

Publication List

ShARC

Shoulder Arthroplasty Research Committee

2025

Smaller glenosphere size and increased baseplate retroversion improve postoperative internal rotation after reverse total shoulder arthroplasty performed with a 135° humeral implant and lateralized glenoid.

Adams J, Al-Humadi S, Werner BC, et al

JSES Int. Published online July 1, 2025. doi:10.1016/j.jseint.2025.06.004

Scapula anatomy influences simulated impingement-free range of motion in reverse shoulder arthroplasty.

Greiner S, Denard PJ, Metcalfe N, et al

J Shoulder Elbow Surg. Published online June 14, 2025. doi:10.1016/j.jse.2025.05.008

Stress shielding of the Univers Revers system in reverse shoulder arthroplasty is minimal and does not progress substantially from short- to midterm follow-up.

Khorram R, Al-Humadi S, Kohut K, et al

J Shoulder Elbow Surg. Published online July 11, 2025. doi:10.1016/j.jse.2025.05.032

Variability in ultimate humeral height of an inlay humeral stem does not impact outcomes following reverse shoulder arthroplasty.

Mendoza MA, Werner BC, Denard PJ, ShARC Group

JSES Int. Published online May 14, 2025. doi:10.1016/j.jseint.2025.04.017

Glenoid-sided lateralization decreases scapular notching with a 135° humeral component Arthrex reverse shoulder arthroplasty.

Pak T, Kilic AI, Ardebol J, et al

J Shoulder Elbow Surg. Published online July 16, 2025. doi:10.1016/j.jse.2025.05.044

Preoperative planning and inferior glenosphere overhang increases the odds of achieving high internal rotation after Univers reverse total shoulder arthroplasty.

Noble MB, Griffin JW, Sears BW, et al

J Shoulder Elbow Surg. Published online February 16, 2025. doi:10.1016/j.jse.2025.01.018

Results of anatomic total shoulder arthroplasty with the Arthrex Eclipse™ stemless humeral implant in patients over 70 years of age.

Dillon MT, Denard PJ, ShARC Group

J Shoulder Elbow Surg. 2025;34(9):e750-e756. doi:10.1016/j.jse.2024.12.037



Reverse shoulder arthroplasty baseplate stability is affected by bone density and the type and amount of augmentation.

Ritter D, Raiss P, Denard PJ, et al

Bioengineering. 2025;12(1):42. doi:10.3390/bioengineering12010042

Correlation of preoperatively planned humeral component size and actual implanted size: a retrospective and prospective evaluation of anatomic and reverse shoulder arthroplasty.

Werner BC, Parsons B, Johnson J, Denard PJ

JSES Int. 2025;9(2):411-414. doi:10.1016/j.jseint.2024.09.020

Lateralization has minimal biomechanical impact on tuberosity fixation with the use of a stem-based repair and a 135° humeral implant in reverse shoulder arthroplasty for 4-part proximal humerus fracture.

Bercik MJ Jr, Denard P, McGarry MH, et al

JSES Int. 2025;9(2):486-491. doi:10.1016/j.jseint.2024.11.001

Machine learning models can define clinically relevant bone density subgroups based on patient-specific calibrated computed tomography scans in patients undergoing reverse shoulder arthroplasty.

Ritter D, Denard PJ, Raiss P, et al

J Shoulder Elbow Surg. 2025;34(3):e141-e151. doi:10.1016/j.jse.2024.07.006

The effect of lateralization on clinical outcomes after anatomic total shoulder arthroplasty.

Werner BC, Nauert R, Harmsen S, et al

J Shoulder Elbow Surg. 2025;34(6):1498-1506. doi:10.1016/j.jse.2024.09.044

The impact of 3-dimensional humeral planning and standard transfer instrumentation on reconstruction of native humeral anatomy for anatomic total shoulder arthroplasty.

Werner BC, Lenters TR, Thakur S, Knopf D, Metcalfe N, Tokish JM

J Shoulder Elbow Surg. 2025;34(1):147-153. doi:10.1016/j.jse.2024.04.011

2024

Association of neighborhood level socioeconomic status and patient reported clinical improvement following total shoulder arthroplasty.

Morgan C, Firoved A, Denard PJ, Griffin JW

JSES Int. 2024;9(1):175-180. doi:10.1016/j.jseint.2024.08.205

SECEC Grammont Award 2024: The critical role of posture adjustment for range of motion simulation in reverse total shoulder arthroplasty preoperative planning.

