Stanford



Zara M. Patel, MD

Professor of Otolaryngology - Head & Neck Surgery (OHNS) and, by courtesy, of Neurosurgery

Otolaryngology (Head and Neck Surgery)

CLINICAL OFFICE (PRIMARY)

- **Stanford Dept of Otolaryngology, Head and Neck Surgery**

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Bio

BIO

Dr. Zara M. Patel is Division Chief of Rhinology and Endoscopic Skull Base Surgery, Director of the Stanford Initiative to Cure Smell and Taste Loss, Director of the Neurorhinology - Advanced Sinus and Skull Base Surgery Fellowship, and a Professor of Otolaryngology and, by courtesy, of Neurosurgery at Stanford. She was born and raised in St. Louis, completed her MD at the Oregon Health and Sciences University in Portland, Oregon and completed her residency training in otolaryngology at Mount Sinai Medical Center in New York, NY. After pursuing fellowship training in rhinology and endoscopic skull base surgery at Stanford University, she joined the Emory University faculty in Atlanta in 2011. After four years, she was recruited back to the West coast to rejoin the department here at Stanford University in 2015.

Dr. Patel is an expert in advanced endoscopic sinus and skull base surgery. She treats patients with a wide variety of rhinologic complaints, including chronic sinus infection or inflammation, sinus disease that has failed medical therapy, sinus disease that has failed prior surgical therapy, cerebrospinal fluid leaks, benign and and malignant sinus and skull base tumors, as well as olfactory disorders.

She has served as Chair of the Education Committee and Member of the Board of Directors for the American Rhinologic Society, Chair of the Rhinology and Allergy Education Committee for the American Academy of Otolaryngology - Head and Neck Surgery, and has developed a multitude of educational materials for both physicians and patients to help them better understand rhinologic disorders. She is passionate about educating patients to allow them to make the best decisions about their own care, leading to better outcomes.

Dr. Patel has published widely in topics such as avoiding complications in endoscopic sinus surgery, chronic rhinosinusitis in the immunosuppressed patient population, new techniques for endoscopic skull base surgery, ethics/governance/clinical use of artificial intelligence, and olfactory dysfunction. She continues to perform research in these areas, and is currently collaborating with computer scientists and engineers to develop technology that she hopes will eventually help cure patients with smell loss, and potentially even help those with neurodegenerative disorders, such as Alzheimer's and Parkinson's disease.

CLINICAL FOCUS

- Endoscopic Sinus and Skull Base Surgery
- Chronic Rhinosinusitis
- Sinusitis
- Benign and Malignant Sinus and Skull Base Tumors
- Frontal Sinusitis
- Ethmoid Sinusitis
- Maxillary Sinusitis
- Sphenoid Sinusitis
- Cerebrospinal Fluid Leaks
- Rhinology
- Otolaryngology
- Olfaction and Olfactory Disorders
- Pituitary Surgery
- Epiphora, Orbital Tumors, Orbital decompression
- Chronic Rhinosinusitis with Nasal Polyps
- AERD

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Otolaryngology (Head and Neck Surgery)
- Professor-Univ Med Line (By courtesy), Neurosurgery
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Chief of Rhinology, Department of Otolaryngology - Head and Neck Surgery, (2026- present)
- Director of the Stanford Initiative to Cure Smell and Taste Loss, Department of Otolaryngology - Head and Neck Surgery, (2025- present)
- Director of Endoscopic Skull Base Surgery, Department of Otolaryngology - Head and Neck Surgery, (2017- present)
- Director Neurorhinology - Advanced Sinus and Skull Base Surgery Fellowship, Department of Otolaryngology-Head and Neck Surgery, Stanford University, (2015-2026)

HONORS AND AWARDS

- Award for Distinguished Service, American Academy of Otolaryngology - Head and Neck Surgery (2024)
- Presidential Citation for Service, American Rhinologic Society (2018, 2021, 2022)
- Fellow, American Rhinologic Society (2016)
- Woodruff Teaching Award, Emory University (2014)
- Mount Sinai Resident Teaching Award, Mount Sinai Medical School (2010)
- First Place, New York City Otolaryngology Resident Research Day (2008)
- Leadership Grant, American Academy of Otolaryngology (2007, 2008)
- Campbell Scholarhsip, Oregon Health and Sciences University (2004)
- Inductee, National Medical Honors Society, Alpha Omega Alpha (2004)

