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15. [**Hsieh MK**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hsieh%20MK%5BAuthor%5D&cauthor=true&cauthor_uid=31251780) **(first author)**, [Liu MY](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20MY%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Chen JK](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20JK%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Tsai TT](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tsai%20TT%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Lai PL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lai%20PL%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Niu CC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Niu%20CC%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Tai CL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tai%20CL%5BAuthor%5D&cauthor=true&cauthor_uid=31251780)\*. Use of longer sized screws is a salvage method for broken pedicles in osteoporotic vertebrae. *Sci Rep.* 2020 Jun 26;10(1):10441. (SCI；IF: 4.996；Multidisciplinary Sciences 19/73) CRRPG3H0082
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17. [**Hsieh MK**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hsieh%20MK%5BAuthor%5D&cauthor=true&cauthor_uid=31276852)\* **(first author and corresponding author)**, Bowles DR, Canseco JA, Sherman MB, Schroeder GD, Vaccaro AR. Is open surgery for metastatic spinal cord compression secondary to lung cancer really beneficial? A systematic review. [*World neurosurgery*.](https://www.ncbi.nlm.nih.gov/pubmed/31276852) 2020 Dec; 144: e253-e263. (SCI；IF: 2.210；Surgery 123/211)
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19. [**Hsieh**](https://pubmed.ncbi.nlm.nih.gov/?term=Hsieh+MK&cauthor_id=33511875) **MK**, [Liu](https://pubmed.ncbi.nlm.nih.gov/?term=Liu+MY&cauthor_id=33511875) MY, [Tsai](https://pubmed.ncbi.nlm.nih.gov/?term=Tsai+TT&cauthor_id=33511875) TT, [Lai](https://pubmed.ncbi.nlm.nih.gov/?term=Lai+PL&cauthor_id=33511875) PL, [Tai](https://pubmed.ncbi.nlm.nih.gov/?term=Tai+CL&cauthor_id=33511875) CL.Biomechanical Comparison of Different Numbers and Configurations of Cross-Links in Long-Segment Spinal Fixation-An Experimental Study in a Porcine Model. *Global Spine Journal*. 2021 Jan 29; 2192568221990646. Doi: 10.1177 /2192568221990646. Online ahead of print. (SCI；IF: 2.230；Orthopedics 52/86)
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21. [Chiang](https://pubmed.ncbi.nlm.nih.gov/?term=Chiang+CC&cauthor_id=34410226) CC, [**Hsieh**](https://pubmed.ncbi.nlm.nih.gov/?term=Hsieh+MK&cauthor_id=34410226) **MK,** [Wang](https://pubmed.ncbi.nlm.nih.gov/?term=Wang+CY&cauthor_id=34410226) CY, [Tuan](https://pubmed.ncbi.nlm.nih.gov/?term=Tuan+WH&cauthor_id=34410226) WH, [Lai](https://pubmed.ncbi.nlm.nih.gov/?term=Lai+PL&cauthor_id=34410226) PL\*. Cytotoxicity and cell response of preosteoblast in calcium sulfate-augmented PMMA bone cement. *Biomedical Material.* 2021 Aug 19; 16(5). (SCI；IF: 4.103；Engineering, Biomedical 46/98)
22. **Hsieh MK**, Li YD, Liu MY, Lin CX, Tsai TT, Lai PL, Tai CL\*. Biomechanical Comparison of Fixation Stability among Various Pedicle Screw Geometries: Effects of Screw Outer/Inner Projection Shape and Thread Profile. *Applied Sciences*. 2021 Oct. 11(21): 9901. (SCI；IF: 2.838；Engineering, Multidisciplinary 39/92)
23. Wang SF, Lai PL, Liu HF, Tsai TT, Lin YC, Li YD, Chiu PY, **Hsieh MK**, Kao FC. Risk Factors of Coexisting Septic Spondylitis and Arthritis: A Case-Control Study in a Tertiary Referral Hospital. *J Clin Med.* 2021 Nov 16; 10(22): 5345. (SCI；IF: 4.964；Medicine, General & Internal 54/172)
24. Lai PJ, Wang SF, Tsai TT, Li YD, Chiu PY, **Hsieh MK**, Kao FC. Percutaneous Endoscopic Interbody Debridement and Fusion for Pyogenic Lumbar Spondylodiskitis: Surgical Technique and the Comparison with Percutaneous Endoscopic Drainage and Debridement. *Neurospine*. 2021 Dec;18(4):891-902. (SCI；IF: 3.374；Surgery 63/211)
