



Type	Ball brush diameter (mm)	
	Dry state	After immerse
2.2	3.025	3.121
2.8	3.379	3.399
3.2	4.226	4.316
3.7	4.741	4.775
4.2	4.807	4.927

**Supplementary Fig. 1.** Structure and size of the brush ball. The brush ball is made of a silicon ball wrapped in microfibers and is approximately 0.5–1.0 mm larger than the inner diameter of the endoscopic channel. When it enters the water, it swells slightly from its original size (approximately 0.1 mm). Photos and data provided by Silverex.