

CURRICULUM VITAE
JACK ELLIOT ZIGLER, MD, FACS, FAAOS

ADDRESS

Center for Disc Replacement at Texas Back Institute
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EDUCATION

Bachelor of Science, with Distinction - 1973
Cornell University
Ithaca, New York

M.D. Cum Laude - 1977
SUNY Upstate Medical Center
Syracuse, New York

**POSTGRADUATE
TRAINING**

July 1977 - June 1978
Resident in Surgery
Long Island Jewish - Hillside Medical Center
New Hyde Park, New York

July 1978 - June 1981
Resident and Chief Resident in Orthopedic Surgery
Mount Sinai School of Medicine
New York, New York

July 1981 - June 1982
Arnold Fellow in Spine Surgery
Henry H. Bohlman, M.D., Preceptor
Department of Orthopedic Surgery
Case Western Reserve Univ. School of Medicine
Cleveland, Ohio

CLINICAL PRACTICE

July 1982 - August 1996
Orthopedic Surgeon
Anaheim, California

1983 - August 1996
Chief, Spinal Injury Service
Rancho Los Amigos Medical Center
Director of Fellowship & Residency
Orthopedic Training Program

1991 - 1996
Clinical Professor of Orthopedic Surgery
USC School of Medicine
Los Angeles, California

1994-1996

Clinical Professor of Orthopedic Surgery
UCI School of Medicine
Irvine, California

1996 - Present

Spine Surgeon
Co-Director Spine Fellowship Program 1996-2020
Texas Back Institute
Plano, Texas

**HONORS AND
APPOINTMENTS**

1976 Alpha Omega Alpha Honor Medical Society

1977 Academic Achievement Award
Alumni Association, Upstate Medical Center
College of Medicine

1984 Spinal Injury Consultant
Los Angeles Olympic Committee

1985 -1995 Chairman, Department of Surgery
West Anaheim Medical Center

1992 -2005 Representative to the Council of Musculoskeletal
Specialty Societies (COMSS) of the American
Academy of Orthopedic Surgeons (AAOS)

1993 Vernon Nickel Teaching Excellence Award
Rancho Los Amigos Alumni Association

1994 Contributor: AAOS Self-Assessment
Examination/Adult Spine

1994-1997 AAOS Spine Instrument Work Group

1994 -2005 Council of Spine Societies
Executive Committee

1995 –2011 Board of Directors; ASIA
American Spinal Injury Association

1996 -1999 Secretary: Council of Spine Societies

1997 –2004 Chairman, Task Force on Aging;
North American Spine Society (NASS)

1997 - 2000 Chairman, Program Committee;
American Spinal Injury Association

- 1998 -2001 AAOS Committee on the Spine
- 1998 -1999 AAOS Task Force on Aging
- 1998-2014 Board of Directors
Cervical Spine Research Society
- 1998 – 2002 Executive Committee; Chairman of Core
Curriculum Committee CSRS
- 1998 - 2000 ASIA Program Chair for Federation of Spine
Associations (FOSA)
- 1999 – 2001 Secretary/Treasurer, American Spinal Injury
Association (ASIA)
- 2000 – 2001 President, FOSA
- 2000-2006 Orthopaedic Section Editor:
The Journal of Spinal Cord Medicine
- 2001-2010 American Orthopaedic Association
- 2001-2003 President-Elect, American Spinal Injury Assn
- 2002-2004 Chairman, CSRS Committee on Patient Education
- 2002 –present Foreign Correspondent: Coluna
(Portuguese language Spine Journal)
- 2003-2005 President; ASIA
American Spinal Injury Association
- 2005-2007 Chairman of the Membership Committee,
Cervical Spine Research Society
- 2005-2017 Board of Directors
Capital Bank; San Juan Capistrano, CA
Chairman- Compensation Committee
- 2006-2007 Scientific Program Committee
Spine Arthroplasty Society
- 2006-2007 President: Spinemark CRO at TBI
- 2007-2010 Medical Director:
Spinemark Medical Conference Center at TBI

- 2007-present Medical Advisory Board of Veritas Health
Spine-Health.com
- 2007-2015 Medical Director
RadAlliance
Costa Mesa, CA
- 2007-2021 AO Lumbar Degenerative Expert Group
- 2008-2009 2008-2009 Membership Chair
Lumbar Spine Research Society
- 2008-2011 Chairman: Exhibits Committee
Cervical Spine Research Society
- 2008-present Associate Editor
SAS Journal
- 2008-2018 Medical Director
Texas Back Institute
- 2014-2021 Board of Directors, ISASS
International Society for the Advancement of
Spine Surgery
- 2015 Visiting Professor University of Sao Paulo
Academic Assessment Program
- 2016-2021 Chairman AO Lumbar Degenerative Expert
Group (LDEG); member AOTK
- 2018-present Board of Trustees, AO
- 2019-2020 President, ISASS
- 2021-2024 Member at Large AOTC
(AO Spine Technical Commission)

EDITORIAL ROLES WITH PEER- REVIEWED JOURNALS

- 2000-present La Coluna
2000-2012 Acta Ortopedica Brasiliera
2001-2007 Journal of Spinal Cord
2005-2011 Journal of Spine Disorders & Techniques
2008-2021 ISASS Journal Associate Editor
2014-2021 Section Editor IJSS

CERTIFICATIONS

1984 Certified by American Board of Orthopedic Surgery

1986 Fellow of the American College of Surgeons (FACS)

1987 Fellow of the American Academy of Orthopedic Surgeons
(FAAOS)

TEXTBOOK EDITOR

Spine Trauma - Levine A, Eismont F, Garfin S, **Zigler J**, Editors;
W.B. Saunders Company; Philadelphia, Pennsylvania, 1998

Spine Arthroplasty: A New Era in Spine Care - Guyer RD,
Zigler JE, Editors;
QMC Publishing; St. Louis, Missouri, 2005

Spine Trauma-2nd Edition - **Zigler JE**, Eismont FJ, Garfin SR,
Vaccaro AR, Editors; AAOS Publishing; Rosemont, Ill, 2012

PUBLICATIONS

1. **Zigler JE**, Waters RL, Nelson RW, Capen DA, Perry J: Occipito-cervico-thoracic Spine Fusion in a Patient With Occipito-cervical Dislocation and Survival. *Spine* 11(6):645-646, 1986.
2. **Zigler J**, Bahniuk E, Van Dyke C, Bohlman HH: Localization of Foreign Bodies in the Spinal Canal by the Computer - Assisted Biplanar Digitizer. *Spine* 11(9):892-894, 1986.
3. **Zigler JE**, Bohlman HH, Robinson RA, Riley LH, Dodge LD: Pyogenic Osteomyelitis of the Occiput, the Atlas, and the Axis. A Report of Five Cases. *J Bone Joint Surg* 69-A(7):1069-1073, 1987.
4. **Zigler JE**, Waters R, Capen DA, Nelson R, Rockowitz N: Posterior Cervical Fusion under Local Anesthesia. *Spine* 12(3):206-208, 1987.
5. Capen DA, **Zigler JE**, Garland D: Surgical Stabilization in Cervical Spine Trauma. *Contemporary Orthop* 14(2):25-32, 1987.
6. Capen DA, Nelson RW, **Zigler J**, Waters RL, Garland DE: Surgical Stabilization of the Cervical Spine: A Comparative Analysis of Anterior and Posterior Spine Fusions. *Paraplegia* 25(2):111-119, 1987.
7. Capen DA, Nelson R, **Zigler JE**, Waters R, Anderson L, Klein N: Staged Total Thigh Rotation Flap for Coverage of Chronic Recurrent Pressure Sores. *Contemporary Orthopedics* 16(6):23-30, 1988.
8. Capen DA, Nelson R, **Zigler JE**, Sadler CR Jr.: Cervical Laminectomy in Spinal Trauma. *Contemporary Orthop* 16(7):22-30, 1988.
9. **Zigler JE**, Capen DA: Management of Unstable Spine Injuries. *Complications in Orthop* July/August:124-128, 1989.
10. Kane R, Capen DA, Waters R, **Zigler JE**, Adkins R: Spinal Cord Injury from Civilian Gunshot Wounds: The Rancho Experience 1980-1988. *J Spinal Disord* 4(3):306-311, 1991.

11. Rosen C, Rothman S, **Zigler JE**, Capen DA: Lumbar Facet Fracture as a Possible Source of Pain after Lumbar Laminectomy. *Spine* 16(6 Suppl):S234-S238, 1991.
12. Rimoldi R, **Zigler JE**, Capen DA, Hu S: The Effect of Surgical Intervention on Rehabilitation Time in Patients with Thoracolumbar and Lumbar Spinal Cord Injuries. *Spine* 17:1443-1449, 1992.
13. **Zigler JE**, Field BT: Surgical Procedures for Spinal Cord Injury. *Phys Med Rehab Clin N Amer* 3(4):711-723, 1992.
14. Hu SS, Capen DA, Rimoldi RL, **Zigler JE**: The Effect of Surgical Decompression on Neurologic Outcome after Lumbar Fractures. *Clin Orthop* 288:166-173, 1993.
15. Jenkins LA, Capen DA, **Zigler JE**, Nelson RW, Nagelberg S: Cervical Spine Fusions for Trauma. A Long-Term Radiographic and Clinical Evaluation. *Orthop Rev Nov(Suppl)*:13-19, 1994.
16. Capen DA, Gordon ML, **Zigler JE**, Garland DE, Nelson RW, Nagelberg S: Nonoperative Management of Upper Thoracic Spine Fractures. *Orthop Rev* 23(10):818-821, 1994.
17. Jenkins LA, Capen DA, **Zigler JE**, Nelson RW, Nagelberg S: Cervical Spine Fusions for Trauma: A Long Term Radiographic and Clinical Evaluation. *Orthop Review November (Suppl)*:13-19, 1994.
18. **Zigler JE**, Capen DA, Rothman SL: Spinal Disease in the Aged. *Clin Orthop* 316:70-79, 1995.
19. Broner FA, Garland DE, **Zigler JE**: Spinal Infections in the Immunocompromised Host. *Orthop Clin North Am* 27(1):37-46, 1996.
20. Barros TE, **Zigler JE**, Pentelenyi TJ, Balderston RE, el-Masry WS, Meyer PR Jr: Clinical Case of the Month. Cervical Vertebral Fracture: Orthopaedic Issues. *Spinal Cord* 35(6):358-360, 1997.
21. Barros TE, Bohlman HH, Capen DA, Cotler J, Dons K, Biering-Sorensen F, Marchesi DG, **Zigler JE**: Traumatic Spondylolisthesis of the Axis: Analysis of Management. *Spinal Cord* 37(3):166-171, 1999.
22. **Zigler JE**, Anderson PA, Bridwell K, Vaccaro A: What's New in Spine Surgery. *J Bone Joint Surg* 83-A(8):1285-1292, 2001.
23. Barros TE, **Zigler J**, Aito S, Di Lorenzo N, Wing P: Gunshot Wound to the Spine. *Spinal Cord* 39(10):541-544, 2001.
24. **Zigler JE**, Boden S, Anderson PA, Bridwell K, Vaccaro A: What's New in Spine Surgery. *J Bone Joint Surg* 84-A(7):1282-1288, 2002.
25. **Zigler JE**, Burd TA, Vialle EN, Sachs BL, Rashbaum RF, Ohnmeiss DD: Lumbar Spine Arthroplasty: Early Results using the ProDisc II- A Prospective Randomized Trial of Arthroplasty versus Fusion. *J Spinal Disord Tech* 16(4):352-361, 2003.
26. **Zigler JE**, Boden S, Anderson PA, Bridwell K, Vaccaro A: What's New in Spine Surgery. *J Bone Joint Surg* 85-A(8):1626-1636, 2003.
27. **Zigler JE**: Clinical Results with ProDisc: European Experience and U.S. Investigation Device Exemption Study. *Spine* 28(20):S163-S166, 2003.