25. Wang SF, Hung SF, Tsai TT, Li YD, Chiu PY, **Hsieh MK**, Kao FC. Better Functional Outcome and Pain Relief in the Far-Lateral-Outside-in Percutaneous Endoscopic Transforaminal Discectomy. *J Pain Res*. 2021 Dec 30;14:3927-3934. (SCI；IF: 2.832；Clinical Neurology 139/212)
26. Kao FC, Ho HH, Chiu PY, **Hsieh MK,** Liao JC, Lai PL, Huang YF, Dong MY, Tsai TT, Lin ZH\*. Self-assisted wound healing using piezoelectric and triboelectric nanogenerators. Review. *Sci Technol Adv Mater.* 2022 Jan 7; 23(1): 1-16. (SCI；IF: 7.821；Materials science, Multidisciplinary 75/345)
27. **Hsieh MK,** Li YD, Li YC, Liu MY, Tsai TT, Lai PL, Tai CL\*. Improved fixation stability for repairing pedicle screw loosening using a modified cement filling technique in porcine vertebrae. *Sci Rep.* 2022 Feb 17; 12(1): 2739. (SCI；IF: 4.996；Multidisciplinary Sciences 19/73)
28. Wang CY, **Hsieh MK**, Hu YJ, Bit A, Lai PL\*. Monocarboxylate transporter 1-mediated lactate accumulation promotes nucleus pulposus degeneration under hypoxia in a 3D multilayered nucleus pulposus degeneration model. *Eur Cell Mater*. 2022 Feb 21; 43: 53-65. (SCI；IF: 4.325；Engineering, Biomedical 41/98)
29. [**Hsieh**](https://pubmed.ncbi.nlm.nih.gov/?term=Hsieh+MK&cauthor_id=34410226) **MK,** [Wang](https://pubmed.ncbi.nlm.nih.gov/?term=Wang+CY&cauthor_id=34410226) CY, [Wu CJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20CJ%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Chen YC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20YC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Wu SC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20SC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Tuan](https://pubmed.ncbi.nlm.nih.gov/?term=Tuan+WH&cauthor_id=34410226) WH\*, [Lai PL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lai%20PL%5BAuthor%5D&cauthor=true&cauthor_uid=31318872)\*. Strontium sintered calcium sulfate bone graft for enhancing osteogenesis in a rat femoral defect model. *Materials Today Communications.* Mar 2022; Vol.30: 103050. (SCI；IF:3.662； Materials science, Multidisciplinary 180/345) CMRPG3K2361
30. Hu YH, Yeh YC, Niu CC, **Hsieh MK,** Tsai TT, Chen WJ, Lai PL. Novel MRI-based vertebral bone quality score as a predictor of cage subsidence following transforaminal lumbar interbody fusion. *Journal of Neurosurgery-Spine*. 2020 May; 13; 1-9. (SCI；IF: 3.467；Surgery 58/211)
31. **Hsieh MK,** Li YD, Hsu YJ, Tsai TT, Lai PL, Lee DM\*, Tai CL\*. Novel Dual-Threaded Pedicle Screws Provide Fixation Stability That Is Comparable to That of Traditional Screws with Relative Bone Preservation: An In Vitro Biomechanical Study. *Applied Sciences.* Jun 2022; 12(12): 6172. (SCI；IF: 2.838；Engineering, Multidisciplinary 39/92)
32. Wang SF, Tsai TT, Li YD, Chiu PY, **Hsieh MK,** Liao JC, Lai PL, Kao FC\*. Percutaneous Endoscopic Interbody Debridement and Fusion (PEIDF) Decreases Risk of Sepsis and Mortality in Treating Infectious Spondylodiscitis for Patients with Poor Physical Status, a Retrospective Cohort Study. *Biomedicines.* 2022 Jul 10; 10(7): 1659. (SCI；IF: 4.757；Pharmacology & Pharmacy 86/279)
33. Li YD, **Hsieh MK,** Lee DM, Lin YJ, Tsai TT, Lai PL\*, Tai CL\*. Biomechanical Comparison of Salvage Pedicle Screw Augmentations Using Different Biomaterials. *Applied Sciences.* Aug 2022; 12(15):7792. (SCI；IF: 2.838；Engineering, Multidisciplinary 39/92)
34. Tsai YY, **Hsieh MK\*,** Lai PL, Tai CL, Chang SW\*. Predicting pullout strength of pedicle screws in broken bones from X-ray images. *J Mech Behav Biomed Mater.* 2022 Oct; 134: 105366. (SCI；IF: 4.042；Engineering, Biomedical 48/98)
35. **Hsieh MK,** Liu PY, Li YD, Wang CY, Hu CC, Tai CL, Lai PL\*. The role of counter-torque holders in tightening of pedicle screw-rod constructs: a biomechanical study in a porcine model. *Spine Journal.* Sep 1 2022; S1529-9430(22)00903-2. (SCI；IF: 4.297；Orthopedics 15/86) MOST 111-2221-E-182A-003-; NRRPG3M0161
36. **Hsieh MK,** Chen WJ, Lee Mel S, Lin SY, Liu MY, Lee DM\*, Tai CL\*. Biomechanical evaluation of a novel expandable vertebral augmentation system using human cadaveric vertebrae. *Applied Sciences.* Oct 2022; 12: 10165. (SCI；IF: 2.838；Engineering, Multidisciplinary 39/92)