Moroder P, Poltaretskyi S, Raiss P, et al

Bone Joint J. 2024;106-B(11):1284-1292. doi:10.1302/0301-620X.106B11.BJJ-2024-0110.R1

Virtual assessment of internal rotation in reverse shoulder arthroplasty based on statistical shape models of scapular size.

Galasso LA, Lädermann A, Werner BC, et al

JSES Int. 2024;8(6):1248-1258. doi:10.1016/j.jseint.2024.07.014

Posteroinferior glenosphere positioning is associated with improved range of motion following reverse shoulder arthroplasty with a 135° inlay humeral component and lateralized glenoid.

Pak T, Ardebol J, Kilic AI, et al

J Shoulder Elbow Surg. 2024;33(10):2171-2177. doi:10.1016/j.jse.2024.02.019

Quantifying bone loss and lateralization with standardized baseplate vs augmented baseplates.

Shah A, Werner B, Gobezie R, et al

JSES Int. 2024;8(5):1055-1062. doi:10.1016/j.jseint.2024.04.014

Limited preoperative forward flexion does not impact outcomes between anatomic or reverse shoulder arthroplasty for primary glenohumeral arthritis.

Sears BW, Denard PJ, Lederman E, Gobezie R, Werner BC

Semin Arthroplasty. 2024;34(3):626-631. doi:10.1053/j.sart.2024.03.007

Seasonal timing of surgery does not affect clinical outcomes in total shoulder arthroplasty.

Erickson BJ, Denard PJ, Gobezie R, Lederman E, Sears B, Werner BC

Semin Arthroplasty. 2024;34(3):679-684. doi:10.1053/j.sart.2024.03.015

A stemless anatomic shoulder arthroplasty design provides increased cortical medial calcar bone loading in variable bone densities compared to a short stem implant.

Ritter D, Denard PJ, Raiss P, Wijdicks CA, Bachmaier S

JSES Int. 2024;8(4):851-858. doi:10.1016/j.jseint.2024.02.008

Glenoid lateralization in reverse shoulder arthroplasty: metal versus bone offset in different implant designs.

Wittmann T, Denard PJ, Werner BC, Raiss P

JSES Int. 2024;8(4):845-850. doi:10.1016/j.jseint.2024.02.006

Rates of subacromial notching are low following reverse shoulder arthroplasty with a 135° inlay humeral component and a lateralized glenoid.

Pak T, Menendez ME, Gobezie R, Sears BW, Lederman E, ShARC

JSES Int. 2024;8(3):522-527. doi:10.1016/j.jseint.2024.01.009

The subcoracoid distance is correlated with pain and internal rotation after reverse shoulder arthroplasty.

Klosterman EL, Tagliero AJ, Lenters TR, et al

JSES Int. 2024;8(3):528-534. doi:10.1016/j.jseint.2024.01.010

Preoperative 3D computed tomography bone density measures provide objective bone quality classifications for stemless anatomic total shoulder arthroplasty.

Ritter D, Denard PJ, Raiss P, Wijdicks CA, Bachmaier S

J Shoulder Elbow Surg. 2024;S1058-2746(23)00887-X. doi:10.1016/j.jse.2023.11.005

Robert H. Cofield, MD, Award for Best Oral Presentation 2023: up to 8 mm of glenoid-sided lateralization does not increase the risk of acromial or scapular spine stress fracture following reverse shoulder arthroplasty with a 135° inlay humeral component.

Pak T, Ardebol J, Menendez ME, et al

J Shoulder Elbow Surg. 2024;S1058-2746(24)00019-3. doi:10.1016/j.jse.2023.11.018

Assessment of a novel computed tomography ratio to characterize B2 glenoid morphology with total shoulder arthroplasty.

Oak SR, Horinek JL, Barras LA, et al

Semin Arthroplasty. 2024;34(1):P252-P258. doi:10.1053/j.sart.2023.04.016

2023

Reverse shoulder arthroplasty patients younger than 60 years old exhibit lower clinically significant Single Assessment Numeric Evaluation (SANE) scores compared to older patients.

Stewart BP, Hawthorne BS, Dorsey CG, Wellington IJ, Cote M, Mazzocca A

Cureus. 2023;15(10):e46492. doi:10.7759/cureus.46492

Influence of backside seating parameters and augmented baseplate components in virtual planning for reverse shoulder arthroplasty.