28. **Zigler JE**: Lumbar Spine Arthroplasty Using the ProDisc II. *Spine J* 4(6 Suppl):260S-267S, 2004.
29. Bridwell KH, Anderson PA, Boden SD, Vaccaro AR, **Zigler JE**: What's New in Spine Surgery. *J Bone Joint Surg Am* 86-A(7):1587-1596, 2004.
30. Boden SD, Balderston RA, Heller JG, Hanley EN Jr, **Zigler JE**: An AOA Critical Issue. Disc Replacements: This Time Will We Really Cure Low-Back and Neck Pain? *J Bone Joint Surg Am* 86-A(2):411-422, 2004.
31. **Zigler JE**, Bennett MT: Disc Prosthesis for Lumbar Degenerative Disease and Axial Instability – ProDisc. *Seminars Spine Surg* 17(4): 285-296, 2005.
32. Bertagnoli R, Tropiano P, **Zigler J**, Karg A, Voigt S. Hybrid Constructs. *Orthop Clin North Am* 36(3):379-388, 2005.
33. Bertagnoli R, **Zigler J**, Karg A, Voigt S. Complications and Strategies for Revision Surgery in Total Disc Replacement. *Orthop Clin North Am* 36(3):389-395, 2005.
34. Dickerman RD, **Zigler JE**: A Traumatic Vertebral Artery Dissection after Cervical Corpectomy: A Traction Injury? *Spine* 30(21):E658-E661, 2005.
35. **Zigler JE**, Ohnmeiss DD: Patient Selection for Lumbar Arthroplasty. *Seminars in Spine Surg* 18:40-46, 2006.
36. **Zigler JE**: [Editorial] Arthroplasty as the Next Evolution of Surgical Reconstruction of the Spine. *Business Briefing: US Orthopedics Review* 30-35, 2006.
37. **Zigler JE**, Sachs BL, Rashbaum RF, Ohnmeiss DD: Two to Three Year Follow-up of ProDisc-L: Results from a Prospective Randomized Trial of Arthroplasty versus Fusion. *SAS J* 1(2):63-67, 2007.
38. **Zigler J**, Delamarter R, Spivak JM, Linovitz RJ, Danielson GO 3rd, Haider TT, Cammisa F, Zucherman J, Balderston R, Kitchel S, Foley K, Watkins R, Bradford D, Yue J, Yuan H, Herkowitz H, Geiger D, Bendo J, Peppers T, Sachs B, Girardi F, Kropf M: Results of the Prospective, Randomized, Multicenter Food And Drug Administration Investigational Device Exemption Study of the ProDisc-L Total Disc Replacement versus Circumferential Fusion for the Treatment of 1-Level Degenerative Disc Disease. *Spine* 32(11):1155-1162, 2007.
39. Dickerman RD, **Zigler JE**: [Letter to the Editor] Re: Carragee EJ, Lincoln T, Parmar VS, et al. A Gold Standard Evaluation of the 'Discogenic Pain' Diagnosis as Determined by Provocative Discography. *Spine* 15 32(2):287-288, 2007.
40. Dickerman RD, Reynolds AS, Stevens Q, **Zigler J**: [Letter] Cervical Pedicle Screws vs. Lateral Mass Screws: Uniplanar Fatigue Analysis and Residual Pullout Strengths. *Spine J* 7(3):384, 2007.
41. **Zigler J**, Walsh J, Zigler J: Medical Device Reporting: Issues with Class III Medical Devices. *Food Drug Law J* 62(3):573-580, 2007.
42. Leahy M, **Zigler JE**, Ohnmeiss DD, Rashbaum RF, Sachs BL: Comparison of Results of Total Disc Replacement in Post-Discectomy Patients versus Patients with No Previous Lumbar Surgery. *Spine* 33(15):1690-1693, 2008.
43. **Zigler JE**, Ohnmeiss DD: Comparison of Two-level vs. One-level Total Disc Replacement: Data from a Prospective FDA-regulated Trial. *SAS J* 2(3):140-144, 2008.

44. Guyer RD, Siddiqui S, **Zigler JE**, Ohnmeiss DD, Blumenthal SL, Sachs BL, Hochschuler SH, Rashbaum RF: Lumbar Spinal Arthroplasty: Analysis of One Center's 20 Best and 20 Worst Clinical Outcomes. *Spine* 33(23):2566-2569, 2008.
45. Rohan MX Jr, Ohnmeiss DD, Guyer RD, **Zigler JE**, Blumenthal SL, Hochschuler SH, Sachs BL, Rashbaum RF: Relationship between the Length of Time Off Work Pre-operatively and Clinical Outcome at 24-month Follow-up in Patients Undergoing Total Disc Replacement or Fusion. *Spine J* 9(5):360-365, 2009.
46. Murrey D, Janssen M, Delamarter R, Goldstein J, **Zigler J**, Tay B, Darden B: Results of the Prospective, Randomized, Controlled Multicenter Food and Drug Administration Investigational Device Exemption Study of the ProDisc-C Total Disc Replacement Versus Anterior Discectomy and Fusion for the Treatment of 1-Level Symptomatic Cervical Disc Disease. *Spine J* 9(4):275-286, 2009.
47. Dickerman RD, Reynolds A, **Zigler J**, Guyer R: [Letter] Adjacent Segment Degeneration. *J Neurosurg Spine* 10(2):177, 2009.
48. Ohnmeiss DD, Bodemer W, **Zigler JE**: Effect of Adverse Events on Low Back Surgery Outcome: 24-Month Follow-Up Results from an FDA IDE Trial. *Spine* 35(7):835-838, 2010.
49. Delamarter RB, Murrey D, Janssen ME, Goldstein JA, **Zigler J**, Tay BK-B, Darden II B: Results at 24 Months from the Prospective, Randomized, Multicenter Investigational Device Exemption Trial of ProDisc-C Versus Anterior Cervical Discectomy and Fusion With 4-Year Follow-Up and Continued Access Patients. *SAS J* 4:122-128, 2010.
50. Delamarter R, **Zigler JE**, Balderston RA, Cammisa FP, Goldstein JA, Spivak JM: Prospective, Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of the ProDisc-L Total Disc Replacement Compared with Circumferential Arthrodesis for the Treatment of Two-Level Lumbar Degenerative Disc Disease: Results at Twenty-Four Months. *J Bone Joint Surg Am* 93(8):705-715, 2011.
51. **Zigler JE**: Five-Year Results of the ProDisc-L Multicenter, Prospective, Randomized, Controlled Trial Comparing ProDisc-L With Circumferential Spinal Fusion for Single-Level Disabling Degenerative Disk Disease. *Seminars Spine Surg* 24(1):25-31, 2012.
52. Rainey S, Blumenthal SL, **Zigler JE**, Guyer RD, Ohnmeiss DD: Analysis of Adjacent Segment Re-Operation Following Lumbar Total Disc Replacement. *Int J Spine Surg* 6:140-144, 2012.
53. **Zigler JE**, Delamarter RB: Five Year Results of The Prospective, Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of the ProDisc-L Total Disc Replacement Versus Circumferential Arthrodesis for the Treatment of 1-Level Degenerative Disc Disease. *J Neurosurg: Spine* 17(6):493-501, 2012.
54. **Zigler JE**, Glenn J, Delamarter RB: Five Year Adjacent Level Degenerative Changes Comparing Lumbar Total Disc Replacement with ProDisc-L to Circumferential Fusion in Patients with Surgically Treated Single-level Disease. *J Neurosurg: Spine* 17(6):504-511, 2012.
55. **Zigler JE**, Delamarter R, Murrey D, Spivak J, Janssen M: ProDisc-C and Anterior Cervical Discectomy and Fusion as Surgical Treatment for Single-Level Cervical Symptomatic

- Degenerative Disc Disease: Five-Year Results of a Food and Drug Administration Study. *Spine* 38(3):203-209, 2013.
56. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE**: Re-operations in Cervical Total Disc Replacement Compared with Anterior Cervical Fusion: Results Compiled from Multiple Prospective FDA IDE Trials Conducted at a Single Site. *Spine* 38(14):1177–1182, 2013.
 57. Delamarter RB, **Zigler J**: Five-year Re-Operation Rates, Cervical Total Disc Replacement versus Fusion, Results of a Prospective Randomized Clinical Trial. *Spine* 38(9):711–717, 2013.
 58. **Zigler JE**, Delamarter RB: Does 360° Lumbar Spinal Fusion Improve Long-Term Clinical Outcomes After Failure of Conservative Treatment in Patients With Functionally Disabling Single Level Degenerative Lumbar Disc Disease? Results of 5 Year Follow-Up in 75 Postoperative Patients. *Int J Spine Surg* 7:e1–e7, 2013.
 59. McAnany SJ, Overley S, Baird EO, Cho SK, Hecht AC, **Zigler JE**, Qureshi SA: The 5-year Cost-Effectiveness of Anterior Cervical Discectomy and Fusion and Cervical Disc Replacement: A Markov Analysis. *Spine* 39(23):1924-1933, 2014.
 60. **Zigler JE**, Delamarter RB: Oswestry Disability Index. *J Neurosurg Spine* 20(2):241-242, 2014.
 61. Radcliff KE, Zigler JD, **Zigler JE**: Costs of Cervical Disc Replacement Versus Anterior Cervical Discectomy and Fusion for Treatment of Single-Level Cervical Disc Disease: An Analysis of the Blue Health Intelligence Database for Acute and Long-term Costs and Complications *Spine* 40(8):521-529, 2015.
 62. Hipp JA, Guyer RD, **Zigler JE**, Ohnmeiss DD, Wharton ND: Development of a novel radiographic measure of lumbar instability and validation using the facet fluid sign. *Int J Spine Surg*:99:37, 2015.
 63. Janssen ME, **Zigler JE**, Spivak JM, Delamarter RB, Darden BV, Kopjar B: Seven-year Follow-up of the Food and Drug Administration Investigational Device Exemption Study of the ProDisc®-C Total Disc Replacement Versus Anterior Cervical Discectomy and Fusion for Single Level Cervical Disc Disease. *J Bone Joint Surg [Am]* 97(21):1738-1747, 2015.
 64. Lieberman IH, Hu X, Ohnmeiss DD, Guyer RD, **Zigler JE**: Restoration of Cervical Alignment Is Associated with Improved Clinical Outcome after One and Two Level Anterior Cervical Discectomy and Fusion. *Int J Spine Surg* 9:61, 2015.
 65. **Zigler J**, Garcia R: ISASS Policy Statement – Lumbar Artificial Disc. *Int J Spine Surg* 9:7, 2015.
 66. **Zigler JE**, Rogers RW, Ohnmeiss DD: Comparison of One-Level versus Two-Level Anterior Cervical Discectomy and Fusion: Clinical and Radiographic Follow-Up at 60 Months. *Spine* 41(6):463-469, 2016.
 67. Radcliff K, Lerner J, Yang C, Bernard T, **Zigler JE**: Seven-year Cost-effectiveness of ProDisc-C Total Disc Replacement: Results from Investigational Device Exemption and Post-Approval Studies. *J Neurosurg Spine* 24: 760-768; 2016.
 68. Musacchio MJ, Laurysen C, Davis RJ, Bae HW, Pelozza JH, Guyer RD, **Zigler JE**, Ohnmeiss DD, Leary S: Evaluation of Decompression and Interlaminar Stabilization Compared with Decompression and Fusion for the Treatment of Lumbar Spinal Stenosis: 5-year Follow-up of a Prospective, Randomized, Controlled Trial. *Int J Spine Surg* 10:6, 2016.

