Stanford



WILLIAM T. KUO, MD, FSIR, FCCP, FSVM, FACR, FCIRSE

Professor of Radiology (Interventional Radiology)

CLINICAL OFFICE (PRIMARY)

- **Interventional Radiology**

  300 Pasteur Dr Rm H3652

  MC 5642

  Stanford, CA 94305

  Tel (650) 723-0728 **Fax** (650) 725-0533

ACADEMIC CONTACT INFORMATION

- **Alternate Contact**

  Maresela Ramos - Administrative Assistant

  Email MareselaRamos@stanfordhealthcare.org

  Tel (650) 736-3623

Bio

BIO

Dr. William T. Kuo is an award-winning physician, clinical researcher, innovator, educator, and patient advocate. He was born in St. Louis, MO and attended high school in Southeast Missouri where he graduated valedictorian. He attended college at Duke University where he received a BS degree with honors. He earned an MD degree from Wake Forest University School of Medicine with distinction in radiology, winning the Meschan Award for radiology excellence. His surgical internship was accomplished at Virginia Mason Medical Center in Seattle, WA. He then trained in a combined Interventional & Diagnostic Radiology Residency program at the University of Rochester Medical Center where he served as Chief Resident, and he was among the first in the nation to complete the Clinical Pathway in Interventional Radiology – ABR prototype for the current Integrated IR-DR Residency. Following this, Dr. Kuo completed Interventional Radiology Fellowship at Stanford University Medical Center. After fellowship, Dr. Kuo was recruited to become faculty in the Stanford Division of Vascular and Interventional Radiology where he was appointed Assistant Professor in 2006, promoted to Associate Professor in 2013, and promoted to Professor of Radiology – Interventional Radiology in 2017. Following a national search, he was appointed Chief of the Stanford IR Division in 2025.

Dr. Kuo is a recognized expert on advanced IVC filter retrieval, venous interventions, thrombolysis, and catheter-directed therapy (CDT) for acute pulmonary embolism (PE). He has written many seminal and award-winning papers, and his work has been cited in all major guidelines on antithrombotic therapy for venous thromboembolism. In 2009, his PE meta-analysis was the first to reveal the safety and effectiveness of CDT as a life-saving procedure for acute massive PE, leading to major changes in treatment guidelines. Dr. Kuo's landmark meta-analysis eventually led to wide adoption of catheter-directed therapy for acute life-threatening PE – the 3rd leading cause of cardiovascular death. His work has also inspired many investigators to pursue research on percutaneous PE interventions; and today, based on these collective efforts, Catheter-Directed Therapy is now recognized around the world as a valid treatment option for patients with life-threatening PE.

At Stanford, Dr. Kuo also pioneered the field of advanced IVC filter retrieval. Among several innovations, Dr. Kuo invented excimer laser-assisted IVC filter retrieval and he was the first to perform this procedure in humans. For this achievement, he received the Gary J. Becker Young Investigator Award

in 2011 from the SIR Foundation. Following this, his first-in-human clinical trial led to FDA clearance of the CavaClear Laser Sheath, and he received the international Award of Excellence and Innovation in IR from CIRSE in 2022.

Dr. Kuo's protocols and innovations have changed the paradigm on managing embedded vena cava filters, to help address the epidemic of filter-related morbidity. His techniques have allowed thousands more patients each year, previously diagnosed with an irretrievable filter, to achieve safe and successful filter removal regardless of dwell time. In 2010, Dr. Kuo established the Stanford IVC Filter Clinic as a quaternary referral center dedicated to treating patients with embedded filters and related complications. His clinic routinely accepts challenging cases from around the country and around the world. Dr. Kuo has successfully treated thousands of filter patients referred from all 50 states and from over 10 countries.

His innovative work has been featured on multiple media outlets including the Australian media, Canadian CTV network, ABC News, and NBC Nightly News with Lester Holt. He was also featured in the Netflix Original Documentary –The Bleeding Edge. Dr. Kuo has testified as an expert before the FDA, and he was invited to publish his expertise in the New England Journal of Medicine.

