0.439±0.057	0.454±0.073	0.01%
Forceps Minor	0.316±0.028	0.320±0.034	0.418±0.038	0.433±0.045	1%
Inferior Fronto-Ocipital Fasciculus-L	0.312±0.026	0.317±0.031	0.362±0.049	0.380±0.057	0.13%
Inferior Fronto-Ocipital Fasciculus-R	0.321±0.025	0.323±0.031	0.396±0.038	0.404±0.044	0.31%
Inferior Longitudinal Fasciculus- L	0.298±0.022	0.302±0.028	No significant voxels	No significant voxels	0%
Inferior Longitudinal Fasciculus- R	0.290±0.021	0.293±0.026	0.431±0.051	0.440±0.059	0.02%
Superior Longitudinal Fasciculus- L	0.287±0.020	0.290±0.026	0.437±0.057	0.450±0.055	0.13%
Superior Longitudinal Fasciculus- R	0.273±0.018	0.276±0.022	0.390±0.045	0.398±0.052	0.02%
Ucinate Fasciculus-L	0.304±0.027	0.308±0.033	0.355±0.055	0.361±0.056	0.13%
Ucinate Fasciculus-R	0.304±0.026	0.310±0.033	0.549±0.83	0.550±0.113	0.05%
Superior Longitudinal Fasciculus- L (Temporal Part)	0.316±0.026	0.317±0.031	0.436±0.113	0.498±0.14	0.1%
Superior Longitudinal Fasciculus- R (Temporal Part)	0.353±0.026	0.354±0.030	No significant voxels	No significant voxels	0%

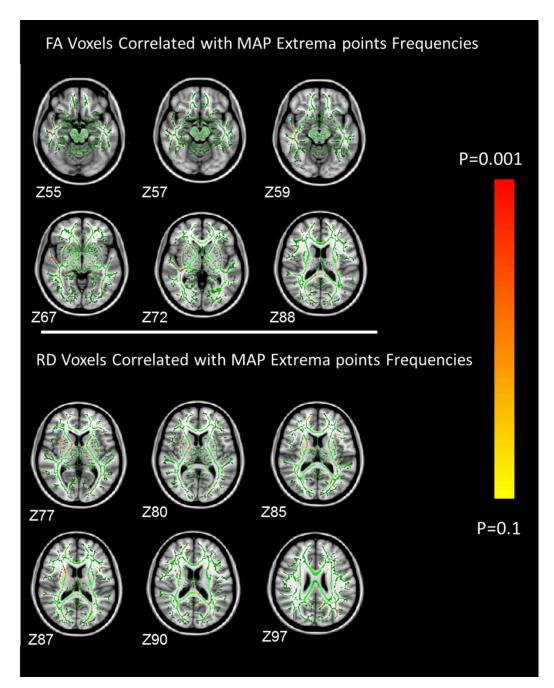
## **Supplemental Table 2. Region of Interest Analysis of Fractional Anisotropy.**

Region of Interest analysis using John Hopkins University white matter labels atlas demonstrating the changes in regional means of fractional anisotropy and in the statistically significant voxels over one year aggregating both the control and interventional groups. The percentages of the significant voxels in each region are also presented.

## **SUPPLEMENTAL FIGURE 1**



**Supplemental Figure 1.** Statistical image representing the results the voxel wise t-test between group comparison at baseline and one year. The statistically significant voxels with P values of <0.05 corrected for multiple comparisons (Red-Yellow) are overlaid on a mean skeleton (Green) on a standardised T1 axial brain slices (of Z-scores). The colour bar represents the degree of significance. No significant voxels were found between the two groups at baseline. At one year fractional anisotropy values of the significant voxels between the two groups are represented by the bottom boxplots. The top boxplots represent the fractional anisotropy values of the same voxels at baseline.



**Supplemental Figure 2** Statistical overlay of the Fractional Anisotropy (FA) and Radial Diffusivity (RD) Voxels that significantly correlated with frequencies of mean arterial blood pressure (MAP) extrema points frequencies. Fractional anisotropy positively correlated with higher frequencies of MAP extrema points whereas there was a negative correlation with Radial diffusivity.