

SUPPLEMENTARY ONLINE-ONLY APPENDIX:

Detailed Methods

Identification of First Authors: Included Medline records were matched by first author, as defined by the first name appearing in the Full Author [FAU] field in the Medline record. There was a subset of 223 records that could not be directly matched in this way due to discrepancies in the way the authors were listed in the PubMed; this sub-group of records was reviewed manually (BC, JK). Full-text publications and Internet searches of authors' names and institutions were used as needed to identify the most likely matches. The main data set was updated to correctly identify these first authors, as appropriate.

There were seven included records that did not include the names of individual authors or collaborators indexed with their PubMed records, because they were published under the name of a study group. The full-text of these manuscripts was reviewed by three team members (ALS, BC, and RJ) and these names were extracted manually. Disagreements in classification were resolved by author team consensus. The main data set was updated to correctly identify these first authors, as appropriate.

All eight included records published in the October 2015 issue of NEJM were missing the date of publication (i.e., the month and year were listed but not the date). The full-text of manuscripts were reviewed and the date was updated to reflect the publication date listed on the manuscripts (October 1, 2015). The main data set was updated to correctly identify these publication dates appropriately.

Supplementary Internet Data Capture: Two authors (JK, JS) further investigated each specific publication to obtain biographical and institutional information about their authors. Each query began with a PubMed search using each publication's eight-digit PubMed identification

number (PMID). On the PubMed landing page for each article, they searched for the author's institution, specific address, and contact information in the form of their personal email address or that of a colleague. When this information was not present, the downloadable PDF file of the original published article was reviewed. On the first page, in a small column next to the abstract, NEJM typically provided information about the first author; this information was used to further investigate the author's gender, whether they were based in North America, and if not, on which continent they were located. Gender was assigned by the coauthor team in a binary manner (female or male) based on the available information. Contact information for a corresponding author was absent in four cases: PMID's: 18703472, 18172173, 14695411, and 17522399.

An Internet search was then performed using the Google search engine with the goal of obtaining each author's CV, but this proved difficult and yielded inconsistent results. When available, the CV was downloaded and filed. When the CV was not found, an institutional biographical webpage was downloaded and filed instead. These sources documented the authors' current institution phone number, fax number, specialties, current degree(s), title(s), and academic rank(s). When a direct fax number was not listed for the author, the fax number for their academic or professional department was noted. Occasionally, other websites that collected physician demographics were used (e.g., WebMD, U.S. News & World Report). When all pertinent information was available from a CV, the author's webpage was only reviewed if it contained additional pertinent information. In a small number of instances, separate papers were written by different first authors with the same name. These cases were analyzed individually and the authors were differentiated using unique identifying information.

To obtain information about the published study, the abstract of each article included in the present study was reviewed. Each publication's study design, intervention, comparison,

outcome, result, and conclusion were documented; primary outcomes were classified as t positive, neutral, negative, or other based on whether patients benefitted or experienced an adverse outcome as a direct result of an intervention while participating in a study. Also, when available, information from www.clinicaltrials.gov was reviewed to confirm the abstract details and to determine in which countries the participating clinical sites were located. A link to the relevant entry on www.clinicaltrials.gov website was not present for articles older than 2003, as that is when the website itself went live. Entries were also absent for many articles published prior to 2007, when the United States government began requiring that studies register their information in the database. Publications were categorized as clinical trials when their primary dataset was catalogued as a trial at www.clinicaltrials.gov. If the publication was released prior to 2007, categorization as a clinical trial was based on whether the research met the criteria outlined in the NIH's definition of a clinical trial.¹²

Each publication was further categorized using MeSH terms assigned by PubMed. Because of PubMed's lack of a centralized and consistent system of MeSH term categorization, three classification tables were created to help facilitate this step. Articles were labeled according to their MeSH terms as outlined on the accompanying tables (Diseases, Techniques, and Phenomena). When an article should have been labeled with a specific MeSH term, it was categorized as such and the inconsistency was noted.

Statistical Methods: Categorical variables were compared for SP versus MP using chi-square tests with exact p-values via Monte Carlo simulations (for author-level variables) or generalized linear mixed models with authors as random effects (for record-level variables). Continuous variables were compared for SP versus MP using linear mixed models with authors as random effects. Multivariable logistic regression models were used to examine independent

factors associated with MP authors. To evaluate trends over time, log-linear Poisson regression models were used with corrections for over-/under-dispersions (as appropriate) for counts; and linear mixed models with authors as random effects were used for continuous outcomes. All analyses were performed using SAS 9.4 (SAS Institute Inc., Cary, NC) and significance was established *a priori* as $p \leq 0.05$.

Data Availability: The Medline data used for this analysis are publicly available. This research study's database will be made available to the journal and peer-reviewers, as well as readers, upon request, to validate this study's findings.

Human Subjects Protection: This protocol was reviewed by the Stony Brook University Committee on Research in Human Subjects (CORIHS) office; the CORIHS office made a determination that this study was exempt from IRB Committee review as it was deemed "not human subjects" research (exemption dated January 10, 2018).