- OHSU Rose Award, Oregon Health and Sciences University (2003)
- Miller Memorial Fund Scholarship, University of Missouri (2001-2003)
- Hughes Academic Achievement Award, State of Missouri (2000)
- Inductee, National Honor Society, Phi Bet Kappa (2000)
- Inductee, National Honor Society, Phi Eta SIgma (1998)
- Bright Flight Scholarship, University of Missouri (1997-2001)
- National Merit Finalist, National Merit Scholarship Corporation (1997)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Chair, Rhinology and Allergy Education Committee, American Academy of Otolaryngology and Head and Neck Surgery (2021 - 2024)
- Member, Board of Directors, American Rhinologic Society (2018 - 2021)
- Member, Scientific Program Committee, American Academy of Otolaryngology (2016 - 2021)
- Chair, Education Committee, American Rhinologic Society (2014 - 2017)
- Member, Adult Sinusitis Guideline Committee, American Academy of Otolaryngology (2014 - 2015)
- Member, Rhinology and Allergy Education Committee, American Academy of Otolaryngology (2013 - 2021)
- Member, Program Committee, American Rhinologic Society (2012 - 2016)
- Member, Legislative Representatives Committee, Board of Governors, American Academy of Otolaryngology (2012 - 2016)

PROFESSIONAL EDUCATION

- Residency: Icahn School of Medicine at Mount Sinai (2010) NY
- Internship: Icahn School of Medicine at Mount Sinai (2006) NY
- Board Certification: Otolaryngology, American Board of Otolaryngology (2011)
- Fellowship: Stanford School of Medicine (2011) CA
- Medical Education: Oregon Health Science University (2005) OR

PATENTS

- Zara Patel. "United States Patent 20240024664 Methods of Treatment and Devices for Repair of Inflammatory, Neurotransmitter, Endocrine or Metabolic Issues", Leland Stanford Junior University, Jan 25, 2024

LINKS

- Stanford Initiative to Cure Smell and Taste Loss: https://med.stanford.edu/smell.html
- Donate to support Dr. Patel's Research (Please specify Dr. Zara Patel on form): https://med.stanford.edu/ohns/contact/gift.html
- Get a Second Opinion: https://stanfordhealthcare.org/second-opinion/overview.html
- Google Scholar: https://scholar.google.com/citations?user=CqVolWoAAAAJ

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Smell and Taste Disorders: The only US based surgeon-scientist who has run multiple randomized controlled trials innovating new and effective treatment options for smell loss. Current line of research is in endoscopic electrical recording and stimulation of the olfactory system.

Artificial Intelligence: Investigating the ability for automated machine learning to distinguish benign from malignant tumors in the sinonasal region. Has also published on ethics and governance of AI.

Chronic Sinusitis and Endoscopic Sinus Surgery: Investigating an array of medical and surgical treatment options, evaluating the treatment paradigm for patients with immunocompromise.

Endoscopic Skull Base Surgery: Innovating new methodologies for skull base reconstruction and surgical techniques that can improve patient outcomes.

CLINICAL TRIALS

- Randomized Clinical Trial of Intranasal Injection of Platelet-Rich Plasma for Treatment of Parosmia, Recruiting
- Physician/Patient Choice of Either High-Dose Recombinant Interferon Alfa-2B or Ipilimumab, Versus Pembrolizumab in Treating Patients With Stage III-IV High Risk Melanoma That Has Been Removed by Surgery, Not Recruiting

Publications

PUBLICATIONS

- **Artificial Intelligence-Based Quantification of Indocyanine Green Fluorescence for Standardized Perfusion Assessment in Endoscopic Skull Base Surgery.** *Journal of neurological surgery. Part B, Skull base*

  Sethi, S., Daum, R., Grimm, D., Yong, M., Hosseinzadeh, F., Lee, C. K., Fernandez-Miranda, J. C., Nayak, J. V., Patel, Z. M., Hwang, P. H., Chang, M. T.

