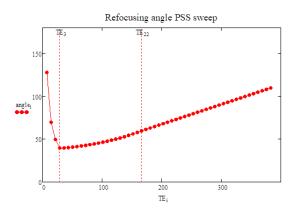
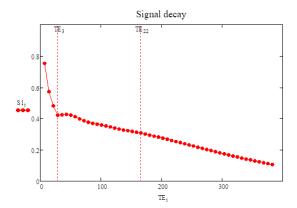
## **Supplementary tables and figures**

**Supplementary Table 1.** Scores by the two independent observers for arterial, venous, and fat suppression of the 3D CRANI sequence. Suppression was scored using a 3-point Likert scale (0: unsuppressed and nondiagnostic; 1: moderately suppressed but diagnostic; 2: excellent suppression). A nerve scoring system using a 5-point Likert scale was adopted from Fuji et al. (4: excellent; 3: good; 2: fair; 1: poor; 0: none).

			Observed								Observe 2							
			Observer 1 Overall Inferior Greater								Observer 2 Overall Inferior							
			Arterial	Venous	Fat .	nerve	alveolar	Lingual	Facial	occipital	Arterial .	Venous .	Fat .	nerve	alveolar	Lingual	Facial	
Case number	Sex	Age	suppression	suppression	suppression	visualization	nerve	nerve	nerve	nerve	suppression	suppression	suppression	visualization	nerve	nerve	nerve	Greater occipital nerve
1	Female	25	2	1	2	1	3	3	3	4	2	1	2	1	3	3	3	4
2	Male	28	2	2	1	2	4	4	1	4	2	2	2	2	4	4	1	4
3	Male	25	2	1	2	1	3	3	3	3	2	1	2	1	3	3	2	3
4	Male	23	2	2	2	2	4	4	4	4	2	2	2	2	4	4	4	4
5	Female	48	2	2	1	2	4	4	4	4	2	2	2	2	4	4	4	4
6	Female	44	2	2	2	2	4	4	4	4	2	2	2	2	4	4	4	4

**Supplementary Figure 1.** Pseudo-steady state (PSS) sweep curves indicating the minimum, middle, and maximum angles. After reaching the minimum angle, non-linear interpolation is used to calculate an optimum sweep, while trying to keep the signal constant.





**Supplementary Figure 2.** Comparison of some contemporary magnetic resonance sequences and the newly introduced 3D CRANI sequence in a subject with titanium osteosynthesis material in the left mandible. Notice the artifact reduction when the 3D CRANI sequence is applied. The inferior alveolar nerve is indicated (white arrow). A: 3D CRANI sequence. B: 3D PSIF (reverse fast imaging with steady-state free precession). C: 3D Brainview (Philips, Best, The Netherlands). D: 3D THRIVE (T1 high-resolution isotropic volume excitation).