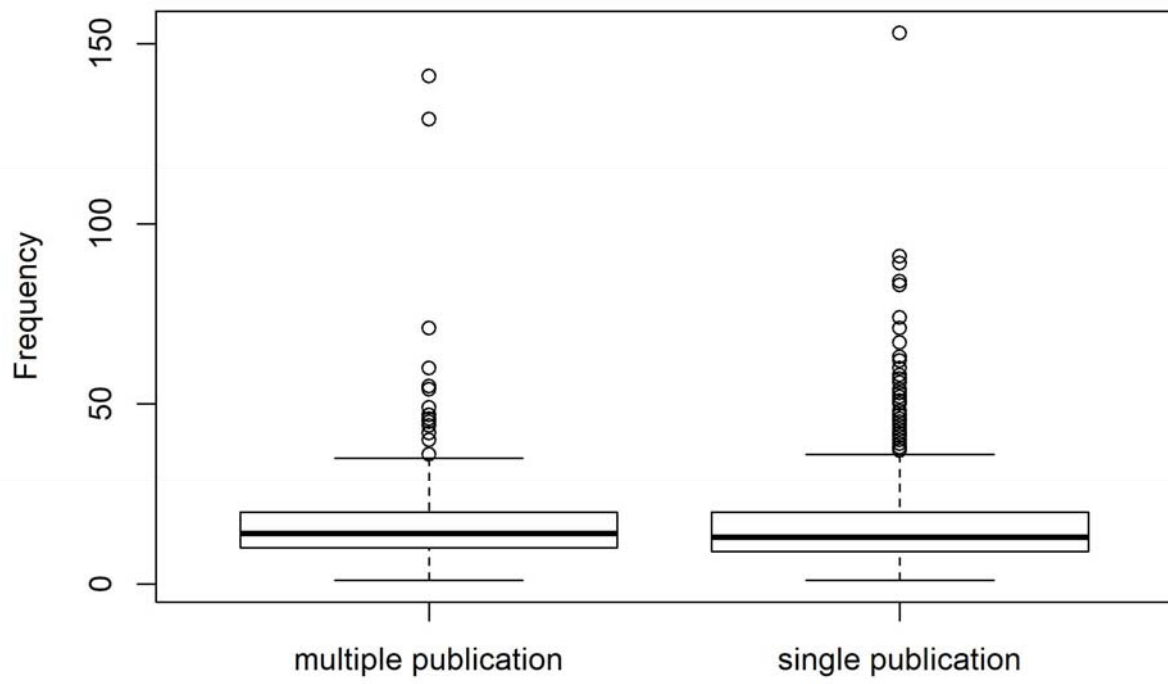
Author Contributions: The International Committee of Medical Journal Editor's requirements for co-authorship were met by all listed coauthor team members. Specifically, each coauthor provided substantial intellectual contributions and participated in:

- Participated in the conception/design of this project and/or in the acquisition, analysis, and/or interpretation of this study's analyses, and
- Drafted and/or revised this manuscript, and
- Approved this final manuscript, and
- Agreed to be held accountable for the integrity of this work.

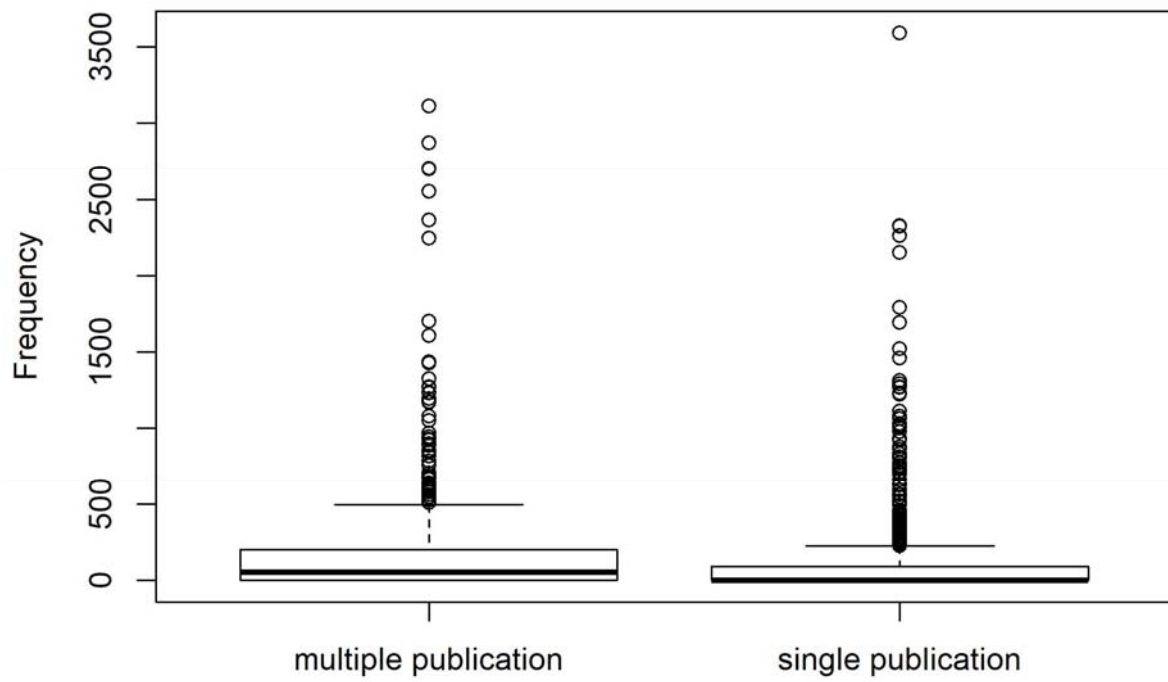
As to specific roles and responsibilities, Dr. A. Laurie Shroyer raised this research question initially, as well as she wrote the first protocol, coordinated the IRB exemption, and recruited all other team members to participate in this study. In addition to the specific contributions noted

above, Dr. Brendan Carr and Mr. John Krstacic worked to refine Dr. Shroyer's first draft manuscript and refine this final manuscript for submission. Ms. Jamie Saragossi served as our team's expert librarian and coordinated the initial Medline extract. Dr. Shroyer, Dr. Carr, Mr. Krystacic, and Ms. Saragossi performed the data extraction and classifications. Dr. Jie Yang and her trainee (Chencan Zhu) served as the biostatistical team responsible for this study's database and analytical reports. Dr. Shroyer provided oversight and leadership for all study-related activities, as well as secured biostatistical supplementary core lab funding support for this project; additionally, she serves as the corresponding author for this study.

SUPPLEMENTARY FIGURE 1: Box Plots of SP versus MP First Authors' Coauthor Counts



SUPPLEMENTARY FIGURE 2: Box Plots of SP versus MP First Authors' Collaborator Counts (if only using data since 2008)



SUPPLEMENTARY TABLE 1: NEJM First Authors' Clinical Trial Publications Over Time (if only using data since 2008 for numbers of collaborating authors and total authors)

	All Clinical Trials	SP Clinical Trials	MP Clinical Trials	p-value* for SP vs MP
Publication Counts				
Mean (Std)	N = 2016	N = 1451	N = 565	
Coauthors	16.5 (10.2)	16.3 (9.7)	16.9 (11.4)	0.249
Publication Counts				
Mean (Std)	N = 1387	N = 986	N = 401	
Collaborating Authors	147.9 (339.8)	116.2 (282.8)	225.6 (441.2)	< 0.0001
Total Authors	166.1 (340.2)	134.3 (283.8)	244.2 (440.5)	< 0.0001

NOTE *: P-value was based on linear mixed model with author as random effect.