  2026; 87 (6): 655-660

- **The Relationship Between Headache and Sinonasal Disease Burden in Cystic Fibrosis.** *International forum of allergy & rhinology*

  Wang, A. R., Lubner, R. J., Fischer, J. L., Mace, J. C., Osborne, T. R., Hedvat, J., Alt, J. A., Bodner, T. E., Chang, M. T., Chowdhury, N. I., Chung, S. Y., Eshaghian, P. H., Gao, et al

  2026

- **Self-Reported Clinician Confidence in and Familiarity With Long COVID Care Following Continuing Medical Education Webinars: Unmatched Pre-Post Study.** *JMIR formative research*

  Xin, V. Z., Kling, S. M., Hosakote, S., Adewuya, R., Bragdon, C., Brown-Johnson, C., Lazarow, S., Levy, V., Miglis, M. G., Moskatel, L. S., Paleru, A., Patel, Z. M., Quach, et al

  2026; 10: e99790

- **Expert Strategies: Controversies in Management of Sinonasal Malignancies-Global Perspectives Through a Mixed Methods Approach.** *International forum of allergy & rhinology*

  Choby, G., Phillips, K. M., Xie, M., Crossley, J. R., Pandrangi, V. C., Talati, V. M., Chang, M. T., Douglas, J. E., Geltzeiler, M. N., Jr, N. R., Roxbury, C. R., Craig, J. R., Patel, et al

  2026

- **Environmental Exposures, Chronic Sinusitis, and Olfaction in People With Cystic Fibrosis.** *International forum of allergy & rhinology*

  Tullis, B., Nicolas, L., Alt, J. A., Bodner, T. E., Chang, M., Chowdhury, N. I., Chung, S., Eshaghian, P., Gao, Y. A., Getz, A., Gill, A. S., Hwang, P. H., Khanwalkar, et al

  2026

- **Large Language Models versus Expert Response: A Comparative Analysis of Patient Education Quality after Skull Base Surgery** *JOURNAL OF NEUROLOGICAL SURGERY PART B-SKULL BASE*

  Manavi, M., Ayoub, N., Rahman, A., Callender, J., Levi, L., Liu, D., Renteria, A. E., Fieux, M., Banu, M., Miranda, J., Hwang, P. H., Nayak, J. V., Patel, et al

  2026

- **Does Debridement of Intracranial Disease in Acute Invasive Fungal Sinusitis Improve Survival?** *Journal of neurological surgery. Part B, Skull base*

  Huang, A. E., Lee, C. K., Nayak, J. V., Hwang, P. H., Patel, Z. M., Fernandez-Miranda, J. C., Chang, M. T.

  2026; 87 (5): 514-522

- **AI-Based Automated Instrument Tracking During Endoscopic Skull Base Surgery: A Pilot Feasibility Study.** *World journal of otorhinolaryngology - head and neck surgery*

  Grimm, D. R., Pangal, D., Khan, D. Z., Masson-Forsythe, M., Duman, K., Syeda, A., Cook, J., Hwang, P. H., Nayak, J., Patel, Z. M., Ayoub, N., Dodd, R., Fernandez-Miranda, et al

