

# Stanford

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## Jeremy J. Heit, MD, PhD

Assistant Professor of Radiology (Neuroimaging and Neurointervention) and, by courtesy, of Neurosurgery at the Stanford University Medical Center

### CLINICAL OFFICES

- **Stanford Neuroscience Health Center**

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### Bio

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#### BIO

Dr. Jeremy Heit is a neurointerventional surgeon (neurointerventional radiologist) who specializes in treating stroke, brain aneurysms, brain arteriovenous malformations, brain and spinal dural arteriovenous fistulae, carotid artery stenosis, vertebral body compression fractures, and congenital vascular malformations. Dr. Heit treats all of these conditions using minimally-invasive, image-guided procedures and state-of-the-art technology.

For more information about Dr. Heit's research lab, please visit:

[www.heitlab.com](http://www.heitlab.com)

#### CLINICAL FOCUS

- Interventional Neuroradiology
- Neurointerventional Surgery
- Neuroradiology
- Diagnostic Radiology
- Stroke
- Cerebral Aneurysms
- Dural Arteriovenous Fistula
- Cerebral Arteriovenous Malformation (AVM)

## ACADEMIC APPOINTMENTS

- Assistant Professor - Med Center Line, Radiology
- Assistant Professor - Med Center Line (By courtesy), Neurosurgery
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

## ADMINISTRATIVE APPOINTMENTS

- Neurointerventional Radiology Fellowship Director, Stanford University Medical Center, (2018- present)

## HONORS AND AWARDS

- Valedictorian, Regis Jesuit High School, Aurora, CO (5/1996)
- Boettcher Foundation Scholar, Full Academic Scholarship to the University of Colorado at Boulder, Boettcher Foundation (8/1996 – 5/2000)
- Beta Kappa Honor Society, Phi Beta Kappa (4/1997 – present)
- Summa Cum Laude, Department of Biochemistry, University of Colorado at Boulder (5/2000)
- Graduation with Distinction in Molecular, Cellular and Developmental Biology, University of Colorado at Boulder (5/2000)
- Department of Biochemistry Outstanding Graduating Senior Award, University of Colorado at Boulder (5/2000)
- Medical Scientist dual MD/PhD Training Program, Stanford University School of Medicine (8/2000 – 6/2008)
- Chief Resident in Radiology, Massachusetts General Hospital, Boston, MA (3/2011 – 2/2102)
- Roentgen Resident/Fellow Research Award, RSNA Research and Education Foundation, Radiological Society of North America (5/2011)
- Alpha Omega Alpha Medical Honor Society, Alpha Omega Alpha Medical Honor Society, Stanford University Medical School Chapter (5/2019)

## BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Research Committee, American Society of Neuroradiology (2012 - present)
- Scientific Program Committee, Neuroradiology/Head and Neck Subcommittee, Radiological Society of North America (2018 - present)

## PROFESSIONAL EDUCATION

- Fellowship: Stanford University Radiology Fellowships (2015) CA
- Residency: Massachusetts General Hospital Radiology Residency (2013) MA
- Internship: Brigham and Women's Hospital Internal Medicine Residency (2009) MA
- Medical Education: Stanford University School of Medicine Registrar (2008) CA
- Board Certification: Diagnostic Radiology, American Board of Radiology (2013)
- PhD, Stanford University Medical School , Developmental Biology (2007)
- BA, University of Colorado at Boulder , Biochemistry, Summa Cum Laude, and Molecular, Cellular, and Developmental Biology (2000)

