



## Advances in Scoliosis, Spinal Deformity and Other Spinal Disorders

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### Message from the Guest Editors

Dear Colleagues,

Spinal disorders are the leading cause of disability worldwide, there is a growing number of persons with adult spinal deformities. In the present Special Issue for the Journal of Clinical Medicine, we aim to highlight current research focused on the management of adult spinal deformities. Specific areas of focus include the following: 1) the application of predictive analytics to patients with adult spinal deformities, focusing on preoperative risk stratification and the development of clinical tools that can assist with preoperative counseling; 2) musculoskeletal health optimization, including pre/postoperative bone health optimization and the incorporation of bone and musculoligamentous integrity into construct selection and mechanical complication prevention; and 3) the utilization of novel technologies and techniques, such as minimally invasive approaches (e.g., anterior column reconstruction) and individualized/patient-specific hardware, to improve outcomes.

**Keywords:** adult spinal deformity; scoliosis; spinal biomechanics; predictive calculators; bone health optimization; minimally invasive spine surgery; mechanical complication prevention; frailty





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