

**NORTH CAROLINA NEWBORN SCREENING PROGRAM PANEL  
CORE AND SECONDARY CONDITIONS**

**Amino acid disorders**

- Argininemia<sup>§</sup>
- Argininosuccinic Aciduria\*
- Benign Hyperphenylalaninemia<sup>§</sup>
- Biotpterin Defect in Cofactor Biosynthesis<sup>§</sup>
- Biotpterin Defect in Cofactor Regeneration<sup>§</sup>
- Citrullinemia, Type I\*
- Citrullinemia, Type II<sup>§</sup>
- Classic Phenylketonuria\*
- Homocystinuria\*
- Hypermethioninemia<sup>§</sup>
- Maple Syrup Urine Disease\*
- Tyrosinemia, Type I\*
- Tyrosinemia, Type II<sup>§</sup>
- Tyrosinemia, Type III<sup>§</sup>

**Endocrine disorders:**

- Primary Congenital Hypothyroidism\*
- Congenital Adrenal Hyperplasia\*

**Fatty acid oxidation disorders**

- Carnitine Acylcarnitine Translocase Deficiency<sup>§</sup>
- Carnitine Palmitoyltransferase Type I Deficiency<sup>§</sup>
- Carnitine Palmitoyltransferase Type II Deficiency<sup>§</sup>
- Carnitine Uptake Defect/Carnitine Transport Defect\*
- Glutaric Acidemia Type II<sup>§</sup>
- Long-chain L-3 Hydroxyacyl-CoA Dehydrogenase Deficiency\*
- Medium-chain Acyl-CoA Dehydrogenase Deficiency\*
- Medium-chain Ketoacyl-CoA Thiolase Deficiency<sup>§</sup>
- Medium/short-chain L-3-Hydroxyacyl-CoA Dehydrogenase Deficiency<sup>§</sup>
- Short-chain Acyl CoA Dehydrogenase Deficiency<sup>§</sup>
- Trifunctional Protein Deficiency\*
- Very Long-chain Acyl-CoA Dehydrogenase Deficiency\*

**Hemoglobin disorders:**

- S,  $\beta$ -Thalassemia\*
- S,C Disease\*
- S,S Disease (Sickle Cell Anemia)\*
- Various other hemoglobinopathies including<sup>§</sup>:
  - Hemoglobin C Disease<sup>§</sup>
  - Hemoglobin E Disease<sup>§</sup>
  - Sickle/hemoglobin C Disease (FSC, Hb S/C)<sup>§</sup>
  - Sickle/hemoglobin E Disease (FSE, Hb S/E)<sup>§</sup>
  - Sickle/hemoglobin D Disease (FSD, Hb D/D)<sup>§</sup>

**Lysosomal Storage Disorders:**

- Mucopolysaccharidosis Type I\*
- Glycogen Storage Disease Type II (Pompe)\*

### Organic acid conditions

- 2-Methylbutyrylglycinuria<sup>§</sup>
- 2-Methyl-3-Hydroxybutyric Aciduria<sup>§</sup>
- 3-Hydroxy-3-Methylglutaric Aciduria\*
- 3-Methylcrotonyl-CoA Carboxylase Deficiency\*
- 3-Methylglutaconic Aciduria<sup>§</sup>
- $\beta$ -Ketothiolase Deficiency\*
- Glutaric Acidemia Type I\*
- Holocarboxylase Synthase Deficiency\*
- Isobutyrylglycinuria<sup>§</sup>
- Isovaleric Acidemia\*
- Malonic acidemia<sup>§</sup>
- Methylmalonic Acidemia (Cobalamin Disorders)\*
- Methylmalonic Acidemia (Methylmalonyl-CoA Mutase)\*
- Methylmalonic Acidemia with Homocystinuria<sup>§</sup>
- Propionic Acidemia\*

### Other conditions

- Biotinidase Deficiency\*
- Classic Galactosemia\*
- Critical Congenital Heart Disease<sup>¥</sup>
- Cystic Fibrosis\*
- Galactoepimerase Deficiency<sup>§</sup>
- Galactokinase Deficiency<sup>§</sup>
- Hearing Loss<sup>¥</sup>
- Severe Combined Immunodeficiencies\*
- T-cell Related Lymphocyte Deficiencies<sup>§</sup>
- Spinal Muscular Atrophy due to homozygous deletion of exon 7 in SMN1\*
- X-linked Adrenoleukodystrophy\*

\*Core condition on the RUSP, screening conducted at NCSLPH

¥Core condition on the RUSP, screening conducted at point of care

§Secondary condition on the RUSP, screening conducted at NCSLPH