## LINKS

- Latest Advances in Stroke Treatment: <https://stanfordhealthcare.org/stanford-health-care-now/health-library-videos/latest-advances-stroke-treatment.html>
- Stanford Interventional Neuroradiology: <https://stanfordhealthcare.org/medical-clinics/interventional-neuroradiology-program.html>
- NBC Nightly News- New hope for stroke patients: <https://www.nbcnews.com/nightly-news/video/new-hope-for-stroke-patients-1145054787673>
- KPIX TV- Acute Stroke Therapy Trial Proves Successful In Palo Alto: <http://sanfrancisco.cbslocal.com/video/category/news/3798305-acute-stroke-therapy-trial-proves-successful-in-palo-alto/>
- Complete Publication List: <https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/50949141/?sort=date&direction=descending>
- Stroke Patient Story Facebook Live Interview: <https://www.facebook.com/LucyNoland/videos/1763443777071205/>
- How the stroke stopwatch was shattered: <https://www.youtube.com/watch?v=pkxzQMUTLGw>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our research seeks to advance our understanding of cerebrovascular disease and to develop new minimally invasive treatments for these diseases. We study ischemic and hemorrhagic stroke, cerebral aneurysms, delayed cerebral ischemia, cerebral arteriovenous malformations (AVMs), dural arteriovenous fistulae, and other vascular diseases of the brain. We use state-of-the-art neuroimaging techniques to non-invasively study these diseases, and we are developing future endovascular technologies to advance neurointerventional surgery.

[www.heitlab.com](http://www.heitlab.com)

### CLINICAL TRIALS

- PHIL in the Treatment of Intracranial dAVF., Recruiting
- Ruptured Aneurysms Treated With Hydrogel Coils, Recruiting
- Endovascular Therapy Following Imaging Evaluation for Ischemic Stroke 3, Not Recruiting

## Teaching

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### STANFORD ADVISEES

#### Postdoctoral Faculty Sponsor

Tobias D. Faizy, Dylan Wolman

## Publications

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### PUBLICATIONS

- **Multivariable analysis on factors associated with aneurysm rupture in patients with multiple intracranial aneurysms.** *Emergency radiology*  
Liberato, A. C., Xu, J., Montes, D., Heit, J. J., Barnaure, I., Maza, N. M., Zheng, H., Hirsch, J. A., Gonzalez, R. G., Romero, J. M.  
2020
- **Collateral status contributes to differences between observed and predicted 24-h infarct volumes in DEFUSE 3.** *Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism*  
Rao, V. L., Mlynash, M., Christensen, S., Yennu, A., Kemp, S., Zaharchuk, G., Heit, J. J., Marks, M. P., Lansberg, M. G., Albers, G. W.  
2020: 271678X20918816
- **Endovascular Treatment of Acute Carotid Stent Occlusion: Aspiration Thrombectomy and Angioplasty** *CUREUS*  
Murray, N. M., Wolman, D. N., Marks, M., Dodd, R., Do, H. M., Lee, J. T., Heit, J. J.  
2020; 12 (5)
- **CT perfusion core and ASPECT score prediction of outcomes in DEFUSE 3.** *International journal of stroke : official journal of the International Stroke Society*  
Kim-Tenser, M., Mlynash, M., Lansberg, M. G., Tenser, M., Bulic, S., Jagadeesan, B., Christensen, S., Simpkins, A., Albers, G. W., Marks, M. P.  
2020: 1747493020915141
- **Comparison of Tmax values between full- and half-dose gadolinium perfusion studies.** *Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism*  
Christensen, S., Amukotuwa, S., Lansberg, M. G., Kemp, S., Heit, J. J., Mlynash, M., Marks, M. P., Albers, G. W., Bammer, R.  
2020: 271678X20914537
- **Safety and Effectiveness of Neuro-thrombectomy on Single compared to Biplane Angiography Systems.** *Scientific reports*  
Guenego, A., Mosimann, P. J., Wintermark, M., Heit, J. J., Zuber, K., Dobrocky, T., Lotterie, J. A., Nicholson, P., Marcellus, D. G., Olivot, J. M., Gonzalez, N., Blanc, R., Pereira, et al  
2020; 10 (1): 4470

