Supplementary Table 1 Individual repeat measurements of magnetically induced displacement force and torque

Force					Torque				
No.	**Object**	**Angle [°]**	**Extra weight [g]**	**Force [mN]**	**No.**	**Object**	**Force [N]**	**Reference [N]**	**Torque [mNm]**
1	PillCam SB3	59	14.642	288.27	1	PillCam SB3	2.38	1.36	19.2
		59		288.27			2.66	1.12	
		59		288.27			2.50	1.38	
2	OMOM HD	56.5	0	47.91	2	OMOM HD	1.72	1.36	5.1
		56.5		47.91			1.64	1.12	
		56.5		47.91			1.64	1.38	
3	NaviCam	76	52.071	2231.84	3	NaviCam	–	1.36	271.9
		76		2231.84			–	1.12	
		76		2231.84			–	1.38	
4	MiroCam 1200	55	37.429	571.96	4	MiroCam 1200	4.12	1.36	41.7
		55		571.96			3.84	1.12	
		55		571.96			4.16	1.38	
5	CapsoCam Plus	59	37.429	672.66	5	CapsoCam Plus	4.40	1.36	51.0
		59		672.66			4.78	1.12	
		59		672.66			4.68	1.38	

6	MiroCam 2000	55	37.429	575.92	6	MiroCam 2000	4.42	1.36	54.0
		55		575.92			4.76	1.12	
		55		575.92			4.98	1.38	
7	PillCam Colon2	60	14.642	299.57	7	PillCam Colon2	2.26	1.36	15.6
		60		299.57			2.28	1.12	
		60		299.57			2.42	1.38	
8	OMOM CC	77	0	127.5	8	OMOM CC	1.54	1.36	5.1
		77		127.5			1.68	1.12	
		77		127.5			1.72	1.38	
9	NaviCam Colon	38	0	21.96	9	NaviCam Colon	1.36	1.36	–
		38		21.96			1.38	1.12	
		38		21.96			1.34	1.38	
10	OMOM RC	76.5	52.071	2366.34	10	OMOM RC	–	1.36	289
		76.5		2366.34			–	1.12	
		76.5		2366.34			–	1.38	
11	MiroCam Navi	77	52.071	2414.68	11	MiroCam Navi	–	1.36	293.9
		77		2414.68			–	1.12	
		77		2414.68			–	1.38	

Each video capsule endoscope was measured three times. Force readings at the displacement-force apparatus were highly consistent across all repetitions, while force readings at the torque apparatus showed minor variability. For capsules containing an

integrated permanent magnet (NaviCam, OMOM RC, MiroCam Navi), direct torque measurement at the torque apparatus was not feasible due to the high magnetic forces; the values shown in the Torque column for these capsules represent the upper bound calculated from the measured displacement force according to ASTM F2213-17. For NaviCam Colon, the torque was below the measuring limit of the apparatus.