**Presentation:**

1. Clinical Experience in Management of Myelomatous Vertebral Compression Fracture with Percutaneous Vertebroplasty. The Annual Spring Meeting of Orthopaedic Association, Taichung, R.O.C., April. 19, 2008.
2. **Repositioning Osteotomy for Chronic Unreduced Intraarticular Fractures of the Distal Radius.** Annual Meeting of Orthopedic Association, R.O.C., 2007.
3. **Highly Suspected Conversion Paralysis After Surgery for Lumbar Disc Herniation-A case report.** The Annual Spring Meeting of Orthopaedic Association, Taichung, R.O.C., April. 19, 2008.
4. **Tactical approach to chronic intra-articular fractures of distal radius****.** Annual Meeting of Orthopedic Association, R.O.C., 2008.
5. **Recollapse in cemented vertebra after percutaneous vertebroplasty.** Annual Meeting of Taiwan Spine Society, R.O.C., 2009.
6. **Recollapse in cemented vertebra after percutaneous vertebroplasty.** Annual Meeting of Orthopedic Association, R.O.C., 2009.
7. **Rostoperative Anterior Spondylodiscitis After Posterior Pedicle Screw Instrumentation.** Annual Meeting of Taiwan Spine Society, R.O.C., 2010.
8. **Combined anterior lumbar interbody fusion and instrumented posterolateral fusion for degenerative lumbar scoliosis with spinal stenosis.** Annual Meeting of Taiwan Spine Society, R.O.C., 2011.
9. **Combined anterior lumbar interbody fusion and instrumented posterolateral fusion for degenerative lumbar scoliosis with spinal stenosis.** Asia Pacific Orthopaedic Association Spine and Pediatric section, Japan, 2011.
10. **Kyphoplasty: Evidence based review.** Annual Meeting of Taiwan Spine Society, R.O.C., 2012.
11. **Clinical signiﬁcance of cement leakage after percutaneous vertebroplasty.** Annual Meeting of Taiwan Spine Society, R.O.C., 2013.
12. **Clinical signiﬁcance of cement leakage after percutaneous vertebroplasty.** Annual Meeting of Orthopedic Association, R.O.C., 2013.
13. **Microscope-assisted Minimally Invasive Transforaminal Lumbar Interbody Fusion(Mini-TLIF) with Percutaneous Pedicle Screw Fixation for the Treatment of Degenerative Lumbar Diseases :A Short-Term Report.** Annual Meeting of Taiwan Spine Society, R.O.C., 2013.
14. **Balloon kyphoplasty versus vertebroplasty with calcium sulfate/phosphate cement and pedicle-screw fixation for acute thoracolumbar burst fracture.** Annual Meeting of Taiwan Spine Society, R.O.C., 2014.
15. **Balloon kyphoplasty versus vertebroplasty with calcium sulfate/phosphate cement and pedicle-screw fixation for acute thoracolumbar burst fracture.** Annual Meeting of Orthopedic Association, R.O.C., 2014.
16. **Microscope-assisted Minimally Invasive Transformational Lumbar Interbody Fusion(Mini-TLIF) with Percutaneous Pedicle Screw Fixation for the Treatment of Degenerative Lumbar Diseases:** **complications and learning curve.** The 14th Annual Meeting of the Pacific Asian Society of Minimally Invasive Spine Surgery (PASMISS), Taiwan, 2014.
17. **Microscope-assisted Minimally Invasive Transforaminal Lumbar Interbody Fusion(Mini-TLIF) with Percutaneous Pedicle Screw Fixation for the Treatment of Degenerative Lumbar Diseases.** 2014 APSS (Asia Pacific Spine Society) traveling fellow in Singapore, Bangkok, and Sarawak.
18. **Microscope-assisted Minimally Invasive Transforaminal Lumbar Interbody Fusion(Mini-TLIF) with Percutaneous Pedicle Screw Fixation for the Treatment of Degenerative Lumbar Diseases: complications.** The combined congress of APSS (Asia Pacific Spine Society) and APPOS (Asia Pacific Paediatric Orthopaedic Society), Hong Kong, 2015.
19. **Anterior instrumented reconstruction for thoracolumbar junctional spondylodiscitis.** Annual Meeting of Orthopedic Association, R.O.C., 2016.