MeSH 

Full

Diseases Category

PubMed search builder options

Restrict to MeSH Major Topic.

Tree Number(s): C

[All MeSH Categories](#)

Diseases Category

[Animal Diseases](#)

- [Abortion, Veterinary](#) +
- [Actinobacillosis](#)
- [Aleutian Mink Disease](#)
- [Anal Gland Neoplasms](#)
- [Anaplasmosis](#)
- [Bird Diseases](#) +
- [Borna Disease](#)
- [Cat Diseases](#) +
- [Cattle Diseases](#) +
- [Digital Dermatitis](#)
- [Disease Models, Animal](#)
- [Dog Diseases](#) +
- [Enterotoxemia](#)
- [Erysipelothrix Infections](#) +
- [Fish Diseases](#) +
- [Foot-and-Mouth Disease](#)
- [Foot Rot](#)
- [Goat Diseases](#)
- [Heartwater Disease](#)
- [Hepatitis, Animal](#) +
- [Horse Diseases](#) +
- [Keratoconjunctivitis, Infectious](#)
- [Lameness, Animal](#)
- [Mammary Neoplasms, Animal](#)
- [Mink Viral Enteritis](#)
- [Muscular Dystrophy, Animal](#) +
- [Myxomatosis, Infectious](#)
- [Parasitic Diseases, Animal](#) +
- [Paratuberculosis](#)
- [Parturient Paresis](#)
- [Peste-des-Petits-Ruminants](#)
- [Pleuropneumonia, Contagious](#)
- [Primate Diseases](#) +
- [Pseudorabies](#)
- [Pythiosis](#)

- [Rinderpest](#)
- [Rodent Diseases](#) +
- [Salmonella Infections, Animal](#)
- [Sheep Diseases](#) +
- [Steatitis](#)
- [Swine Diseases](#) +
- [Venereal Tumors, Veterinary](#)
- [Vesicular Stomatitis](#)
- [Wasting Disease, Chronic](#)
- [Zoonoses](#)

Bacterial Infections and Mycoses

- [Bacterial Infections](#) +
- [Central Nervous System Infections](#) +
- [Infection](#) +
- [Mycoses](#) +
- [Zoonoses](#)

Cardiovascular Diseases

- [Cardiovascular Abnormalities](#) +
- [Cardiovascular Infections](#) +
- [Heart Diseases](#) +
- [Pregnancy Complications, Cardiovascular](#) +
- [Vascular Diseases](#) +

Chemically-Induced Disorders

- [Drug-Related Side Effects and Adverse Reactions](#) +
- [Poisoning](#) +
- [Substance-Related Disorders](#) +

Congenital, Hereditary, and Neonatal Diseases and Abnormalities

- [Congenital Abnormalities](#) +
- [Fetal Diseases](#) +
- [Genetic Diseases, Inborn](#) +
- [Infant, Newborn, Diseases](#) +

Digestive System Diseases

- [Biliary Tract Diseases](#) +
- [Digestive System Abnormalities](#) +
- [Digestive System Fistula](#) +
- [Digestive System Neoplasms](#) +
- [Gastrointestinal Diseases](#) +
- [Liver Diseases](#) +
- [Pancreatic Diseases](#) +
- [Peritoneal Diseases](#) +

Disorders of Environmental Origin

- [Environmental Illness](#) +
- [Preconception Injuries](#)

Endocrine System Diseases

- [Adrenal Gland Diseases](#) +
- [Bone Diseases, Endocrine](#)
- [Diabetes Mellitus](#) +
- [Dwarfism](#) +
- [Endocrine Gland Neoplasms](#) +
- [Female Athlete Triad Syndrome](#)

[Gonadal Disorders](#) +
[Parathyroid Diseases](#) +
[Pituitary Diseases](#) +
[Polyendocrinopathies, Autoimmune](#)
[Thyroid Diseases](#) +
[Tuberculosis, Endocrine](#)

[Eye Diseases](#)

[Asthenopia](#)
[Cogan Syndrome](#)
[Conjunctival Diseases](#) +
[Corneal Diseases](#) +
[Eye Abnormalities](#) +
[Eye Diseases, Hereditary](#) +
[Eye Hemorrhage](#) +
[Eye Infections](#) +
[Eye Injuries](#) +
[Eye Manifestations](#) +
[Eye Neoplasms](#) +
[Eyelid Diseases](#) +
[Lacrimal Apparatus Diseases](#) +
[Lens Diseases](#) +
[Ocular Hypertension](#) +
[Ocular Hypotension](#)
[Ocular Motility Disorders](#) +
[Optic Nerve Diseases](#) +
[Orbital Diseases](#) +
[Pupil Disorders](#) +
[Refractive Errors](#) +
[Retinal Diseases](#) +
[Scleral Diseases](#) +
[Uveal Diseases](#) +
[Vision Disorders](#) +
[Vitreous Detachment](#)

[Female Urogenital Diseases and Pregnancy Complications](#)

[Female Urogenital Diseases](#) +
[Pregnancy Complications](#) +

[Hemic and Lymphatic Diseases](#)

[Hematologic Diseases](#) +
[Lymphatic Diseases](#) +

[Immune System Diseases](#)

[Autoimmune Diseases](#) +
[Erythroblastosis, Fetal](#) +
[Glomerulonephritis, Membranoproliferative](#)
[Graft vs Host Disease](#)
[Hypersensitivity](#) +
[Immune Reconstitution Inflammatory Syndrome](#)
[Immunologic Deficiency Syndromes](#) +
[Immunoproliferative Disorders](#) +
[Purpura, Thrombocytopenic](#) +
[Transfusion Reaction](#) +

Male Urogenital Diseases

[Genital Diseases, Male](#) +
[Pelvic Floor Disorders](#)
[Tuberculosis, Urogenital](#) +
[Urogenital Abnormalities](#) +
[Urogenital Neoplasms](#) +
[Urologic Diseases](#) +

Musculoskeletal Diseases

[Bone Diseases](#) +
[Cartilage Diseases](#) +
[Fasciitis](#) +
[Foot Deformities](#) +
[Foot Diseases](#) +
[Hand Deformities](#) +
[Jaw Diseases](#) +
[Joint Diseases](#) +
[Muscular Diseases](#) +
[Musculoskeletal Abnormalities](#) +
[Rheumatic Diseases](#) +

