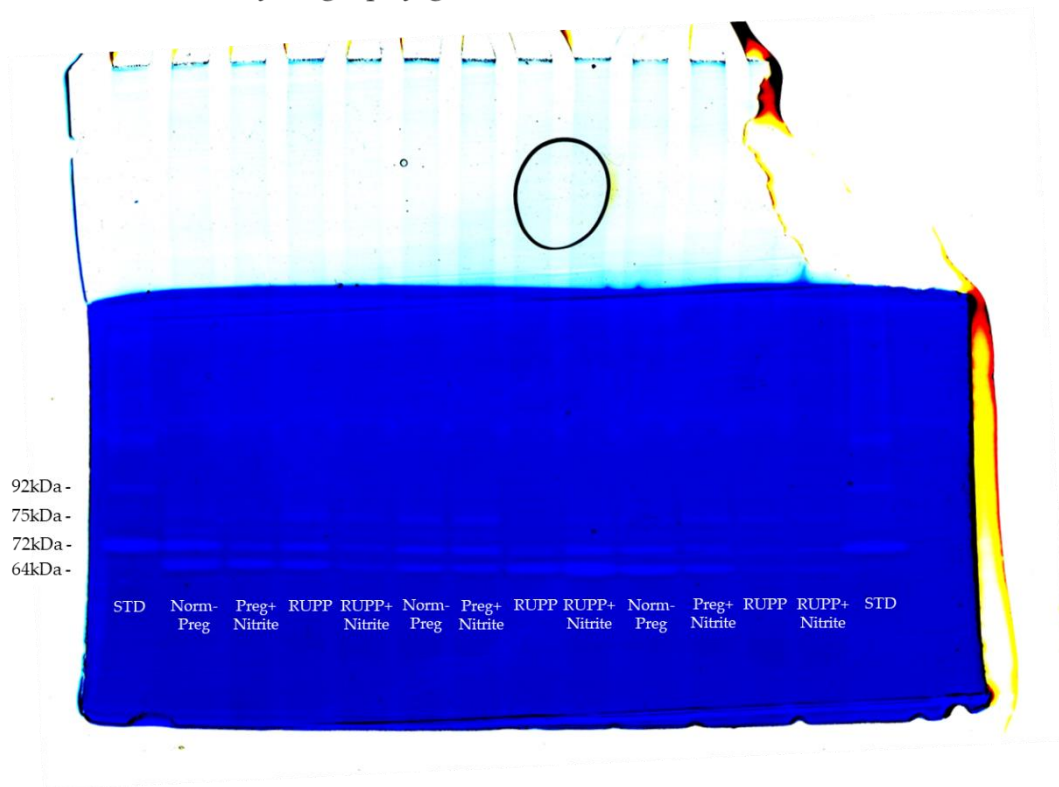


**Table S1.** Average of maternal, fetal, placental, vascular function and biochemical parameters.

Parameters	Group			
	Norm-Preg	Preg+Nitrite	RUPP	RUPP+Nitrite
Systolic blood pressure pregnancy day 21 (mmHg)	94 ± 2.4	78 ± 3.1 *	129 ± 6.9 * <sup>&amp;</sup>	107 ± 5.4 <sup>#</sup> <sup>&amp;</sup>
Fetal weight (g)	4.5 ± 0.1	3.6 ± 0.1 *	3.3 ± 0.1 * <sup>&amp;</sup>	4.2 ± 0.1 <sup>#</sup> <sup>&amp;</sup>
Placental weight (g)	0.33 ± 0.007	0.32 ± 0.007	0.28 ± 0.006 * <sup>&amp;</sup>	0.32 ± 0.011 <sup>#</sup>
Litter size (number of pups)	12.0 ± 0.8	7.0 ± 2.0 *	7.0 ± 0.5 *	10.5 ± 1.0 <sup>#</sup>
Plasma levels of NO metabolites (mmol/L)	23 ± 2.8	37 ± 3.3 *	13 ± 0.3 *	15 ± 1.5 <sup>&amp;</sup>
Placental levels of NO metabolites (μmol/100 mg of tissue)	158 ± 4.3	181 ± 8.5	218 ± 8.7 * <sup>&amp;</sup>	229 ± 12.2 * <sup>&amp;</sup>
Phe Emax (%) e+	1.6 ± 0.1	1.6 ± 0.1	2.9 ± 0.2 * <sup>&amp;</sup>	2.2 ± 0.2 * <sup>#</sup> <sup>&amp;</sup>