CLINICAL FOCUS

- Advanced Vena Cava Filter Retrieval
- Catheter-Directed Thrombolysis
- Acute Massive and Submassive PE
- Acute and Chronic DVT
- Endovascular Treatment of Chronic Total Occlusions
- Interventional Radiology

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Radiology
- Member, Bio-X
- Member, Cardiovascular Institute

ADMINISTRATIVE APPOINTMENTS

- Chief of Vascular & Interventional Radiology, Department of Radiology - Stanford University School of Medicine, (2025- present)
- Interim Chief of Vascular & Interventional Radiology, Department of Radiology - Stanford University School of Medicine, (2024-2025)
- Director-Interventional Radiology Fellowship Program, Department of Radiology - Stanford University School of Medicine, (2008-2020)
- Director-Interventional Radiology Residency Program, Department of Radiology - Stanford University School of Medicine, (2016-2025)
- Founder & Director-Stanford IVC Filter Clinic, Division of Vascular & Interventional Radiology - Stanford University Medical Center, (2010- present)

HONORS AND AWARDS

- Award of Excellence and Innovation in IR, Cardiovascular and Interventional Radiological Society of Europe (CIRSE) (2022)
- Elected to Fellowship, American College of Radiology (2020)
- America's Top Doctors, Castle Connolly Medical Ltd. (2013-2026)
- Best Doctors in America, Best Doctors Polling & Research (2017, 2018, 2019, 2020)
- Compassionate Doctor Award, PatientsChoice.org (2012-2020)
- On-Time Physician Award, Vitals.com (2014, 2016, 2017, 2018, 2019, 2020)
- Patients' Choice Award, PatientsChoice.org (2012-2020)
- America’s Most Honored Professionals, The American Registry (2016-2019)

- Featured Manuscript, Journal of Vascular and Interventional Radiology (2018)
- Resident/Fellow Research Award - Mentor to Alexander Sheu, SIR Foundation (2017)
- Resident/Fellow Research Award - Mentor to Andrew Kesselman, SIR Foundation (2017)
- Best Papers Selection, American Venous Forum (2016)
- Letter of Commendation-Integrated IR-DR Residency Program, ACGME (2016)
- Distinguished Abstract, Society of Interventional Radiology (2015)
- Editors' Choice Article, Journal of Vascular and Interventional Radiology (2015)
- Elected to Fellowship, Society for Vascular Medicine (2015)
- Elected to Fellowship, Cardiovascular and Interventional Radiological Society of Europe (2014)
- Featured Paper, Cardiovascular and Interventional Radiological Society of Europe (2014)
- Featured Manuscript, Journal of Vascular and Interventional Radiology (2013)
- Top 10 Doctor Award, Vitals.com (2012, 2013, 2014, 2015)
- Letter of Commendation-Interventional Radiology Fellowship Program, ACGME (2012)
- Dr. Gary J. Becker Young Investigator Award, Society of Interventional Radiology Foundation (2011)
- Elected to Fellowship, Society of Interventional Radiology (2011)
- Featured Manuscript, Journal of Vascular and Interventional Radiology (2011)
- Outstanding Faculty Award, Society of Interventional Radiology (2010)
- Featured Manuscript-SIR National Press Release, Society of Interventional Radiology (2009)
- SIR Leadership Academy, Society of Interventional Radiology (2009)
- Elected To Fellowship, American College of Chest Physicians (2008)
- Featured Manuscript-ACR/Reuters National Press Release, American College of Radiology (2008)
- Distinguished Reviewer Award, Journal of Vascular and Interventional Radiology (2007)
- Top 5 Best Poster Award, American College of Chest Physicians (2007)
- Chief Resident in Radiology, University of Rochester Medical Center (2003-2005)
- Featured Manuscript-JVIR/SIR National Press Release, Society of Interventional Radiology (2003)
- I. Meschan Radiology Merit Award, Wake Forest University School of Medicine (2000)