Neoplasms

[Cysts](#) +
[Hamartoma](#) +
[Neoplasms by Histologic Type](#) +
[Neoplasms by Site](#) +
[Neoplasms, Experimental](#) +
[Neoplasms, Hormone-Dependent](#)
[Neoplasms, Multiple Primary](#) +
[Neoplasms, Post-Traumatic](#)
[Neoplasms, Radiation-Induced](#) +
[Neoplasms, Second Primary](#)
[Neoplastic Processes](#) +
[Neoplastic Syndromes, Hereditary](#) +
[Paraneoplastic Syndromes](#) +
[Precancerous Conditions](#) +
[Pregnancy Complications, Neoplastic](#) +

Nervous System Diseases

[Autoimmune Diseases of the Nervous System](#) +
[Autonomic Nervous System Diseases](#) +
[Central Nervous System Diseases](#) +
[Chronobiology Disorders](#) +
[Cranial Nerve Diseases](#) +
[Demyelinating Diseases](#) +
[Nervous System Malformations](#) +
[Nervous System Neoplasms](#) +
[Neurocutaneous Syndromes](#) +
[Neurodegenerative Diseases](#) +
[Neurologic Manifestations](#) +
[Neuromuscular Diseases](#) +
[Neurotoxicity Syndromes](#) +
[Restless Legs Syndrome](#)

[Sleep Wake Disorders](#) +
[Trauma, Nervous System](#) +

[Nutritional and Metabolic Diseases](#)

[Metabolic Diseases](#) +
[Nutrition Disorders](#) +

[Occupational Diseases](#)

[Agricultural Workers' Diseases](#) +
[Asthma, Occupational](#)
[Bird Fancier's Lung](#)
[Dermatitis, Occupational](#)
[Hand-Arm Vibration Syndrome](#)
[High Pressure Neurological Syndrome](#)
[Inert Gas Narcosis](#)
[Laboratory Infection](#)
[Occupational Stress](#) +
[Persian Gulf Syndrome](#)
[Pneumoconiosis](#) +
[Sleep Disorders, Circadian Rhythm](#)

[Otorhinolaryngologic Diseases](#)

[Ciliary Motility Disorders](#) +
[Ear Diseases](#) +
[Laryngeal Diseases](#) +
[Nose Diseases](#) +
[Otorhinolaryngologic Neoplasms](#) +
[Pharyngeal Diseases](#) +

[Parasitic Diseases](#)

[Central Nervous System Parasitic Infections](#) +
[Coinfection](#)
[Eye Infections, Parasitic](#) +
[Helminthiasis](#) +
[Intestinal Diseases, Parasitic](#) +
[Liver Diseases, Parasitic](#) +
[Lung Diseases, Parasitic](#) +
[Mesomycetozoea Infections](#) +
[Opportunistic Infections](#) +
[Parasitemia](#)
[Parasitic Diseases, Animal](#) +
[Pregnancy Complications, Parasitic](#)
[Protozoan Infections](#) +
[Skin Diseases, Parasitic](#) +
[Zoonoses](#) +

[Pathological Conditions, Signs and Symptoms](#)

[Morphological and Microscopic Findings](#) +
[Pathologic Processes](#) +
[Pathological Conditions, Anatomical](#) +
[Signs and Symptoms](#) +

[Respiratory Tract Diseases](#)

[Bronchial Diseases](#) +
[Ciliary Motility Disorders](#) +
[Granuloma, Respiratory Tract](#) +

- [Laryngeal Diseases](#) +
- [Lung Diseases](#) +
- [Nose Diseases](#) +
- [Pleural Diseases](#) +
- [Respiration Disorders](#) +
- [Respiratory Hypersensitivity](#) +
- [Respiratory System Abnormalities](#) +
- [Respiratory Tract Fistula](#) +
- [Respiratory Tract Infections](#) +
- [Respiratory Tract Neoplasms](#) +
- [Thoracic Diseases](#) +
- [Tracheal Diseases](#) +

[Skin and Connective Tissue Diseases](#)

- [Connective Tissue Diseases](#) +
- [Skin Diseases](#) +

[Stomatognathic Diseases](#)

- [Ankyloglossia](#)
- [Jaw Diseases](#) +
- [Mouth Diseases](#) +
- [Pharyngeal Diseases](#) +
- [Stomatognathic System Abnormalities](#) +
- [Temporomandibular Joint Disorders](#) +
- [Tooth Diseases](#) +

[Virus Diseases](#)

- [Arbovirus Infections](#) +
- [Bronchiolitis, Viral](#)
- [Central Nervous System Viral Diseases](#) +
- [Coinfection](#)
- [DNA Virus Infections](#) +
- [Encephalitis, Viral](#) +
- [Eye Infections, Viral](#) +
- [Fatigue Syndrome, Chronic](#)
- [Hepatitis, Viral, Animal](#) +
- [Hepatitis, Viral, Human](#) +
- [Opportunistic Infections](#) +
- [Pneumonia, Viral](#)
- [RNA Virus Infections](#) +
- [Sexually Transmitted Diseases](#) +
- [Skin Diseases, Viral](#) +
- [Slow Virus Diseases](#) +
- [Tumor Virus Infections](#) +
- [Viremia](#)
- [Zoonoses](#)

[Wounds and Injuries](#)

- [Abdominal Injuries](#) +
- [Amputation, Traumatic](#)
- [Arm Injuries](#) +
- [Asphyxia](#)
- [Athletic Injuries](#)
- [Back Injuries](#) +

