

Andres Felipe Zuluaga, MD, MSc, MeH

https://www.researchgate.net/profile/Andres_Zuluaga4

Andres.zuluaga@udea.edu.co

Teléfono: (+57) 6042192383

Celular: (+57) 3014020291

Carrera 46ª 29Sur 20, Ap 303, Envigado, Antioquia

Identificación: 71768621

Educación

- Jul 2022 – presente* **Universidad Benito Juarez**
Doctorado en Administración Gerencial (DBA)
México
- Aug 2016 – Jul 2018* **Universidad de Antioquia**
MSc, eHealth
Medellín, Colombia
- Feb 2012 – May 2012* **University of Southern California**
Pharmacometrics
Los Angeles, United States
- Jan 2003 – Dec 2005* **Universidad de Antioquia**
MSc, Farmacología
Antioquia, Colombia
- Jun 1995 – Dec 2001* **Universidad de Antioquia**
MD, Médico y cirujano
Antioquia, Colombia

Experiencia como investigador

- Jan 2013 – present* **Investigador senior**
Minciencias
Medellín, Colombia

Experiencia como docente

- Jan 2014 – present* **Profesor titular (Full professor)**
Universidad de Antioquia
Medellín, Colombia
- Jan 2012 – 2014* **Profesor asociado**
Universidad de Antioquia
Medellín, Colombia
- Jan 2009 – 2012* **Profesor asistente**
Universidad de Antioquia
Medellín, Colombia

Statistics

<i>RG Score</i>	694
<i>Publications</i>	140
<i>Citations</i>	1231
<i>H-index</i>	17

Premios

<i>Mar 2018</i>	Premios AUIP a la Calidad del Postgrado en Iberoamérica: Alta Calidad de la Especialidad en Toxicología Clínica
<i>Oct 2010</i>	The Outstanding Young Persons of the World (TOYP), cámara de comercio Junior, Medellín, Colombia

Habilidades

Pharmacodynamics, Toxicological Analysis, Clinical Pharmacokinetics, PKPD Modeling, Drug Metabolism, Toxicity, Toxicokinetics, Pharmacokinetics, Pharmacokinetic Modeling, Antiinfective pharmacology, Pharmaceutical Development, Therapeutic Drug Monitoring, Pre-clinical Development, Bioavailability, Clinical Pharmacology, Animal Models, Active Pharmaceutical Ingredients, Microbiology, Pharmacovigilance, Antibiotics, Antimicrobials, Antibacterials, Medicines, Bacteria, MRSA, ADME TOX, Pathogens, Toxicology, Development Research, Medical Pharmacology, Drug Toxicity, Infectious Diseases, Staphylococcus Aureus, Safety Pharmacology, Drug Safety, Preclinical Toxicology, Pharmacology, Biotechnology, MIC, Acetylcholinesterase, Infection, Drug Discovery, Computational Biology, Clinical Pharmacy, Therapeutics, Vancomycin, Enterococcus, Ventilator Weaning, Work of Breathing, Muscle, Surface Electromyography

Lenguas Inglés, Español

Membresía científica International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT), full member
Asociación Colombiana de Infectología (ACIN), miembro de número

Proyectos de extensión – innovación, en curso o finalizados, y escritos como investigador principal en los últimos cinco años:

- Regalías 2020-presente. BPIN 2020000100152 "**Fortalecimiento de capacidades instaladas de Ciencia y Tecnología del Laboratorio Integrado de Medicina Especializada para atender problemáticas asociadas con agentes biológicos de alto riesgo para la salud humana, Medellín**" por valor total de \$18.268.472.531
- 2018-presente. Convenio específico de cooperación "**Programa de optimización terapéutica en individuos multi medicados con alto riesgo en salud (optimmas+) en la institución prestadora de salud universidad de Antioquia**", celebrado entre la universidad de antioquia y la ips universitaria. \$300.000.000
- 2015-2019. Creación del Laboratorio Integrado de Medicina Especializada, lanzamiento junio de 2019. Obra entre la Facultad de Medicina, IPS Universitaria y Fundación Universidad de Antioquia por \$3.500.000.000
- 2017. Optimización Terapéutica de Individuos Multimedicados con Alto Riesgo en Salud. Convenio Ruta N 0253-2017, \$998.200.000
- 2015. Fundación de CIEMTO. Centro de Información y Estudio de Medicamentos y Tóxicos. Este centro atendió más de 12 mil casos de pacientes intoxicados en Colombia. Su conformación quedó descrita en el siguiente artículo científico: <https://pubmed.ncbi.nlm.nih.gov/28406329/>
- Regalías 2014-2017. Desarrollo de soluciones en CTel para el asesoramiento especializado en farmacología y toxicología en Medellín, Antioquia, Occidente