69. Hisey MS, **Zigler JE**, Jackson R, Nunley PD, Bae HW, Kim KD, Ohnmeiss DD: Prospective, Randomized Comparison of One-level Mobi-C Cervical Total Disc Replacement vs. Anterior Cervical Discectomy and Fusion: Results at 5-year Follow-up. *Int J Spine Surg* 10:10, 2016.
70. Blumenthal S, Buttermann G, Garcia R, Gornet M, Grunch B, Guyer R, Janssen M, Kimball B, Lewis A, Mesiwala A, Miller L, Morreale J, Reed W, Dandhu F, Shackelford I, Yue J, **Zigler J**, O'Connell B, Ferko N, Hollmann S: Foreword: Proceedings From the First Annual Lumbar Total Disc Replacement Summit. *Spine*; 42(Suppl 24):S99-S100, 2017.
71. Janssen M, Garcia R, Miller L, Reed W, **Zigler J**, Ferko N, Hollman S: Challenges and Solutions for Lumbar Total Disc Replacement Implantation. *Spine* 42 (Suppl24):S108-S111, 2017.
72. **Zigler J**, Gornet MF, Ferko N, Cameron C, Schranck FW, Patel L: Comparison of Lumbar Total Disc Replacement with Surgical Spinal Fusion for the Treatment of Single-level Degenerative Disc Disease: A Meta-analysis of 5-year Outcomes from Randomized Controlled Trials. *Global Spine J* 8(4): 413-423, 2018.
73. Radcliff K, Spivak J, Darden B, Janssen M, Bernard T, **Zigler J**: Five-Year Reoperation Rates of 2-Level Lumbar Total Disc Replacement Versus Fusion: Results of a Prospective, Randomized Clinical Trial. *Clin Spine Surg* 31(1):37-42, 2018.
74. **Zigler JE**, Ferko N, Cameron C, Patel L: Comparison of Therapies in Lumbar Degenerative Disc Disease: A Network Meta-analysis of Randomized Control Trials. *J Comp Eff Res* 7(3), 233-246, 2018.
75. **Zigler JE**, Blumenthal SL, Guyer RD, Ohnmeiss DD, Patel L. Relationship of Range of Motion and Adjacent Level Degeneration Following Lumbar Total Disc Replacement: Results of a Prospective Study with 5-year Follow-up. *Spine* 43(20):1395-1400, 2018.
76. Braxton Jr. E, Wohlfeld BJ, Blumenthal S, Bozzio A, Butterman G, Guyer R, Idema I, Laich D, Morreale J, Nikolakis M, Patel A, Price JS, Witt JP, **Zigler J**, Martin M: Postoperative Care Pathways Following Lumbar Total Disc Replacement: Results of a Modified Delphi Approach. *Spine* 44(Suppl 24):S1-S12, 2019.
77. Rometsch E, Spruit M, **Zigler JE**, Menon VK, Ouellet JA, Mazel C, Härtl R, Espinoza K, Kandziora F: Screw-Related Complications After Instrumentation of the Osteoporotic Spine: A Systematic Literature Review with Meta-Analysis. *Global Spine J* 10(1):69-88, 2020.
78. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 535 Patients Receiving the ProDisc-C Device. *Eur Spine J* 29(11):2683-2687, 2020.
79. Derman PB, **Zigler JE**: Cervical Disc Arthroplasty: Rationale and History. *Int J Spine Surg* 14(S2):S5-S13, 2020.
80. Guyer RD, Ohnmeiss DD, Blumenthal SL, **Zigler JE**: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Cervical Spine Symptoms? *Eur Spine J* 29(11):2665-2669, 2020.
81. Radcliff K, **Zigler J**, Braxton E, Butterman G, Coric D, Derman P, Garcia R, Jorgensen A, Ferko NC, Situ A, Yue J: Final Long-Term Reporting From a Randomized Controlled IDE Trial for Lumbar Artificial Discs in Single Level Degenerative Disc Disease: 7-year Results. *Int J Spine Surg* 15(4):612-632, 2021.

82. Phillips FM, Coric D, Sasso R, Lanman T, Lavelle W, Blumenthal S, Laurysen C, Guyer R, Albert T, **Zigler J**, Cammisa F, Milam RA: Prospective, Multicenter Clinical Trial Comparing M6-C Compressible Six Degrees of Freedom Cervical Disc with Anterior Cervical Discectomy and Fusion for the Treatment of Single Level Degenerative Cervical Radiculopathy: Two- Year Results of an FDA Investigational Device Exemption Study. *Spine J* 21(2):239-252, 2021.
83. Coric D, **Zigler J**, Derman P, Braxton E, Situ A, Patel L: Predictors of Long-term Clinical Outcomes in Adult Patients after Lumbar Total Disc Replacement: Development and Validation of a Prediction Model. *J Neurosurg Spine* 36(3):399-407, 2022.
84. **Zigler JE**, Guyer RD, Blumenthal SL, Satin AM, Shellock JL, Ohnmeiss DD: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration?? *Eur Spine J* 31(10):2607-2611, 2022.
85. Spivak J, **Zigler J**, Phillip T, Jansen M, Darden B, Radcliff K: Segmental Motion of Cervical Arthroplasty Leads to Decreased Adjacent Level Degeneration: Analysis of the 7 Year Postoperative Results of a Multicenter Randomized Controlled Trial. *Int J Spine Surg* 16 (1) 186-193, 2022.
86. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Impact of Previous Lumbar Spine Surgery on the Outcome of Lumbar Total Disc Replacement: Analysis of Prospective 5-year Follow-up Study Data. *Eur Spine J.* 32(3):797-802, 2023.
87. Guyer RD, **Zigler JE**, Blumenthal SL, Shellock JL, Ohnmeiss DD: Evaluation of Anterior Lumbar Interbody Fusion Performed Using a Stand-alone, Integrated Fusion Cage. *Int J Spine Surg* 17(1):1-5, 2023.
88. Satin AM, Rogers-LaVanne MP, Guyer RD, **Zigler JE**, Blumenthal SL, Shellock JL, Ohnmeiss DD, Derman PB: Letter to the editor regarding, "Long-term Results of the NECK Trial-Implanting a Disc Prosthesis After Cervical Anterior Discectomy Cannot Prevent Adjacent Segment Disease: Five-Year Clinical Follow-Up of a Double-Blinded Randomised Controlled Trial" by Goedmakers et al. *Spine J* 24(2):387-388, 2024.
89. Patwardhan AG, Havey RM, Phillips FM, **Zigler JE**, Coric D, Guyer R, Lanman T, Muriuki MG: Prosthesis Design and Likelihood of Achieving Physiological Range of Motion After Cervical Disc Arthroplasty: Analysis of ROM data from 1,173 patients from 7 IDE clinical trials. *Spine J* 24(6):969-978, 2024.
90. Guyer RD, Blumenthal SL, Shellock JL, **Zigler JE**, Ohnmeiss DD: Lumbar Total Disc Replacement Device Removals and Revisions Performed During a 20 Year Experience with 2,141 Patients. *Spine* 49 (10):671-676, 2024.
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229. Spivak JM, Delamarter RB, Janssen ME, Murrey DB, **Zigler JE**: Adjacent Level Radiographic Degenerative Changes following Cervical Total Disc Replacement or Fusion: 5 to 7 year Follow Up. Cervical Spine Research Society. December, 2012; Chicago, Illinois.
230. **Zigler JE**: Cervical Arthroplasty: Present and Future. Symposium on Spinal Disorders. January-February, 2013; Las Vegas, Nevada.
231. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE**: Re-operations in Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Mean 48 Month Follow-up. American Academy of Orthopaedic Surgeons. March, 2013; Chicago, Illinois.
232. **Zigler JE**, Murrey DB, Delamarter RB, Spivak JM, Janssen M: Seven-year Results of the ProDisc-C Multi-center Randomized Clinical Trial. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
233. Blumenthal SL, **Zigler JE**, Guyer RD, Ohnmeiss DD: Long-term Evaluation of Re-operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,237 Patients. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
234. Guyer RD, Shivers J, Ohnmeiss DD, **Zigler JE**: Implementation and Impact of Pre-operative Peer Case Review in a Spine Practice. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
235. Delamarter RB, **Zigler JE**, Murrey D, Janssen M, Spivak J: 7-year Reoperation Rates: Results of a Prospective, Randomized Clinical Trial: Cervical Total Disc Replacement vs.

- Fusion. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada
236. Blumenthal SL, **Zigler JE**, Guyer RD, Ohnmeiss DD: Long-term Evaluation of Re-operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,237 International Society for the Study of the Lumbar Spine. May, 2013; Scottsdale, Arizona.
 237. **Zigler JE**: Discography: Does It Still Have a Role? State of Spine Surgery Think Tank. June, 2013; Los Cabos, Mexico.
 238. **Zigler JE**: What's New in Motion Preservation. State of Spine Surgery Think Tank. June, 2013; Los Cabos, Mexico.
 239. Shellock J, Guyer RD, Shivers J, Ohnmeiss DD, **Zigler JE**: Implementation and Impact of a Pre-operative Peer Case Review Process in a Spine Practice. State of Spine Surgery Think Tank. June, 2013; Los Cabos, Mexico.
 240. **Zigler JE**: Adjacent Level Disease after Cervical and Lumbar TDR vs. Fusion. North American Spine Society– Summer Spine Meeting. August, 2013; Naples, Florida.
 241. **Zigler JE**: Debate: Pro: Disc Arthroplasty Has Proven Its Value as a Surgical Option. North American Spine Society– Summer Spine Meeting. August, 2013; Naples, Florida.
 242. Blumenthal SL, **Zigler JE**, Guyer RD, Ohnmeiss DD: Long-term Evaluation of Re-operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,237 Patients. North American Spine Society. October, 2013; New Orleans, Louisiana.
 243. Radcliff K, Zigler JD, **Zigler JE**: Costs of Cervical Disc Replacement Versus Anterior Cervical Discectomy and Fusion for Treatment of Single-Level Cervical Disc Disease: An Analysis of the Blue Health Intelligence Database for Acute and Long-Term Costs and Complications. North American Spine Society. October, 2013; New Orleans, Louisiana.
 244. **Zigler JE**: Cervical Total Disc Replacement. Current Solutions in Spine Surgery. April, 2014; Duck Key, Florida.
 245. **Zigler JE**: Lumbar Arthroplasty: Does It Protect the Adjacent Level? Symposium on Current Concepts in Spinal Disorders. January-February, 2014; Las Vegas, Nevada.
 246. Radcliff KE, Zigler JD, **Zigler JE**: Costs of Cervical Disc Replacement versus Anterior Cervical Discectomy and Fusion for Treatment of Single-Level Cervical Disc Disease: An Analysis of the Blue Health Intelligence Database for Acute Long-Term Costs and Complications. Spine Society of Australia. April, 2014; Brisbane, Australia.
 247. Biehn J, Shellock J, Ohnmeiss DD, Guyer RD, **Zigler JE**: Use of Amniotic Membrane Anti-adhesion Barrier for Lumbar Discectomy. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
 248. Ohnmeiss DD, Guyer RD, Blumenthal SL, **Zigler JE**: The Re-operation Rate in a Single Dataset Varies Significantly Depending on the Definitions Applied. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida
 249. Ohnmeiss DD, Baker R, Guyer RD, Blumenthal SL, **Zigler JE**; The Re-operation Rate in a Single Dataset Varies Significantly Depending on the Definitions Applied. International Society for the Study of the Lumbar Spine. June, 2014; Seoul, Korea.
 250. **Zigler JE**: Spine Societies. Have They Lost Their Way? State of Spine Surgery: A Think Tank. June, 2014; Los Cabos, Mexico.