- **Hypoperfusion Intensity Ratio Correlates With Angiographic Collaterals In Acute Ischemic Stroke With M1 Occlusion.** *European journal of neurology*  
Guenego, A., Fahed, R., Albers, G. W., Kuraitis, G., Sussman, E. S., Martin, B. W., Marcellus, D. G., Olivot, J., Marks, M. P., Lansberg, M. G., Wintermark, M., Heit, J. J.  
2020
- **Arterial-spin labeling MRI identifies residual cerebral arteriovenous malformation following stereotactic radiosurgery treatment** *JOURNAL OF NEURORADIOLOGY*  
Heit, J. J., Thakur, N. H., Iv, M., Fischbein, N. J., Wintermark, M., Dodd, R. L., Steinberg, G. K., Chang, S. D., Kapadia, K. B., Zaharchuk, G.  
2020; 47 (1): 13–19
- **Dual antiplatelet therapy after carotid artery stenting: trends and outcomes in a large national database.** *Journal of neurointerventional surgery*  
Sussman, E. S., Jin, M., Pendharkar, A. V., Pulli, B., Feng, A., Heit, J. J., Telischak, N. A.  
2020
- **Initial experience with the Scepter Mini dual-lumen balloon for transophthalmic artery embolization of anterior cranial fossa dural arteriovenous fistulae.** *Journal of neurointerventional surgery*  
Pulli, B., Sussman, E. S., Mayercik, V., Steinberg, G. K., Do, H. M., Heit, J. J.  
2020
- **Tilt-Corrected Region Boundaries May Enhance the Alberta Stroke Program Early Computed Tomography Score for Less Experienced Raters.** *Journal of stroke and cerebrovascular diseases : the official journal of National Stroke Association*  
Culbertson, C. J., Christensen, S., Mlynash, M., Heit, J. J., Federau, C., Sells, C. M., Legault, C., McCaslin, A. F., Werbaneth, K., Albers, G. W., Lansberg, M. G.  
2020: 104820
- **The Myelin Water Fraction Serves as a Marker for Age-Related Myelin Alterations in the Cerebral White Matter - A Multiparametric MRI Aging Study.** *Frontiers in neuroscience*  
Faizy, T. D., Thaler, C., Brooks, G., Flottmann, F., Leischner, H., Kniep, H., Nawabi, J., Schon, G., Stellmann, J., Kemmling, A., Reddy, R., Heit, J. J., Fiehler, et al  
2020; 14: 136
- **Computed Tomography Perfusion Data for Acute Ischemic Stroke Evaluation Using Rapid Software: Pitfalls of Automated Postprocessing.** *Journal of computer assisted tomography*  
Kauw, F., Heit, J. J., Martin, B. W., van Ommen, F., Kappelle, L. J., Velthuis, B. K., de Jong, H. W., Dankbaar, J. W., Wintermark, M.  
2019
- **Perfusion Computed Tomography in Acute Ischemic Stroke.** *Radiologic clinics of North America*  
Heit, J. J., Sussman, E. S., Wintermark, M.  
2019; 57 (6): 1109–16
- **Comparison of MRI IVIM and MR perfusion imaging in acute ischemic stroke due to large vessel occlusion.** *International journal of stroke : official journal of the International Stroke Society*  
Zhu, G., Federau, C., Wintermark, M., Chen, H., Marcellus, D. G., Martin, B. W., Heit, J. J.  
2019: 1747493019873515
- **Neuroimaging selection for thrombectomy in pediatric stroke: a single-center experience** *JOURNAL OF NEUROINTERVENTIONAL SURGERY*  
Lee, S., Heit, J., Albers, G. W., Wintermark, M., Jiang, B., Bernier, E., Fischbein, N. J., Mlynash, M., Marks, M. P., Do, H. M., Dodd, R. L.  
2019; 11 (9): 940–46
- **Endovascular versus medical therapy for large-vessel anterior occlusive stroke presenting with mild symptoms.** *International journal of stroke : official journal of the International Stroke Society*  
Wolman, D. N., Marcellus, D. G., Lansberg, M. G., Albers, G., Guenego, A., Marks, M. P., Dodd, R. L., Do, H. M., Wintermark, M., Martin, B. W., Heit, J. J.  
2019: 1747493019873510
- **Optimized Combination of b#values for IVIM Perfusion Imaging in Acute Ischemic Stroke Patients.** *Clinical neuroradiology*  
Zhu, G., Heit, J. J., Martin, B. W., Marcellus, D. G., Federau, C., Wintermark, M.  
2019
- **Thrombectomy Results in Reduced Hospital Stay, More Home-Time, and More Favorable Living Situations in DEFUSE 3.** *Stroke*  
Tate, W. J., Polding, L. C., Kemp, S., Mlynash, M., Heit, J. J., Marks, M. P., Albers, G. W., Lansberg, M. G.  
2019: STROKEAHA119025165