[Barotrauma](#) +
[Battered Child Syndrome](#)
[Birth Injuries](#) +
[Bites and Stings](#) +
[Burns](#) +
[Cold Injury](#) +
[Contrecoup Injury](#)
[Crush Injuries](#) +
[Drowning](#) +
[Electric Injuries](#) +
[Esophageal Perforation](#)
[Extravasation of Diagnostic and Therapeutic Materials](#)
[Foreign Bodies](#) +
[Fractures, Bone](#) +
[Fractures, Cartilage](#)
[Frostbite](#) +
[Hand Injuries](#) +
[Heat Stress Disorders](#) +
[Hip Injuries](#) +
[Joint Dislocations](#) +
[Lacerations](#)
[Leg Injuries](#) +
[Microtrauma, Physical](#)
[Multiple Trauma](#) +
[Nasal Septal Perforation](#)
[Neck Injuries](#) +
[Occupational Injuries](#)
[Radiation Injuries](#) +
[Retropneumoperitoneum](#)
[Rupture](#) +
[Self Mutilation](#)
[Shock, Traumatic](#) +
[Shoulder Injuries](#) +
[Soft Tissue Injuries](#) +
[Spinal Cord Injuries](#) +
[Sprains and Strains](#) +
[Surgical Wound](#)
[Tendon Injuries](#) +
[Thoracic Injuries](#) +
[Tooth Injuries](#) +
[Trauma, Nervous System](#) +
[Tympanic Membrane Perforation](#)
[Vascular System Injuries](#)
[War-Related Injuries](#)
[Wounds, Nonpenetrating](#) +
[Wounds, Penetrating](#) +

MeSH

Full

Analytical, Diagnostic and Therapeutic Techniques and Equipment Category

PubMed search builder options

Restrict to MeSH Major Topic.

Tree Number(s): E

[All MeSH Categories](#)

Analytical, Diagnostic and Therapeutic Techniques and Equipment Category

Anesthesia and Analgesia

[Analgesia](#) +
[Anesthesia](#) +
[Anesthesia Recovery Period](#)
[Conscious Sedation](#)
[Deep Sedation](#)
[Electronarcosis](#)
[Hypotension, Controlled](#)
[Neuromuscular Blockade](#)
[Preanesthetic Medication](#)

Dentistry

[Air Abrasion, Dental](#)
[Anesthesia, Dental](#) +
[Dental Atraumatic Restorative Treatment](#)
[Dental Bonding](#) +
[Dental Care](#) +
[Dental Debonding](#)
[Dental Equipment](#) +
[Dental Health Surveys](#) +
[Dental High-Speed Technique](#)
[Dental Models](#)
[Dental Occlusion](#) +
[Dental Pins](#)
[Dental Polishing](#)
[Dental Stress Analysis](#)
[Dentistry, Operative](#) +
[Diagnosis, Oral](#) +
[Electrogalvanism, Intraoral](#)
[Endodontics](#) +
[Esthetics, Dental](#) +
[Infection Control, Dental](#)
[Jaw Relation Record](#) +
[Mouth Rehabilitation](#)
[Myofunctional Therapy](#)
[Odontometry](#) +
[Oral Medicine](#)

- [Oral Surgical Procedures](#) +
- [Orthodontics](#) +
- [Pathology, Oral](#)
- [Periodontics](#) +
- [Preventive Dentistry](#) +
- [Prosthodontics](#) +
- [Surgery, Oral](#) +
- [Technology, Dental](#) +
- [Tooth Preparation](#) +
- [Tooth Remineralization](#)

Diagnosis

- [Clinical Decision-Making](#)
- [Delayed Diagnosis](#)
- [Diagnosis, Computer-Assisted](#) +
- [Diagnosis, Differential](#)
- [Diagnosis, Dual \(Psychiatry\)](#)
- [Diagnostic Errors](#) +
- [Diagnostic Techniques and Procedures](#) +
- [Early Diagnosis](#) +
- [Incidental Findings](#)
- [Prodromal Symptoms](#)
- [Prognosis](#) +
- [Theranostic Nanomedicine](#)

Equipment and Supplies

- [Air Filters](#)
- [Atmosphere Exposure Chambers](#)
- [Bandages](#) +
- [Bathroom Equipment](#)
- [Bioreactors](#) +
- [Capillary Tubing](#)
- [Catheters](#) +
- [Compressed Air](#)
- [Contraceptive Devices](#) +
- [Culture Media](#) +
- [Dental Equipment](#) +
- [Diagnostic Equipment](#) +
- [Diffusion Chambers, Culture](#)
- [Disposable Equipment](#)
- [Durable Medical Equipment](#)
- [Electrical Equipment and Supplies](#) +
- [Emergency Medical Tags](#)
- [Equipment and Supplies, Hospital](#) +
- [Exoskeleton Device](#)
- [Feminine Hygiene Products](#) +
- [Gamma Cameras](#)
- [Gas Scavengers](#)
- [Gastric Balloon](#)
- [Gravity Suits](#)
- [Humidifiers](#)
- [Incubators](#) +

[Infant Equipment](#) +
[Infusion Pumps](#) +
[Intermittent Pneumatic Compression Devices](#)
[Medicine Chests](#)
[Microbubbles](#)
[Micropore Filters](#)
[Microspheres](#)
[Nanospheres](#)
[Nebulizers and Vaporizers](#) +
[Needles](#)
[Optical Devices](#) +
[Oxygenators](#) +
[Phantoms, Imaging](#)
[Prostheses and Implants](#) +
[Protective Devices](#) +
[Quantum Dots](#)
[Radiation Equipment and Supplies](#) +
[Radio Frequency Identification Device](#)
[Reagent Kits, Diagnostic](#) +
[Self-Help Devices](#) +
[Sensory Aids](#) +
[Surgical Equipment](#) +
[Surgically-Created Structures](#) +
[Syringes](#)
[Thermometers](#)
[Tomography Scanners, X-Ray Computed](#)
[Tourniquets](#)
[Transdermal Patch](#)
[Ventilators, Mechanical](#) +
[X-Ray Film](#)
[X-Ray Intensifying Screens](#)

Investigative Techniques

[Accelerometry](#) +
[Airway Extubation](#)
[Animal Experimentation](#) +
[Animal Identification Systems](#)
[Anthropometry](#) +
[Artifacts](#)
[Autoanalysis](#)
[Automation, Laboratory](#)
[Autopsy](#)
[Biological Assay](#) +
[Biomedical Enhancement](#) +
[Bioprinting](#)
[Bioprospecting](#)
[Bone Demineralization Technique](#)
[Catheterization](#) +
[Cementation](#)
[Centrifugation](#) +
[Chemistry Techniques, Analytical](#) +

