

**Short-term repeatability and postprandial effect assessment
of liver perfusion quantification in healthy subjects using
arterial spin labeling MRI**

ELECTRONIC SUPPLEMENTARY MATERIAL

Table S1. Interobserver reliability analysis of liver perfusion parameters in 30 randomly selected measurements using semi-automated VOI delineation

Liver perfusion parameters	Observer 1	Observer 2	ICC (95% confidence interval)	P values
LP-A (ml/100g/min)	260.4±67.7	258.1±65.9	0.982(0.963, 0.992)	<0.0001
LP-P (ml/100g/min)	63.9±19.5	64.7±19.7	0.984(0.966, 0.992)	<0.0001
HPI (%)	18.7±7.7	19.1±8.2	0.982(0.963, 0.991)	<0.0001

LP-A liver perfusion from hepatic artery, LP-P liver perfusion from portal vein, HPI hepatic perfusion index, ICC: intraclass correlation coefficient (bidirectional random effects, absolute consistency, single measurement), Observer 1: PG.Q. (primary radiologist), Observer 2: FR.G. (validation radiologist).

Table S2. Pre- and postprandial liver perfusion (ASL-MRI) and portal venous hemodynamics (US) results in 12 subjects

Subject number {age, gender, BMI}	ASL-MRI						US					
	LP-A (ml/100g/min)		LP-P (ml/100g/min)		HPI (%)		D (cm)		Vmax (cm/s)		PVF (mL/min)	
	Pre*	Post	Pre*	Post	Pre*	Post	Pre	Post	Pre	Post	Pre	Post
Subject 1 {36, M, 21.3}	65.8	66.2	199.0	246.5	24.8	21.2	1.1	1.3	41.8	44.5	1332.7	1927.2
Subject 2 {38, M, 23.4}	63.1	53.1	266.7	150.3	19.1	26.1	1.2	1.0	46.0	44.1	1753.4	1141.5
Subject 3 {42, M, 22.2}	47.2	38.6	158.5	155.4	22.9	19.9	1.0	1.1	46.0	37.6	1256.0	1297.7
Subject 4 {42, M, 22.5}	38.5	46.5	223.2	262.4	14.7	15.1	1.0	1.1	31.3	53.7	911.0	1654.2
Subject 5 {41, M, 23.9}	42.0	39.8	163.1	229.9	20.5	14.8	1.0	1.1	34.7	43.0	954.8	1279.2
Subject 6 {32, F, 21.7}	34.9	36.3	237.7	219.9	12.8	14.2	1.0	0.8	25.0	31.1	672.1	534.8
Subject 7 {24, M, 20.5}	83.7	88.5	388.0	450.1	17.7	16.4	1.1	1.0	24.3	27.4	730.3	751.7
Subject 8 {35, F, 21.5}	42.9	52.0	273.8	318.5	13.5	14.0	0.8	0.8	28.0	36.9	452.4	644.5
Subject 9 {22, M, 22.6}	66.0	69.1	257.4	299.5	20.4	18.7	1.0	1.2	38.9	44.9	1048.0	1810.6
Subject 10 {21, M, 20.3}	63.4	109.2	224.1	322.3	22.0	25.3	0.9	0.8	31.7	47.0	636.1	850.9
Subject 11 {24, M, 22.5}	73.9	115.1	210.8	253.7	26.0	31.2	1.1	1.0	38.9	43.9	1164.0	1361.4
Subject 12 {30, M, 23.7}	89.7	-	248.6	-	26.5	-	1.0	-	35.9	-	915.3	-

LP-A liver perfusion from hepatic artery, LP-P liver perfusion from portal vein, HPI hepatic perfusion index, D diameter of portal vein, Vmax maximum velocity of portal vein, PVF blood flow volume calculated from D and Vmax, * average values calculated from three pre-prandial measurements. - missing data (Subject 12 declined postprandial protocol)