Appendix 1 MRI data acquisition

The mpMRI images (including transverse T2WI, DWI, and ADC) were acquired using two 3.0-T MR scanners ((Achieva MR, Philips Medical Systems, Netherlands; Signa HDxt, GE, USA).

The signal intensity on DWI is written in a mono-exponential model as follows

$$\frac{S_b}{S_0} = e^{-b*ADC} \tag{1}$$

where S_b and S_0 are the signal intensities at b values of b and 0, respectively, and ADC represents the apparent diffusion coefficient. Then the ADC value can be calculated from two signal intensities at b values of b_1 and b_2, which is given by

$$ADC = \frac{\ln\left(\frac{S_{b_1}}{S_{b_2}}\right)}{(b_2 - b_1)} \tag{2}$$

Table S1 MRI machine parameters

Parameters	Achieva, Philips		Signa HDxt	
	T2WI	DWI	T2WI	DWI
Sequence	TSE/FS	SE	FRFSE	SE-EPI
TR (ms)	4900	2500	3800	5600
TE (ms)	90	70	110	70
Flip angle (degree)	90	90	90	90
Echo train length	19	61	32	1
Field of view (mm × mm)	220×220	320×320	260×260	320×320
Acquisition Matrix	220×220	160×157	320×224	256×128
Slice Thinkness (mm)	3.5	3.5	3.5	4.0
Other		b values =1,000 mm²/sec		b values =1,000 mm²/sec

TR, repetition time; TE, time echo; SE, spin echo; FS, fat suppression; DWI, diffusion-weighted imaging; FRFSE, fast relaxation fast spin echo; SE-EPI, spin-echo echo planar imaging.