- **Outcomes of Thrombectomy in Transferred Patients With Ischemic Stroke in the Late Window: A Subanalysis From the DEFUSE 3 Trial** *JAMA NEUROLOGY*  
Sarraj, A., Mlynash, M., Savitz, S. I., Heit, J. J., Lansberg, M. G., Marks, M. P., Albers, G. W.  
2019; 76 (6): 682–89
- **Response by de Havenon et al to Letter Regarding Article, "Results From DEFUSE 3: Good Collaterals Are Associated With Reduced Ischemic Core Growth but Not Neurologic Outcome"** *STROKE*  
de Havenon, A., Albers, G. W., Heit, J. J.  
2019; 50 (6): E166
- **Collateral blood flow measurement with intravoxel incoherent motion perfusion imaging in hyperacute brain stroke** *NEUROLOGY*  
Federau, C., Wintermark, M., Christensen, S., Mlynash, M., Marcellus, D. G., Zhu, G., Martin, B. W., Lansberg, M. G., Albers, G. W., Heit, J. J.  
2019; 92 (21): E2462–E2471
- **Response by Guenego and Heit to Letter Regarding Article, "Hypoperfusion Intensity Ratio Is Correlated With Patient Eligibility for Thrombectomy"**. *Stroke*  
Guenego, A., Heit, J. J.  
2019: STROKEAHA119025863
- **Response by de Havenon et al to Letter Regarding Article, "Results From DEFUSE 3: Good Collaterals Are Associated With Reduced Ischemic Core Growth but Not Neurologic Outcome"**. *Stroke*  
de Havenon, A., Albers, G. W., Heit, J. J.  
2019: STROKEAHA119025713
- **Rapid Neurologic Improvement Predicts Favorable Outcome 90 Days After Thrombectomy in the DEFUSE 3 Study** *STROKE*  
Heit, J. J., Mlynash, M., Kemp, S. M., Lansberg, M. G., Christensen, S., Marks, M. P., Ortega-Gutierrez, S., Albers, G. W.  
2019; 50 (5): 1172–77
- **Superselective methohexital challenge prior to intracranial endovascular embolization** *JOURNAL OF CLINICAL NEUROSCIENCE*  
Bican, O., Cho, C., Suarez-Roman, A., Viet Nguyen, Lee, L., Le, S., Heit, J., Dodd, R., Lopez, J.  
2019; 63: 68–71
- **Collateral blood flow measurement with intravoxel incoherent motion perfusion imaging in hyperacute brain stroke.** *Neurology*  
Federau, C., Wintermark, M., Christensen, S., Mlynash, M., Marcellus, D. G., Zhu, G., Martin, B. W., Lansberg, M. G., Albers, G. W., Heit, J. J.  
2019
- **Baseline Perfusion Imaging Collateral Scores Predict Infarct Growth in DEFUSE 3**  
MacLellan, A., Mlynash, M., Heit, J., Marks, M., Lansberg, M., Albers, G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Association of Thrombectomy With Stroke Outcomes Among Patient Subgroups Secondary Analyses of the DEFUSE 3 Randomized Clinical Trial** *JAMA NEUROLOGY*  
Lansberg, M. G., Mlynash, M., Hamilton, S., Yeatts, S. D., Christensen, S., Kemp, S., Lavori, P. W., Ortega-Gutierrez, S., Broderick, J., Heit, J., Marks, M. P., Albers, G. W., Ortega-Gutierrez, et al  
2019; 76 (4): 447–53
- **Rapid Neurologic Improvement Predicts Favorable Outcome 90 Days After Thrombectomy in the DEFUSE 3 Study.** *Stroke*  
Heit, J. J., Mlynash, M., Kemp, S. M., Lansberg, M. G., Christensen, S., Marks, M. P., Ortega-Gutierrez, S., Albers, G. W.  
2019: STROKEAHA119024928
- **Hypoperfusion Intensity Ratio Is Correlated With Patient Eligibility for Thrombectomy** *STROKE*  
Guenego, A., Marcellus, D. G., Martin, B. W., Christensen, S., Albers, G. W., Lansberg, M. G., Marks, M. P., Wintermark, M., Heit, J. J.  
2019; 50 (4): 917–22
- **Cerebral foreign body reaction due to hydrophilic polymer embolization following aneurysm treatment by pipeline flow diversion device.** *Interventional neuroradiology : journal of peritherapeutic neuroradiology, surgical procedures and related neurosciences*  
Geisbush, T. R., Marks, M. P., Heit, J. J.  
2019: 1591019919830767
- **Proposed achievable levels of dose and impact of dose-reduction systems for thrombectomy in acute ischemic stroke: an international, multicentric, retrospective study in 1096 patients.** *European radiology*