Phe Emax (%) e-	2.3 ± 0.3	2.4 ± 0.1	3.9 ± 0.3 * <sup>&amp;</sup>	2.8 ± 0.2 <sup>#</sup>
Phe pEC <sub>50</sub> (-log M) e+	6.5 ± 0.1	6.2 ± 0.1	7.1 ± 0.3	6.3 ± 0.3
Phe pEC <sub>50</sub> (-log M) e-	7.0 ± 0.2	6.2 ± 0.1	8.3 ± 0.2	5.7 ± 1.1 <sup>#</sup>
ACh Emax (%) e+	87 ± 2.4	81 ± 3.7	52 ± 3.6 * <sup>&amp;</sup>	56 ± 1.1 * <sup>&amp;</sup>
ACh pEC <sub>50</sub> (-log M) e+	6.0 ± 0.2	6.3 ± 0.4	4.2 ± 0.8	7.0 ± 1.3
72kDa MMP-2 (Arbitrary units)	0.32 ± 0.02	0.29 ± 0.03	0.09 ± 0.02 * <sup>&amp;</sup>	0.20 ± 0.02 * <sup>#</sup> <sup>&amp;</sup>
64kDa MMP-2 (Arbitrary units)	0.48 ± 0.04	0.44 ± 0.02	0.14 ± 0.01 * <sup>&amp;</sup>	0.30 ± 0.03 * <sup>#</sup> <sup>&amp;</sup>

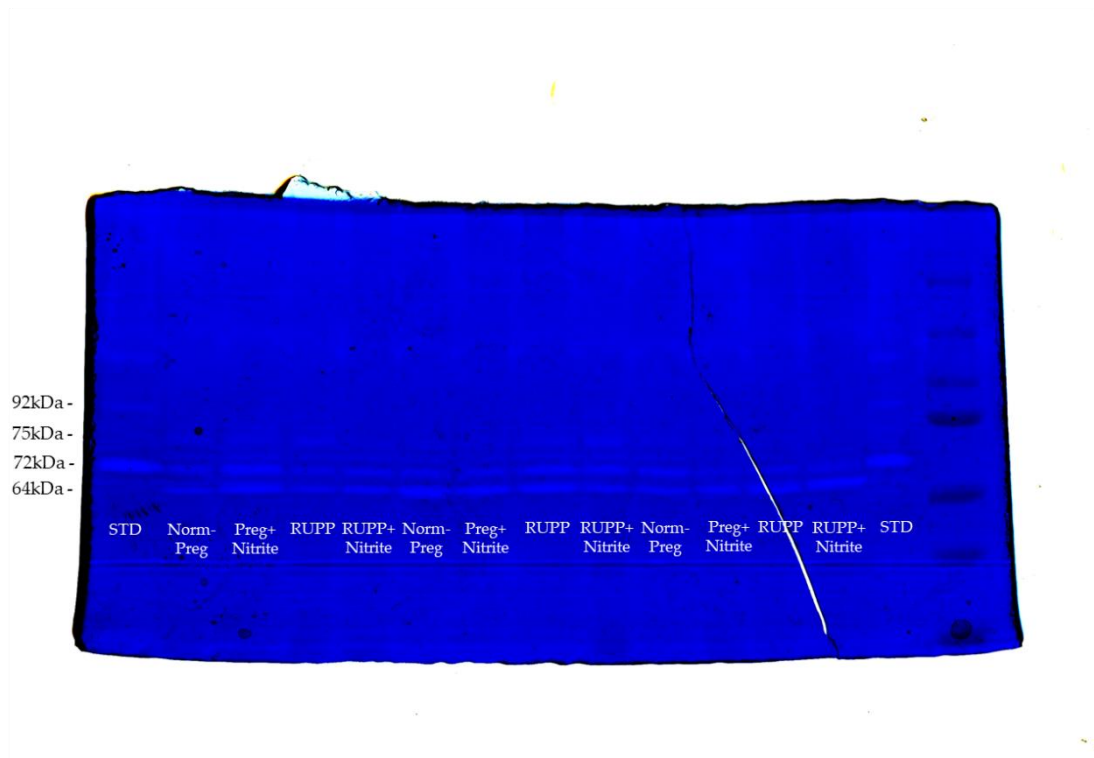
Data are expressed as means ± SEM in Norm-Preg (n = 10), Preg+Nitrite (n = 10), RUPP (n = 10) and RUPP+Nitrite (n = 10) groups. \*P < 0.05 vs Norm-Preg group; <sup>#</sup>P < 0.05 vs RUPP group and <sup>&</sup>P < 0.05 vs Preg+Nitrite group.