[Chemistry Techniques, Synthetic](#) +
[Chromophore-Assisted Light Inactivation](#)
[Clinical Laboratory Techniques](#) +
[Constriction](#)
[Containment of Biohazards](#)
[Cytological Techniques](#) +
[Decision Support Techniques](#) +
[Dermatoglyphics](#)
[Dilatation](#)
[Drug Discovery](#) +
[Ecological Parameter Monitoring](#)
[Electrochemical Techniques](#) +
[Embryo Research](#) +
[Endpoint Determination](#)
[Epidemiologic Methods](#) +
[Equipment Design](#) +
[Equipment Failure](#) +
[Equipment Reuse](#)
[Equipment Safety](#)
[Ergometry](#) +
[Euthanasia, Animal](#)
[Evaluation Studies as Topic](#) +
[Fetal Research](#)
[Finite Element Analysis](#)
[Food Analysis](#)
[Fourier Analysis](#)
[Games, Experimental](#) +
[Genetic Techniques](#) +
[Hardness Tests](#)
[Human Experimentation](#) +
[Immersion](#)
[Immobilization](#) +
[Immunologic Techniques](#) +
[In Vitro Techniques](#) +
[Indicator Dilution Techniques](#) +
[Interferometry](#) +
[Intubation](#) +
[Ischemic Preconditioning](#) +
[Isolated Heart Preparation](#)
[Isotope Labeling](#)
[Magnetometry](#) +
[Manometry](#) +
[Materials Testing](#)
[Methods](#) +
[Microchip Analytical Procedures](#) +
[Micromanipulation](#) +
[Microscopy](#) +
[Models, Animal](#) +
[Models, Theoretical](#) +
[Molecular Probe Techniques](#) +

[Neoplasm Transplantation](#) +
[Neuroimaging](#) +
[Neuromuscular Blockade](#)
[Olfactometry](#)
[Optical Imaging](#) +
[Optical Tweezers](#)
[Oscillometry](#)
[Oxygen Radical Absorbance Capacity](#)
[Parabiosis](#) +
[Perfusion](#) +
[Photoacoustic Techniques](#)
[Photography](#) +
[Physical Stimulation](#) +
[Physiognomy](#)
[Preservation, Biological](#) +
[Protein Refolding](#)
[Protein Unfolding](#) +
[Psychological Techniques](#) +
[Radiometry](#) +
[Reproductive Techniques](#) +
[Rheology](#) +
[Sonication](#)
[Sound Spectrography](#)
[Stereotaxic Techniques](#) +
[Substance Abuse Detection](#)
[Technology, Pharmaceutical](#) +
[Technology, Radiologic](#) +
[Telemetry](#) +
[Therapeutic Irrigation](#) +
[Thermometry](#) +
[Toxicity Tests](#) +
[Trauma Severity Indices](#) +
[Wavelet Analysis](#)
[Weightlessness Countermeasures](#)
[Weightlessness Simulation](#) +
[Weights and Measures](#) +
[Whole Body Imaging](#)
[Whole-Body Irradiation](#)
[Surgical Procedures, Operative](#)
[Ablation Techniques](#) +
[Ambulatory Surgical Procedures](#)
[Anastomosis, Surgical](#) +
[Anterior Temporal Lobectomy](#)
[Assisted Circulation](#) +
[Bariatric Surgery](#) +
[Biopsy](#) +
[Bloodless Medical and Surgical Procedures](#)
[Body Modification, Non-Therapeutic](#) +
[Cardiovascular Surgical Procedures](#) +
[Curettage](#) +

[Cytoreduction Surgical Procedures](#)
[Debridement](#)
[Decompression, Surgical](#) +
[Deep Brain Stimulation](#)
[Device Removal](#)
[Digestive System Surgical Procedures](#) +
[Dissection](#) +
[Drainage](#) +
[Elective Surgical Procedures](#)
[Electrosurgery](#)
[Endocrine Surgical Procedures](#) +
[Extracorporeal Circulation](#) +
[Fasciotomy](#)
[Hemostasis, Surgical](#) +
[Keratectomy](#) +
[Laparotomy](#)
[Ligation](#)
[Lymph Node Excision](#) +
[Mastectomy](#) +
[Metastasectomy](#)
[Microsurgery](#) +
[Minimally Invasive Surgical Procedures](#) +
[Minor Surgical Procedures](#)
[Monitoring, Intraoperative](#) +
[Myotomy](#) +
[Neurosurgical Procedures](#) +
[Obstetric Surgical Procedures](#) +
[Ophthalmologic Surgical Procedures](#) +
[Oral Surgical Procedures](#) +
[Orthopedic Procedures](#) +
[Ostomy](#) +
[Otorhinolaryngologic Surgical Procedures](#) +
[Pelvic Exenteration](#)
[Perioperative Care](#) +
[Perioperative Period](#) +
[Pneumonectomy](#)
[Prophylactic Surgical Procedures](#) +
[Prosthesis Implantation](#) +
[Punctures](#) +
[Reconstructive Surgical Procedures](#) +
[Reoperation](#)
[Second-Look Surgery](#)
[Splenectomy](#)
[Surgery, Computer-Assisted](#) +
[Symphysiotomy](#)
[Thoracic Surgical Procedures](#) +
[Transplantation](#) +
[Ultrasonic Surgical Procedures](#) +
[Urogenital Surgical Procedures](#) +
[Wound Closure Techniques](#) +

Therapeutics

[Acoustic Stimulation](#)
[Airway Management](#) +
[Apitherapy](#)
[Balneology](#) +
[Bed Rest](#)
[Behavior Control](#) +
[Biological Therapy](#) +
[Blood Component Removal](#) +
[Catheterization](#) +
[Cautery](#) +
[Chronotherapy](#) +
[Climatotherapy](#)
[Clinical Protocols](#) +
[Combined Modality Therapy](#) +
[Complementary Therapies](#) +
[Conservative Treatment](#)
[Contraindications](#) +
[Cosmetic Techniques](#) +
[Cryotherapy](#) +
[Decompression](#) +
[Delayed Diagnosis](#)
[Directly Observed Therapy](#)
[Drainage](#) +
[Drug Therapy](#) +
[Electric Stimulation Therapy](#) +
[Emergency Treatment](#) +
[Feeding Methods](#) +
[Fetal Therapies](#) +
[Hemodilution](#)
[Hemostatic Techniques](#) +
[Hygiene](#) +
[Hyperthermia, Induced](#) +
[Insufflation](#)
[Intubation](#) +
[Ischemic Postconditioning](#)
[Ischemic Preconditioning](#) +
[Laser Therapy](#) +
[Leeching](#)
[Lithotripsy](#) +
[Magnetic Field Therapy](#) +
[Mechanical Thrombolysis](#)
[Nutrition Therapy](#) +
[Obesity Management](#) +
[Organ Sparing Treatments](#)
[Orthokeratologic Procedures](#)
[Orthopedic Procedures](#) +
[Orthoptics](#)
[Pain Management](#)
[Patient Care](#) +