- Guenego, A., Mosimann, P. J., Pereira, V. M., Nicholson, P., Zuber, K., Lotterie, J. A., Dobrocky, T., Marcellus, D. G., Olivot, J. M., Piotin, M., Gralla, J., Fahed, R., Wintermark, et al  
2019
- **Hypoperfusion Intensity Ratio Is Correlated With Patient Eligibility for Thrombectomy.** *Stroke*  
Guenego, A., Marcellus, D. G., Martin, B. W., Christensen, S., Albers, G. W., Lansberg, M. G., Marks, M. P., Wintermark, M., Heit, J. J.  
2019: STROKEAHA118024134
  - **Results From DEFUSE 3 Good Collaterals Are Associated With Reduced Ischemic Core Growth but Not Neurologic Outcome** *STROKE*  
de Havenon, A., Mlynash, M., Kim-Tenser, M. A., Lansberg, M. G., Leslie-Mazwi, T., Christensen, S., McTaggart, R. A., Alexander, M., Albers, G., Broderick, J., Marks, M. P., Heit, J. J., DEFUSE 3 Investigators  
2019; 50 (3): 632–38
  - **Ischemic Core and Hypoperfusion Volumes Correlate With Infarct Size 24 Hours After Randomization in DEFUSE 3** *STROKE*  
Rao, V., Christensen, S., Yennu, A., Mlynash, M., Zaharchuk, G., Heit, J., Marks, M. P., Lansberg, M. G., Albers, G. W.  
2019; 50 (3): 626–31
  - **Persistent Target Mismatch Profile > 24 Hours After Stroke Onset in DEFUSE 3** *STROKE*  
Christensen, S., Mlynash, M., Kemp, S., Yennu, A., Heit, J. J., Marks, M. P., Lansberg, M. G., Albers, G. W.  
2019; 50 (3): 754–57
  - **Superselective methohexital challenge prior to intracranial endovascular embolization.** *Journal of clinical neuroscience : official journal of the Neurosurgical Society of Australasia*  
Bican, O., Cho, C., Suarez-Roman, A., Nguyen, V., Lee, L., Le, S., Heit, J., Dodd, R., Lopez, J.  
2019
  - **Persistent Target Mismatch Profile >24 Hours After Stroke Onset in DEFUSE 3.** *Stroke*  
Christensen, S., Mlynash, M., Kemp, S., Yennu, A., Heit, J. J., Marks, M. P., Lansberg, M. G., Albers, G. W.  
2019: STROKEAHA118023392
  - **Outcomes of Thrombectomy in Transferred Patients With Ischemic Stroke in the Late Window: A Subanalysis From the DEFUSE 3 Trial.** *JAMA neurology*  
Sarraj, A., Mlynash, M., Savitz, S. I., Heit, J. J., Lansberg, M. G., Marks, M. P., Albers, G. W.  
2019
  - **Ischemic Core and Hypoperfusion Volumes Correlate With Infarct Size 24 Hours After Randomization in DEFUSE 3.** *Stroke*  
Rao, V., Christensen, S., Yennu, A., Mlynash, M., Zaharchuk, G., Heit, J., Marks, M. P., Lansberg, M. G., Albers, G. W.  
2019: STROKEAHA118023177
  - **Results From DEFUSE 3.** *Stroke*  
de Havenon, A., Mlynash, M., Kim-Tenser, M. A., Lansberg, M. G., Leslie-Mazwi, T., Christensen, S., McTaggart, R. A., Alexander, M., Albers, G., Broderick, J., Marks, M. P., Heit, J. J., DEFUSE 3 Investigators  
2019: STROKEAHA118023407
  - **DEFUSE 3 Trial Outcomes not Affected by the Enrollment Rates of the Participating Centers.**  
Mlynash, M., Lansberg, M. G., Kemp, S., Christensen, S., Heit, J. J., Marks, M. P., Albers, G. W.  
LIPPINCOTT WILLIAMS & WILKINS.2019
  - **Baseline Perfusion Imaging Collateral Scores Predict Infarct Growth in DEFUSE 3**  
MacLellan, A., Heit, J. J., Marks, M. P., Lansberg, M. G., Michael, M., Albers, G. W.  
LIPPINCOTT WILLIAMS & WILKINS.2019
  - **Optimizing CT Perfusion Thresholds for Identification of Ischemic Core in Hyperacute Stroke.**  
Legault, C., Lansberg, M., Heit, J., Albers, G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
  - **Late Window Transfer Patients had Favorable Outcomes Following Thrombectomy in DEFUSE 3**  
Sarraj, A., Mlynash, M., Heit, J., Marks, M., Lansberg, M., Albers, G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
  - **Selection Criteria for Thrombectomy in Pediatric Stroke: A Single-Center Series**

