

Table SI. Definition of the 11 MRI features.

Feature	Definition
Placenta previa	Placenta covering the cervix (marginal, partial or complete placenta previa), or a low-lying placenta, whose extremity is located at <2 cm from the internal cervical os.
Focal defect of the UPI	Interruption or a defect of any of the three normal layers.
Myometrial thinning	Thickness of the myometrium of the uterus ≤ 2 mm. Generally accompanied with focal defect of the UPI; however, the myometrial thickness of patients with focal defect of the UPI may be >2 mm.
Disruption of the inner layer of the UPI	Interruption or thinning of the inner layer of the UPI.
Intraplacental thick dark bands	Hypointense areas on SSFSE T2W and FIESTA images, preferentially located on the maternal surface of the placenta, with the longest diameter >20 mm.
Focal defect of the interval between the bladder and uterus	Disappearance of the fat gap between the bladder and the uterus, displaying an irregular and discontinuous hypointense bladder serosa.
Increased placental vascularity	Presence of irregular, large or tortuous intraplacental vessels. The vessels are defined by irregular flow voids on SSFSE T2W images and isointense on FIESTA images.
Markedly heterogeneous placenta	Heterogeneity of the placenta. Presence of hyperintense or/and hypointense areas in the placenta. This partly depends on the presence of intraplacental thick dark bands and increased placental vascularity.
Uterine bulge	Abnormal bulging of uterus where PAS is suspected.
Increased uterine vascularity	Irregular, large or tortuous vessels in adjacent myometrium where PAS is suspected.
Increased vascularity at UPI	Vessels at the UPI increase or/and the vessels run through the myometrium and the placenta.

UPI, uteroplacental interface; PAS, placenta accreta spectrum; SSFSE T2W, single-shot fast spin echo T2-weighted; FIESTA, fast imaging employing steady-state acquisition.