

Erratum: 5D Flow MRI: A Fully Self-gated, Free-running Framework for Cardiac and Respiratory Motion-resolved 3D Hemodynamics

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5D Flow MRI: A Fully Self-gated, Free-running Framework for Cardiac and Respiratory Motion-resolved 3D Hemodynamics

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This erratum corrects an error in **Table 1**. The original table wrongly duplicated the peak flow values for Conventional and 5D flow into the Net Flow category and a corresponding incorrect percent difference for both Net Flow and Peak Flow. As a result, the original article incorrectly stated net flow was within 7% of conventional

4D flow at all planes. Using the corrected values, 5D flow peak flow, peak velocity, and net flow still showed good-to-excellent agreement with values within 7% of conventional at most planes. Higher variability (8.0% to 21.3% difference) was demonstrated in planes at the edge of the acquired FOV (1, 2, 5, 6) for net flow and peak velocity. In addition, the original peak flow values were reported correctly; however, the percent difference was incorrectly represented as 5D flow having up to a 6.5% difference compared to conventional 4D flow. The updated calculations depict up to a 6.1% difference in peak flow between techniques.

While the demonstrated variability in net flow was higher than originally suggested, 5D flow-derived parameters nonetheless showed good-to-excellent agreement and none of the original conclusions were altered by these new values.

The table has been amended online and should appear as follows:

Table 1: In Vitro Phantom Results

Peak Flow (mL/sec)										
Data Reconstruction	Plane 1	Plane 2	Plane 3	Plane 4	Plane 5	Plane 6	Plane 7	Plane 8	Plane 9	Plane 10
Conventional	219.5	222.3	250.7	238.9	233.5	234.6	224.9	234.5	238.0	236.3
5D flow	206.1	230.9	249.9	237.5	244.8	245.0	224.6	226.1	251.6	239.5
NUFFT	208.9	252.1	259.1	250.9	254.4	249.3	228.9	234.2	253.0	261.3
5D flow % difference from conventional	-6.1	3.9	-0.3	-0.6	4.8	4.4	-0.1	-3.6	5.7	1.4
Net Flow (mL/cycle)										
	Plane 1	Plane 2	Plane 3	Plane 4	Plane 5	Plane 6	Plane 7	Plane 8	Plane 9	Plane 10
Conventional	73.0	71.4	88.3	87.4	81.8	83.3	79.0	84.2	91.2	93.3
5D flow	76.2	86.7	93.8	90.2	90.2	90.0	84.1	83.8	93.6	91.2
NUFFT	76.2	87.9	94.2	90.7	89.0	90.5	83.9	83.0	94.2	97.5
5D flow % difference from conventional	4.5	21.3	6.3	3.1	10.3	8.0	6.4	-0.5	2.6	-2.2
Peak Velocity (cm/sec)										
	Plane 1	Plane 2	Plane 3	Plane 4	Plane 5	Plane 6	Plane 7	Plane 8	Plane 9	Plane 10
Conventional	96	107	115	101	109	101	110	106	98	94
5D flow	115	112	115	99	103	100	109	106	102	98
5D flow % difference from conventional	19.1	4.5	-0.4	-1.6	-5.9	-0.6	-1.0	0.6	3.6	3.7