

## **Supplemental file 1**

### ***Details of clinical features of subjects***

All infants with clinical features suggestive of intra-abdominal inflammation or acute surgical abdomen received a full sepsis screen in the NICU (see Supplemental file 2 for details about the full sepsis screen). The specific abdominal signs and symptoms, included (i) abdominal distension, guarding or rebound, (ii) abdominal wall erythema, (iii) bloody or blood-stained stool, and (iv) unexplained diarrhea. **Non-specific abdominal clinical features, included (i) bile-stained gastric aspirates, (ii) repeated vomiting or significant regurgitation more than 4 times in 24 hours, and (iii) volume of gastric residuals exceeding half of the oral intake in the previous 4 hours on 2 occasions within the same day.** These gastrointestinal features were usually accompanied by other non-specific signs of sepsis such as (i) unstable temperature ( $< 36.5^{\circ}\text{C}$  or  $> 37.5^{\circ}\text{C}$  on two occasions within 12 hours); (ii) hemodynamic instability *e.g.*, sudden increase or decrease in heart rate or persistent tachycardia ( $> 160/\text{min}$ ) or bradycardia ( $< 100/\text{min}$ ), poor peripheral circulation with prolonged capillary refilling time  $> 3$  seconds, systemic hypotension or unexplained increase in requirement of vasopressor support to maintain an acceptable blood pressure; (iii) respiratory compromise as evidenced by progressive increase in oxygen requirement or ventilatory setting in a previously stable infant, apnea, tachypnea ( $> 60$  breaths/min), and central cyanosis due to splinting of diaphragm by a distended abdomen; and (iv) unexplained metabolic parameters such as persistent metabolic acidosis (base deficit  $\geq 10$  mmol/L) or hyperglycemia ( $> 10$  mmol/L).