20. **Long term osteoporosis treatment of Zoledronate.** Taiwan Bone Muscle Joint Total care Association, Taipei, March 13, 2016.
21. **Anterior instrumented reconstruction for thoracolumbar spondylodiscitis.** Annual Meeting of Orthopedic Association, Taipei, Taiwan, 2017.
22. **Combination of BMP-2 and gelatin sponges as a gene-activated matrices for pre-osteoblast differentiation.** Frontier of Biotechnology, National Taiwan University, Taipei, Taiwan. Sep 2017.
23. **Osteoporotic vertebral fractures-current surgical treatment and complications management.** Taiwan Bone Muscle Joint Total care Association, Taipei, March 25, 2018.
24. **Sclerosis epithelioid fibrosarcoma in lumbar spine with neurological deficit.** Spine Clinical Case Conference, Taiwan Spine Society, Taipei, July 14, 2018.
25. **Anterior instrumented reconstruction for thoracolumbar spondylodiscitis.** 2018 Annual Meeting of Asia Pacific Spine Society (APSS), NTUH International Convention Center, June 8-9, 2018.
26. **Bone regeneration in Ds-Red pig calvarial defect using allogenic transplantation of GFP pMSCs.** Frontier of Biotechnology, National Taiwan University, Taipei, Sep 2018.
27. **Osteoporosis and spinal surgery.** Taiwan Bone Muscle Joint Total care Association, Taipei, Sep 1, 2018.
28. **Plasmid BMP-2 embedded gelatin sponge as a gene-activated matrix for preosteoblast differentiation.** Annual Meeting of Orthopedic Association, R.O.C., Oct 27, 2018.
29. **Knowledge update in degenerative cervical myelopathy.** Taiwan Spine Society, Taipei, Jan 12, 2019.
30. **High thoracic spinal metastasis secondary to hepatocellular carcinoma.** Spine Clinical Case Conference, Taiwan Spine Society, Taipei, Jan 15, 2019.
31. **The efficacy and safety of vertebral augmentation.** Taiwan Bone Muscle Joint Total care Association, Taipei, April 14, 2019.
32. **TB spondylodiscitis T12-L1 with paraspinal abscess treated with anterior approach.** Spine Clinical Case Conference, Taiwan Spine Society, Taipei, June 8, 2019.
33. **ASBMR Task Force Report: secondary fracture prevention: consensus clinical recommendations from a multistakeholder coalition.** Taiwan Bone Muscle Joint Total care Association, Taipei, Aug 23, 2020.
34. **以生物力學方法探討及解決臨床脊椎手術中椎弓根破裂.** 台灣生物力學學會年度學術研討會暨科技部成果發表會，台灣台北 (invited speaker), Nov 9, 2020.
35. **Cervical spondylotic myelopathy.** 桃竹苗骨科月會，Dec 26, 2020**.**
36. **Anterior lumbar interbody fusion: the advantages and pitfalls.** Taiwan Minimally Invasive Spine Society, Taipei, Mar 20, 2021.
37. **Effect of Zoledronate after spinal fusion surgery.** Taiwan Bone Muscle Joint Total care Association, Taipei, Apr 24, 2021.
38. **Pedicle wall violation during tulip- set screw tightening in pedicle screw- rod construct: the role of counter-torque.** Annual conference of the Taiwanese Society of biomechanics, Taipei, Oct 16, 2021.
39. **脊椎手術臨床困境-以生物力學角度探討與未來發展.** 長庚醫院骨關節中心月會, Oct 30, 2021.
40. **Optimize the treatment diagram for the very-high-risk PMO patients.** Taiwan Bone Muscle Joint Total care Association, Taipei, Nov 02, 2021.
41. **Thoracolumbar pyogenic spondylodiscitis treated with anterior instrumentation and reconstruction.** Spine Clinical Case Conference, Taiwan Spine Society, Taipei, Jan 22, 2022.
42. **Salvage pedicle screw implantation in pedicle wall violation: an in vitro biomechanical study.** 9th World Congress of Biomechanics, Taipei, Jul 11, 2022.
43. **Pedicle wall violation during tulip- set screw tightening in pedicle screw- rod construct: the role of counter-torque holder.** 台灣生物力學學會年度學術研討會暨科技部成果發表會, Kaohsiung, Oct 28, 2022.
44. **Combined posterior instrumented fusion and ACDF for degenerative cervical myelopathy.** Annual Meeting of Taiwan Spine Society. (invited speaker) Oct 29, 2022.