Libro

Lina Maria Peña, Andres Felipe Zuluaga: *Protocolos de Manejo del Paciente Intoxicado*. 11/2017; Universidad de Antioquia., ISBN: 978-958-5413-63-4

Andres Felipe Zuluaga, Carlos A. Rodriguez, Sergio Parra, Lina M Peña: *Guías para el manejo del paciente intoxicado*. Cuarta 12/2009; ISBN: 978-958-44-4481-3

Capítulos

J. D. Otálvaro, A. F. Zuluaga, A. M. Hernández: *Modeling and simulation of ciprofloxacin pharmacokinetics: electric circuits approach*. VII Latin American Congress on Biomedical Engineering CLAIB 2016,

Bucaramanga, Santander, Colombia, October 26th -28th, 2016, 04/2017: pages 646-649; , ISBN: 978-981-10-4085-6, DOI:10.1007/978-981-10-4086-3_162

Isabel Cristina Muñoz, Alher Mauricio Hernández, Andrés Felipe Zuluaga: *Simulador para el entrenamiento y la evaluación del conocimiento sobre la sintomatología, diagnóstico y tratamiento del asma*. Actas XXXIII Congreso Anual de la Sociedad Española de Ingeniería Biomédica (CASEIB), Edited by Gema García Sáez, Enrique J. Gómez Aguilera, M. Elena Hernando Pérez, Patricia Sánchez González, 11/2015: pages 354-357; XXXIII Congreso Anual de la Sociedad Española de Ingeniería Biomédica (CASEIB), ISBN: 978-84-608-3354-3

Andres Felipe Zuluaga: *Interacciones medicamentosas y otras precauciones para considerar antes de prescribir antimicrobianos*. Enfermedades infecciosas de Homo sapiens, 1 edited by Omar Vesga M., Lázaro A. Vélez G., Eduardo Leiderman W., Ángela Restrepo M., 01/2015: chapter 30; Fondo editorial CIB., ISBN: 978-958-8843-15-5

Andres Felipe Zuluaga: *Aminoglucósidos*. Enfermedades infecciosas de Homo sapiens, 1 edited by Omar Vesga M., Lázaro A. Vélez G., Eduardo Leiderman W., Ángela Restrepo M., 01/2015: chapter 11; Fondo editorial CIB., ISBN: 978-958-8843-15-5

Andres F. Zuluaga: *Antisépticos urinarios*. Enfermedades infecciosas de Homo sapiens, 1 edited by Omar Vesga M., Lázaro A. Vélez G., Eduardo Leiderman W., Ángela Restrepo M., 01/2015: chapter 20; Fondo editorial CIB., ISBN: 978-958-8843-15-5

Andres Felipe Zuluaga: *Principios de manejo de la terapia antibiótica*. Texto de Medicina Interna. Aprendizaje Basado en Problemas, 1 edited by Paulo E. Archila, Juan M. Senior, 01/2013: chapter 146: pages 1721-1730; Distribuna Editorial Medica., ISBN: 978-958-8379-62-3

