SUPPLEMENTAL MATERIAL

Supplementary Table 1: Individual data for sFlt1, PIGF and ratio among all participants and excluding reenrollments

Supplementary Table 1A

| All patients included | Predictors | Median (25 | AUC (95% CI) | |
|-----------------------|------------------|-----------------------|-------------------------|-------------------|
| | | No adverse outcome | Adverse outcome | |
| All Subjects | sFlt1 (pg/ml) | 2,999 (1,963 - 4,958) | 5,708 (3,251 - 9,003) | 0.72 (0.68, 0.76) |
| | PIGF (pg/ml) | 278 (155 - 538) | 124 (70 - 228) | 0.74 (0.70, 0.78) |
| | sFlt1/PIGF ratio | 11 (4 - 29) | 47 (16 - 112) | 0.76 (0.72, 0.80) |
| <34 Weeks | sFlt1 (pg/ml) | 2,102 (1,465 - 3,030) | 10,399 (4,410 - 15,648) | 0.87 (0.81, 0.94) |
| | PIGF (pg/ml) | 440 (180 - 761) | 51 (25 - 119) | 0.87 (0.81, 0.93) |
| | sFlt1/PIGF ratio | 4 (2 -14) | 226 (50 - 547) | 0.89 (0.83, 0.95) |

Supplementary Table 1B

| Excluding re- enrollments | Predictors | Median (25 th -75 th centile) | | AUC (95% CI) |
|------------------------------|------------------|---|-------------------------|-------------------|
| | | No adverse outcome | Adverse outcome | |
| All Subjects | sFlt1 (pg/ml) | 2,999 (2,003 - 5,031) | 6,085 (3,270 - 9,876) | 0.73 (0.69, 0.78) |
| | PIGF (pg/ml) | 281 (158 - 538) | 124 (66 - 222) | 0.75 (0.71, 0.79) |
| | sFlt1/PIGF ratio | 11 (4 - 28) | 51 (15 - 126) | 0.78 (0.74, 0.82) |
| <34 Weeks | sFlt1 (pg/ml) | 2,076 (1,439 - 3,007) | 10,509 (7,309 - 15,585) | 0.88 (0.82, 0.95) |
| | PIGF (pg/ml) | 440 (186 - 793) | 49 (25 - 91) | 0.88 (0.82, 0.94) |
| | sFlt1/PIGF ratio | 4 (2 - 13) | 248 (111 - 547) | 0.90 (0.84, 0.96) |

Supplementary Table 2: sFlt1/PIGF tertile and risk of adverse outcome in all participants and those presenting at less than 34 weeks gestation (excluding re-enrollments)

| All | | | | tile 1 S/P≤9.6) | Tertile 2 (N=179, 9.6 <s p<39.9)<="" th=""><th colspan="2">Tertile 3 (n=178, S/P≥39.9)</th></s> | | Tertile 3 (n=178, S/P≥39.9) | |
|-------------------------|-----|---------------------|------------------------------|--------------------|--|-----------------|--------------------------------|-----------------------|
| | N | Adverse Outcomes | Adverse Outcomes | OR (95% CI) | Adverse Outcomes | OR (95% CI) | Adverse Outcomes | OR (95% CI) |
| All Participants | 535 | 223 (41.7%) | 32 (17.9%) | Ref | 65 (36.3%) | 2.6 (1.6, 4.2) | 126 (70.8%) | 11.1 (6.7, 18.2) |
| Normotensive | 247 | 54 (21.9%) | 12 (11.1%) | Ref | 20 (21.1%) | 2.1 (1.0, 4.6) | 22 (50.05) | 8 (3.4, 18.6) |
| Non-Proteinuric | 377 | 110 (29.2%) | 24 (15.6%) | Ref | 40 (29.0%) | 2.2 (1.3, 3.9) | 46 (54.1%) | 6.4 (3.5, 11.8) |
| Presenting at <34 Weeks | | | Tertile 1 (n=52, S/P≤4.0) | | Tertile 2 (N=53, 4.0 <s p<50.4)<="" th=""><th colspan="2">Tertile 3 (n=53, S/P≥50.4)</th></s> | | Tertile 3 (n=53, S/P≥50.4) | |
| | N | Adverse Outcomes | Adverse Outcomes | OR (95% CI) | Adverse Outcomes | OR (95% CI) | Adverse Outcomes | OR (95% CI) |
| All Participants | 158 | 53 (33.5%) | 3 (5.8%) | Ref | 8 (15.1%) | 2.9 (0.7, 11.6) | 42 (79.3%) | 62.3 (16.3, 238.4) |
| Normotensive | 70 | 8 (11.4%) | 2 (5.7%) | Ref* | 0 (0.0%) | Ref* | 6 (66.7%) | 58.9 (8.2, 425.7) |
| Non-Proteinuric | 102 | 15 (14.7%) | 0 (0.0%) | Ref* | 5 (11.4%) | Ref* | 10 (58.8%) | 22.9 (6.1, 85.8) |