**Honor &/or Awards：**

1. **Hsieh MK (first author)**, Wu CJ, [Chen](https://www.sciencedirect.com/science/article/pii/S0928493117321562#!) CC, [Tsai](https://www.sciencedirect.com/science/article/pii/S0928493117321562#!) TT, [Niu](https://www.sciencedirect.com/science/article/pii/S0928493117321562#!) CC, [Wu](https://www.sciencedirect.com/science/article/pii/S0928493117321562#!) SC\*, [Lai](https://www.sciencedirect.com/science/article/pii/S0928493117321562#!) PL\*. BMP-2 gene transfection of bone marrow stromal cells to induce osteoblastic differentiation in a rat calvarial defect model. *Materials Science & Engineering C-Materials for Biological Applications.* 2018; [Vol.91](https://www.sciencedirect.com/science/journal/09284931/91/supp/C): 806-816. (SCI；IF: 7.328；Materials Science, General Materials Science 7/40)

獲得長庚醫院優秀論文獎

1. **Hsieh MK (first author)**, Toh EKW, Tsai TT, Niu CC, Wu SC\*, Lai PL\*. Plasmid BMP-2–embedded gelatin sponge as a gene-activated matrix for preosteoblast differentiation. *Journal of Drug Delivery Science and Technology*. 2019; Vol.53: 101129. (SCI；IF: 3.981；Pharmacology & Pharmacy 122/275)

獲得2017年 台灣大學生物科技論壇優秀論文口頭報告獎

1. [**Hsieh MK**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hsieh%20MK%5BAuthor%5D&cauthor=true&cauthor_uid=31318872) **(first author)**, [Wu CJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20CJ%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Su XC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Su%20XC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Lai PL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lai%20PL%5BAuthor%5D&cauthor=true&cauthor_uid=31318872)\*, [Wu SC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20SC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872)\*. Bone regeneration in Ds-Red pig calvarial defect using allogenic transplantation of GFP pMSCs.

獲得2018年 台灣大學生物科技論壇優秀論文口頭報告獎

1. [**Hsieh MK**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hsieh%20MK%5BAuthor%5D&cauthor=true&cauthor_uid=31318872) **(first author)**, [Wu CJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20CJ%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Su XC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Su%20XC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Chen YC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20YC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Tsai TT](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tsai%20TT%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Niu CC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Niu%20CC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872), [Lai PL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lai%20PL%5BAuthor%5D&cauthor=true&cauthor_uid=31318872)\*, [Wu SC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20SC%5BAuthor%5D&cauthor=true&cauthor_uid=31318872)\*. Bone regeneration in Ds-Red pig calvarial defect using allogenic transplantation of EGFP-pMSCs - A comparison of host cells and seeding cells in the scaffold. [*PLoS One*.](https://www.ncbi.nlm.nih.gov/pubmed/31318872) 2019 Jul 18; Vol.14(7): e0215499. (SCI；IF: 3.240；Multidisciplinary Sciences 26/73)

獲得2020年 台灣大學生物科技論壇優秀論文口頭報告獎

1. 指導台灣大學動物科學研究所 蘇暄淳 獲得科技部大專生研究計畫補助

Topic: 綠螢光骨髓間葉幹細胞在scaffold上的生化分析。(107-2813-C-002-151-B)

1. 台灣生物力學學會2021年度學術研討會暨科技部成果發表會Annual conference of the Taiwanese Society of biomechanics

Topic: Stability and strength of pedicle screws in broken pedicles via particle-based modeling approach

論文競賽 優等獎 (指導學生：台灣大學土木工程研究所 蔡亞芸)

1. [**Hsieh MK**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hsieh%20MK%5BAuthor%5D&cauthor=true&cauthor_uid=31251780) **(first author),** [Liu MY](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20MY%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Chen JK](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20JK%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Tsai TT](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tsai%20TT%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Lai PL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lai%20PL%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Niu CC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Niu%20CC%5BAuthor%5D&cauthor=true&cauthor_uid=31251780), [Tai CL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tai%20CL%5BAuthor%5D&cauthor=true&cauthor_uid=31251780)\*. Use of longer sized screws is a salvage method for broken pedicles in osteoporotic vertebrae. Sci Rep. 2020 Jun 26; 10(1): 10441. (SCI；IF: 4.379；Multidisciplinary Sciences 17/73)

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