2026

- **Exhalation Delivery System with Fluticasone in Chronic Rhinosinusitis by Eosinophil, Asthma, and Allergy Status.** *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*
  Peters, A. T., Adappa, N. D., Chandra, R. K., Davis, G. E., Deck, D., Mahdavinia, M., Patel, Z. M., Schlosser, R. J., Sindwani, R., Soler, Z. M., White, M. P., Wise, S. K., Palmer, et al
  2026
- **Efficacy of Exhalation Delivery System With Fluticasone in Chronic Rhinosinusitis With Versus Without Polyps.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
  Schlosser, R. J., Adappa, N. D., Chandra, R. K., Davis, G. E., Mahdavinia, M., Messina, J., Patel, Z. M., Peters, A. T., Sindwani, R., Soler, Z. M., White, A. A., Wise, S. K., Palmer, et al
  2026
- **Outcomes of Biologic Switching in Chronic Rhinosinusitis With Nasal Polyps.** *American journal of rhinology & allergy*
  Fu, B. J., Jimenez, I., Chang, M. T., Patel, Z. M., Nayak, J. V., Hwang, P. H., Ayoub, N.
  2026: 19458924261477466
- **The Orbitofrontal Expansion for Extending Nasoseptal Flap Reach in the Frontal Sinus** *JOURNAL OF NEUROLOGICAL SURGERY PART B-SKULL BASE*
  Renteria, A. E., Levi, L., Fieux, M., Ozaydin, D., Rosso, C., Franks, Z., Chang, M. T., Nayak, J. V., Hwang, P., Miranda, J., Patel, Z. M.
  2026
- **Neuromodulators do not appear effective for post-viral parosmia** *RHINOLOGY*
  Resler, K., Castro, B., Patel, Z. M.
  2026; 64 (4): 570-572
- **Patency of the Cavernous Sinus After Medial Wall Resection: An Observational Study.** *Journal of neurological surgery. Part B, Skull base*
  Renteria, A. E., Fieux, M., Castro, B., Levi, L., Hung, L. T., Azevedo, A., Lee, C. K., Chang, M. T., Hwang, P. H., Nayak, J. V., Fischbein, N., Fernandez-Miranda, J. C., Patel, et al
  2026; 87 (4): 462-468
- **Persistent Smell and Taste Disorders in the Post-COVID-19 Pandemic Era: A Cross-National Study of Prevalence and Quality of Life in the UK and the USA.** *International forum of allergy & rhinology*
  Rehman, U., Lau, Z. J., Philpott, C., Lund, V. J., Eynon-Lewis, N., Klussmann, J. P., Manes, R. P., Judson, B. L., Kimple, A. J., Yarbrough, W. G., Nayak, J. V., Hwang, P. H., Patel, et al
  2026
- **Early Versus Late Recurrence in Olfactory Neuroblastoma: A Multi-Institutional Analysis of Predictive Risk Factors.** *International forum of allergy & rhinology*
  Harris, A., Tang, A., Fung, N., Almeida, J. P., Champagne, P. O., Fernandez-Miranda, J., Gardner, P. A., Hwang, P., Kalyvas, A., Patel, C., Patel, Z. M., Celda, M. P., Pinheiro-Neto, et al
  2026
- **Systemic Corticosteroids in the Management of Sinonasal Disease: An Evidence-Based Expert Review.** *International forum of allergy & rhinology*
  Thamboo, A., Gigliotti, D., De Corso, E., Lee, S., Bleier, B. S., Chin, C. J., Corriveau, M. N., Hox, V., Hopkins, C., Hwang, P. H., Janjua, A., Klimek, L., Lee, et al
  2026
- **Clival Chordoma With Cavernous Sinus Involvement and Pontine Attachment: Endoscopic Endonasal Approach: A 2-Dimensional Operative Video.** *Operative neurosurgery (Hagerstown, Md.)*
  Burgos-Sosa, E., Xu, Y., Vigo, V., Uchida, T., Patel, Z. M., Banu, M. A., Fernandez-Miranda, J. C.
  2026
- **Assessment of the extent of previous endoscopic sinus surgery using the ACCESS score in patients with chronic rhinosinusitis referred to tertiary care rhinologic clinics** *RHINOLOGY*
  Lazzeroni, M., Hoven, R., de Corso, E., Montuori, C., Sedaghat, A. R., Sarafidou, A., Constantinidis, J., Hopkins, C., Castro, B., Patel, Z., Capaccio, P., Fokkens, W. J., Reitsma, et al
  2026; 64 (3): 349-356