### Zymography gel 1 of abdominal aorta



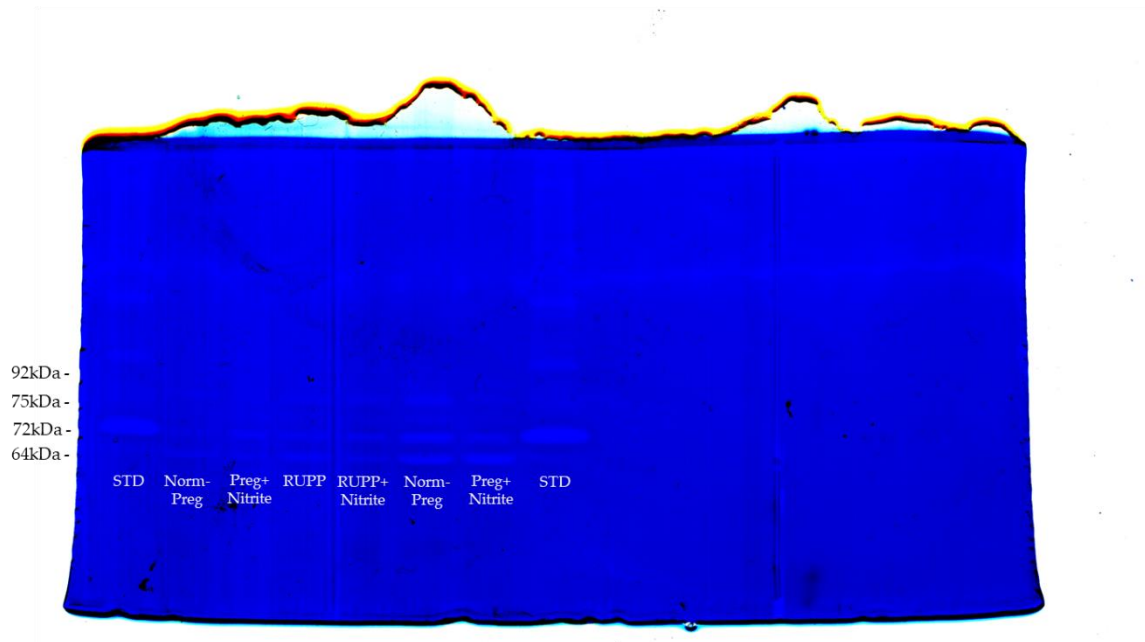
**Supplementary Figure S1.** Acrylamide gel stained with Coomassie Brilliant Blue to quantify the gelatinolytic activities of 92kDa MMP-9, 75kDa MMP-2, 72kDa MMP-2 and 64kDa MMP-2 in abdominal aorta samples of Norm-Preg, Preg+Nitrite, RUPP, and RUPP+Nitrite groups. STD: internal standard.

## Zymography gel 2 of abdominal aorta



**Supplementary Figure S2.** Acrylamide gel stained with Coomassie Brilliant Blue to quantify the gelatinolytic activities of 92kDa MMP-9, 75kDa MMP-2, 72kDa MMP-2 and 64kDa MMP-2 in abdominal aorta samples of Norm-Preg, Preg+Nitrite, RUPP, and RUPP+Nitrite groups. STD: internal standard.

### Zymography gel 3 of abdominal aorta



**Supplementary Figure S3.** Acrylamide gel stained with Coomassie Brilliant Blue to quantify the gelatinolytic activities of 92kDa MMP-9, 75kDa MMP-2, 72kDa MMP-2 and 64kDa MMP-2 in abdominal aorta samples of Norm-Preg, Preg+Nitrite, RUPP, and RUPP+Nitrite groups. STD: internal standard.