Werner BC, Lin A, Lenters TR, et al

Shoulder Elbow Surg. 2023;S1058-2746(23)00851-0. doi:10.1016/j.jse.2023.10.024

Stemless anatomic total shoulder arthroplasty is associated with less early postoperative pain.

Werner BC, Burrus MT, Denard PJ, et al

JSES Int. 2023;8(1):197-203. doi:10.1016/j.jseint.2023.10.012

Short-term functional outcomes of reverse shoulder arthroplasty following three-dimensional planning is similar whether placed with a standard guide or patient-specific instrumentation.

Hwang S, Werner BC, Provencher M, et al

J Shoulder Elbow Surg. 2023;32(8):1654-1661. doi:10.1016/j.jse.2023.02.136

Obesity is associated with improvement in functional outcome but lowers internal rotation after reverse shoulder arthroplasty.

Shah A, Galal Y, Werner BC, Gobezie R, Denard PJ, Lederman E

JSES Int. 2023;8(1):147-151. doi:10.1016/j.jseint.2023.08.021

Humeral osteophyte size and clinical outcomes after anatomic total shoulder arthroplasty.

Shah A, Galal Y, Lederman E, et al

Semin Arthroplasty. 2023;33(1):141-147. doi:10.1053/j.sart.2022.09.003

Stemless components lead to improved radiographic restoration of humeral head anatomy compared with short-stemmed components in total shoulder arthroplasty.

Sears BW, Creighton RA, Denard PJ, et al

J Shoulder Elbow Surg. 2023;32(2):240-246. doi:10.1016/j.jse.2022.07.024

2022

Substantial clinical benefit values demonstrate a high degree of variability when stratified by time and geographic region.

Wellington IJ, Davey AP, Cote MP, et al

JSES Int. 2022;7(1):153-157. doi:10.1016/j.jseint.2022.10.003

Does lateralizing the glenosphere center of rotation by 4 mm decrease scapular notching in reverse shoulder arthroplasty with a 135° humeral component?

Harmsen SM, Robaina J, Campbell D, Denard PJ, Gobezie R, Lederman ES

JSES Int. 2022;6(3):442-446. doi:10.1016/j.jseint.2021.12.005

Anatomic total shoulder arthroplasty for patients with preserved preoperative motion.

Burrus MT, Griffin JW, Denard PJ, Lederman E, Gobezie R, Werner BC

Semin Arthroplasty. 2022;32(2):258-264. doi:10.1053/j.sart.2021.09.009

The addition of preoperative three-dimensional analysis alters implant choice in shoulder arthroplasty.

Werner BC, Denard PJ, Tokish JM, et al

Shoulder Elbow. 2022;14(4):378-384. doi:10.1177/1758573221989306

Rotational range of motion of elliptical and spherical heads in shoulder arthroplasty: a dynamic biomechanical evaluation.

Muench LN, Otto A, Kia C, et al

Arch Orthop Trauma Surg. 2022;142(1):67-76. doi:10.1007/s00402-020-03587-0

A comparison of central screw versus post for glenoid baseplate fixation in reverse shoulder arthroplasty using a lateralized glenoid design.

Bercik MJ, Werner BC, Sears BW, Gobezie R, Lederman E, Denard PJ

J Clin Med. 2022;11(13):3763. doi:10.3390/jcm11133763

Short-term clinical and radiographic outcomes of a hybrid all-polyethylene glenoid based on preoperative glenoid morphology.

Creighton RA, Burrus MT, Werner BC, Gobezie R, Lederman E, Denard PJ

J Shoulder Elbow Surg. 2022;31(12):2554-2561. doi:10.1016/j.jse.2022.05.016

The influence of preoperative rotator cuff cross-sectional area and strength on postoperative outcomes in reverse shoulder arthroplasty.

Kirloskar KM, Szakiel PM, Gruber MD, Werner BC, Denard PJ

J Shoulder Elbow Surg. 2022;31(11):2274-2280. doi:10.1016/j.jse.2022.04.003

Initial and 1-year radiographic comparison of reverse total shoulder arthroplasty with a short versus standard length stem.

Erickson BJ, Denard PJ, Griffin JW, Gobezie R, Lederman E, Werner BC

J Am Acad Orthop Surg. 2022;30(14):e968-e978. doi:10.5435/JAAOS-D-21-01032

A 135° short inlay humeral stem leads to comparable radiographic and clinical outcomes compared with a standard-length stem for reverse shoulder arthroplasty.

