

Supplementary

Table S1. Selective High Risk Group Testing.

| | DAT negative | DAT positive | P value | Total |
|---|-----------------------------------|--------------|---------|-------------|
| Group 1. Screening in mothers blood group O or Rh negative (n=768)* | | | | |
| | Phototherapy (n=154) [#] | | | |
| Yes | 12 (13.2%) | 11 (17.5%) | 0.497 | 23 (14.9%) |
| No | 79 (86.8%) | 52 (82.5%) | | 131 (85.1%) |
| Group 2. Screening in mothers with blood group O (n=722)* | | | | |
| | Phototherapy (n=143) [#] | | | |
| Yes | 11 (13.1%) | 11 (18.6%) | 0.5 | 22 (15.4%) |
| No | 73 (86.9%) | 48 (81.4%) | | 212 (84.6%) |
| Group 3. Screening in neonates with blood group B (n=303)* | | | | |
| | Phototherapy (n=81) [#] | | | |
| Yes | 9 (18.4%) | 9 (28.1%) | 0.413 | 18 (22.2%) |
| No | 40 (81.6%) | 23 (71.9%) | | 63 (77.8%) |
| Group 4. Screening in neonates with blood group B born to mothers with blood group O or Rh negative (n=96)* | | | | |
| | Phototherapy (n=47) [#] | | | |
| Yes | 4 (23.5%) | 8 (26.7%) | 0.8 | 12 (25.5%) |
| No | 13 (76.5%) | 22 (73.3%) | | 35 (74.5%) |

* Number of maternal-neonatal pairs in group; # Number of neonates assessed for phototherapy.

Table S2. Percent of neonates requiring phototherapy detected in high risk groups.

| Group tested | Number of patients requiring phototherapy detected | Percent decrease in testing | Positive Predictive Value [95% CI] |
|--------------|--|-----------------------------|------------------------------------|
| All cohort | 36 (100%) | | |
| Group 1 | 23 (63.9%) | 47.5% | 17.5% [11.6 – 25.4%] |
| Group 2 | 22 (61.1%) | 50.7% | 18.6% [12.5 – 26.8%] |
| Group 3 | 18 (50%) | 79.3% | 28.1% [18.2 – 40.8%] |
| Group 4 | 12 (33.3%) | 93.4% | 26.7% [18.5 – 36.9%] |