[Patient Care Bundles](#)
[Patient Isolation](#)
[Phototherapy](#) +
[Physical Therapy Modalities](#) +
[Placebos](#)
[Precision Medicine](#)
[Preservation, Biological](#) +
[Prosthesis Fitting](#) +
[Punctures](#) +
[Radiotherapy](#) +
[Rehabilitation](#) +
[Rejuvenation](#)
[Remission Induction](#) +
[Renal Replacement Therapy](#) +
[Reproductive Techniques](#) +
[Respiratory Therapy](#) +
[Retreatment](#) +
[Rewarming](#)
[Salvage Therapy](#)
[Secondary Prevention](#)
[Self Care](#) +
[Sex Reassignment Procedures](#) +
[Sorption Detoxification](#) +
[Tertiary Prevention](#)
[Theranostic Nanomedicine](#)
[Therapeutic Occlusion](#) +
[Therapies, Investigational](#) +
[Therapy with Helminths](#)
[Therapy, Computer-Assisted](#) +

MeSH

Full

Anthropology, Education, Sociology and Social Phenomena Category

PubMed search builder options

Restrict to MeSH Major Topic.

Tree Number(s): I

[All MeSH Categories](#)

Anthropology, Education, Sociology and Social Phenomena Category

Education

- [Curriculum](#) +
- [Education, Distance](#)
- [Education, Nonprofessional](#) +
- [Education, Predental](#)
- [Education, Premedical](#)
- [Education, Professional](#) +
- [Educational Measurement](#) +
- [Inservice Training](#) +
- [Interdisciplinary Placement](#)
- [International Educational Exchange](#)
- [Mentoring](#)
- [Needs Assessment](#)
- [Schools](#) +
- [Teaching](#) +

Human Activities

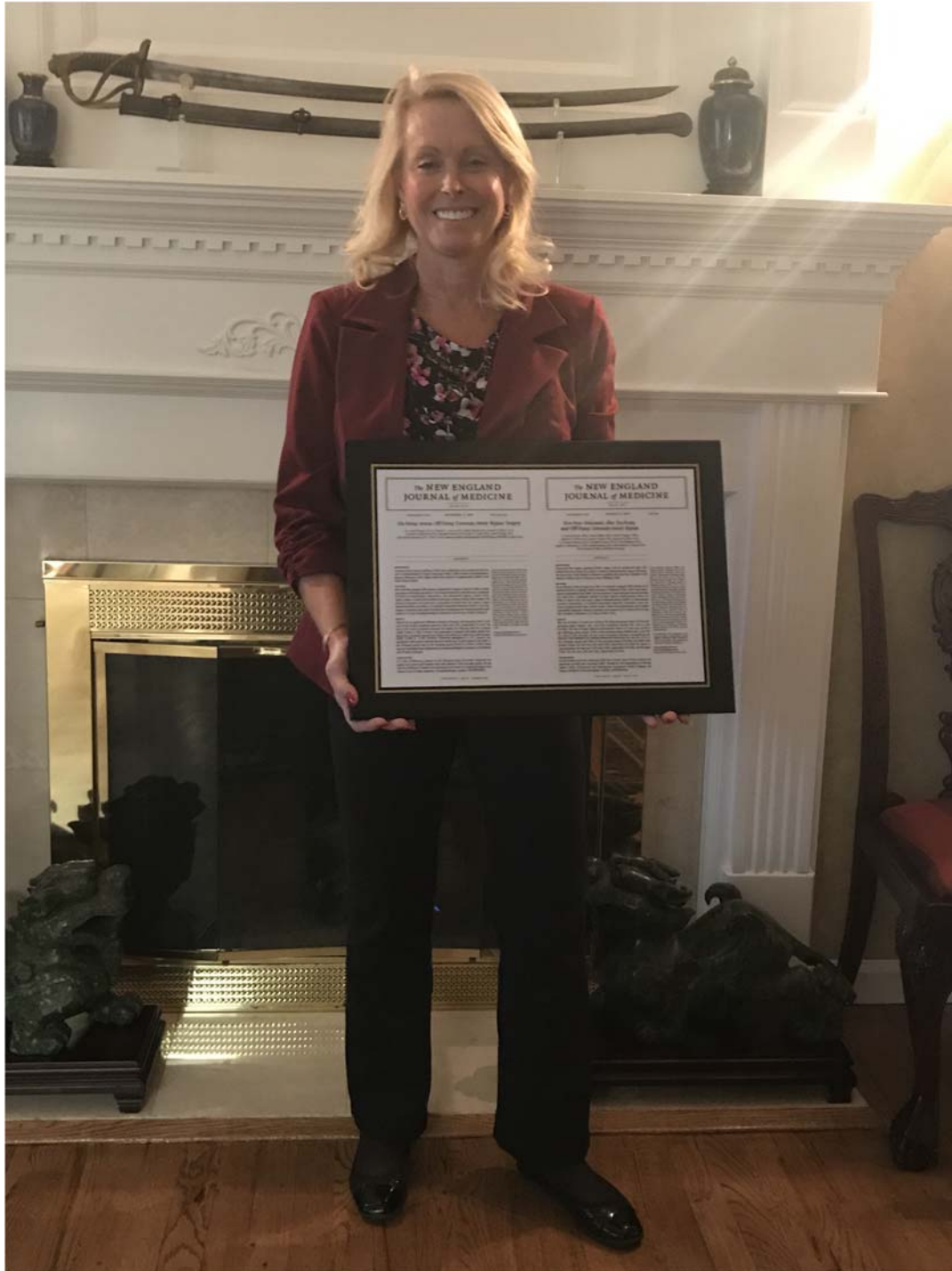
- [Activities of Daily Living](#) +
- [Anti-Vaccination Movement](#)
- [Automobile Driving](#) +
- [Diet Fads](#)
- [Exercise](#) +
- [Leisure Activities](#) +
- [Nudism](#)
- [Retirement](#)
- [Stakeholder Participation](#)
- [Survival](#)
- [Temperance Movement](#)
- [Travel](#) +
- [Work](#) +

