A pseudorandomized RF saturation/acquisition schedule (40 dynamic scans) for unsupervised MRF reconstruction.

Scan number	B1 (μT)	Ts (sec)	Ω (ppm)	Td (sec)	Scan number	B1 (μT)	Ts (sec)	Ω (ppm)	Td (sec)
1	1.0	0.4	8	3.5	21	1.7	0.6	15	4.5
2	1.3	0.9	8	4.0	22	1.9	1.1	15	3.6
3	1.7	1.3	8	4.5	23	1.0	1.6	15	4.1
4	1.9	1.8	8	3.6	24	1.3	2.0	15	4.3
5	1.1	1.8	9	4.1	25	1.8	2.0	20	3.5
6	1.4	0.4	9	4.3	26	1.0	0.6	20	4.0
7	1.8	0.9	9	3.5	27	1.1	1.1	20	4.5
8	1.2	1.3	9	3.7	28	1.4	1.6	20	3.6
9	1.3	1.3	10	4.5	29	1.9	1.6	25	4.1
10	1.5	1.8	10	3.6	30	1.1	2.0	25	4.0
11	1.9	0.4	10	4.1	31	1.3	0.6	25	3.5
12	0.9	0.9	10	4.0	32	1.0	1.1	25	4.0
13	1.4	0.9	11	3.5	33	1.3	1.1	35	4.4
14	1.7	1.3	11	4.0	34	1.0	1.6	35	3.6
15	1.0	1.8	11	4.1	35	1.4	2.0	35	4.1
16	1.0	0.4	11	3.6	36	1.7	0.6	35	4.3
17	1.5	0.4	13	4.1	37	1.2	0.6	50	4.5
18	1.8	0.9	13	4.3	38	1.1	1.1	50	4.0
19	1.0	1.3	13	3.8	39	1.5	1.6	50	4.5
20	1.1	1.8	13	4.0	40	1.8	2.0	50	3.6

3D MTC-MRF images were acquired from a fat-suppressed (spectral pre-saturation with inversion recovery, SPIR), multi-shot TSE pulse sequence using the following parameters: TE= 6 ms; FOV = 212 x 186 x 60 mm3; spatial resolution = 1.8 x 1.8 x 4 mm3; slice-selective 120° refocusing pulses; turbo factor = 104; slice oversampling factor = 1.4; and shot duration = 1584ms. A variable density k-space undersampling pattern was applied for a compressed sensing acceleration (4-fold in the ky-kz direction).