Publicaciones

- MA Montoya Giraldo, G Sepulveda-Barbosa, G Restrepo-Chavarriaga, AF Zuluaga. Reacción similar a la enfermedad del suero secundaria al uso de cefalotina: reporte de un caso. *Infectio* 2022; 26(4):465-467
- Enderson Murillo, Katherine Palacio-Rua, Carlos Afanador-Ayala, Juan Felipe García-Correa, Andrés F. Zuluaga. Validación de una nueva estrategia para la identificación de variantes de SARS-CoV-2 mediante secuenciación del gen espiga por Sanger. *Enfermedades Infecciosas y Microbiología Clínica* 2022. <https://doi.org/10.1016/j.eimc.2022.04.014>.
- Otalvaro JD, Hernandez B E AM, Rodriguez CA, Zuluaga AF. Population Pharmacokinetic Models of Anti-Tuberculosis Drugs in Patients: a Systematic Critical Review. *Therapeutic drug monitoring* 2021; 43 (1), 108-115
- KP Rua, JFG Correa, W Aguilar-Jiménez, CA Ayala, MT Rugeles, AF Zuluaga. Validación de una técnica de PCR dúplex usando el gen E y RNasa P para el diagnóstico de SARS-CoV-2. *Enfermedades Infecciosas y Microbiología Clínica* 2021.
- I Jimenez-Toro, CA Rodriguez, AF Zuluaga, JD Otalvaro, O Vesga. A new pharmacodynamic approach to study antibiotic combinations against enterococci in vivo: Application to ampicillin plus ceftriaxone. *Plos one* 15 (12), e0243365 2020
- MA Montoya-Giraldo, LF Díaz, UE Gómez, J Quintero, AF Zuluaga. Use of low-molecular-weight heparin in severe paraquat poisoning: a case report. *Journal of Medical Case Reports* 14 (1), 1-6
- Lina Peña-Acevedo, Andres F. Zuluaga, Alexander Aristizabal-Solis: *A counterfeit multivitamin product inducing severe bleeding disorders in humans*. *Clinical Toxicology* 2020; 7(3):398-403, DOI:10.1080/15563650.2019.1703999
- Buendía JA, Restrepo Chavarriaga GJ, Zuluaga AF. *Social and economic variables related with Paraquat self-poisoning: an ecological study*. *BMC Public Health*. 2020 Mar 27;20(1):404. doi: 10.1186/s12889-020-08510-1.

