Evaluation of Safety and Outcomes of Scoliosis Correction Surgery without Prior Decompression of Associated Intraspinal Pathology

- The purpose of this study is to analyze the safety and outcomes of the patients undergoing scoliosis correction surgery without prior neurological decompression for associated intraspinal conditions including Chiari malformation-I, syringomyelia or tethered cord.

**Specific Aim 1:** Determine the incidence of neurologic compromise in patients with previously untreated intraspinal pathology (Chiari I malformation, syringomyelia, diastematomyelia, and/or tethered cord) undergoing scoliosis correction.

**Specific Aim 2:** Determine the rate of subsequent neurosurgical correction for intraspinal pathology (Chiari I malformation, syringomyelia, diastematomyelia, and/or tethered cord) in patients who have undergone scoliosis correction and to compare the outcomes following scoliosis correction in patients who had prior neurological correction of intraspinal pathology versus those who did not undergo prior neurological correction.

**Specific Aim 3:** To determine and compare the outcomes and safety of scoliosis correction in patients with intraspinal pathology with varying degree of severity (mild, moderate, and severe neurological deficits) versus those with scoliosis without intraspinal pathology (adolescent idiopathic scoliosis).