Risk of adverse outcomes in participants when only the first triage visit was included for the analyses. Adverse outcomes were considered if they occurred within 2 weeks of presentation. S/P= sFlt1/PIGF ratio.

^{*}In normotensive and non-proteinuric participants presenting at less than 34 weeks, the reference odds ratio is the incidence of adverse outcome in tertiles 1 and 2 combined.

Supplementary Table 3: Clinical features of participants with sFlt1/PIGF ratio less than 85 at presentation who experienced adverse outcomes within 2 weeks

| Study ID | GA at presentation (wks) | sFlt1/PIGF ratio | Adverse Outcome | Delivery Indication | GA at Delivery | Other Clinical Information |
|----------|--------------------------------|---------------------|----------------------------|------------------------|-------------------|---|
| 41 | 28.4 | 50.3 | Delivery | HTN, NRFHT | 28.4 | Chronic HTN |
| 153 | 28.0 | 2.4 | Neonatal death | NRFHT, abruption | 28.0 | Chronic abruption and oligohydramnios since 16 wks, Potter's sequence |
| 185 | 32.2 | 5.9 | Delivery | Headache | 32.3 | Gestational HTN |
| 227 | 31.0 | 25.8 | Delivery | NRFHT | 31.2 | Chronic HTN |
| 253 | 33.3 | 17.3 | Delivery | Elective | 35.1 | Chronic HTN |
| 303 | 33.4 | 3.0 | Delivery | Headache | 35.1 | PE |
| 305 | 33.4 | 58.1 | Delivery | Headache | 34.1 | PE, Breech |
| 399 | 31.1 | 1.3 | Delivery, Elevated LFTs | AFLP | 32.5 | |
| 427 | 33.0 | 11.6 | Delivery | Abruption | 33.2 | Chronic HTN, no pathologic |
| 458 | 29.0 | 5.02 | Delivery | Headache | 29.0 | evidence of abruption PE |
| 572 | 33.5 | 8.6 | Delivery | Elective | 34.3 | Chronic HTN |
| 598 | 32.0 | 0.95 | Delivery | Headache | 32.4 | Chronic HTN |
| 612 | 32.3 | 40.4 | Delivery | Headache, | 33.1 | PE |
| 710 | 33.6 | 45.9 | Delivery | HTN Abruption | 35.5 | Gestational HTN, no pathologic evidence of |
| 718 | 33.4 | 38.0 | Delivery | NRFHT | 33.4 | abruption Chronic HTN |
| 738 | 26.2 | 15.6 | Acute Renal Failure | Labor | 26.6 | Chronic HTN, renal disease, diabetes, s/p gastric bypass |