PROFESSIONAL EDUCATION

- Fellowship: Stanford University Radiology Fellowships (2006) CA
- Residency: University of Rochester Medical Center Radiology Residency (2005) NY
- Medical Education: Wake Forest School of Medicine (2000) NC
- Board Certification: Interventional Radiology, American Board of Radiology (2017)
- Internship: Virginia Mason Medical Center (2001) WA
- College, Duke University, BS in Biology with Honors , NC (1996)

LINKS

- Award of Excellence and Innovation: https://twitter.com/cirsesociety/status/1557292050013470721?cxt=HHwWgoC-ycu3zpwrAAAA
- New England Journal of Medicine: https://www.nejm.org/doi/full/10.1056/NEJMclde2118538
- Philips Global Press Release: https://www.philips.com/a-w/about/news/archive/standard/news/press/2022/20220421-first-patients-filter-free-after-laser-assisted-inferior-vena-cava-ivc-filter-removal-with-philips-cavaclear.html
- TCTMD - The Heart Beat: https://www.tctmd.com/news/lasers-can-aid-retrieval-stubborn-ivc-filters

- NBC NIGHTLY NEWS: http://www.nbcnews.com/health/health-news/why-did-firm-keep-selling-problem-blood-clot-filters-n488166
- Interventional News: https://interventionalnews.com/laser-technique-ivc-filter-removal/
- Australian Sunshine Coast Daily: https://www.sunshinecoastdaily.com.au/news/surgery-leaves-our-luke-pain-free/2783886/
- Forbes: https://www.forbes.com/sites/danmunro/2018/07/29/new-documentary-film-is-scathing-indictment-of-fdas-regulation-of-medical-devices/#3a30343c26b8
- The Bleeding Edge - Netflix Original Documentary: https://www.netflix.com/title/80170862
- Stanford Medicine News - Pioneering Endovascular Laser Use: https://med.stanford.edu/news/all-news/2010/05/removing-filter-spike-takes-expertise-unique-to-stanford-hospital.html
- Stanford Medicine News - Meta-analysis Reveals Lifesaving Treatment for Acute PE: https://med.stanford.edu/news/all-news/2009/10/study-reveals-life-saving-treatment-for-pulmonary-embolism.html

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

1) LASER-ASSISTED AND COMPLEX IVC FILTER RETRIEVAL

2) CATHETER-DIRECTED THERAPY FOR ACUTE PULMONARY EMBOLISM

3) INTERNATIONAL PE REGISTRY

4) IVC FILTER REGISTRY

5) ENDOVASCULAR TREATMENT OF CAVAL AND DEEP VENOUS THROMBOSIS

CLINICAL TRIALS

- Filter Initial & Long Term Evaluation After Placement and Retrieval Registry, Recruiting
- Clinical Management With SPM System and Validation of the SPM 5 Hour Cutoff in Patients With Symptoms of Gastroparesis, Not Recruiting

Publications

PUBLICATIONS

- **Routine Removal of Inferior Vena Cava Filters.** *The New England journal of medicine*
  Lee, C., Stavropoulos, S. W., Kuo, W. T.
  2022; 386 (22): 2149-2151
- **Laser-Assisted Removal of Embedded Vena Cava Filters: A First-In-Human Escalation Trial in 500 Patients Refractory to High-Force Retrieval.** *Journal of the American Heart Association*
  Kuo, W. T., Doshi, A. A., Ponting, J. M., Rosenberg, J. K., Liang, T., Hofmann, L. V.
  2020: e017916
- **Single-Session Pharmacomechanical Catheter-Directed Thrombolysis Using the JETi Thrombectomy Device for Acute Iliofemoral Deep Vein Thrombosis Refractory to Therapeutic Anticoagulation.** *Journal of vascular and interventional radiology : JVIR*
  Rohr, A. M., Kuo, W. T.
  2019
- **Developing and Evaluating a Simulator for Complex IVC Filter Retrieval.** *Academic radiology*
  Hoang, N. S., Ge, B. H., Kuo, W. T.
  2019
- **Percutaneous Pulmonary Embolism Thrombectomy and Thrombolysis: Technical Tips and Tricks.** *Seminars in interventional radiology*
  Devcic, Z., Kuo, W. T.
  2018; 35 (2): 129–35
- **Endovascular Removal of Fractured Inferior Vena Cava Filter Fragments: 5-Year Registry Data with Prospective Outcomes on Retained Fragments** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kesselman, A. J., Hoang, N., Sheu, A. Y., Kuo, W. T.

