Supplementary Table. Calculated dice indices (DIs) in seven animals between the H&E pallor areas and segmented cerebral ischemic lesions on DWI. Mean DI with 83 THR$_{relative}$ (DI=0.820 %) was the best among all the thresholds even though the 530 THR$_{absolute}$ was the most comparable among conventional absolute thresholds. It suggested that segmentation with 83 THR$_{relative}$ as the threshold was more congruous with H&E gross pathology at 1 hour.

Animal number	Absolute thresholding of the ADC$_{original}$							Relative thresholding of the ADC$_{normalized}$						
	500	510	520	530	540	550	560	80	81	82	83	84	85	86
5	0.862	0.879	0.895	**0.904**	0.896	0.892	0.886	0.884	0.888	0.894	**0.904**	0.903	0.897	0.882
6	0.770	0.813	0.844	0.857	0.869	0.882	**0.885**	0.842	0.859	0.868	0.878	**0.883**	0.880	0.876
8	0.828	**0.843**	0.829	0.827	0.825	0.812	0.792	0.834	0.836	0.842	**0.841**	0.836	0.829	0.799
10	0.694	0.700	0.707	0.711	**0.716**	0.714	0.711	0.708	0.709	**0.713**	**0.713**	0.711	0.710	0.707
11	**0.739**	0.734	0.733	0.731	0.730	0.726	0.713	0.739	0.743	0.744	**0.745**	0.742	0.737	0.734
12	0.833	**0.836**	0.830	0.821	0.810	0.796	0.789	0.806	0.812	0.821	**0.836**	0.830	0.823	0.820
22	0.819	0.820	**0.821**	0.819	0.817	0.809	0.807	0.816	0.820	**0.823**	0.822	0.820	0.817	0.811
Mean	0.792	0.804	0.808	**0.810**	0.809	0.804	0.798	0.804	0.810	0.815	**0.820**	0.818	0.813	0.804

Supplementary figure. The intensity distribution of the left hemisphere of original ADC (ADC$_{original}$) and normalized ADC (ADC$_{normalized}$). Five peaks of histograms from 5 MR scans at 5 different time points in representative animal 5 showed intra-subject variation (A) and 8 peaks from 8 animals with territorial sustained MCAO at 15 minutes also demonstrated inter-subject variation(C). Those peaks representing the variations were aligned after the normalization process (B, D).

A

B

C

D