Lee, S., Heit, J. J., Albers, G. W., Wintermark, M., Elbers, J., Bernier, E., Jiang, B., Marks, M. P., Do Huy, M., Dodd, R.  
LIPPINCOTT WILLIAMS & WILKINS.2019

- **CT Perfusion Collateral Score Predicts Which Patients Will Maintain a Penumbra Profile on MRI for Greater than 24 Hours**  
Christensen, S., Mlynash, M., Kemp, S., Yennu, A., Heit, J. J., Marks, M. P., Lansberg, M. G., Albers, G., DEFUSE 3 Investigators  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Correlation between Modified Rankin Scale and Quality of Life in DEFUSE 3**  
Polding, L. C., Tate, W. J., Mlynash, M., Marks, M. P., Heit, J. J., Kemp, S., Albers, G. W., Lansberg, M. G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Combination of Tmax and Relative CBV Perfusion Parameters More Accurately Predicts CTA Collaterals Than a Single Perfusion Parameter in DEFUSE 3.**  
Mlynash, M., Lansberg, M. G., Kemp, S., Christensen, S., Yennu, A., Heit, J. J., Marks, M. P., Albers, G. W.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Union of Ischemic Core and Hypoperfusion Volume Correlates With 24-hour Infarct Size in DEFUSE 3**  
Rao, V., Christensen, S., Yennu, A., Mlynash, M., Zaharchuk, G., Heit, J., Marks, M. P., Lansberg, M. G., Albers, G. W.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Later Imaging More Accurately Captures Infarct Growth in DEFUSE 3**  
Tate, W. J., Polding, L. C., Christensen, S., Mlynash, M., Heit, J. J., Marks, M. P., Albers, G. W., Lansberg, M. G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Early Dramatic Improvement on the National Institutes of Health Stroke Scale Predicts Favorable Outcome 90 Days After Thrombectomy in the DEFUSE 3 Study.**  
Heit, J. J., Mlynash, M., Kemp, S., Lansberg, M. G., Christiansen, S., Marks, M. P., Albers, G. W.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Improved Quality of Life With Endovascular Therapy in the DEFUSE 3 Trial**  
Polding, L. C., Tate, W. J., Mlynash, M., Marks, M. P., Heit, J. J., Kemp, S., Albers, G. W., Lansberg, M. G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Thrombectomy Results in Reduced Hospital Stay, More Time at Home, and More Favorable Living Situations for Patients in the DEFUSE 3 Trial.**  
Tate, W. J., Polding, L. C., Kemp, S., Mlynash, M., Heit, J. J., Marks, M. P., Albers, G. W., Lansberg, M. G.  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Results From the DEFUSE 3 Trial: Good Leptomeningeal Collaterals Are Associated With Reduced Core Infarct Size but Not Improved Neurologic Outcome**  