Erickson BJ, Denard PJ, Griffin JW, et al

JSES Int. 2022;6(5):802-808. doi:10.1016/j.jseint.2022.05.003

No difference in range of motion in reverse total shoulder arthroplasty using standard or constrained liners: a matched cohort study.

Goodloe JB, Denard PJ, Lederman E, Gobezie R, Werner BC

JSES Int. 2022;6(6):929-934. doi:10.1016/j.jseint.2022.07.004

Patient reported outcomes and ranges of motion after reverse total shoulder arthroplasty with and without subscapularis repair.

Oak SR, Kobayashi E, Gagnier J, et al

JSES Int. 2022;6(6):923-928. doi:10.1016/j.jseint.2022.07.009

Lesser tuberosity osteotomy does not appear to compromise fixation or function compared with peel in short-stem anatomic shoulder arthroplasty.

Griffin JW, Werner BC, Lederman E, et al

Orthopedics. 2022;45(3):151-155. doi:10.3928/01477447-20220128-10

Can the reverse total shoulder arthroplasty provide as good of an outcome as an anatomic shoulder arthroplasty.

Erickson BJ, Chalmers P, Shishani Y, Romeo AA, Lederman ES, Gobezie R

Semin Arthroplasty. 2022;32(4):850-855. doi:10.1053/j.sart.2022.04.013

The influence of computed tomography preoperative planning on clinical outcomes after anatomic total shoulder arthroplasty: a matched cohort analysis.

Burrus MT, Denard PJ, Lederman E, Gobezie R, Werner BC

Semin Arthroplasty. 2022;32(4):856-862. doi:10.1053/j.sart.2022.04.011

A comprehensive evaluation of the association of radiographic measures of lateralization on clinical outcomes following reverse total shoulder arthroplasty.

Erickson BJ, Werner BC, Griffin JW, et al

J Shoulder Elbow Surg. 2022;31(5):963-970. doi:10.1016/j.jse.2021.10.010

A radiographic analysis of proximal humeral anatomy in patients with primary glenohumeral arthritis and implications for press-fit stem length.

Bents EJ, Werner BC, Griffin JW, Raiss P, Denard PJ

J Clin Med. 2022;11(10):2867. doi:10.3390/jcm11102867

A biomechanical comparison of subscapularis tenotomy repair techniques for stemless shoulder arthroplasty.

Werner BC, McClish SJ, Mealey NC, Wijdicks C, Thompson T, Higgins LD

J Shoulder Elbow Surg. 2022;31(4):711-717. doi:10.1016/j.jse.2021.10.017

2021

Reverse total shoulder arthroplasty for patients with preserved active elevation and moderate-to-severe pain: a matched cohort study.

Burrus MT, Denard PJ, Lederman E, Gobezie R, Werner BC

JSES Int. 2021;6(1):1-6. doi:10.1016/j.jseint.2021.10.004

Negligible correlation between radiographic measurements and clinical outcomes in patients following primary reverse total shoulder arthroplasty.

Berthold DP, Morikawa D, Muench LN, et al

J Clin Med. 2021;10(4):809. doi:10.3390/jcm10040809

The impact of subscapularis integrity on functional outcome in reverse total shoulder arthroplasty utilizing a 135° stem.

Cirino CM, Cagle PJ, Gobezie RB, Lederman ES, Denard PJ, Parsons BO

Semin Arthroplasty. 2021;31(4):721-729. doi:10.1053/j.sart.2021.04.010

Why patients fail to achieve a Patient Acceptable Symptom State (PASS) after total shoulder arthroplasty?

Cole EW, Moulton SG, Werner BC, Denard PJ

JSES Int. 2021;6(1):49-55. doi:10.1016/j.jseint.2021.09.017

Cause for revision differs between a short and standard length stem at 5 year follow-up.

Denard PJ, Werner BC, Gobezie R, Cohen BS, Lederman E

Semin Arthroplasty. 2021;31(4):836-841. doi:10.1053/j.sart.2021.05.01

Does commercially available shoulder arthroplasty preoperative planning software agree with surgeon measurements of version, inclination, and subluxation?

Erickson BJ, Chalmers PN, Denard P, et al

J Shoulder Elbow Surg. 2021;30(2):413-420. doi:10.1016/j.jse.2020.05.027

Inclination correction is associated with improved clinical outcomes in anatomic total shoulder arthroplasty.