- AF Zuluaga, CA Rodríguez-Jaramillo, MA Montoya-Giraldo. Which is the pharmacodynamic target to calculate a rational dose against SARS-CoV-2? *Lat Am J Clin Sci Med Technol* 2020;2 (2), 35-37
- AF Zuluaga, MA Montoya-Giraldo, JA Buendía. Are the high smoking rates related to COVID-19 outbreaks? *Lat Am J Clin Sci Med Technol* 2020;2 (2), 25-27
- Guillermo Drelichman, Gilberto Castañeda-Hernandez, Cem Ar, Marta Dragosky, Ricardo Garcia, Howard Lee, Sergey Moiseev, Majid Naderi, Hanna Rosenbaum, Irena Žnidar, Andrés Felipe Zuluaga, Selena Freisens, Pramod K. Mistry: *The Road to Biosimilars in Rare Diseases – Ongoing Lessons from Gaucher Disease*. *American Journal of Hematology* 2019; 95(3), DOI:10.1002/ajh.25701
- Rodriguez CA, Zuluaga AF, Neely MN, Sierra Y, Morales-Gutierrez J, Zapata J, Zapata JD, Naranjo TW, Agudelo Y. *Nonparametric Population Pharmacokinetic Modeling of Isoniazid in Colombian Patients With Tuberculosis*. *Ther Drug Monit.* 2019 Dec;41(6) 719-725. doi:10.1097/ftd.0000000000000661. PMID: 31725693.
- Jefferson Antonio Buendía, José Armando Justinico Castro, Laura Joanna Tapia Vela, Denis Sinisterra, Juana Patricia Sánchez Villamil, Andrés Felipe Zuluaga Salazar: *Comparison of four pharmacological strategies aimed to prevent the lung inflammation and paraquat-induced alveolar damage*. *BMC Research Notes* 2019; 12(1), DOI:10.1186/s13104-019-4598-0
- Jefferson Antonio Buendía, Gabriel Jaime Restrepo Chavarriaga, Andrés F. Zuluaga: *Burden of paraquat poisoning in the department of Antioquia, Colombia*. *BMC pharmacology & toxicology* 2019; 20(1), DOI:10.1186/s40360-019-0291-0
- Ivone Jiménez Toro, Carlos A. Rodríguez, Andrés F. Zuluaga: *Eficacia de las combinaciones antimicrobianas para el tratamiento de infecciones enterocócicas: una revisión crítica*. *Revista chilena de infectología: organo oficial de la Sociedad Chilena de Infectología* 2019; 36(5):556-564., DOI:10.4067/S0716-10182019000500556
- María Alejandra Montoya-Giraldo, Rayner G. Bedoya, Alejandro Pulgarin, Camilo A. Serrano, Andres F. Zuluaga: *Artralgia inducida por levofloxacina: Reporte de un caso*. 2019; 23(4):405., DOI:10.22354/in.v23i4.816
- Jessica Morales-Gutierrez, Sebastián Díaz-Cortés, María A. Montoya-Giraldo, Andres F. Zuluaga: *Toxicity induced by multiple high doses of vitamin B 12 during pernicious anemia treatment: a case report*. *Clin Toxicol (Phila)*. 2020 Feb;58(2):129-131. doi: 10.1080/15563650.2019.1606432.
- Rodrigo Ochoa, Carlos A. Rodriguez, Andres F. Zuluaga: *Prediction of Ligands Binding Acetylcholinesterase with Potential Antidotal Activity: A Virtual Screening Approach*. *Molecular Informatics* 2019;, DOI:10.1002/minf.201800126
- Maria Agudelo, Carlos A. Rodriguez, Andres F. Zuluaga, Omar Vesga: *Nontherapeutic equivalence of a generic product of imipenem-cilastatin is caused more by chemical instability of the active pharmaceutical ingredient (imipenem) than by its substandard amount of cilastatin*. *PLoS ONE* 02/2019; 14(2):e0211096., DOI:10.1371/journal.pone.0211096
- María Alejandra Montoya-Giraldo, Dayana Vanessa Montoya, David Alexander Atehortúa, Jefferson Antonio Buendía, Andrés Felipe Zuluaga: *Miclonías inducidas por salbutamol*. *Biomédica: revista del Instituto Nacional de Salud* 09/2018; 38(3):303-307., DOI:10.7705/biomedica.v38i3.3813
- Andrés F García J, Rayner G Bedoya H, María A Montoya G, Carlos A Rodríguez, Andrés F Zuluaga: *¿Son sinónimos e intercambiables los términos veneno y ponzoña?*. *Salud UIS* 06/2018; 50(2):174-175., DOI:10.18273/revsal.v50n2-2018011
- Laura M. Rendon, Andrés F. Zuluaga, Carlos A. Rodriguez, Maria Agudelo, Omar Vesga: *Obtaining a murine model of streptozotocin-induced diabetes useful in the pharmacodynamic evaluation of regular insulin*. *Vitae* 12/2017; 24(2):11-18., DOI:10.17533/udea.vitae.v24n2(2)a02
- Andrés F. García J., Rayner G. Bedoya H., María A. Montoya G., Carlos A. Rodríguez, Andrés F. Zuluaga: *Caracterización de los casos de accidente ofídico atendidos por el Centro de Información y Estudio*

de Medicamentos y Tóxicos (CIEMTO) de Medellín, Colombia durante 2016. Salud UIS 2017; 49(3):450-457., DOI:10.18273/revsal.v49n3-2017003