2018; 29 (6): 758–64

- **Society of Interventional Radiology Position Statement on Catheter-Directed Therapy for Acute Pulmonary Embolism.** *Journal of vascular and interventional radiology : JVIR*
  Kuo, W. T., Sista, A. K., Faintuch, S. n., Dariushnia, S. R., Baerlocher, M. O., Lookstein, R. A., Haskal, Z. J., Nikolic, B. n., Gemmete, J. J.
  2018; 29 (3): 293–97
- **Prophylactic IVC filter placement in bariatric surgery patients: results from a prospective filter registry** *CVIR ENDOVASCULAR*
  Sheu, A. Y., Hoang, N., Kesselman, A. J., Liang, T., Rosenberg, J. K., Kuo, W. T.
  2018; 1 (1)
- **Prophylactic IVC filter placement in bariatric surgery patients: results from a prospective filter registry.** *CVIR endovascular*
  Sheu, A. Y., Hoang, N. S., Kesselman, A. J., Liang, T., Rosenberg, J. K., Kuo, W. T.
  2018; 1 (1): 13
- **Endovascular Removal of Fractured Inferior Vena Cava Filter Fragments: 5-Year Registry Data with Prospective Outcomes on Retained Fragments.** *Journal of vascular and interventional radiology : JVIR*
  Kesselman, A. J., Hoang, N. S., Sheu, A. Y., Kuo, W. T.
  2018; 29 (6): 758–64
- **Catheter-Directed Therapy for Acute Submassive Pulmonary Embolism: Summary of Current Evidence and Protocols** *TECHNIQUES IN VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kesselman, A., Kuo, W. T.
  2017; 20 (3): 193–96
- **Interventional radiology treatment for pulmonary embolism** *WORLD JOURNAL OF RADIOLOGY*
  De Gregorio, M. A., Guirola, J. A., Lahuerta, C., Serrano, C., Figueredo, A. L., Kuo, W. T.
  2017; 9 (7): 295–303
- **Laser-Assisted Removal of Embedded Vena Cava Filters A 5-Year First-in-Human Study** *CHEST*
  Kuo, W. T., Odegaard, J. I., Rosenberg, J. K., Hofmann, L. V.
  2017; 151 (2): 417-424
- **Stratification, Imaging, and Management of Acute Massive and Submassive Pulmonary Embolism.** *Radiology*
  Sista, A. K., Kuo, W. T., Schiebler, M. n., Madoff, D. C.
  2017; 284 (1): 5–24
- **Catheter-directed therapy as a first-line treatment strategy in hemodynamically unstable patients with acute pulmonary embolism: Yes or no?** *INTERNATIONAL JOURNAL OF CARDIOLOGY*
  Zuin, M., Kuo, W. T., Rigatelli, G., Daggubati, R., Vassiliev, D., Roncon, L.
  2016; 225: 14–15
- **Inferior Vena Cava Filter Elucidation: How to Identify Specific Inferior Vena Cava Filter Types on Multi-Detector-Row Computed Tomography Imaging** *JOURNAL OF COMPUTER ASSISTED TOMOGRAPHY*
  Deso, S. E., Kuo, W. T.
  2016; 40 (4): 596-602
- **Creation of an iOS and Android Mobile Application for Inferior Vena Cava (IVC) Filters: A Powerful Tool to Optimize Care of Patients with IVC Filters** *SEMINARS IN INTERVENTIONAL RADIOLOGY*
  Deso, S. E., Idakoji, I. A., Muelly, M. C., Kuo, W. T.
  2016; 33 (2): 137-143
- **Evidence-Based Evaluation of Inferior Vena Cava Filter Complications Based on Filter Type** *SEMINARS IN INTERVENTIONAL RADIOLOGY*
  Deso, S. E., Idakoji, I. A., Kuo, W. T.
  2016; 33 (2): 93-100
- **Laser-Assisted Venous Thrombectomy for Treatment of Recurrent In-Stent Restenosis and Superior Vena Cava Syndrome.** *Journal of vascular and interventional radiology : JVIR*
  Ahmed, O. n., Kuo, W. T.
  2016; 27 (4): 603–6