Griffin JW, Denard P, Romeo A, Gobezie R, Lederman E, Werner B

Semin Arthroplasty. 2021;31(3):557-562. doi:10.1053/j.sart.2021.03.005

Clinical and radiological outcomes in reverse total shoulder arthroplasty by inclination angle with a modular prosthesis.

Otto A, Baldino JB, Mehl J, et al

Orthopedics. 2021;44(4):e527-e533. doi:10.3928/01477447-20210618-12

Revision to reverse total shoulder arthroplasty: do short stem and stemless implants reduce the operative burden compared to convertible stems?

Tracy ST, Werner BC, Steinbeck J, et al

Semin Arthroplasty. 2021;31(2):248-254. doi:10.1053/j.sart.2020.11.019

Prosthetic humeral head center of rotation shift from ideal is associated with inferior clinical outcomes after anatomic total shoulder arthroplasty.

Werner BC, Creighton RA, Denard PJ, Lederman E, Romeo A, Griffin JW

Semin Arthroplasty. 2021;31(4):668-676. doi:10.1053/j.sart.2021.04.004

Glenoid lateralization influences active internal rotation after reverse shoulder arthroplasty.

Werner BC, Lederman E, Gobezie R, Denard PJ

J Shoulder Elbow Surg. 2021;30(11):2498-2505. doi:10.1016/j.jse.2021.02.021

Glenosphere inclination and clinical outcomes after reverse shoulder arthroplasty.

Werner BC, Griffin JW, Lederman E, Gobezie R, Denard PJ

Semin Arthroplasty. 2021;31(3):430-437. doi:10.1053/j.sart.2020.12.014

Biomechanical evaluation of 2 techniques of repair after subscapularis peel for stemless shoulder arthroplasty.

Werner BC, Griffin JW, Thompson T, Lendhey M, Higgins LD, Denard PJ

Shoulder Elbow Surg. 2021;30(10):2240-2246. doi:10.1016/j.jse.2021.01.037

Understanding the variables that are associated with failure to achieve an acceptable symptom state after reverse shoulder arthroplasty.

Werner BC, Lederman E, Gobezie R, Denard PJ

Semin Arthroplasty. 2021;31(4):730-736. doi:10.1053/j.sart.2021.05.001

Variability in total shoulder arthroplasty planning software compared to a control CT-derived 3D printed scapula.

Shah SS, Sahota S, Denard PJ, et al

Shoulder Elbow. 2021;13(3):268-275. doi:10.1177/1758573219888821

Surgeon acceptance of an initial 3D glenoid preoperative plan: rates and risk factors.

Hartzler RU, Denard PJ, Griffin JW, Werner BC, Romeo AA

J Shoulder Elbow Surg. 2021;30(4):787-794. doi:10.1016/j.jse.2020.06.032

2020

Five-year radiographic evaluation of stress shielding with a press-fit standard length humeral stem.

Cole EW, Moulton SG, Gobezie R, et al

JSES Int. 2020;4(1):109-113. doi:10.1016/j.jses.2019.11.002

Osseous integration of the central peg of an all-polyethylene glenoid with 3 different surgical techniques.

Denard PJ, Gobezie R, Griffin JW, Romeo AA, Lederman E

Orthopedics. 2020;43(5):278-283. doi:10.3928/01477447-20200721-04

Short-term evaluation of humeral stress shielding following reverse shoulder arthroplasty using press-fit fixation compared with cemented fixation.

Denard PJ, Haidamous G, Gobezie R, Romeo AA, Lederman E

J Shoulder Elbow Surg. 2020;29(5):906-912. doi:10.1016/j.jse.2019.09.042

Lower rates of radiolucency with a hybrid all-polyethylene pegged glenoid component compared to a completely cemented pegged glenoid component.

Denard PJ, Werner BC, Gobezie R, Tokish JM, Kissenberth MJ, Ledermang E

Semin Arthroplasty. 2020;30(1):56-62. doi:10.1053/j.sart.2020.05.002

Current state of short-stem implants in total shoulder arthroplasty: a systematic review of the literature.

Erickson BJ, Chalmers PN, Denard PJ, Gobezie R, Romeo AA, Lederman ES

JSES Int. 2020;4(1):114-119. doi:10.1016/j.jses.2019.10.112

Subscapularis repair during reverse total shoulder arthroplasty using a stem-based double-row repair: sonographic and clinical outcomes.

Erickson BJ, Shishani Y, Bishop ME, et al

Orthop J Sports Med. 2020;8(3):2325967120906806. doi:10.1177/2325967120906806

The risk of postoperative scapular spine fracture following reverse shoulder arthroplasty is increased with an onlay humeral stem.

