

Supplementary Materials:

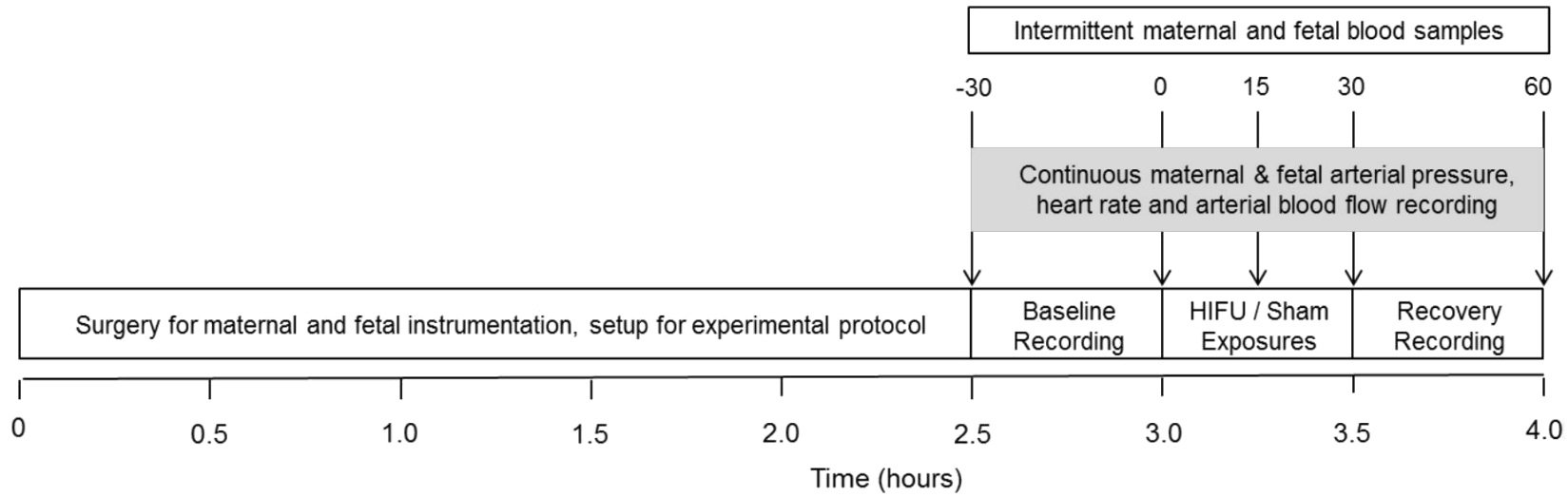


Figure S1: Surgical and experimental timeline

Schema of experimental timeline showing total length of general anaesthesia divided into time for surgical and experimental procedures, including the baseline, HIFU/sham exposures, and recovery periods.

Placentome number	Harmonic US		Doppler US		Photography		Histology					Successful treatment outcome? (of 3 criteria)	Complications
	Hyperecho (>2 successive B Mode)	Structural change (B Mode)	"No flow" color Doppler	Retreatment needed	Tissue paling (visual)	Tissue darkening (visual)	Clot in vessel	Shrunken / collapsed vessels	Cellular debris	Extravasation	Cross-sectional area damaged (%)		
1	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	59	Yes	None
2	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	23	Yes	None
3	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	27	Yes	None
4	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	9	Yes	None
5	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	30	Yes	None
6	Yes	Yes	Yes	No	No	Yes	Tissue too friable to obtain sections				2/3 criteria	None	
7	Yes	No	Yes	No	Yes	No	No clear view		Yes	Yes	19	2/3 criteria	None
8	Yes	Yes	Yes	No	No	Yes	No clear view		No	Yes	34	2/3 criteria	None
9	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	24	Yes	None
10	No	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	41	No	Tissue damage involved edge of placentome; no damage to uterus, adjacent placentomes, mother, or fetus
10 (retreat)	Yes	No	Yes	No			Yes	Yes	Yes	Yes		Yes	
11	No	No	No	Not attempted	Yes	Yes	No	No	Yes	Yes	16	No	None
12	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	22	Yes	None
13	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	41	Yes	None
14	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	48	Yes	None
15	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	13	Yes	None
16	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	15	Yes	None
17	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	53	Yes	None
18	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	41	Yes	None
19	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	63	Yes	None
20	No	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	44	No	Vessel hemorrhage after 1st

20 (retreat)	Yes	Yes	No	Not attempted									exposure series, not resolved by retreatment
21	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	5	Yes	None
22	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	33	Yes	None
23	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	46	Yes	None
24	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	31	Yes	None
25	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	46	Yes	None
26	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	39	Yes	None
27	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	43	Yes	None
28	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	20	Yes	None
29	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	30	Yes	None
30	Yes	Yes	Yes	No	No	Yes	Tissue too friable to obtain sections				2/3 criteria	None	

Table S1: Summary of treatment outcomes.

Outcomes and complications determined by tissue responses seen on harmonic and Doppler ultrasound imaging, visual examination, and photography at post-mortem and histological examination of tissues.

Placentome number	Exposures								
	Power (dBm)	In Situ I _{SPTA-2} (W.cm ⁻²)	Duration (s)	Interval (s)	Linear movement gantry (mm)	Depth of target (mm)	Number of exposures	Number of breath holds	Time to complete treatment (s)
1	-5	3959	5	5	12	27	7	1	136
2	-5	5537	5	5	12	10	7	1	119
3	-5	5359	5	5	18	11	10	1	135
4	-5	5521	5	5	8	10	5	1	165
5	-5	5117	5	5	6	14	4	1	105
6	-5	5560	5	5	8	9	5	1	93
7	-5	5689	5	5	8	8	5	1	81
8	-5	5547	5	5	10	10	6	1	92
9	-5	4884	5	5	8	16	5	1	106
10	-5	5005	5	5	8	16	5	1	137
10 (retreat)	-5	4832	5	5	8	16	5	1	182
11	-5	4506	5	5	10	20	6	1	99
12	-5	4579	5	5	12	19	7	1	114
13	-5	5184	5	5	10	13	6	1	142
14	-5	5053	5	5	12	14	7	1	111
15	-5	5107	5	5	8	14	5	1	92
16	-5	5059	5	5	10	14	6	1	88
17	-5	5070	5	5	12	14	7	1	146
18	-5	5124	5	5	10	14	6	1	95
19	-5	5241	5	5	8	13	5	1	89
20	-5	5337	5	5	2	12	6	1	134

20 (retreat)	-5	5442	5	5	10	12	6	1	359
21	-5	5385	5	5	10	11	6	1	107
22	-5	5168	5	5	10	13	6	1	125
23	-5	5137	5	5	8	14	5	1	70
24	-5	5015	5	5	10	15	6	1	87
25	-5	5541	5	5	8	10	5	1	84
26	-5	5561	5	5	8	9	5	1	89
27	-5	5605	5	5	10	9	6	1	97
28	-5	5583	5	5	8	9	5	1	86
29	-5	4963	5	5	8	15	5	1	128
30	-5	4546	5	5	12	20	7	1	100

Table S2: Summary of exposure conditions.

Exposure conditions used to attempt placental vascular occlusion in the 30 placental targets described in this paper.