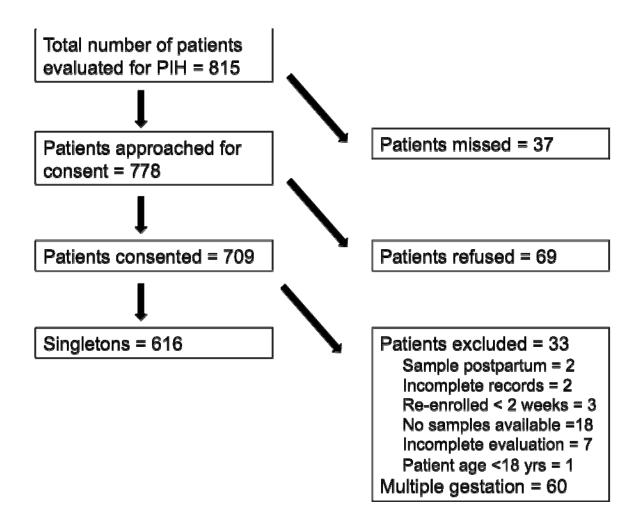
Adverse outcomes were considered if occurring within 2 weeks of presentation. GA=gestational age, HTN=hypertension, NRFHT=non-reassuring fetal heart tracing, PE= preeclampsia, LFT=liver function test, AFLP=acute fatty liver of pregnancy.

Supplementary Table 4: Clinical features of participants with sFlt1/PIGF ≥85 at presentation, but no adverse outcome occurring within in 2 weeks

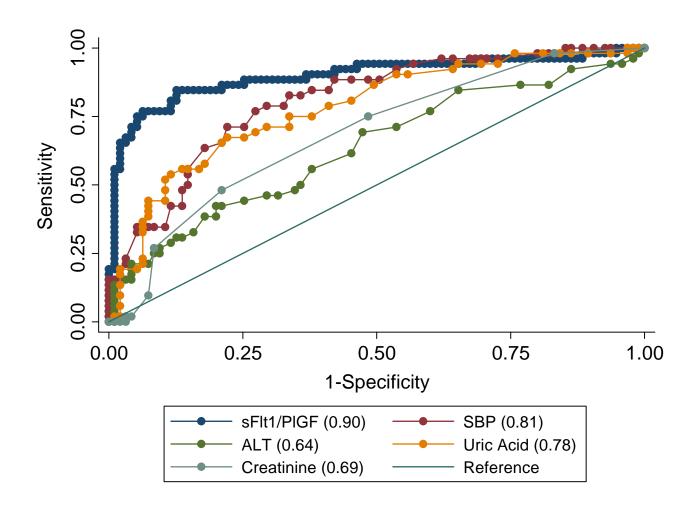
| Study ID | GA at presentation (wks) | sFlt1/PIGF ratio | Clinical Diagnosis at 2 Weeks | Final Clinical Diagnosis | GA at Delivery | Other Clinical Information |
|-------------|--------------------------------|---------------------|----------------------------------|-----------------------------|-------------------|-------------------------------|
| 42 | 23.5 | 627.8 | Gestational HTN | Severe PE | 27.1 | Neonatal Death |
| 238 | 32.2 | 125.0 | No Hypertensive Dx | PE, Appendicitis | 36.2 | |
| 306 | 33.3 | 107.6 | Gestational HTN | Severe PE | 37.4 | Severe HTN |
| 339 | 30.4 | 312.8 | Mild PE | Severe PE | 33.0 | HELLP syndrome |
| 638 | 29.3 | 210.0 | No Hypertensive Dx | Severe PE | 34.2 | HELLP syndrome |
| 741 | 32.6 | 147.0 | Gestational HTN | Severe PE | 35.5 | Severe HTN |
| 753 | 30.2 | 143.5 | No Hypertensive Dx | Severe PE | 34.5 | Severe HTN |

GA=gestational age, wks= weeks, HTN= hypertension, PE= preeclampsia, HELLP= Hemolysis, Elevated Liver enzymes and Low Platelets.

Supplementary Figure 1: Enrollment and exclusions



Supplementary Figure 2: Predictive accuracy of the sFlt1/PIGF ratio in patients less than 34 Weeks gestation (excluding re-enrollments)



Predictive accuracy is shown for various analytes amongst participants when only the first triage visit was included for the analyses. The above figure shows receiver operating characteristic curves for prediction of adverse outcomes using the sFlt1/PIGF ratio, ALT (alanine aminotransferase), uric acid, SBP (highest systolic blood pressure measured in triage) and creatinine. All laboratory values were measured in blood collected at the time of presentation. The area under the receiver operator curve (AUC) is given for each potential predictor in the legend. All AUC's were significantly different from that of the sFlt1/PIGF ratio alone (p<0.01).