- **Regenerating smell in neurodegenerative disease -translating theory into therapy.** *European archives of oto-rhino-laryngology : official journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOS) : affiliated with the German Society for Oto-Rhino-Laryngology - Head and Neck Surgery*
  Di Stadio, A., Brenner, M. J., De Luca, P., D'Ascanio, L., Patel, Z. M.
  2026
- **Optimizing Radiography Utilization: Multidisciplinary Expert Consensus Recommendations Endorsed by the Society of Academic Bone Radiologists, Society of Skeletal Radiology, American Society of Emergency Radiology, Orthopaedic Trauma Association, American Academy of Emergency Medicine, and American Rhinologic Society.** *Radiology*
  Zandee van Rilland, E. D., Fayad, L. M., Link, T. M., Davis, K. W., Wu, J. S., Brown, I. P., Chang, E. Y., Chow, L. C., Desai, S. C., Fritz, J., Gatz, J. D., Garner, H. W., Gorbachova, et al
  2026; 319 (2): e252309
- **Minimal Clinically Important Difference of the Sinonasal Outcome Test in Sinonasal Malignancy.** *The Annals of otology, rhinology, and laryngology*
  Maoz, S. L., Lee, M., Fischer, J. L., Choby, G., Hwang, P. H., Wang, E. W., Kuan, E. C., Adappa, N. D., Geltzeiler, M., Getz, A. E., Humphreys, I. M., Le, C. H., Pinheiro-Neto, et al
  2026: 34894261428393
- **Determining the Minimal Clinically Important Difference of the 40-Item Smell Identification Test in People With Cystic Fibrosis** *INTERNATIONAL FORUM OF ALLERGY & RHINOLOGY*
  Oh, E., Miller, J. E., Lee, M. J., Zemke, A., Baraghoshi, D., Strand, M. J., Alt, J. A., Bodner, T. E., Chang, M., Chowdhury, N. I., Eshaghian, P. H., Getz, A. E., Goralski, et al
  2026
- **Artificial Intelligence-Based Quantification of Indocyanine Green Fluorescence for Standardized Perfusion Assessment in Endoscopic Skull Base Surgery** *JOURNAL OF NEUROLOGICAL SURGERY PART B-SKULL BASE*
  Sethi, S., Daum, R., Grimm, D., Yong, M., Hosseinzadeh, F., Lee, C. K., Fernandez-Miranda, J. C., Nayak, J. V., Patel, Z. M., Hwang, P. H., Chang, M. T.
  2026
- **Added Sinonasal Morbidity of Transpterygoid Approach versus Transsphenoidal Approach: A Case-Controlled Analysis.** *Journal of neurological surgery. Part B, Skull base*
  Saroya, J., Huang, A. E., Hooseinzadeh, F., Lee, C. K., Fernandez-Miranda, J., Hwang, P. H., Patel, Z. M., Nayak, J. V., Chang, M. T.
  2026; 87 (1): 43-49
- **Outcomes for Sinonasal Undifferentiated Carcinoma (SNUC): An International Multi-Center Retrospective Cohort Study.** *Cancers*
  Liu, J., Takahashi, Y., Rehman, U., Turri-Zanoni, M., Mattavelli, D., Counsell, N., Ferrari, M., Rampinelli, V., Vermi, W., Lombardi, D., Saade, R., Park, K. W., Emanuel, et al
  2026; 18 (3)
- **Regional disparities in cost-effectiveness of biologics for CRSwNP should not modify the strategy.** *Rhinology*
  Fieux, M., Carsuzaa, F., Chang, M., Hwang, P. H., Patel, Z. M., Tringali, S., Favier, V., Margier, J.
  2026
- **The Future of Treating Smell Loss**
  Patel, Z. M.
  OXFORD UNIV PRESS.2026
- **Predictive Value of Ipratropium Responsiveness on Posterior Nasal Nerve Neurectomy Outcomes in Chronic Rhinitis.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
  Maddineni, S., Hwang, P. H., Ayoub, N. F., Patel, Z. M., Nayak, J. V., Chang, M. T.
  2025
- **Artificial Intelligence for Endoscopic Surveillance Post-Treatment for Nasopharyngeal Carcinoma: Detection of Recurrence and Osteoradionecrosis.** *International forum of allergy & rhinology*
  Levi, L., Huynh, J. D., Wang, Y., Fieux, M., Manavi, M. S., Renteria, A., Sethi, S. K., Ayoub, N., Patel, Z., Nayak, J. V., Hwang, P., Chang, M. T.
  2025
- **Distinguishing Suspected Invasive Fungal Sinusitis From Its Mimics: A Clinicopathologic Analysis of Histopathology-Negative Cases.** *International forum of allergy & rhinology*
  Idler, B. M., Renteria, A., Liu, D. T., Rubio-Jimenez, I., Levi, L., Nayak, J. V., Patel, Z. M., Chang, M. T., Rahman, M., Hwang, P. H., Ayoub, N. F.