- Maria Bernarda Salazar Sánchez, Alher Mauricio Hernández Valdivieso, Miguel Ángel Mañanas Villanueva, Andrés Felipe Zuluaga Salazar: *Potential clinical application of surface electromyography as indicator of neuromuscular recovery during weaning tests after organophosphate poisoning.* Revista Brasileira de Terapia Intensiva 2017; 29(2):253-258., DOI:10.5935/0103-507X.20170035
- Andres Felipe Zuluaga, Carlos A. Rodriguez: *La ruta abreviada de comparabilidad colombiana para medicamentos biotecnológicos: ¿tendencia global o caso único?.* Revista Panamericana de Salud Pública 05/2017; 41:e94.
- Andres Felipe Zuluaga, Carlos A. Rodriguez, Sara Lastra-Bello, Lina M. Peña- Acevedo, Maria A. Montoya-Giraldo: *CIEMTO: the new drug and poison research and information center in Medellín, Colombia.* Clinical Toxicology 04/2017; 55(7)., DOI:10.1080/15563650.2017.1312003
- Carlos A. Rodriguez, Maria Agudelo, Andres F. Zuluaga, Omar Vesga: *In vivo pharmacodynamics of piperacillin/tazobactam: implications for antimicrobial efficacy and resistance suppression with innovator and generic products.* International journal of antimicrobial agents 02/2017; 49(2):189-197., DOI:10.1016/j.ijantimicag.2016.10.011
- Tonny W. Naranjo, Damaris Lopera, Andrés Felipe Zuluaga, Luz Elena Cano: *Immunomodulatory activity of itraconazole in lung.* Tropical Journal of Pharmaceutical Research 12/2016; 15(12):2603-2609., DOI:10.4314/tjpr.v15i12.10
- Javier M. Gonzalez, Carlos A. Rodriguez, Maria Agudelo, Andres F. Zuluaga, Omar Vesga: *Antifungal pharmacodynamics: Latin America's perspective.* Brazilian Journal of Infectious Diseases 11/2016; 21(1):79-87., DOI:10.1016/j.bjid.2016.09.009
- Maria G Garcia-Orjuela, Lineth Alarcon-Franco, Juan C Sanchez-Fernandez, Yuli Agudelo, Andres F Zuluaga: *Dependence to legally prescribed opioid analgesics in a university hospital in Medellin-Colombia: An observational study.* BMC pharmacology & toxicology 09/2016; 17(1):42., DOI:10.1186/s40360-016-0087-4
- Rodrigo Ochoa, Carlos A. Rodríguez, Andres F. Zuluaga: *Perspectives for the structure-based design of acetylcholinesterase reactivators.* Journal of Molecular Graphics and Modelling 07/2016; 68:176-183., DOI:10.1016/j.jmgm.2016.07.002
- Carlos A. Rodriguez, Maria Agudelo, Yudy A. Aguilar, Andres F. Zuluaga, Omar Vesga: *Impact on Bacterial Resistance of Therapeutically Nonequivalent Generics: The Case of Piperacillin-Tazobactam.* PLoS ONE 05/2016; 11(5):e0155806., DOI:10.1371/journal.pone.0155806
- Javier M Gonzalez, Carlos A Rodriguez, Andres F Zuluaga, Maria Agudelo, Omar Vesga: *Demonstration of Therapeutic Equivalence of Fluconazole Generic Products in the Neutropenic Mouse Model of Disseminated Candidiasis.* PLoS ONE 11/2015; 10(11):e0141872., DOI:10.1371/journal.pone.0141872
- Andres Felipe Zuluaga: *Pharmacodynamics of nine generic products of amikacin compared with the innovator in the neutropenic mouse thigh infection model.* BMC Research Notes 10/2015; 8(1):546., DOI:10.1186/s13104-015-1507-z
- Andres F Zuluaga, Beatriz E Salazar, Maria Agudelo, Carlos A Rodriguez, Omar Vesga: *A strain-independent method to induce progressive and lethal pneumococcal pneumonia in neutropenic mice.* Journal of Biomedical Science 03/2015; 22(1-1):24., DOI:10.1186/s12929-015-0124-4
- Maria Agudelo, Carlos A. Rodriguez, Andres F. Zuluaga, Omar Vesga: *Relevance of various animal models of human infections to establish therapeutic equivalence of a generic product of piperacillin/tazobactam.* International Journal of Antimicrobial Agents 11/2014; 45(2)., DOI:10.1016/j.ijantimicag.2014.10.014
- Carlos A. Rodriguez, Maria Agudelo, Javier M. Gonzalez, Omar Vesga, Andres F. Zuluaga: *An Optimized Mouse Thigh Infection Model for Enterococci and Its Impact on Antimicrobial*

