



Publication summary of the **AO Spine Knowledge Forum Deformity – An international consensus on the appropriate treatment for adults with spinal deformity (ASD Consensus)**

March 2026

Peer-reviewed Journal Articles:

1. Naresh-Babu J, Kwan KYH, Wu Y, Yilgor C, Alanay A, Cheung KMC, Polly DW, Jr., Park JB, Ito M, Lenke LG, van Hooff ML, Kleuver M and AO Spine Knowledge Forum Deformity. *AO Spine Adult Spinal Deformity Patient Profile: A Paradigm Shift in Comprehensive Patient Evaluation in Order to Optimize Treatment and Improve Patient Care*. Global Spine J 21925682211037935, 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/34402318>
2. Kwan KYH, Naresh-Babu J, Jacobs W, de Kleuver M, Polly DW, Yilgor C, Wu Y, Park JB, Ito M and van Hooff ML. *Toward the Development of a Comprehensive Clinically Oriented Patient Profile: A Systematic Review of the Purpose, Characteristic, and Methodological Quality of Classification Systems of Adult Spinal Deformity*. Neurosurgery 88 (6): 1065-1073, 2021.
<https://www.ncbi.nlm.nih.gov/pubmed/33588440>

Conference Proceedings:

Podium/Oral Presentations

1. Polly D. *Intraoperative Neuromonitoring Has Poor Correlation with Postop Neurological Deficits in Non-Cord Level Adult Deformity Surgery COL (Ret)* 66th SOMOS meeting Nashville, TN, USA. December 9-13, 2024.
2. Stephen Lewis SB, Lawrence Lenke, Christopher J. Nielsen, Justin Smith, Michael Kelly, David Polly, Christopher Shaffrey, Brett Rocos, Aditya Raj, Hananel Shear-Yashuv. *A Prospective, Observational, Multicenter Study Assessing Functional Improvements After Multi-Level Fusions For Adult Spinal Deformity: 5 Year Follow-Up Results*. Global Spine Congress 2024 Bangkok, Thailand. May 15-18, 2024.
3. Brett Rocos JPS, Anastasios Charalampidis, Jeffrey Gum, Stephen Lewis. *One-Third Of Surgical Adult Spinal Deformity (ASD) Patients Are Consuming Opioids Both Pre- And Postoperatively With Significant International Differences: This Is Partly A Cultural Issue*. Global Spine Congress 2024 Bangkok, Thailand. May 15-18, 2024.
4. Anna Rienmüller MS, Michael Kelly, Stephen Lewis. *What Are The Risk Factors For Not Reaching A Patient-Acceptable Symptom State (PASS+) Using The Oswestry Disability Index (ODI) After Adult Deformity Surgery In Patients Above 60 Years?* . Global Spine Congress 2024 Bangkok, Thailand. May 15-18, 2024.

5. Lewis SJ. *One-Third of Surgical Adult Spinal Deformity (ASD) Patients are Consuming Opioids Both Pre- and Postoperatively with Significant International Differences: This is Partly a Cultural Issue*. North American Spine Society (NASS) 38th Annual Meeting Los Angeles, CA, USA. October 18-21, 2023.
6. Lewis SJ. *A prospective, observational, multicenter study assessing functional improvements after multilevel fusion for adult spinal deformity (ASD): 5- year follow- up results*. North American Spine Society (NASS) 38th Annual Meeting Los Angeles, CA, USA. October 18-21, 2023.
7. J Naresh-Babu, Kenny Yat Hong Kwan, Yabin Wu, Caglar Yilgor, Ahmet Alanay, Kenneth M. C. Cheung, David W. Polly, Jong-Beom Park, Manabu Ito, Lawrence G. Lenke, Miranda L. van Hooff, Marinus de Kleuver and Deformity ASKF. *AO Adult Spine Deformity Patient Profile - A Paradigm Shift In Comprehensive Patient Evaluation In Order To Improve Patient Care*. Scoliosis Research Society (SRS) 56th Annual Meeting & Course 2021 St. Louis, Missouri, USA September 22-25, 2021.
8. J Naresh-Babu, Kenny Yat Hong Kwan, Yabin Wu, Caglar Yilgor, Ahmet Alanay, Kenneth M. C. Cheung, David W. Polly, Jong-Beom Park, Manabu Ito, Lawrence G. Lenke, Miranda L. van Hooff, Marinus de Kleuver and Deformity ASKF. *AO Adult Spine Deformity Patient Profile - A Paradigm Shift In Comprehensive Patient Evaluation In Order To Improve Patient Care*. Annual Meeting of the Nordic Spinal Deformities Society (NSDS) Virtual. August 26-27, 2021.
9. Naresh-Babu J, Hooff MLv, Kwan K, Wu Y, Cheung K, Ito M, Park J-B, Polly D and de Kleuver M. *Framework for Developing an AOSpine Comprehensive Classification for Adult Spinal Deformity* Global Spine Congress 2019 Toronto, ON, Canada. May 15-18, 2019.

Poster or Virtual Presentations

1. Rocos B, Kato S, Lewis S, Shaffrey C and Lenke L. *Antibiotic Use In Spine Deformity Surgery: Results From The AO Spine Surveillance Of The Management Of Patients With Adult Spine Deformity* Global Spine Congress 2024 Bangkok, Thailand. May 15-18, 2024.
2. B. Rocos J, Sardi, A. Charalampidis, J. Gum and Lewis S. *Opioid Use At Baseline Is Associated With Greater Baseline And 2 Year Back Pain Scores In Older Patients Undergoing Adult Spinal Deformity Surgery*. Global Spine Congress 2024 Bangkok, Thailand. May 15-18, 2024.
3. Shin Oe YM, Kenneth Cheung, Kenny Kwan, So Kato, Stephen Lewis, Christopher Shaffrey, Lawrence Lenke, and AO Spine Knowledge Forum Deformity. *Questionnaires from AO Spine members performing ASD surgery on wound closure and antibiotic use by specialty and by developing and developed countries*. Global Spine Congress 2023 Prague, Czech Republic. May 31-June 3, 2023.
4. Van Hooff M, Kwan K, Wu Y, Yilgor C, Alanay A, Cheung K, Polly D, Park J-B, Ito M, Lenke LG, Naresh-Babu J, De Kleuver M and Deformity oboASKF. *The AOSpine Adult Spine Deformity Patient Profile Classification System. - The Development, Validation and International Expert Consensus*. Global Spine Congress 2021 Paris, France. November 3-6, 2021.
5. Naresh-Babu J, Kwan K, Wu Y, Cheung K, Jacobs W, Ito M, Polly D, Park J-B, van Hooff M and de Kleuver M. *Do we have an Ideal System for Classifying Adult Spinal Deformity Patients? The characteristics, clinical utility and methodological quality of classification systems for Adult Spinal deformity: A Systematic review*. Global Spine Congress 2021 Paris, France. November 3-6, 2021.