251. **Zigler JE**: Cervical TDR is the gold standard for cervical spondylosis. *State of Spine Surgery: A Think Tank*. June, 2014; Los Cabos, Mexico.
252. **Zigler JE**: Dynamic Stabilization: Conclusions. World Congress of Minimally Invasive Spine Surgery and Techniques. June, 2014, Paris, France.
253. Hartl R, Christensen F, Korge A, Lam K, Vialle E, **Zigler J**, McGuire R: Comparison of Safety Outcomes between Anterior Lumbar Interbody Fusion and Extreme Lateral Interbody Fusion. Global Spine Congress. May, 2014; San Francisco, California.
254. **Zigler JE**, Rogers RW, Hisey MS, Davis RJ, Bae H, Ohnmeiss DD: Differences in Outcomes following ACDF in Patients with One and Two Level Symptomatic Cervical Disc Disease: Follow-up at Four Years in a Prospectively Collected Series of 186 Patients. Cervical Spine Research Society. December, 2014; Orlando, Florida.
255. **Zigler J**: Pregnancy in Patients with Lumbar Artificial Discs. Current Concepts in Spinal Disorders. January, 2015; Las Vegas, Nevada.
256. **Zigler J**: Degenerative Spondylolisthesis with Stenosis - When Is Interlaminar Stabilization Appropriate? Current Concepts in Spinal Disorders. January, 2015; Las Vegas, Nevada.
257. **Zigler J**: Is There a Clinical Difference in Cervical Arthroplasty Implants? AO Advanced Cervical Spine Symposium. April, 2015; Shanghai, China.
258. Guyer RD, Otero-Lopez E, Blumenthal SL, Ohnmeiss DD, **Zigler JE**: Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid Surgery. Spine Society of Australia. April, 2015; Canberra, Australia.
259. Guyer RD, Blumenthal SL, Ohnmeiss DD, **Zigler JE**: Long-Term Evaluation of Re-Operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,279 Patients. Spine Society of Australia. April, 2015; Canberra, Australia.
260. Hipp JA, Guyer RD, **Zigler JE**, Ohnmeiss DD, Wharton N: A New Method Correlating an Objective Radiographic Metric for Lumbar Spine Stability and the Facet Fluid Sign on MRI. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
261. Hipp JA, **Zigler JE**, Guyer RD, Ohnmeiss DD, Wharton N: Developing Normative Values for a Quantifiable, Clinically Applicable Method to Evaluate Lumbar Instability. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
262. **Zigler JE**: How Have FDA Studies Made Us Better Scientists? Elevating Best Practices Symposium. May, 2015; Shanghai, China.
263. **Zigler JE**: Metal on Polyethylene Cervical Disc Arthroplasty. Cervical Spine motion Preservation Symposium; Hospital for Special Surgery. May 2015; New York, New York.
264. **Zigler JE**, Rogers WR, Ohnmeiss DD: Comparison of One-Level versus Two-Level Anterior Cervical Discectomy and Fusion: Clinical and Radiographic Follow-Up at 60 Months in Patients Serving as Control Groups in Randomized Trials. Global Spine Congress. May, 2015; Buenos Aires, Argentina.
265. Owusu A, **Zigler JE**, Ohnmeiss DD, Guyer RD, Blumenthal SL: Pregnancy after Lumbar Total Disc Replacement. Global Spine Congress. May, 2015; Buenos Aires, Argentina.

266. Guyer RD, Otero-Lopez E, **Zigler JE**, Ohnmeiss DD, Blumenthal SL Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid Surgery. Global Spine Congress. May, 2015; Buenos Aires, Argentina.
267. **Zigler JE**: Does the Choice of TDR Implant Matter? State of Spine Surgery: A Think Tank. June, 2015; Los Cabos, Mexico.
268. Ohnmeiss, DD, Guyer RD, Blumenthal SL, **Zigler JE**: The Re-operation Rate in a Single Dataset Varies Significant Depending on the Definitions Applied. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
269. Rogers RW, Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Clinical Outcomes following Anterior Cervical Hybrid Surgery Using Total Disc Replacement Combined with Anterior Cervical Fusion at the Adjacent Segment. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
270. Otero-Lopez ER, Blumenthal SL, Ohnmeiss, Guyer RD, **Zigler JE**: Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid (Total Disc Replacement / Fusion) Surgery. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
271. Hu X, Ohnmeiss DD, **Zigler JE**, Guyer RD, Lieberman IH: Restoration of Cervical Alignment is Associated with Improved Clinical Outcome after One and Two Level Anterior Cervical Discectomy and Fusion. North American Spine Society. October, 2015; Chicago, Illinois.
272. Spivak JM, **Zigler JE**, Darden BV, Radcliff KE, Janssen ME: The Benefit of Continued Motion of a Cervical Artificial Disc Replacement on Radiographic Adjacent Level Degeneration at 7 Year Follow-Up. North American Spine Society. October, 2015; Chicago, Illinois.
273. Radcliff KE, Lerner JH, Bernard T, Yang C, **Zigler JE**: Seven-year Cost-Effectiveness of Cervical Disc Replacement versus Anterior Cervical Discectomy and Fusion-Results from Investigational Device Exemption and Post-approval Studies of ProDisc®-C Total Disc Replacement. North American Spine Society. October, 2015; Chicago, Illinois.
274. **Zigler JE**: 2-level Lumbar Degenerative Disc Disease: Hybrid (total disc replacement at One Level, Fusion at the Other); (Part of symposium: The Debate: Motion vs. Fusion). North American Spine Society. October, 2015; Chicago, Illinois.
275. Blumenthal SL, Hisey MS, Bae, HW, **Zigler JE**: Comparison of One and Two Level Treatment with Cervical Disc Arthroplasty or ACDF Through Five Year Follow-Up. Cervical Spine Research Society. December, 2015; San Diego, California.
276. Radcliff KE, Lerner JH, Bernard T, Yang C, **Zigler JE**: Seven-Year Cost-Effectiveness of Cervical Disc Replacement versus Anterior Cervical Discectomy and Fusion – Results from Investigational Device Exemption and Post-Approval Studies of ProDisc®-C Total Disc Replacement. Cervical Spine Research Society. December, 2015; San Diego, California.
277. Spivak JM, **Zigler JE**, Janssen ME, Darden BV, Radcliff KE: The Positive Effect of Continued Motion of a Cervical Artificial Disc Replacement on Radiographic Adjacent Level Degeneration at 7 Year Follow-Up. Cervical Spine Research Society. December, 2015; San Diego, California.

278. Hisey MS, Ohnmeiss, DD, Bae, HW, **Zigler JE**: Impact of Adverse Events on Clinical Outcome: Results Through Five Year Follow-Up. Cervical Spine Research Society. December, 2015; San Diego, California.
279. **Zigler JE**: Surgical Treatment of Degenerative Spondylolisthesis and Stenosis with Interlaminar Stabilization. Current Concepts in Spinal Surgery. February, 2016; Las Vegas, Nevada.
280. Zigler J: Motion Preservation and Interspinous Devices. Current Concepts in Spinal Disorders. January, 2016; Las Vegas, Nevada.
281. **Zigler JE**: Lumbar and Cervical Arthroplasty: Outcomes at 7-10 Years. Texas Association of Neurosurgeons. February, 2016; Fort Worth, Texas.
282. **Zigler JE**: Lumbar Arthroplasty with ProDisc-L: What Have We Learned From the FDA Studies Since 2001? ProDisc-L Spine Symposium March 2016, Paris, France
283. **Zigler JE**: Do Cervical TDR's Decrease Adjacent Level Disease and Re-Operation Rates? Federation of Spine Associations - American Academy of Orthopaedic Surgeons. March, 2016; Orlando, Florida.
284. **Zigler J**, Shivers J, Guyer R, Ohnmeiss D: Complications Associated with the Anterior Approach to the Lumbar Spine: Analysis of 2,881 Consecutive Cases during a 6-year Period. International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
285. Hisey M, **Zigler J**, Guyer R, Ohnmeiss D: Impact of Age on Patient Outcomes after Cervical Disc Arthroplasty or Anterior Cervical Discectomy and Fusion: Comparison at 5-Year Follow-up. International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
286. Guyer R, Putney E, Ohnmeiss D, Zigler J: Analysis of Hospital Length of Stay Following Lumbar Anterior/Posterior Combined Fusion: Is There a Disadvantage Associated with Shorter Stays? International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
287. Putney E, Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Analysis of Hospital Length of Stay Following Lumbar Anterior/Posterior Combined Fusion: Is There a Disadvantage Associated with Shorter Stays? Spine Society of Australia. April, 2016; Melbourne, Australia.
288. Blumenthal SL, **Zigler JE**, Shivers J, Ohnmeiss DD, Guyer RD: Complications Associated with the Anterior Approach to the Lumbar Spine: Analysis of 2,881 Consecutive Cases during a 6-Year Period. Spine Society of Australia. April, 2016; Melbourne, Australia.
289. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Stand-Alone Interbody Devices in the Treatment of Cervical Spine Disease. Spine Society of Australia. April, 2016; Melbourne, Australia.
290. Hisey M, **Zigler J**, Guyer R, Ohnmeiss D: Impact of Age on Patient Outcomes after Cervical Disc Arthroplasty or Anterior Cervical Discectomy and Fusion: Comparison at 5-year Follow-up. International Society for the Advancement of Spine Surgery – SpineWeek. May, 2016; Singapore.

291. **Zigler JE:** Does Cervical Arthroplasty Decrease Adjacent Level Disease and Reoperation Rates? Innovative Techniques in Spine Surgery. June, 2016; Los Cabo, Mexico.
292. **Zigler JE:** What is the Science Behind Lumbar Hybrid Constructs? International Symposium for Cervical and Lumbar Arthroplasty. October, 2016; Berlin, Germany.
293. **Zigler JE:** Clinical Results – Lumbar TDR vs. Fusion. International Symposium for Cervical and Lumbar Arthroplasty. October, 2016; Berlin, Germany.
294. Ohnmeiss DD, Guyer RD, Blumenthal SL, **Zigler JE:** Re-operation Rates in Lumbar Spine Surgery: Statistically Significant Differences Exist in the Same Dataset When Different Definitions for Re-operation Are Applied. North American Spine Society. October, 2016; Boston, Massachusetts.
295. Hisey MS, **Zigler JE,** Davis RJ, Bae HW, Kim KD, Nunley PD, Jackson RJ, Ohnmeiss DD: Total Disc Replacement versus ACDF: Results from an FDA Clinical Trial on Single Level Treatment through 84 Months. North American Spine Society. October, 2016; Boston, Massachusetts.
296. Zigler J: Two Level Disease: ACDA and Hybrid Procedures. (Section on Biologics and Basic Research: ACDF vs. TDR: Adjacent Segment Disease and Clinical Outcomes). North American Spine Society. October, 2016; Boston, Massachusetts.
297. **Zigler JE,** Putney E, Ohnmeiss DD, Guyer RD, Blumenthal SL: Anterior Access to the Lumbar Spine: Complications Encountered in 2,881 Consecutive Procedures. North American Spine Society. October, 2016; Boston, Massachusetts.
298. **Zigler JE,** Ohnmeiss DD: Ten-year Follow-up of Patients Enrolled in the FDA-regulated Trial for Single-level Lumbar Total Disc Replacement: One Site's Experience. North American Spine Society (best papers session). October, 2016; Boston, Massachusetts.
299. Zigler, JE: What is the Science Behind Lumbar Hybrids? Chinese Orthopaedic Association. November, 2016; Beijing, China.
300. **Zigler J:** The Science Behind Lumbar Hybrid Constructs. Current Concepts in Spinal Disorders. February, 2017; Las Vegas, Nevada.
301. **Zigler J,** Liu ZJ, Niu CC, Park C-K, Park CK: Asia-Pacific Multicenter, Prospective, Randomized, Trial Comparing Arthroplasty vs. Anterior Cervical Discectomy and Fusion in the Treatment of Symptomatic Cervical Disc Degeneration. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
302. Phillips F, Sasso R, Coric D, Guyer R, Sama A, Cammisa F, Blumenthal S, Albert T, Zigler J: Clinical and Radiographic Outcomes for the M6-C Artificial Cervical Disc: 1 Year Follow-up at Five IDE Investigation Centers for a Novel Design Six Degree of Freedom Prosthesis. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
303. Guyer R, **Zigler J,** Ohnmeiss D: Ten-year Follow-up of Patients Enrolled in the FDA-regulated Trial for Single-level Lumbar Total Disc Replacement: One Site's Experience. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
304. Zigler J: Impact of Device Type, Treatment Level and Lordotic Angle Correction on Clinical and Radiographic Outcomes 5 Years Following Lumbar Total Disc Replacement.