- **Respiratory-Induced Haemodynamic Changes: A Contributing Factor to IVC Filter Penetration.** *Cardiovascular and interventional radiology*
  Laborda, A., Kuo, W. T., Ioakeim, I., de Blas, I., Malvè, M., Lahuerta, C., de Gregorio, M. A.
  2015; 38 (5): 1192-1197

- **Pulmonary Embolism Response to Fragmentation, Embolectomy, and Catheter Thrombolysis (PERFECT) Initial Results From a Prospective Multicenter Registry** *CHEST*
  Kuo, W. T., Banerjee, A., Kim, P. S., DeMarco, F. J., Levy, J. R., Facchini, F. R., Unver, K., Bertini, M. J., Sista, A. K., Hall, M. J., Rosenberg, J. K., de Gregorio, M. A.
  2015; 148 (3): 667-673

- **Bard denali inferior vena cava filter fracture and embolization resulting in cardiac tamponade: a device failure analysis.** *Journal of vascular and interventional radiology*
  Kuo, W. T., Robertson, S. W.
  2015; 26 (1): 111-115 e1

- **Endovascular Therapy for Pulmonary Embolism** *Interventional Radiology and Endovascular Surgery*
  Kuo, W. T.
  Revinter Publishing.2014

- **Vena Tech LGM Filter Retrieval 16 Years after Implantation: Piecemeal Removal by Intentional Mechanical Fracture.** *Journal of vascular and interventional radiology*
  Kuo, W. T., Deso, S. E., Robertson, S. W.
  2013; 24 (11): 1731-1737

- **Excimer laser-assisted removal of embedded inferior vena cava filters: a single-center prospective study.** *Circulation. Cardiovascular interventions*
  Kuo, W. T., Odegaard, J. I., Rosenberg, J. K., Hofmann, L. V.
  2013; 6 (5): 560-566

- **Complex retrieval of fractured, embedded, and penetrating inferior vena cava filters: a prospective study with histologic and electron microscopic analysis.** *Journal of vascular and interventional radiology*
  Kuo, W. T., Robertson, S. W., Odegaard, J. I., Hofmann, L. V.
  2013; 24 (5): 622-630 e1

- **Optimizing catheter-directed thrombolysis for acute deep vein thrombosis: validating the open vein hypothesis.** *Journal of vascular and interventional radiology*
  Kuo, W. T.
  2013; 24 (1): 24-26

- **Endovascular Therapy for Acute Pulmonary Embolism** *Abrams' Angiography*
  Kuo, W. T.
  Lippincott Williams & Wilkins.2013; 3rd

- **Percutaneous Interventions for Acute Pulmonary Embolism** *Image-Guided Interventions*
  Kuo, W. T.
  Saunders.2013; 2nd

- **Complex Retrieval of Embedded IVC Filters: Alternative Techniques and Histologic Tissue Analysis** *CARDIOVASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Cupp, J. S., Louie, J. D., Kothary, N., Hofmann, L. V., Sze, D. Y., Hovsepian, D. M.
  2012; 35 (3): 588-597

- **Endovascular Therapy for Acute Pulmonary Embolism** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T.
  2012; 23 (2): 167-179

- **Photothermal Ablation with the Excimer Laser Sheath Technique for Embedded Inferior Vena Cava Filter Removal: Initial Results from a Prospective Study** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Odegaard, J. I., Louie, J. D., Sze, D. Y., Unver, K., Kothary, N., Rosenberg, J. K., Hovsepian, D. M., Hwang, G. L., Hofmann, L. V.
  2011; 22 (6): 813-823

