

Supplemental Table 1 Clinical manifestations in children at the age of 18 months and 3 years

| Clinical manifestations* | 18m (n=141) | 36m (n=129) |
|--|-------------|-------------|
| abdominal pain, diarrhea or hematochezia | 92 | 61 |
| feeding difficulty | 41 | 13 |
| rash with pruritus | 40 | 81 |
| sneezing, nasal congestion and runny nose | 13 | 21 |
| Red eyes and tears | 8 | 13 |
| Itching, tingling or swelling of the mouth, lips or throat | 7 | 11 |
| dyspnea | 4 | 5 |

* Multiple clinical manifestations could be observed in one child.

Supplemental Table 2 Food types causing food allergy in children at the age of 18 months and 3 years

| Food type | 18m (n=141) | 36m (n=129) |
|------------------------|-------------|-------------|
| Milk | 72 | 34 |
| Eggs | 24 | 36 |
| Wheat | 13 | 19 |
| Fish and shrimp | 10 | 13 |
| Pork | 5 | 5 |
| Peanut | 5 | 8 |
| Mango | 4 | 5 |
| Milk and eggs | 6 | 4 |
| Milk and wheat | 2 | 2 |
| Fish, shrimp and wheat | 0 | 2 |
| Fish, shrimp and mango | 0 | 1 |

Supplemental Table 3 Characteristics of children born to mothers with allergic diseases history between with GBS-IAP group and Without GBS- IAP group

| Characteristic | Without GBS- IAP (n=225) | With GBS- IAP (n=39) | <i>t/χ²</i> | <i>P value</i> |
|------------------------|-----------------------------|-------------------------|------------------------|----------------|
| *Mother's age (years) | 27.50±4.07 | 28.18±4.41 | -0.954 | 0.341 |
| *Mother's BMI (x±s) | 20.84±1.80 | 20.60±1.30 | 0.813 | 0.417 |
| **Parity (n, %) | | | 0.936 | 0.333 |
| One child | 134 (59.6) | 20 (51.3) | | |
| **Second child or more | 91 (40.4) | 19 (48.7) | | |
| **GBS Screening (n, %) | | | 233.186 | <0.001 |

| | | | | |
|--|----------------|----------------|---------|--------|
| Positive | 2(0.9) | 37(94.9) | | |
| Negative | 2527(96.3) | 14(4.9) | | |
| **Whether received higher education (n, %) | 176(78.2) | 30(76.9) | 0.033 | 0.856 |
| **Gender (man, n, %) | 126 (56.0) | 16 (41.0) | 2.998 | 0.083 |
| *Gestational age (weeks $\bar{x}\pm s$) | 39.3 \pm 1.1 | 38.8 \pm 1.1 | 2.596 | 0.010 |
| *Weight of birth (g $\bar{x}\pm s$) | 3388 \pm 399 | 3348 \pm 380 | 0.605 | 0.548 |
| **Feeding method (n, %) | | | 1.761 | 0.358 |
| Breastfeeding | 155 (68.9) | 31 (79.5) | | |
| Artificial feeding | 7 (3.1) | 1 (2.6) | | |
| Mixed feeding | 63 (28.0) | 7 (17.9) | | |
| **Cesarean section (n, %) | 105 (46.7) | 15 (38.5) | 0.903 | 0.342 |
| **Whether used antibiotics in the infant (n, %) | 18 (8.0) | 20 (51.3) | 50.533 | <0.001 |
| Smoking | 1(0.4) | 19(48.7) | 103.823 | <0.001 |
| keeping pets | 116(51.6) | 17(43.6) | 0.844 | 0.358 |
| **Incidence of food allergy in 18 months children | 31(13.8) | 19(48.7) | 26.431 | <0.001 |
| **Incidence of food allergy in 3 years children (n, %) | 48 (21.3) | 21 (53.8) | 18.200 | <0.001 |

Supplemental Table 4 Characteristics of GBS-IAP between without GBS-IAP group and with GBS-IAP group

| Characteristics | GBS-IAP | without GBS-IAP |
|--|--------------------|------------------|
| | n = 284 | n = 2625 |
| Type of GBS-specific antibiotic, n (%) | | 77(2.9) |
| Ampicillin | 52(18.3) | 20 (26.0) |
| Cefazolin | 21 (7.4) | 9(11.7) |
| Penicillin | 211(74.3) | 48(62.3) |
| Hours from first antibiotic dose to delivery, median (IQR) | 11.22 (7.42–16.54) | 2.56(1.76–3.58) |
| Exposure to other antibiotic (not GBS-specific) before delivery, n (%) | 30(10.6) | 1634(62.2) |
| Clindamycin | 3(10.0) | 103(6.3) |
| Piperacillin tazobactam | 23(76.7) | 210(12.9) |
| Azithromycin or erythromycin | 3(10.0) | 22(1.3) |
| Ceftriaxone | 1(3.3) | 87(5.3) |
| Cefoxitin | 0 | 1212(74.2) |
| Hours from first dose of other antibiotic to delivery, median (IQR) | 3.48 (1.49–6.48) | 0.91 (0.51–1.81) |