- International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
305. Guyer R, **Zigler J**, Ohnmeiss DD: Clinical Outcome of Two-level Lumbar Total Disc Replacement: An Analysis of 141 Patients with Minimum 24-month Follow-up. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
 306. Zigler J: Range of Motion Preservation Five Years Following Lumbar Total Disc Replacement: Comparison of Treatment Level and Device Type. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
 307. Zigler J: Does Cervical Arthroplasty Decrease Adjacent Level Degeneration and Reoperation. Castellvi Spine. May, 2017; Duck Key, Florida.
 308. Zigler J: What Is the Data Supporting Various Surgical Treatment Options For Two Level Cervical Disc Disease. Castellvi Spine. May, 2017; Duck Key, Florida.
 309. Zigler J: Case 2- Hybrid - TDR / The Science Behind Hybrid TDR. Castellvi Spine. May, 2017; Duck Key, Florida.
 310. Blumenthal SL, Guyer RD, Ohnmeiss DD, **Zigler JE**: Adjacent Segment Degeneration after Lumbar Total Disc Replacement: 5-Year Results of a Multicenter, Prospective, Randomized Study with Independent Radiographic Assessment. International Society for the Study of the Lumbar Spine. May-June, 2017; Athens, Greece.
 311. **Zigler JE**: International Keynote Speaker. AO Spine Masters Course on Cervical Spondylosis. June, 2017; Chengdu, China.
 312. **Zigler J**: Cervical Arthroplasty Outcomes 7-10 years. AO Spine Masters Symposium. June, 2017; Chengdu, China.
 313. **Zigler JE**: Cervical Spondylosis: Two-level Disease. Role for Hybrid Constructs. State of Spine Surgery Think Tank. June, 2017; Los Cabos, Mexico.
 314. **Zigler J**: Cervical Hybrid at Spine Technology Education Group. June, 2017; Cabo, Mexico.
 315. Blumenthal S, Ohnmeiss D, Guyer R, **Zigler J**: Adjacent Segment Degeneration after Lumbar Total Disc Replacement: 5-Year Results of a Multicenter, Prospective, Randomized Study with Independent Radiographic Assessment. Eurospine. October, 2017; Dublin, Ireland.
 316. **Zigler J**, Gornet M, Ferko N, Cameron C, Schranck F, Patel F: Long-Term Outcomes of Lumbar Total Disc Replacement Versus Spinal Fusion for the Treatment of DDD: A Novel Meta-Analysis of Randomized Controlled Trials. Eurospine. October, 2017; Dublin, Ireland.
 317. **Zigler JE**, Gornet M, Schranck F, Ferko N, Cameron C, Patel L: Comparison of Lumbar Total Disc Replacement with Spinal Fusion for the Treatment of Single-Level Degenerative Disc Disease: A Meta-Analysis of Five-Year Outcomes from Randomized Controlled Trials. North American Spine Society. October, 2017; Orlando, Florida.
 318. Sasso R, Phillips F, Guyer R, Sama A, Cammisa F, Blumenthal S, Albert T, Zigler J: M6-C Artificial Cervical Disc: Two-Year Follow-Up at Five IDE Investigation Centers. North American Spine Society. October, 2017; Orlando, Florida.

319. Blumenthal SL, Guyer RD, Ohnmeiss DD, **Zigler JE**: Adjacent Segment Degeneration after Lumbar Total Disc Replacement: 5-Year Results of a Multicenter, Prospective, Randomized Study with Independent Radiographic Assessment. North American Spine Society (best paper session). October, 2017; Orlando, Florida.
320. **Zigler JE**: Comparison of Therapies in Lumbar DDD: Network Meta-Analysis of Randomized Trials. Symposium on Current Concepts in Spinal Disorders. February, 2018; Las Vegas, Nevada.
321. Zigler J: Surgeon Reimbursement compared to ACDF/Cost Effectiveness/QALY Analysis. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Ontario, Canada.
322. Guyer RD, **Zigler JE**, Blumenthal SL, Ohnmeiss DD: Analysis of Lumbar Total Disc Replacement Removals/Revisions during a 17 Year Experience with 1,707 Patients. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Ontario, Canada.
323. Sasso R, Coric D, Phillips F, Guyer R, Blumenthal S, **Zigler J**, Sama A, Cammisa F, Albert T: M6-C Artificial Cervical Disc 24 Month Follow up: Clinical and Radiographic Outcomes from Five Investigational Centers Involved in a US FDA Approved IDE Study. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Ontario, Canada.
324. Blumenthal S, **Zigler JE**, Guyer RD, Ohnmeiss DD: Analysis of Lumbar Total Disc Replacement Removals/Revisions during a 17 Year Experience with 1,707 Patients. Global Spine Conference. April, 2018; Singapore.
325. Sasso R, **Zigler J**, Blumenthal S, Guyer R, Cammisa F, Albert T, Coric D: Prospective, Multi-center Study with 24-month Follow-up Evaluating the M6-C Cervical Total Disc Replacement. Spine Society of Australia. April, 2018; Adelaide, Australia.
326. **Zigler J**, Blumenthal S, Guyer R, Ohnmeiss D: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the ProDisc-C Device. Spine Society of Australia. April, 2018; Adelaide, Australia.
327. Blumenthal S, **Zigler J**, Guyer R, Ohnmeiss D: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-Year Experience. Spine Society of Australia. April, 2018; Adelaide, Australia.
328. Blumenthal S, **Zigler J**, Guyer R, Ohnmeiss D: Progression of Adjacent-level Degeneration after Lumbar Total Disc Replacement: Results of a Prospective Study with 5-year Follow-up. Spine Society of Australia. April, 2018; Adelaide, Australia.
329. **Zigler JE**: Lumbar Disc Replacement; Visiting Surgeon Rush University Medical Center. May, 2018; Chicago, Illinois.
330. **Zigler JE**: Lumbar TDR Is Back? The State of Spine Surgery Think Tank. June, 2018; Aruba.
331. Aucoin J, **Zigler J**, Blumenthal S, Guyer R, Ohnmeiss D: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the ProDisc-C Device. The State of Spine Surgery Think Tank. June, 2018; Aruba.
332. **Zigler JE**: Current Concepts of Motion Preserving Surgery- Cervical Arthroplasty. Seattle Science Foundation's Resident and Fellow's Course. August, 2018; Seattle, Washington.

333. **Zigler JE**: Neck Pain and Cervical Spondylosis. AO Spine. August, 2018; Tianjin, China.
334. **Zigler JE**, Guyer RD, Gornet MF, Ferko N, Cameron C, Patel L: Long-Term Outcomes of Lumbar Total Disc Replacement versus Spinal Fusion for the Treatment of DDD: A Novel Meta-Analysis of Randomized Controlled Trials. Spine Across the Sea. July-August, 2018; Lihue, Hawaii.
335. Guyer R, Blumenthal S, **Zigler J**, Ohnmeiss D: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-Year Experience. Spine Across the Sea. July-August, 2018; Lihue, Hawaii.
336. Guyer R, Ohnmeiss D, Blumenthal S, Zigler J: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-Year Experience (Best Papers Session). North American Spine Society. September, 2018; Los Angeles, California.
337. **Zigler JE**, Blumenthal SL: Impact of Range of Motion on Patient Outcomes 5 Years Following Lumbar TDR at L5-S1. North American Spine Society. September, 2018; Los Angeles, California.
338. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients. North American Spine Society. September, 2018; Los Angeles, California.
339. Blumenthal SL, Guyer RD, **Zigler JE**: Impact of Range of Motion on Progression of Adjacent Segment Disease: Disc vs. Disc. North American Spine Society. September, 2018; Los Angeles, California.
340. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-Operations After Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the Same Device Type. Cervical Spine Research Society. December, 2018; Scottsdale, Arizona.
341. **Zigler J**: Multilevel OPLL. Current Concepts in Spinal Disorders. February, 2019; Las Vegas, Nevada.
342. **Zigler JE**: Health Economics: Does Arthroplasty Make Economic Sense? (Instructional Course Lecture: Current State of Total Disc Replacement). American Academy of Orthopaedic Surgeons. March, 2019; Las Vegas, Nevada.
343. **Zigler JE**: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the ProDisc-C Device. International Society for the Advancement of Spine Surgery. March, 2019; Anaheim, California.
344. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Is Osteoporosis Screening Routinely Needed to Evaluate Cervical Total Disc Replacement Patients? Spine Society of Australia. April, 2019; Queensland, Australia.
345. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE**: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration? Spine Society of Australia. April, 2019; Queensland, Australia.
346. **Zigler JE**: Disc Replacement: Current Status. Castelli Spine. May, 2019; Key West, Florida.

347. **Zigler JE:** Self-Policing Our Profession. State of Spine Surgery Think Tank. June, 2019; Aruba.
348. **Zigler JE:** AOTK Spine Expert's Symposium Moderator. September, 2019; Amsterdam, The Netherlands.
349. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Is Osteoporosis Screening Routinely Needed to Evaluate Cervical Total Disc Replacement Patients? International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
350. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the ProDisc-C Device. International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
351. Guyer RD, **Zigler JE**, Blumenthal SL, Ohnmeiss DD: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Cervical Spine Symptoms. International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
352. Guyer RD, Blumenthal SL, **Zigler JE**, Ohnmeiss DD, Vovk A: Spike vs. Keel: Does Endplate Design of Lumbar Artificial Discs Affect Radiographic Outcomes? International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
353. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Clinical Outcome of Cervical Hybrid Surgery Using a Stand-alone Device at the Fusion Level. International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
354. **Zigler JE:** 5-10 Year US IDE Outcomes (Symposium: Lumbar/Cervical ADR). International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
355. Guyer RD, Coric D, Phillips F, Sasso R, Sama A, Cammisa F, Blumenthal SL, Albert T, **Zigler JE:** Clinical and Radiographic Outcomes for a Next Generation Artificial Cervical Disc: Two-Year Follow-Up at Five Investigational Centers Participating in a US FDA Approved Study. Global Spine Congress. May, 2019; Toronto, Ontario, Canada.
356. Blumenthal SL, Ohnmeiss DD, **Zigler JE**, Guyer RD: Impact of Previous Lumbar Spine Surgery on Outcome of Lumbar Total Disc Replacement: Analysis of Prospective 5-year Follow-up Study Data. International Society for the Study of the Lumbar Spine. June, 2019; Kyoto, Japan.
357. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock J, Phillips F, Coric D, Camissa F, Sasso R: A novel compressible core artificial cervical disc compared to anterior cervical discectomy and fusion: 2 year clinical results. North American Spine Society. September, 2019; Chicago, Illinois.
358. Guyer RD, Ohnmeiss DD, Blumenthal SL, **Zigler JE:** In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Cervical Spine Symptoms? North American Spine Society. September, 2019; Chicago, Illinois.
359. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Is Osteoporosis Screening Routinely Needed to Evaluate Cervical Total Disc Replacement Patients? North American Spine Society. September, 2019; Chicago, Illinois.

360. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Intraoperative Conversion of Cervical Total Disc Replacement to Fusion: Incidence and Reasons. North American Spine Society. September, 2019; Chicago, Illinois.
361. Guyer RD, Blumenthal SL, **Zigler JE**, Ohnmeiss DD: Impact of Previous Lumbar Spine Surgery on Outcome of Lumbar Total Disc Replacement: Analysis of Prospective Five-Year Follow-Up Study Data (presented in Best Papers Session). North American Spine Society. September, 2019; Chicago, Illinois.
362. **Zigler JE**: Advances in Motion Preservation Course (Course Co-Chair): Seattle Science Foundation. October, 2019; Seattle, Washington.
363. **Zigler JE**: Advanced Course in Disc Arthroplasty DOCS Course (Course Co-Director). November, 2019; Los Angeles, California.
364. **Zigler JE**: The Lost Art of Listening to the Patient. Symposium on Current Concepts in Spinal Disorders. January, 2020; Las Vegas, Nevada.
365. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Impact of Previous Lumbar Spine Surgery on Outcome of Lumbar Total Disc Replacement: Analysis of Prospective 5-year Follow-up Study Data. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
366. **Zigler JE**: Presidential Address. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
367. Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Intra-operative Conversion of Cervical Total Disc Replacement to Fusion: Incidence and Reasons. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
368. **Zigler JE**: The Scientific Data Supporting Lumbar TDR. Brazilian Spine Society. August, 2020 (virtual).
369. **Zigler JE**: Lumbar Arthroplasty Update. Advances in Motion Preservation of the Spine - Seattle Science Foundation October, 2020 (virtual).
370. Garcia R, **Zigler JE**, Radcliff KE, Coric D, Yue JJ, Ferko N, Situ A: Seven-year Results of a Randomized Controlled IDE Trial for Lumbar Artificial Discs in Single-level Degenerative Disc. North American Spine Society. October, 2020 (virtual meeting).
371. **Zigler JE**: Lumbar Arthroplasty Update. Advances in Motion Preservation of the Spine Seattle Science Foundation. October, 2020 (virtual).
372. **Zigler JE**: Lumbar Disc Replacement 20 Years of Data. Och Spine Grand Rounds (Weill Cornell) January, 2021 (virtual).
373. **Zigler JE**: Insurance Approval and Off-Label Use of Disc Replacement DOCS Spine Course Los Angeles November, 2021 (virtual).
374. **Zigler JE**: Lumbar TDR Surgical Tips and an Algorithm for Failure Cedars Sinai Spine Grand Rounds March 10, 2021 (virtual).
375. **Zigler JE**: Twenty Years' Experience in the US with Lumbar TDR. Pacific and Asian Society of Minimally Invasive Spine Surgery. July, 2021; Seoul, South Korea (virtual).
376. **Zigler JE**: Twenty Years' Experience with Lumbar TDR. Korean Society of the Advancement of Spine Surgery. June, 2021; Seoul, South Korea. (virtual)