- **The Excimer Laser Sheath Technique for Embedded Inferior Vena Cava Filter Removal** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Cupp, J. S.
  2010; 21 (12): 1896-1899

- **Angiojet Rheolytic Thrombectomy in Massive Pulmonary Embolism Locally Efficacious but Systemically Deleterious? Response** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Hofmann, L. V.
  2010; 21 (11): 1776-1777

- **Optimizing endovascular therapy for acute PE: primum non nocere.** *J Vasc Interv Radiol*
  Kuo WT, Hofmann LV
  2010; 21 (11): 1776-1777

- **High-risk Retrieval of Adherent and Chronically Implanted IVC Filters: Techniques for Removal and Management of Thrombotic Complications** *34th Annual Conference of the Society-of-Interventional-Radiology*
  Kuo, W. T., Tong, R. T., Hwang, G. L., Louie, J. D., Lebowitz, E. A., Sze, D. Y., Hofmann, L. V.
  ELSEVIER SCIENCE INC.2009: 1548–56

- **Catheter-directed Therapy for the Treatment of Massive Pulmonary Embolism: Systematic Review and Meta-analysis of Modem Techniques** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Gould, M. K., Louie, J. D., Rosenberg, J. K., Sze, D. Y., Hofmann, L. V.
  2009; 20 (11): 1431-1440

- **Catheter-directed embolectomy, fragmentation, and thrombolysis for the treatment of massive pulmonary embolism after failure of systemic thrombolysis** *CHEST*
  Kuo, W. T., Van den Bosch, M. A., Hofmann, L. V., Louie, J. D., Kothary, N., Sze, D. Y.
  2008; 134 (2): 250-254

- **Wire loop methods for retrieval of trapped inferior vena cava filters: 10-F versus 16-F sheath technique** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Kee, S. T.
  2008; 19 (6): 956-957

- **Catheter-directed intervention for acute pulmonary embolism - A shining saber** *CHEST*
  Kuo, W. T., Sze, D. Y., Hofmann, L. V.
  2008; 133 (1): 317-318

- **Emergency retrieval of a G2 filter after complete migration in to the right ventricle** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Loh, C. T., Sze, D. Y.
  2007; 18 (9): 1177-1182

- **Retrieval of trapped Gunther tulip inferior vena cava filters: Snare-over-guide wire loop technique** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Bostaph, A. S., Loh, C. T., Frisoli, J. K., Kee, S. T.
  2006; 17 (11): 1845-1849

- **Transcatheter treatment for lower gastrointestinal hemorrhage.** *Techniques in vascular and interventional radiology*
  Kuo, W. T.
  2004; 7 (3): 143-150

- **Superselective microcoil embolization for the treatment of lower gastrointestinal hemorrhage** *JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY*
  Kuo, W. T., Lee, D. E., Saad, W. E., Patel, N., Sahler, L. G., Waldman, D. L.
  2003; 14 (12): 1503-1509

- **Long-term Outcomes Following Inferior Vena Cava Stent Placement Across the Renal Veins.** *Journal of vascular and interventional radiology : JVIR*
  Hung, M. L., Arendt, V., Mabud, T., Kuo, W. T., Hofmann, L. V.
  2025

- **Beyond the AJR: The Excimer Laser-Assisted Retrieval of Embedded IVC Filters.** *AJR. American journal of roentgenology*
  Kesselman, A., Kuo, W.
  2023

- **Ibero-American Society of Interventionism (SIDI) and the Spanish Society of Vascular and Interventional Radiology (SERVEI) Standard of Practice (SOP) for the Management of Inferior Vena Cava Filters in the Treatment of Acute Venous Thromboembolism.** *Journal of clinical medicine*
  De Gregorio, M. A., Guirola, J. A., Sierre, S., Urbano, J., Ciampi-Dopazo, J. J., Abadal, J. M., Pulido, J., Eyheremendy, E., Lonjedo, E., Guerrero, G., Serrano-Casorran, C., Pardo, P., Arrieta, et al
  1800; 11 (1)