2025

- **Using Indocyanine Green Fluorescence Angiography to Evaluate the Impact of Surgical and Patient Factors on Posterior Septal Artery Perfusion in Endoscopic Skull Base Surgery.** *Journal of neurological surgery. Part B, Skull base*
  Daum, R., Grimm, D., Yong, M., Hosseinzadeh, F., Lee, C. K., Fernandez-Miranda, J. C., Nayak, J. V., Patel, Z. M., Hwang, P. H., Chang, M. T.
  2025; 86 (6): e2-e7

- **Proton Beam vs Intensity-Modulated Radiotherapy in Olfactory Neuroblastoma.** *JAMA otolaryngology-- head & neck surgery*
  Tang, A., Adida, S., Donohue, J., Olson, B., Krippaehne, E., Roozdar, P., Goetschel, K., Gago, G., Almeida, J. P., Champagne, P. O., Fernandez-Miranda, J. C., Gardner, P., Hwang, et al
  2025

- **Does Debridement of Intracranial Disease in Acute Invasive Fungal Sinusitis Improve Survival?** *JOURNAL OF NEUROLOGICAL SURGERY PART B-SKULL BASE*
  Huang, A. E., Lee, C. K., Nayak, J. V., Hwang, P. H., Patel, Z. M., Fernandez-Miranda, J. C., Chang, M. T.
  2025

- **Utilizing a publicly accessible automated machine learning platform to enable diagnosis before tumor surgery.** *Communications medicine*
  Hosseinzadeh, F., Liu, G., Tsai, E., Mahmoudi, A., Yang, A., Kim, D., Fieux, M., Levi, L., Abdul-Hadi, S., Adappa, N. D., Alt, J. A., Altartoor, K. A., Banyi, et al
  2025; 5 (1): 419

- **Topical Anesthesia and Olfactory Capability: A Pilot Study.** *Laryngoscope investigative otolaryngology*
  Fieux, M., Wang, E., Liu, D. T., Patel, Z. M.
  2025; 10 (5): e70250

- **Expanded Endoscopic Endonasal Approach for Resection of Abducens Nerve Schwannoma Within the Cavernous Sinus and Posterior Fossa: 2-Dimensional Operative Video.** *Operative neurosurgery (Hagerstown, Md.)*
  Asmaro, K., Vigo, V., Kim, L. H., Nernekli, K., Nunez, M. A., Patel, Z. M., Fernandez-Miranda, J. C.
  2025

- **Functionality of Pituitary Tumors Impacts Sinonasal Quality of Life Before and After Endoscopic Surgery.** *The Laryngoscope*
  Wongworawut, Y., Hwang, P. H., Nayak, J. V., Dodd, R., Fernandez-Miranda, J. C., Patel, Z. M.
  2025

- **Multi-scaled transcriptomics of chronically inflamed nasal epithelium reveals immune-epithelial dynamics and tissue remodeling in nasal polyp formation.** *Immunity*
  Liao, G., Nakayama, T., Zhu, B., Lee, I. T., Yeung, J., Yeo, Y. Y., Chang, Y., Wang, C., Liao, S. C., Nkosi, D., Renteria, A., Bravo, D. T., Overdevest, et al
  2025

- **Is There Utility in Testing Pathologic Specimen for HPV in Sinonasal Inverted Papilloma?** *The Laryngoscope*
  Callander, J. K., Patel, Z. M.
  2025

- **Role of somatostatin receptor 2 (SSTR2) in pituitary adenomas.** *Clinical and translational medicine*
  Power, Y., Liu, J., Rehman, U., Kjerimi, A., Schartinger, V., Counsell, N., Starup-Hansen, J., Newall, N., Lund, V. J., Mohyeldin, A., Fernandez-Miranda, J. C., Lavezo, J., Patel, et al
  2025; 15 (8): e70435

- **Olfactory implants: international opinion paper on emerging technologies and clinical applications** *RHINOLOGY*
  Whitcroft, K. L., Hernandez, A., Andrews, P., Altundag, A., Benkhatar, H., Bensafi, M., Boex, C., Calegari, F., Coelho, D. H., Costanzo, R. M., Druet, V., Esposito, W., Fornos, et al
  2025; 63: 1-38