377. **Zigler JE:** Lumbar Disc Replacement: Analysis of 20 Year Data. Singapore Spine Society June, 2021 (virtual).
378. **Zigler JE:** Two-level TDR. Castellvi Spine. May, 2021; Key Largo, Florida.
379. Blumenthal SL, Kiridly D, Shellock SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Late Failure of Cervical Disc Arthroplasty Due to Osteolysis. International Society for the Advancement of Spine Surgery. May, 2021; Miami, Florida.
380. **Zigler JE:** Using Predictive Analytics to choose the Best Patients for Lumbar Disc Replacement Lessons from the FDA IDE Studies. Spine Society of Australia. November, 2021 (virtual meeting).
381. Blumenthal S, Kiridly D, Shellock J, Guyer R, **Zigler J**, Ohnmeiss D: Late Failure of Cervical Disc Arthroplasty Due to Osteolysis. Spine Society of Australia. November, 2021 (virtual meeting).
382. **Zigler JE:** Latest Data on Lumbar ADR in the US, so We'll Cover Cervical ADR, ALIF, and Lumbar ADR. Spine Society of Australia. November, 2021 (virtual meeting).
383. **Zigler J**, Coric D, Jorgensen A, Derman P, Braxton E, Radcliff K, Buttermann G, Situ A, Prevost M, Ferko N: Progression of Adjacent-level Degeneration and Disease 7 Years after Lumbar Total Disc Replacement, a Post Hoc Analysis of 7-year Data from a Prospective Clinical Trial. Selby Spine Conference. January, 2022; Park City, Colorado.
384. **Zigler J:** Contraindications and Complications of Cervical Arthroplasty (part of symposium). International Meeting on Advanced Spine Techniques. April, 2022; Miami, Florida.
385. **Zigler JE:** Contraindications and Complications of Arthroplasty. International Meeting on Advanced Spine Technologies. April, 2022; Miami, Florida.
386. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock JL, Ohnmeiss DD: Lumbar Total Disc Replacement Removals/Revisions during a 20 Year Experience with 1,775 Patients (best papers session). International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
387. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Hybrid Surgery in a Consecutive Series of Patients with Long-term Follow-up. International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
388. Jorgensen D, Coric D, Derman P, Braxton E, Radcliff K, Buttermann G, Situ A, Ferko N, **Zigler J:** 10-year prediction of adjacent-level degeneration and disease after lumbar total disc replacement and fusion: A post hoc analysis of 7-year data from a prospective clinical trial. International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
389. **Zigler JE:** Case-based Illustrations: This Is Who I Do a Lumbar Disc Replacement for, And This Is Who I Do Not. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
390. Coric D, Derman P, Butterman G, Situ A, Ferko N, **Zigler JE:** Comparison of adjacent-level degeneration and disease progression between lumbar total disc replacement and fusion: 10-year prediction using 7-year data from a prospective clinical trial. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.

391. Patwardhan AG, Havey RM, Phillips FM, Lanman TH, **Zigler JE**, Coric D, Guyer RD, Muriuki MG: Likelihood of Achieving Physiological Range of Motion After Cervical Disc Arthroplasty: Analysis of IDE Clinical Trial Data. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
392. **Zigler JE**: Incidence and Failure Modes. Symposium: Cervical TDR Complications. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
393. Zigler, JE: Predictive Analytics in Lumbar Disc Replacement Visiting Professor University of Pittsburgh Medical Center. May, 2022; Pittsburg, Pennsylvania.
394. **Zigler JE**: 20 Years Experience with Lumbar Disc Replacement. Visiting Professor Hospital for Special Surgery. June, 2022; New York, New York.
395. **Zigler J**: How and When Do I Use in My Practice? Lumbar TDR. State of Spine Surgery Think Tank. June, 2022; Los Cabos, Mexico.
396. **Zigler, JE**: Keynote Address: Refuting the Arguments of 2000...”We Don’t Need Lumbar Arthroplasty Because Fusion Worked Fine” Seattle Science Foundation Motion Preservation. October, 2022; Seattle, Washington.
397. **Zigler JE**: Predictors of Outcome from the Seven Year actively IDE Study. DOCS Spine Course. October, 2022; Los Angeles, California.
398. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock JL, Ohnmeiss DD: Lumbar Total Disc Replacement Removals/Revisions during a 20 Year Experience with 1,775 Patients (best papers session). North American Spine Society. October, 2022; Chicago, Illinois.
399. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Hybrid Surgery in a Consecutive Series of Patients with Long-term Follow-up (best papers session). North American Spine Society. October, 2022; Chicago, Illinois.
400. Blumenthal SL, Guyer RD, Shellock JL, **Zigler JE**, Ohnmeiss DD: Lumbar Total Disc Replacement for the Treatment of Adjacent Segment Degeneration after Lumbar Fusion. North American Spine Society. October, 2022; Chicago, Illinois.
401. **Zigler JE**, Coric D, Derman P, Braxton E, Radcliff K, Buttermann G, Jorgensen A, Situ A, Ferko N: 7-year Progression and 10-year Prediction of Adjacent-level Degeneration and Disease after Lumbar Total Disc Replacement: A Post Hoc Analysis of a Prospective Clinical Trial with 7-year Follow-up. North American Spine Society. October, 2022; Chicago, Illinois.
402. **Zigler JE**: Twenty -Year Data Summary of Lumbar Arthroplasty NYC-MISS Course Weill-Cornell Medical Center. December, 2022; New York, New York.
403. **Zigler J**, Coric D, Derman PB, Braxton E, Radcliff K, Buttermann G, Jorgensen A, Situ A, Ferko N, Patel L: 7-year Patient-reported Outcomes (PRO) After Lumbar Total Disc Replacement: A Post Hoc Analysis of a Prospective Clinical Trial with 7-year Follow-up. Society for Minimally Invasive Spine Surgery. September-October, 2022; Las Vegas, Nevada.
404. Patwardhan A, Havey R, Phillips F, **Zigler J**, Coric D, Guyer RD, Lanman T, Muriuki M: Prosthesis Design and Likelihood of Achieving Physiological Range of Motion After Cervical Disc Arthroplasty: Analysis of Data from Seven IDE Clinical Trials. Cervical Spine Research Society. November, 2022; San Diego, California.

405. Griffin C, Blumenthal SL, **Zigler JE**, Guyer RD, Shellock JL, Ohnmeiss DD, Satin A: Revisions and Removals of Cervical Total Disc Replacement Devices in a Single Institution Consecutive Series of 1,473 Patients Beginning with the First Case Experience in 2003. Cervical Spine Research Society. November, 2022; San Diego, California.
406. Blumenthal SL, Guyer RD, Griffin C, **Zigler JE**, Shellock JL, Ohnmeiss DD, Courtois EC: Removals and Revisions of Cervical Total Disc Replacement Devices in a Consecutive Series of 1,473 Patients Beginning with the First Case Experience in 2003. SpineWeek (North American Spine Society section). May, 2023; Melbourne, Australia.
407. **Zigler J**, Coric D, Derman P, Braxton E, Radcliff K, Buttermann G, Situ A, Ferko N, Jorgensen A: 10-year prediction of adjacent-level degeneration and disease after lumbar total disc replacement and fusion, a post hoc analysis of 7-year data from a prospective clinical trial. SpineWeek. May, 2023; Melbourne, Australia.
408. Blumenthal SL, Griffin C, Courtois EC, Guyer RD, **Zigler JE**, Shellock JL, Ohnmeiss DD: Incidence of Implant Removal or Revision Surgery after Cervical Total Disc Replacement in a Consecutive Series of 1,615 Patients Beginning with the First Case Experience in 2003. International Society for the Advancement of Spine Surgery. June, 2023, San Francisco, California.
409. **Zigler JE**, Shellock JL, Guyer RD, Blumenthal SL, Ohnmeiss DD: Outcome of 2-level Lumbar Total Disc Replacement: Results of a Long-term Follow-up Study. International Society for the Advancement of Spine Surgery. June, 2023; San Francisco, California.
410. **Zigler JE**: Long Term Outcomes in Lumbar Arthroplasty. International Society for the Advancement of Spine Surgery – Asia Pacific Section. August, 2023; Seoul, South Korea.
411. **Zigler JE**: Update on Long-Term Lumbar and Cervical Arthroplasty Outcomes in the US. GECO Spine Meeting. August, 2023; Paris, France.
412. **Zigler JE**: Anatomy of an FDA Study. Seattle Science Foundation Advances in Motion Preservation. October, 2023; Seattle, Washington.
413. **Zigler JE**, Shellock JL, Guyer RD, Blumenthal SL, Ohnmeiss DD: Outcome of 2-level Lumbar Total Disc Replacement: Results of a Long-term Follow-up Study. North American Spine Society. October, 2023; Los Angeles, California.
414. Blumenthal SL, Guyer RD, **Zigler JE**, Shellock JL, Ohnmeiss DD: Long-term Outcome of Lumbar Total Disc Replacement: Impact of Prior Spine Surgery. North American Spine Society. October, 2023; Los Angeles, California.
415. **Zigler JE**: Protocol Deviations in an IDE Study; What Do We Learn? DOCS Spine Arthroplasty Summit. November, 2023; Los Angeles California.
416. **Zigler JE**: Current Status of Lumbar Disc Replacement. Cleveland Clinic Foundation Journal Club; November, 2023; Cleveland, Ohio.
417. **Zigler JE**: Overview of Disc Replacement. SUNY Upstate Medical University Orthopaedics Journal Club. January, 2024.
418. **Zigler JE**: Lumbar TDR Where Are We Now. Spine Summit. Course, February, 2024; Las Vegas Nevada.
419. **Zigler JE**: AO Experts Symposium (Moderator). March, 2014; Santiago, Chile.

420. Guyer RD, Courtois EC, Ohnmeiss DD, Blumenthal SL, Shellock JL, **Zigler JE**,: Effect of Lumbar Total Disc Replacement on Sagittal Alignment. Spine Society of Australia. April, 2024; Sydney, Australia.
421. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JE, **Zigler JE**: Strategies for Addressing Failed Cervical Total Disc Replacement: A Series of 42 Patients. Spine Society of Australia. April, 2024; Sydney, Australia.
422. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. Spine Society of Australia. April, 2024; Sydney, Australia.
423. Guyer RD, Ohnmeiss DD, Blumenthal SL, Courtois EC, Shellock JL, **Zigler JE**: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. Spine Society of Australia. April, 2024; Sydney, Australia.
424. Blumenthal SL, Guyer RG, **Zigler JE**, Shellock SL, Ohnmeiss DD: Impact of Prior Lumbar Spine Surgery on the Long-term Outcome of Lumbar Total Disc Replacement (Best Papers Session). International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
425. Guyer RD, Blumenthal SL, Shellock JL, **Zigler JE**, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
426. Guyer RD, **Zigler JE**, Blumenthal SL, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
427. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JS, **Zigler JE**: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
428. Guyer RD, Blumenthal SL, Shellock JL, **Zigler JE**, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? International Society for the Study of the Lumbar Spine. May, 2024; Milan, Italy.
429. **Zigler J**: Selecting the Appropriate Patient for Lumbar TDR and Outcomes. State of Spine Surgery Think Tank. June, 2024; Cabo, Mexico.
430. Guyer RD, Blumenthal SL, Shellock JL, **Zigler JE**, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? Spine Across the Sea. July, 2024; Kauai, Hawaii.
431. Ohnmeiss DD, Guyer RD, Blumenthal SL, Courtois EC, Shellock JS, **Zigler JE**: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. Spine Across the Sea. July, 2024; Kauai, Hawaii.
432. Blumenthal SL, Guyer RG, **Zigler JE**, Shellock SL, Ohnmeiss DD: Long-term Outcome of Lumbar Total Disc Replacement: Impact of Prior Spine Surgery. Spine Across the Sea. July, 2024; Kauai, Hawaii.

433. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JE, **Zigler JE**: Strategies for Addressing Failed Cervical Total Disc Replacement: A Series of 42 Patients. *Spine Across the Sea*. July, 2024; Kauai, Hawaii.
434. **Zigler JE**: Single Level L5/S1 Symptomatic Degeneration: TDR: Total Disc Replacement. Orthopaedic Summit on Evolving Technologies. September, 2024; Las Vegas, Nevada.
435. **Zigler JE**: Indirect or Direct Lumbar Decompression for Adult Neurogenic Claudication: Indirect Decompression Using TDA. Orthopaedic Summit on Evolving Technologies. September, 2024; Las Vegas, Nevada.
436. Satin AM, Schenk T, Guyer RD, Blumenthal S, **Zigler J**, Shellock J, Derman PB, Ohnmeiss DD, Rogers-LaVanne MP: Cervical Disc Arthroplasty for the Treatment of Adjacent Segment Disease after Anterior Cervical Discectomy and Fusion. Society for Minimally Invasive Spine Surgery. September, 2024; Las Vegas, Nevada.
437. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JS, **Zigler JE**: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. North American Spine Society. September, 2024; Chicago, Illinois.
438. Satin AM, Schenk T, Guyer RD, Blumenthal S, **Zigler J**, Shellock J, Derman PB, Ohnmeiss DD, Rogers-LaVanne MP: Cervical Disc Arthroplasty for the Treatment of Adjacent Segment Disease after Anterior Cervical Discectomy and Fusion. North American Spine Society. September, 2024; Chicago, Illinois.
439. **Zigler J**: Lumbar TDR Outcomes In Patients > 60 Years Old. Seattle Science Foundation Advances in Motion Preservation of the Spine. October, 2024; Seattle, Washington.
440. **Zigler J**: Long Term Follow-up on Control Levels After Discography. Seattle Science Foundation Advances in Motion Preservation of the Spine. October, 2024; Seattle, Washington.
441. **Zigler J**: Grade 1.5 Degen Spondy with Stenosis: ALIF and Perc Screws. Seattle Science Foundation Advances in Motion Preservation of the Spine. October, 2024; Seattle, Washington.
442. **Zigler J**: Small Private Practice in Southern California 1982. Seattle Science Foundation Advances in Motion Preservation of the Spine. October, 2024; Seattle, Washington.
443. Patwardhan A, Havey R, Muriuki M, **Zigler J**: Influence of Cervical Disc Prosthesis Design and 1- Versus 2-level Disc Replacements on ROM Outcomes 2-year Post Disc Arthroplasty in 835 Patients from 4 US IDE Clinical Trials. Cervical Spine Research Society. December, 2024; Chicago, Illinois.
444. Blumenthal S, Guyer R, Ohnmeiss D, Courtois E, Shellock J, **Zigler J**: Relationship of Discographic Injection Results to Subsequent Surgery in the Lumbar Spine with Minimum 10 Year Follow-Up. Spine Society of Australia. April, 2025; Perth, Australia.
445. Blumenthal S, Guyer R, Courtois E, **Zigler J**, Shellock J, Ohnmeiss D: Incidence of New Onset Leg Pain Following Anterior Approach Lumbar Surgery. Spine Society of Australia. April, 2025; Perth, Australia.
446. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JL, **Zigler JE**: Relationship of Discographic Injection Results to Subsequent Surgery in the Lumbar Spine

with Minimum 10 Year Follow-Up (Best Papers Session). International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.

447. Guyer RD, Blumenthal SL, Wilson BA, **Zigler JE**, Shellock JL, Ohnmeiss DD: Outcomes of Lumbar Total Disc Replacement in Patients With Multiple Previous Discectomies. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
448. Ohnmeiss D, Courtois E, Guyer R, Blumenthal S, Shellock J, **Zigler J**: Relationship of Discographic Injection Results to Subsequent Surgery in the Lumbar Spine with Minimum 10 Year Follow-Up. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
449. Guyer R, Blumenthal S, Courtois E, **Zigler J**, Shellock J, Ohnmeiss D: Incidence of New Onset Leg Pain Following Anterior Approach Lumbar Surgery. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
450. Guyer R, Blumenthal S, Courtois E, Shellock J, **Zigler J**, Ohnmeiss D: Changes in Sagittal Alignment Following Lumbar Total Disc Replacement: Analysis Based on Full-Body EOS Imaging of 132 Patients. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.

POSTERS

1. **Zigler JE**: Management of Acute Cervical Spine Instability. American Academy of Orthopedic Surgeons. Scientific Exhibit. January, 1987; San Francisco, California.
2. **Zigler JE**: Management Strategies in Acute Cervical Spine Trauma. American Academy of Orthopedic Surgeons. Scientific Exhibit. February, 1988; Atlanta, Georgia.
3. Araghi A, Guyer RD, Fulp RT, Ohnmeiss DD, Blumenthal SL, Hochschuler SH, Regan JJ, Shelokov AP, **Zigler JE**, Rashbaum RF: Use of Morphine Paste for Pain Control in Lumbar Laminectomies. International Society for the Study of the Lumbar Spine. June, 1997; Singapore.
4. Massoud B, Ohnmeiss DD, Rinn C, Guyer RD, Hochschuler SH, Rashbaum RF, Blumenthal SL, **Zigler JE**, Regan JJ, Fulp T: Results of Hardware Removal in the Lumbar Spine and the Role of Diagnostic Hardware Injection. Spine + Science + Management; November, 1997; New Orleans, Louisiana.
5. Hyde J, Ohnmeiss DD, Rinn C, Guyer RD, Rashbaum RF, Blumenthal SL, **Zigler JE**, Regan JJ, Fulp T: Anterior Cervical Fusion: Factors Related to Outcome. Spine + Science + Management; November, 1997; New Orleans, Louisiana.
6. Massoud B, Ohnmeiss DD, Rinn C, Guyer RD, Hochschuler SH, Rashbaum RF, Blumenthal SL, **Zigler JE**, Regan JJ, Fulp T: Results of Hardware Removal in the Lumbar Spine and the Role of Diagnostic Hardware Injection. North American Spine Society. October, 1998; San Francisco, California.
7. Sengupta D, Ohnmeiss DD, Hyde J, **Zigler JE**, Regan JJ, Hochschuler SH, Fulp T, Guyer RD: Intrasegmental Repair of Pars Defect – Early Results Using a Simple Technique. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.

8. Blumenthal SL, Simpson NS, Ohnmeiss DD, Risk DE, Boehler S, Guyer RD, **Zigler JE**, Fulp T, Hochschuler SH: Anterior Lumbar Interbody Fusion with Threaded Fusion Cages. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.
9. Ohnmeiss DD, Blumenthal SL, Guyer RD, **Zigler JE**, Hochschuler SH: Analysis of Threaded Fusion Cage Subsidence. North American Spine Society. October, 1999; Chicago, Illinois.
10. Blumenthal SL, Regan JJ, Hisey MS, Ohnmeiss DD, Guyer RD, Hochschuler SH, **Zigler JE**: Can Threaded Fusion Cages Be Used Effectively As Stand-Alone Devices? North American Spine Society. October, 1999; Chicago, Illinois.
11. Blumenthal SL, Hisey MS, Ohnmeiss DD, Regan JJ, Guyer RD, Hochschuler SH, **Zigler JE**: Can Threaded Fusion Cages Be Used Effectively as Stand-Alone Devices? International Society for the Study of the Lumbar Spine. April, 2000; Adelaide, Australia.
12. Ohnmeiss DD, Blumenthal SL, Guyer RD, **Zigler JE**, Hochschuler SH: Analysis of Threaded Fusion Cage Subsidence. International Society for the Study of the Lumbar Spine. April, 2000; Adelaide, Australia.
13. Ohnmeiss DD, Blumenthal SL, Guyer RD, Hochschuler SH, **Zigler JE**: Can Foraminal Height be Increased and Maintained with Anterior Lumbar Interbody Fusion Using Cages? International Society for the Study of the Lumbar Spine. April, 2000; Adelaide, Australia.
14. Ohnmeiss DD, Blumenthal SL, Guyer RD, Hochschuler SH, **Zigler JE**: Can Foraminal Height be Increased and Maintained with Anterior Lumbar Interbody Fusion Using Cages? Spine Across the Sea. July, 2000; Kona, Hawaii.
15. Blumenthal SL, Hisey MS, Ohnmeiss DD, Regan JJ, Guyer RD, Hochschuler SH, **Zigler JE**: Can Threaded Fusion Cages Be Used Effectively as Stand-Alone Devices? Spine Across the Sea. July, 2000; Kona, Hawaii.
16. Sengupta D, Ohnmeiss DD, Hyde J, **Zigler JE**, Regan JJ, Hochschuler SH, Fulp T, Guyer RD: Intrasegmental Repair of Pars Defect –Results Using a Simple Technique. Spine Across the Sea. July, 2000; Kona, Hawaii.
17. Ohnmeiss DD, Blumenthal SL, Guyer RD, **Zigler JE**, Hochschuler SH: Analysis of Threaded Fusion Cage Subsidence. Spine Across the Sea. July, 2000; Kona, Hawaii.
18. Burton DC, Ohnmeiss DD, Blumenthal SL, Rashbaum RF, **Zigler JE**, Guyer RD, Regan JJ: Anterior Cervical Discectomy and Fusion with Allograft Bone and Plate Fixation. North American Spine Society. October, 2000; New Orleans, Louisiana.
19. Ferrara LA, **Zigler JE**, Guyer RD: In Vitro Evaluation of Facet Motion Following Anterior Interbody Fusion. Congress of Neurological Surgeons. September-October, 2001; San Diego, California.
20. Tran V, Ohnmeiss DD, Blumenthal SL, Chang Y, Guyer RD, **Zigler JE**, Hochschuler SH, Hisey MS: Analysis of Re-Operations When Using Cages as Stand-Alone Devices: Minimum Three Year Follow-Up Study. Spine + Science + Management; November, 2001; New Orleans, Louisiana.
21. Henry S, Ohnmeiss DD, Guyer RD, **Zigler JE**, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Discographically Proven Pain. Spine + Science + Management. November, 2001; New Orleans, Louisiana.

22. Tran V, Ohnmeiss DD, Blumenthal SL, Chang Y, Guyer RD, **Zigler JE**, Hochschuler SH, Hisey MS, Rashbaum RF: Analysis of Re-Operations When Using Cages as Stand-Alone Devices: Minimum Three Year Follow-Up Study. Meeting of the Americas. April, 2002; New York, New York.
23. Henry S, Ohnmeiss DD, Guyer RD, **Zigler JE**, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion For Discographically Proven Pain. American Spinal Injury Association and the IMSOP joint conference. May, 2002; Vancouver, Canada.
24. Tran V, Ohnmeiss DD, Blumenthal SL, Chang Y, Guyer RD, **Zigler JE**, Hochschuler SH, Hisey MS, Rashbaum RF: Analysis of Re-Operations When Using Cages as Stand-Alone Devices: Minimum Three Year Follow-Up Study. American Spinal Injury Association and the IMSOP joint conference. May, 2002; Vancouver, Canada.
25. Henry S, Ohnmeiss DD, Guyer RD, **Zigler JE**, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion For Discographically Proven Pain. American Academy of Orthopaedic Surgeons. February, 2003; New Orleans, Louisiana.
26. **Zigler JE**, Chang Y, Ohnmeiss DD, Guyer RD: Open-Door Laminoplasty in the Treatment of Cervical Myelopathy. American Spinal Injury Association. April, 2003; Miami, Florida.
27. **Zigler JE**, Boden S, Ohnmeiss DD, Rogers C: Using CT Scans to Assess Boney Reconstitution of Iliac Crest Bone Graft Donor Site Defects Backfilled With Grafton® versus Gelfoam. Spine Across the Sea. July, 2003; Maui, Hawaii.
28. **Zigler JE**, Guyer RD, Chang Y, Ohnmeiss DD: Open-Door Laminoplasty in the Treatment of Cervical Myelopathy. World Spine. August, 2003; Chicago, Illinois
29. Guyer RD, Henry S, Ohnmeiss DD, **Zigler JE**, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Cervical Discogenic Pain with Confirmatory Discography. Cervical Spine Research Society. December, 2003; Scottsdale, Arizona.
30. Hochschuler SH, Whitaker C, **Zigler JE**, Guyer RD, Sachs BL, Blumenthal SL, Rashbaum RF, Ohnmeiss DD: Comparison of Return to Work Following Total Disc Arthroplasty vs. Fusion: A Prospective, Randomized Study. Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
31. Gottlieb J, Sachs B, Guyer R, **Zigler J**, Rashbaum R, Hochschuler S, Blumenthal S, Ohnmeiss D: Comparison of Complications Associated with Lumbar Artificial Disc Replacement versus Fusion at 2 Year Follow-up. International Society for the Study of the Lumbar Spine. June, 2004; Porto, Portugal.
32. Sachs BL, Hisey MS, **Zigler JE**, Burd T, Ohnmeiss DD: Clinical Comparison of Minimally Invasive versus Open Pedicle Screw Placement. International Society for the Study of the Lumbar Spine. June, 2004; Porto, Portugal.
33. Guyer R, **Zigler JE**, Hochschuler S, Rashbaum RF, Hisey M: A Prospective Study Through an Investigational Device Exemption (IDE) Comparing a New Modular Cage with the BAK Cylindrical Cage for Anterior Lumbar Interbody Fusion: 49 Consecutively Operative Cases. International Meeting on Advanced Spinal Techniques. July, 2004; Bermuda.