Haidamous G, Lädermann A, Frankle MA, Gorman RA, Denard PJ

J Shoulder Elbow Surg. 2020;29(12):2556-2563. doi:10.1016/j.jse.2020.03.036

Radiographic parameters associated with excellent versus poor range of motion outcomes following reverse shoulder arthroplasty.

Denard PJ, Lädermann A, Haidamous G, et al

J Shoulder Elbow Surg. 2020;29(4):e169. doi:10.1016/j.jse.2020.01.056

Tuberosity healing improves functional outcome following primary reverse shoulder arthroplasty for proximal humeral fractures with a 135° prosthesis.

Schmalz J, Jessen M, Holschen M, et al

Eur J Orthop Surg Traumatol. 2020;30(5):909-916. doi:10.1007/s00590-020-02649-8

Kinematics and EMG activity in reverse total shoulder arthroplasty.

Smith RA, Woolley K, Mazzocca A, et al

J Orthop. 2020;22:165-169. doi:10.1016/j.jor.2020.04.017

Tuberosity repair in reverse total shoulder arthroplasty for fracture using a stem-based double-row repair: a cadaveric biomechanical study.

Erickson BJ, Shishani Y, Bishop ME, Romeo AA, Lederman E, Gobezie R

J Am Acad Orthop Surg. 2020;28(23):e1059-e1065. doi:10.5435/JAAOS-D-19-00667

2019

Can a functional difference be detected in reverse arthroplasty with 135° versus 155° prosthesis for the treatment of rotator cuff arthropathy: a prospective randomized study.

Gobezie R, Shishani Y, Lederman E, Denard PJ

J Shoulder Elbow Surg. 2019;28(5):813-818. doi:10.1016/j.jse.2018.11.064

Minimum 5-year outcomes of pegged versus keeled all-polyethylene glenoids.

Moulton SG, Cole EW, Gobezie R, Romeo AA, Lederman E, Denard PJ

JSES Open Access. 2019;3(4):292-295. doi:10.1016/j.jses.2019.09.006

2018

Version and inclination obtained with 3-dimensional planning in total shoulder arthroplasty: do different programs produce the same results?

Denard PJ, Provencher MT, Lädermann A, Romeo AA, Parsons BO, Dines JS

JSES Open Access. 2018;2(4):200-204. doi:10.1016/j.jses.2018.06.003

A tensionable method for subscapularis repair after shoulder arthroplasty.

Denard PJ, Noyes MP, Lädermann A

JSES Open Access. 2018;2(4):205-210. doi:10.1016/j.jses.2018.08.003

Proximal stress shielding is decreased with a short stem compared with a traditional-length stem in total shoulder arthroplasty.

Denard PJ, Noyes MP, Walker JB, et al

J Shoulder Elbow Surg. 2018;27(1):53-58. doi:10.1016/j.jse.2017.06.042

Stress shielding of the humerus in press-fit anatomic shoulder arthroplasty: review and recommendations for evaluation.

Denard PJ, Raiss P, Gobezie R, Edwards TB, Lederman E

J Shoulder Elbow Surg. 2018;27(6):1139-1147. doi:10.1016/j.jse.2017.12.020

Radiographic changes differ between two different short press-fit humeral stem designs in total shoulder arthroplasty.

Denard PJ, Noyes MP, Walker JB, et al

J Shoulder Elbow Surg. 2018;27(2):217-223. doi:10.1016/j.jse.2017.08.010

Short-term clinical outcome of an anatomic short-stem humeral component in total shoulder arthroplasty.

Romeo AA, Thorsness RJ, Sumner SA, Gobezie R, Lederman ES, Denard PJ

J Shoulder Elbow Surg. 2018;27(1):70-74. doi:10.1016/j.jse.2017.05.026

2017

Finite element analysis of glenoid-sided lateralization in reverse shoulder arthroplasty.

Denard PJ, Lederman E, Parsons BO, Romeo AA

J Orthop Res. 2017;35(7):1548-1555. doi:10.1002/jor.23394

Healing and functional outcome of a subscapularis peel repair with a stem-based repair after total shoulder arthroplasty.

Gobezie R, Denard PJ, Shishani Y, Romeo AA, Lederman E

J Shoulder Elbow Surg. 2017;26(9):1603-1608. doi:10.1016/j.jse.2017.02.013