de Havenon, A., Mlynash, M., Kim-Tenser, M. A., Lansberg, M., Leslie-Mazwi, T., Christensen, S., McTaggart, R., Alexander, M., Albers, G., Broderick, J., Marks, M. P., Heit, J., DEFUSE 3 Investigators  
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Association of Thrombectomy With Stroke Outcomes Among Patient Subgroups: Secondary Analyses of the DEFUSE 3 Randomized Clinical Trial.** *JAMA neurology*  
Lansberg, M. G., Mlynash, M., Hamilton, S., Yeatts, S. D., Christensen, S., Kemp, S., Lavori, P. W., Gutierrez, S. O., Broderick, J., Heit, J., Marks, M. P., Albers, G. W., DEFUSE 3 Investigators  
2019
- **Thrombectomy for acute ischemic stroke in nonagenarians compared with octogenarians.** *Journal of neurointerventional surgery*  
Sussman, E. S., Martin, B., Mlynash, M., Marks, M. P., Marcellus, D., Albers, G., Lansberg, M., Dodd, R., Do, H. M., Heit, J. J.  
2019
- **Arterial-Spin Labeling MRI Identifies Residual Cerebral Arteriovenous Malformation Following Stereotactic Radiosurgery Treatment.** *Journal of neuroradiology. Journal de neuroradiologie*  
Heit, J. J., Thakur, N. H., Iv, M., Fischbein, N. J., Wintermark, M., Dodd, R. L., Steinberg, G. K., Chang, S. D., Kapadia, K. B., Zaharchuk, G.  
2019
- **Neuroimaging selection for thrombectomy in pediatric stroke: a single-center experience.** *Journal of neurointerventional surgery*  
Lee, S., Heit, J. J., Albers, G. W., Wintermark, M., Jiang, B., Bernier, E., Fischbein, N. J., Mlynash, M., Marks, M. P., Do, H. M., Dodd, R. L.  
2019

- **Arterial Spin-Labeling MRI Identifies Hypervascular Meningiomas.** *AJR. American journal of roentgenology*  
Mayercik, V., Ma, M., Holdsworth, S., Heit, J., Iv, M.  
2019; 1–5
- **Can diffusion- and perfusion-weighted imaging alone accurately triage anterior circulation acute ischemic stroke patients to endovascular therapy?** *JOURNAL OF NEUROINTERVENTIONAL SURGERY*  
Wolman, D. N., Iv, M., Wintermark, M., Zaharchuk, G., Marks, M. P., Do, H. M., Dodd, R. L., Albers, G. W., Lansberg, M. G., Heit, J. J.  
2018; 10 (12): 1132–+
- **Advanced Neuroimaging of Acute Ischemic Stroke: Penumbra and Collateral Assessment.** *Neuroimaging clinics of North America*  
Heit, J. J., Zaharchuk, G., Wintermark, M.  
2018; 28 (4): 585–97
- **Hypoperfusion ratio predicts infarct growth during transfer for thrombectomy** *ANNALS OF NEUROLOGY*  
Guenego, A., Mlynash, M., Christensen, S., Kemp, S., Heit, J. J., Lansberg, M. G., Albers, G. W.  
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