Social Sciences

- [Anthropology](#) +
- [Criminology](#) +
- [Demography](#) +
- [Economics](#) +
- [Environment Design](#)
- [Forecasting](#) +

[Government](#) +
[Government Programs](#) +
[Internationality](#) +
[Policy](#) +
[Political Systems](#) +
[Politics](#) +
[Private Sector](#) +
[Public Sector](#)
[Quality of Life](#)
[Sociology](#) +
[Work-Life Balance](#)

Supplementary Picture: As background for this research question raised, Dr. Shroyer holds a plaque displaying the abstracts for her two New England Journal of Medicine articles (November 5, 2009 and August 17, 2017) as first author. As this plaque had to be custom-made (as the standard NEJM plaque held only a single NEJM publication), Dr. Shroyer’s curiosity for this research question was raised – as to what might be the author-related and publication-related characteristics differentiating NEJM first authors with multiple publications.



**Stony Brook University
Office of Research Compliance/CORIHS
Human Subjects Research Determination Form**

Principal Investigator: **Annie Laurie Shroyer, PhD**

Project Title/Description: **Strategic Approaches for Academic Faculty to Successfully Publish in Top Tier Biomedical Research Journals (and not Perish!)**

IRBNet #: **1180427-2**

I. COMMON RULE DETERMINATION

A. RESEARCH

1. Indicate whether the activity meets the following criteria:

Yes **No** The activity is a systematic investigation: *an activity that involves a prospective plan which incorporates data collection, either quantitative or qualitative, and data analysis to answer a question*

Yes **No** The activity is designed to develop or contribute to generalizable knowledge: *designed to draw general conclusions (i.e., knowledge gained from a study may be applied to populations outside of the specific study population), inform policy, or generalize findings.*

2. **Are BOTH of the criteria met?**

Yes. The activity meets the definition of research in the Common Rule (OHRP).
Go on to the next section.

No. The activity does not meet the definition of research in the Common Rule.
Go to Section II – FDA Determination.

B. HUMAN SUBJECTS

1. Indicate whether the research meets the following criteria:

Yes **No** The research involves **living individuals**

Yes **No** The investigator will obtain data or information **about** those individuals

Will the investigator obtain **EITHER** of the following:

- Yes** **No** Data through **intervention or interaction** with the individuals.
Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject.

or

- Yes** **No** **Identifiable private** information.
Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

2. Are ALL of the criteria met?

- Yes.** The activity involves human subjects research according to the Common Rule.
- No.** The activity does not involve human subjects research according to the Common Rule.

Go on to the next Section

II. FDA DETERMINATION

A. TEST ARTICLE

1. The activity involves a **DRUG/BIOLOGIC** (a chemical or biological substance – other than food – that achieves its primary intended purposes through chemical action within or on the body or which is dependent upon being metabolized for the achievement of any of its primary intended purposes) **or MEDICAL DEVICE** (an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory) **that is one of the following:**

- The article is recognized in the official United States Pharmacopoeia, official Homoeopathic Pharmacopoeia of the United States, or official National Formulary, or any supplement to any of them
- The article is intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in humans or other animals
- The article is intended to affect the structure or any function of the body

2. **Are any of the criteria met?**

- Yes.** The activity involves an FDA test article. Go on to the next section.
- No.** The activity does not involve an FDA test article. Go to Section III – Determination.

B. RESEARCH

1. Indicate whether the activity meets the following criteria:

- The activity is an experiment that involves a test article and one or more human subjects (as defined below)
Note: For drugs, an experiment includes any use of a drug other than the use of a marketed (approved) drug in the course of medical practice. For medical devices, it is limited to activities being conducted to determine the safety or effectiveness of a device.
- Either of the following is true:
- The activity is subject to requirements for prior submission to the Food and Drug Administration; or
 - The activity is intended to be submitted later to, or held for inspection by, the FDA as part of an application for a research or marketing permit.

2. **Are BOTH of the criteria met?**

- Yes.** The activity meets the FDA definition of research. Go on to the next section.
- No.** The activity does not meet the FDA definition of research. Go to Section III (Determination).

C. HUMAN SUBJECTS

1. Indicate whether the research meets either of the following criteria:
 - The research involves one or more individuals who become a subject in research, either as a recipient of the test article or as a control. A subject may be either a healthy human or a patient.
 - For medical devices, an individual on whose specimen an investigational device is used
2. **Are either of the criteria met?**
 - Yes.** The research involves human subjects according to FDA regulations.
 - No.** The research does not involve human subjects according to FDA regulations.

III. DETERMINATION

1. As a reviewer, are you an investigator, consultant, collaborator, or study personnel on the proposed study; do you have a financial interest in the study; or do you have any other conflict of interest with this study?
 - Yes:** An alternative reviewer must conduct review. Do not perform the review!
 - No**
2. Based on the information in the protocol, I have made the following determination:
 - The activity is not human subjects research under either the Common Rule or FDA regulations.
 - The activity is human subjects research under the Common Rule but not under FDA regulations.
 - The activity is human subjects research under FDA regulations but not under the Common Rule.
 - The activity is human subjects research under both FDA regulations and the Common Rule.

Comments:

Thank you for your submission of Amendment/Modification materials. The Stony Brook University Office of Research Compliance reviewed your submission.

The original submission (analysis of publicly available PubMed and Web of Science data) received a determination of Not Human Subjects Research on January 10, 2018. With the addition of the amendment (inclusion of other publicly available data including clinicaltrials.gov and academic websites), the determination remains unchanged.

This activity does not use data obtained through intervention or interaction with subjects or identifiable private information. Therefore, it does not meet the definition of human subjects' research according to the Common Rule (45 CFR 46 subpart B). The proposal does not require approval by the IRB, or exemption by this office.

The Principal Investigator must obtain local departmental endorsement from an authorized representatives (i.e. Department Chair/Division Head/Dean, as applicable) and ensure that the activity complies with applicable regulations (i.e. FERPA, HIPAA, etc) prior to beginning this activity.

If the scope of this project changes, please resubmit to the Office of Research Compliance for review.

Reviewer:

**Jessica Lasebikan
IRB Assistant
6/8/2018**