- **Comparison of Anticoagulation Regimens Following Stent Placement for Nonthrombotic Lower Extremity Venous Disease.** *Journal of vascular and interventional radiology : JVIR*
  Arendt, V. A., Mabud, T. S., Kuo, W. T., Jeon, G. S., An, X., Cohn, D. M., Fu, J. X., Hofmann, L. V.
  2021

- **Society of Interventional Radiology Clinical Practice Guideline for Inferior Vena Cava Filters in the Treatment of Patients with Venous Thromboembolic Disease: Developed in collaboration with the American College of Cardiology, American College of Chest Physicians, American College of Surgeons Committee on Trauma, American Heart Association, Society for Vascular Surgery, and Society for Vascular Medicine.** *Journal of vascular and interventional radiology : JVIR*
  Kaufman, J. A., Barnes, G. D., Chaer, R. A., Cuschieri, J., Eberhardt, R. T., Johnson, M. S., Kuo, W. T., Murin, S., Patel, S., Rajasekhar, A., Weinberg, I., Gillespie, D. L.
  2020

- **Spanish multicenter real - life registry of retrievable vena cava filters (REFiVeC).** *CVIR endovascular*
  De Gregorio, M. A., Guirola, J. A., Urbano, J., Diaz-Lorenzo, I., Munoz, J. J., Villacastin, E., Lopez-Medina, A., Figueredo, A. L., Guerrero, J., Sierre, S., Blazquez Sanchez, J., Kuo, W. T., Jimenez, et al
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- **Diagnostic performance of lower extremity Doppler ultrasound in detecting iliocaval obstruction.** *Journal of vascular surgery. Venous and lymphatic disorders*
  Hui, J. Z., Goldman, R. E., Mabud, T. S., Arendt, V. A., Kuo, W. T., Hofmann, L. V.
  2020

- **Toward Data-Driven Learning Healthcare Systems in Interventional Radiology: Implementation to Evaluate Venous Stent Patency.** *Journal of digital imaging*
  Cohn, D. M., Mabud, T. S., Arendt, V. A., Souffrant, A. D., Jeon, G. S., An, X., Kuo, W. T., Sze, D. Y., Hofmann, L. V., Rubin, D. L.
  2019

- **Inferior Vena Cava Atresia: Characterisation of Risk Factors, Treatment, and Outcomes.** *Cardiovascular and interventional radiology*
  Mabud, T. S., Sailer, A. M., Swee, J. K., Tamboli, M., Arendt, V. A., Jeon, G., An, X., Cohn, D. M., Kuo, W. T., Hofmann, L. V.
  2019

- **Lower Extremity Venous Stent Placement: A Large Retrospective Single-Center Analysis.** *Journal of vascular and interventional radiology : JVIR*
  Mabud, T. S., Cohn, D. M., Arendt, V. A., Jeon, G., An, X., Fu, J., Souffrant, A. D., Sailer, A. M., Shah, R., Wang, D., Sze, D. Y., Kuo, W. T., Rubin, et al
  2019

- **Deep-Learning for Automated Classification of Inferior Vena Cava Filter Types on Radiographs.** *Journal of vascular and interventional radiology : JVIR*
  Ni, J. C., Shpanskaya, K., Han, M., Lee, E. H., Do, B. H., Kuo, W. T., Yeom, K. W., Wang, D. S.
  2019

- **Hemopericardium and Cardiac Tamponade as a Complication of Vena Caval Filters: Systematic Review of the Published Literature and the MAUDE Database** *CLINICAL AND APPLIED THROMBOSIS-HEMOSTASIS*
  Bikdeli, B., Kirtane, A. J., Jimenez, D., Green, P., Spencer, F. A., Kuo, W. T., Krumholz, H. M., Parikh, S. A.
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- **Success in Optional Vena Cava Filter Retrieval. An Analysis of 246 Patients.** *Archivos de bronconeumologia*
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