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151. Rogers RW, Blumenthal SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Clinical Outcomes Following Anterior Cervical Hybrid Surgery Using Total Disc Replacement Combined with Anterior Cervical Fusion at the Adjacent Segment. Cervical Spine Research Society. December, 2015; San Diego, California.
152. Guyer RD, Putney E, Ohnmeiss DD, **Zigler JE**, Blumenthal SL: Analysis of Hospital Length of Stay Following Lumbar Anterior/Posterior Combined Fusion: Is There a Disadvantage Associated with Shorter Stays? International Society for the Study of the Lumbar Spine – SpineWeek. May, 2016; Singapore.
153. **Zigler JE**, Shivers J, Guyer RD, Ohnmeiss DD: Complications Associated with the Anterior Approach to the Lumbar Spine: Analysis of 2,881 Consecutive Cases during a 6-year Period. International Society for the Advancement of Spine Surgery – SpineWeek. May, 2016; Singapore.
154. Ohnmeiss DD, Guyer RD, Blumenthal SL, **Zigler JE**: Re-operation after Lumbar Spine Surgery: Significant Variation in Rates Due to the Definitions Applied for Re-operation. North American Spine Society Summer Meeting. July, 2016; Miami, Florida.
155. Blumenthal SL, Otero-Lopez E, Guyer RD, **Zigler JE**, Ohnmeiss DD: Lumbar Hybrid Surgery with Total Disc Replacement at One Level and Fusion at the Adjacent Level: Does Fusion Type Impact Outcome? North American Spine Society. October, 2016; Boston, Massachusetts.
156. **Zigler JE**, Liu Z, Niu CC, Park CK: Asia-Pacific Multicenter, Prospective, Randomized Clinical Trial of Arthroplasty vs. Anterior Cervical Discectomy and Fusion in the Treatment of Symptomatic Cervical Disc Degeneration. Cervical Spine Research Society. December, 2017; San Diego, California.
157. Sasso R, Smucker J, Blumenthal S, Guyer R, **Zigler J**: Early Experience with the M6-C Artificial Cervical Disc: A Report from Two IDE Investigational Centers Involved in a US FDA Approved IDE Study. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
158. Guyer R, **Zigler J**, Ohnmeiss D: Adjacent Segment Degeneration after Lumbar Total Disc Replacement: 5-year Results of a Multicenter, Prospective, Randomized Study with Independent Radiographic Assessment. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.

159. **Zigler J**, Guyer R: Maintenance of Competence to Practice Spine Surgery: Do We Know How Many Cases Are Required? International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
160. **Zigler JE**, Ohnmeiss DD: Ten-Year Follow-up of Patients Enrolled in the FDA-regulated Trial for Single-level Lumbar Total Disc Replacement: One Site's Experience. International Society for the Study of the Lumbar Spine. May-June, 2017; Athens, Greece.
161. Guyer RD, Blumenthal SL, Ohnmeiss DD, **Zigler JE**: Clinical Outcome of Two-Level Lumbar Total Disc Replacement: An Analysis of 141 Patients with Minimum 24-Month Follow-Up. International Society for the Study of the Lumbar Spine. May-June, 2017; Athens, Greece.
162. **Zigler J**, Niu CC, Park C-K, Park CK: Asia-Pacific Multicenter, Prospective, Randomized, Trial Comparing Arthroplasty vs Anterior Cervical Discectomy and Fusion in the Treatment of Symptomatic Cervical Disc Degeneration. North American Spine Society. October, 2017; Orlando, Florida.
163. Guyer R, **Zigler J**, Blumenthal S, Ohnmeiss D: Clinical Outcome after Three-level Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Ontario, Canada.
164. Zigler J: Impact of Range of Motion on Patient Outcomes 5 Years Following Lumbar TDR at L5-S1 International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Ontario, Canada.
165. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE**: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-year Experience. International Society for the Study of the Lumbar Spine. May, 2018; Banff, Canada.
166. Blumenthal SL, **Zigler JE**, Guyer RD, Ohnmeiss DD: Intra-operative Conversion of Cervical Total Disc Replacement to Fusion: Incidence and Reasons. Spine Society of Australia. April, 2019; Queensland, Australia.
167. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE**: Bone Mineral Density Screening in Patients Who Are Lumbar Total Disc Replacement Patients. International Society for the Study of the Lumbar Spine. June, 2019; Kyoto, Japan.
168. Guyer RD, Blumenthal SL, **Zigler JE**, Ohnmeiss DD: Impact of Range of Motion on Progression of Adjacent Segment Disease: Disc vs. Disc. International Society for the Study of the Lumbar Spine. June, 2019; Kyoto, Japan.
169. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE** In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration? International Society for the Study of the Lumbar Spine. June, 2019; Kyoto, Japan.
170. Guyer RD, Blumenthal SL, **Zigler JE**, Ohnmeiss DD: Spike vs. Keel: Does Endplate Design of Lumbar Artificial Discs Affect Radiographic Outcomes? International Society for the Study of the Lumbar Spine. June, 2019; Kyoto, Japan.
171. **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Spike vs. Keel: Does Endplate Design of Lumbar Artificial Discs Affect Radiographic Outcomes? North American Spine Society. September, 2019; Chicago, Illinois.

172. Blumenthal SL, Ohnmeiss DD, Guyer RD, **Zigler JE**, Satin A: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration? North American Spine Society. October, 2020; (virtual meeting).
173. Guyer RD, Ohnmeiss DD, Blumenthal SL, **Zigler JE**: Clinical Outcome of Anterior Lumbar Interbody Fusion Using a Stand-alone Cage for the Treatment of Symptomatic Disc Degeneration. International Society for the Study of the Lumbar Spine. June, 2021 (virtual meeting).
174. Blumenthal SL, Kiridly D, Shellock SL, Guyer RD, **Zigler JE**, Ohnmeiss DD: Late Failure of Cervical Disc Arthroplasty Due to Osteolysis. Spine Across the Sea (Joint meeting of NASS and JOA). July 2021; Kohala Coast, Hawaii.
175. Jorgensen D, Coric D, Derman P, Braxton E, Radcliff K, Buttermann G, Situ A, Ferko N, **Zigler J**: Progression of Adjacent-Level Degeneration and Disease 7 Years after Lumbar Total Disc Replacement, a Post Hoc Analysis of 7-year Data from a Prospective Clinical Trial. International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
176. Guyer RD, Shellock JL, Blumenthal SL, **Zigler JE**, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? North American Spine Society. October, 2022; Chicago, Illinois.
177. Shellock JL, **Zigler JE**, Guyer RD, Blumenthal SL, Ohnmeiss DD: Outcome of 2-level Lumbar Total Disc Replacement: Results of a Long-term Follow-up Study. SpineWeek (International Society for the Study of the Lumbar Spine section). May, 2023; Melbourne, Australia.
178. Blumenthal SL, Guyer RD, Shellock JL, **Zigler JE**, Ohnmeiss DD: Lumbar Total Disc Replacement for the Treatment of Adjacent Segment Degeneration after Lumbar Fusion. SpineWeek (Oral poster International Society for the Study of the Lumbar Spine section). May, 2023; Melbourne, Australia.
179. Blumenthal SL, Courtois EC, Griffin C, Guyer RD, **Zigler JE**, Shellock JL, Ohnmeiss DD: Incidence of Implant Removal or Revision Surgery after Cervical Total Disc Replacement in a Consecutive Series of 1,615 Patients Beginning with the First Case Experience in 2003. (Oral Poster) North American Spine Society. October, 2023; Los Angeles, California.
180. Blumenthal SL, Guyer RD, Courtois EC, Shellock JL, **Zigler JE**, Ohnmeiss DD: Changes in Sagittal Alignment Following Lumbar Total Disc Replacement: Analysis Based on Full-Body EOS Imaging. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
181. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JL, **Zigler JE**: Strategies for Addressing a Series of Failed Cervical Total Disc Replacements. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
182. Blumenthal SL, Guyer RD, Courtois EC, Shellock JL, **Zigler JE**, Ohnmeiss DD: Effect of Lumbar Total Disc Replacement on Sagittal Alignment. International Society for the Study of the Lumbar Spine. May, 2024, Milan, Italy.

183. Ohnmeiss DD, Guyer RD, Blumenthal SL, Courtois EC, Shellock JL, **Zigler JE**: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. International Society for the Study of the Lumbar Spine. May, 2024, Milan, Italy.
184. Guyer RD, Blumenthal SL, **Zigler JE**, Shellock SJ, Ohnmeiss DD: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. Spine Across the Sea. July, 2024; Kauai, Hawaii.
185. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JL, **Zigler JE**: Strategies for Addressing a Series of Failed Cervical Total Disc Replacements. North American Spine Society. September, 2024; Chicago, Illinois.
186. Guyer R, **Zigler J**, Blumenthal S, Shellock J, Ohnmeiss D: Clinical Outcome of Lumbar Total Disc Replacement In Patients More Than 60 Years of Age. Spine Summit. February, 2025; Tampa, Florida.
187. Guyer R, Fisher K, **Zigler J**, Blumenthal S, Shellock J, Ohnmeiss D: Intraoperative Conversion of Primary Cervical Total Disc Replacement to Fusion: Incidence and Reasons. Spine Summit. February, 2025; Tampa, Florida
188. Guyer R, Blumenthal S, Shellock J, Wilson B, **Zigler J**, Ohnmeiss D: Outcomes of Lumbar Total Disc Replacement in Patients with Multiple Previous Discectomies. Spine Society of Australia. April, 2025; Perth, Australia.
189. Guyer R, Blumenthal S, Platt K, **Zigler J**, Shellock J, Ohnmeiss D: Adoption of Total Disc Replacement Among Surgeons Who Received Training on Their Use During Spine Surgery Fellowship. Spine Society of Australia. April, 2025; Perth, Australia.
190. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JS, **Zigler JE**: Neck Disability Index Scores Across Multiple Cervical Total Disc Replacement Devices and during Long-term Follow-up of Patients Enrolled in Food and Drug Administration Investigational Device Exemption Trials. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
191. Guyer RD, Blumenthal SL, Courtois EC, **Zigler JE**, Shellock JL, Ohnmeiss DD: Incidence of New Onset Leg Pain Following Anterior Approach Lumbar Surgery. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
192. Shellock JL, **Zigler JE**, Platt K, Guyer RD, Blumenthal SL, Ohnmeiss DD: Adoption of Total Disc Replacement Among Surgeons Who Received Training on Their Use During Spine Surgery Fellowship. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
193. Guyer R, Blumenthal S, Wilson B, **Zigler J**, Shellock J, Ohnmeiss D: Outcomes of Lumbar Total Disc Replacement in Patients with Multiple Previous Discectomies. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
194. Guyer R, Blumenthal S, **Zigler J**, Shellock J, Ohnmeiss D: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.