

Supplemental Table 1: Summary Scales of the NICU Network Neurobehavioral Scale (NNNS)

| Summary Scale Name | Description | Scoring Range |
|--|--|---------------|
| Habituation | Habituation is a measure of the infants response to repeated presentations of a rattle and a bell (auditory) as well as a light (visual) stimulus while asleep; high scores indicate faster rates of habituation to stimuli while maintaining a sleep state. | 1-9 |
| Attention (Orientation) | Attention is a measure of the infant's ability to localize and track auditory (examiner voice, rattle sound) and visual (examiner face, rattle, ball) stimuli while in a sustained quiet alert state; high scores indicate appropriate and sustained alertness to stimuli. | 1-9 |
| Handling | Mean number of maneuvers needed to keep the infant alert and calm during orientation; scores closer to 1 indicate more help from the examiner was needed to maintain a quiet alert state during orientation. | 0-1 |
| Quality Movement | Quality of Movements is a measure of the infant's motor quality including smoothness, maturity, modulation of movement of the arms and legs as well as startles and tremors; high scores indicate good motor control | 1-9 |
| Self Regulation | Self-regulation is a measure of the infant's responses in motor activity, physiology, and state in response to the demands of the NNNS exam and examiners attempt to console when crying; higher scores indicate better regulation. | 1-9 |
| Non-Optimal Reflexes | Non-Optimal reflexes represents the total number of non-optimal reflex responses elicited | 0-15 |
| Stress/Abstinence Signs | Stress-Abstinence Signs represents that mean number of stress/abstinence signs displayed by the infant across five organ systems (autonomic, physiologic, gastrointestinal, skin, and central-nervous system); a score closer to 1 indicates a high number of observed stress/abstinence signs. | 0-1 |
| Central Nervous System Stress-Abstinence Signs | CNS Stress-Abstinence Signs represents the mean number of central nervous system related stress/abstinence signs displayed by the infant, including startles, tremors, backarching, and abnormal posturing; a score closer to 1 indicates a high number of observed CNS stress/abstinence signs. This summary score was used separately due to the high degree of applicability of potential effects of SRI medications. | 0-1 |
| Arousal | This is the level of arousal and associated motor activity during the NNNS exam; high scores indicate high arousal, activity, and fussing and crying during the exam. | 1-9 |
| Hypertonia | Hypertonia is the mean number of items in which the infant's response was characterized by high muscle tone (rigidity or lack of relaxation at rest) in the arms, legs, and/or trunk. | 0-10 |
| Hypotonia | Hypotonia is the mean number of items in which the infant's response was characterized by decreased muscle tone (limp, flaccid, or weak) in the arms, legs, and/or trunk. | 0-10 |
| Asymmetrical Reflexes | This is the total number of asymmetric responses to elicited reflexes | 0-16 |
| Excitability | Excitability is a measure of high levels of motor, state and physiological reactivity; high scores reflect infant irritability and high reactivity to stimuli and handling. | 0-15 |
| Lethargy | Lethargy is a measure of low levels of motor, state and physiological reactivity; high scores reflect an infant who is sleepy and/or has low reactivity to stimuli and handling. | 0-15 |

Supplemental Table 2. Model-Estimated Means and Standard Errors of Significant NNNS Subscale Scores Over the First Month by Early vs Late SRI Exposure Group (N=63)

| Variable | LATE SRI EXP | | EARLY SRI EXP | | GROUP | | GROUP * DAYS | |
|---------------------|--------------|-------------|---------------|-------------|-------------|-------------|--------------|------|
| | DF | M (SE) | DF | M (SE) | F | p< | F | p< |
| Arousal | 81 | 4.05 (0.08) | 75 | 4.13 (0.18) | 0.16 | 0.69 | 2.34 | 0.06 |
| Attention | 72 | 4.61 (0.11) | 77 | 5.18 (0.23) | 5.30 | 0.02 | 0.24 | 0.92 |
| CNS Stress | 75 | 0.23 (0.01) | 79 | 0.22 (0.03) | 0.06 | 0.81 | 0.40 | 0.81 |
| Habituation | 17 | 6.96 (0.27) | 135 | 7.05 (0.67) | 0.02 | 0.89 | 1.09 | 0.48 |
| Handling | 79 | 0.37 (0.03) | 83 | 0.35 (0.06) | 0.15 | 0.70 | 1.33 | 0.26 |
| Hypotonicity | 129 | 0.54 (0.06) | 103 | 0.33 (0.13) | 2.20 | 0.14 | 0.55 | 0.70 |
| Quality of Movement | 53 | 4.01 (0.06) | 59 | 4.10 (0.13) | 0.38 | 0.54 | 0.18 | 0.95 |
| Self Regulation | 90 | 5.25 (0.10) | 108 | 5.38 (0.22) | 0.27 | 0.60 | 1.55 | 0.19 |

Supplemental Figure. NNNS scores over days from birth for infants with exposure to SRIs Early (last reported dose before Week 35) versus Late (through delivery) in gestation.