- **Comparative Outcomes of Gross Total Resection vs. Subtotal Resection Plus Radiotherapy for Preventing Craniopharyngioma Recurrence: A Meta-Analysis of the Endoscopic Endonasal Approach.** *Cancers*
  Bobeff, E. J., Szmyd, B., Mlynarski, W., Jouanneau, E., Apra, C., Shen, M., Patel, Z. M., Jaskolski, D. J., Schwartz, T. H.
  2025; 17 (15)

- **Patency of the Cavernous Sinus After Medial Wall Resection: An Observational Study** *JOURNAL OF NEUROLOGICAL SURGERY PART B-SKULL BASE*

Renteria, A. E., Fieux, M., Castro, B., Levi, L., Hung, L., Azevedo, A., Lee, C. K., Chang, M. T., Hwang, P. H., Nayak, J., Fischbein, N., Fernandez-Miranda, J., Patel, et al

2025

- **Comparative analysis of AI-generated study guides in otolaryngology education.** *American journal of otolaryngology*

  Patel, E. A., Herrmann, P. T., Fleischer, L., Filip, P., Joe, S., Kshirsagar, R. S., Kuan, E. C., Papagiannopoulos, P., Patel, Z. M., Rangarajan, S., Batra, P. S., Tajudeen, B. A.

  2025; 46 (5): 104693

- **June 4: International Skull Base Surgery Day.** *Journal of neurological surgery. Part B, Skull base*

  Gudis, D. A., Bleier, B. S., Eloy, J. A., Evans, J. J., Fernandez-Miranda, J. C., Gardner, P. A., Geltzeiler, M., Grayson, J. W., Harvey, R. J., Illing, E. A., Kennedy, D. W., Klatt-Cromwell, C., Kuan, et al

  2025; 86 (3): 243-244

- **Paxlovid Is Associated With Lower Rates of Long COVID-19 Smell and Taste Disorders.** *International forum of allergy & rhinology*

  Wang, E., Patel, Z. M.

  2025: e23612

- **The extra cost of biologics as first-line treatment in uncontrolled chronic rhinosinusitis with nasal polyps with no previous sinus surgery is overwhelming: a budget impact analysis.** *Rhinology*

  Fieux, M., Margier, J., Bartier, S., Chang, M., Carsuzaa, F., Hwang, P. H., Patel, Z. M., Tringali, S., Favier, V., Savary, T.

  2025

- **Office-based Sinus Surgery.** *Otolaryngologic clinics of North America*

  Fieux, M., Patel, Z. M.

  2025

- **Abridging the 22-Item Sino-Nasal Outcome Test (SNOT-22) in People With Cystic Fibrosis: Limiting Survey Burden.** *International forum of allergy & rhinology*

  Chen, H., Fischer, J. L., Tibbe, T. D., Sedaghat, A. R., Han, E. J., Mace, J. C., Alt, J. A., Bodner, T. E., Chowdhury, N. I., Gao, Y. A., Hwang, P. H., Khanwalkar, A., Kimple, et al

  2025: e23591

- **Expert Strategies: Skull Base Reconstruction-Global Perspectives, Insights, and Algorithms through a MixedMethods Approach.** *International forum of allergy & rhinology*

  Kuan, E. C., Talati, V., Patel, J. A., Nguyen, T. V., Abiri, A., Pang, J. C., Goshtasbi, K., Liu, L., Craig, J. R., Papagiannopoulos, P., Phillips, K. M., Tajudeen, B. A., Adappa, et al

  2025: e23596

- **Scoping review of deep learning research illuminates artificial intelligence chasm in otolaryngology-head and neck surgery.** *NPJ digital medicine*

  Liu, G. S., Fereydooni, S., Lee, M. C., Polkampally, S., Huynh, J., Kuchibhotla, S., Shah, M. M., Ayoub, N. F., Capasso, R., Chang, M. T., Doyle, P. C., Holsinger, F. C., Patel, et al

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- **The Development and Validation of the Smell-Qx Questionnaire, Based on a Systematic Review of the Literature and the COMET Initiative on the Development of Core Outcome Sets for Clinical Trials in Olfactory Disorders.** *International forum of allergy & rhinology*

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