

**Additional file 2:** 2D Distance from arterial blood supply / venous drainage to geometric center of individual segments.  
3D Pythagorean distance calculation for estimation of mean hepatic transition time per segment (in seconds).

Distance to geometric center and mean hepatic transition time per segment										
Segment	Axial distance (cm)	Coronal distance (cm)	Sagittal distance (cm)	Axial square (cm <sup>2</sup> )	Coronal square (cm <sup>2</sup> )	Sagittal square (cm <sup>2</sup> )	Sum of squares (cm <sup>2</sup> )	Square root (cm)	Square root x 2 (cm)	Mean hepatic transition time (s)
I	1.74	2.4	1.56	3.03	5.76	2.43	11.22	3.35	6.70	7
II	7.13	7.55	4.42	50.84	57.00	19.54	127.38	11.29	22.57	23
III	4.9	2.97	4	24.01	8.82	16.00	48.83	6.99	13.98	14
IV	4.31	2.82	4.49	18.58	7.95	20.16	46.69	6.83	13.67	14
V	5.53	5.85	2.3	30.58	34.22	5.29	70.09	8.37	16.74	17
VI	7.21	4.81	5.6	51.98	23.14	31.36	106.48	10.32	20.64	21
VII	6.44	4.91	6.55	41.47	24.11	42.90	108.48	10.42	20.83	21
VIII	5.12	5.98	2.99	26.21	35.76	8.94	70.91	8.42	16.84	17
	2D-Distance to geometric segment center				Single 3D-distance to geometric segment center (cm) in cm					
					Double 3D-distance to geometric segment center (cm) in cm					