Pharmacodynamics. Antimicrobial Agents and Chemotherapy 10/2014; 59(1)., DOI:10.1128/AAC.02352-13

- Carlos A Rodriguez, Maria Agudelo, Andres F Zuluaga, Omar Vesga: *Impact on Resistance of the Use of Therapeutically Equivalent Generics: the Case of Ciprofloxacin*. *Antimicrobial Agents and Chemotherapy* 10/2014; 59(1)., DOI:10.1128/AAC.03633-14
- Jefferson Antonio Buendía, Andres Felipe Zuluaga: *Physicians' insight about adverse drug reaction to frequently used medication groups in Bogota (Colombia)*. *Biomédica: revista del Instituto Nacional de Salud* 09/2014; 34(3)., DOI:10.7705/biomedica.v34i3.2181
- Andres F Zuluaga, Carlos A Rodriguez, Maria Agudelo, Omar Vesga: *About the Validation of Animal Models to Study the Pharmacodynamics of Generic Antimicrobials*. *Clinical Infectious Diseases* 04/2014; 59(3)., DOI:10.1093/cid/ciu306
- Ruber Hernando Arias-Correa, Diana Uribe-López, Carlos Andrés Rodríguez, Andrés Felipe Zuluaga: *History of alcohol withdrawal syndrome and its association with delirium tremens on later hospitalizations: retrospective cohort study*. 04/2014; 27(1):17-23.
- Kelly Payares, Maria Victoria Morales, Andrés Zuluaga: *conocimientos básicos sobre la toxina botulínica para una utilización terapéutica segura*. *Revista Colombiana de Medicina Física y Rehabilitación*, 2013;23(1), p. 106-118.
- Jefferson Antonio Buendía, Andrés Felipe Zuluaga Salazar, Claudia Patricia Vacca González: *Uso del Registro de Solicitudes de Medicamentos no Incluidos en el Listado de Medicamentos Esenciales como Nueva Fuente de Información en los Sistemas Nacionales de Farmacovigilancia*. *Value in Health* 12/2013; 2(3):357., DOI:10.1016/j.vhri.2013.10.005
- Carlos A Rodriguez, Maria Agudelo, Andres F Zuluaga, Omar Vesga: *Generic Vancomycin Enriches Resistant Subpopulations of Staphylococcus aureus after Exposure in a Neutropenic Mouse Thigh Infection Model*. *Antimicrobial Agents and Chemotherapy* 11/2011; 56(1):243-7., DOI:10.1128/AAC.05129-11
- Andres Felipe Zuluaga: *Medicamentos biológicos y biotecnológicos: algunas reflexiones sobre la biosimilaridad*. *Medicina Postgrado* 2012.
- Omar Vesga, Maria Agudelo, Beatriz E Salazar, Carlos A Rodriguez, Andres F Zuluaga: *Generic Vancomycin Products Fail In Vivo despite Being Pharmaceutical Equivalents of the Innovator*. *Antimicrobial Agents and Chemotherapy* 08/2010; 54(8):3271-9., DOI:10.1128/AAC.01044-09
- Carlos A Rodriguez, Maria Agudelo, Andres F Zuluaga, Omar Vesga: *In vitro and in vivo comparison of the anti-staphylococcal efficacy of generic products and the innovator of oxacillin*. *BMC Infectious Diseases* 06/2010; 10(1):153., DOI:10.1186/1471-2334-10-153
- Andres F Zuluaga, Maria Agudelo, John J Cardeño, Carlos A Rodriguez, Omar Vesga: *Determination of Therapeutic Equivalence of Generic Products of Gentamicin in the Neutropenic Mouse Thigh Infection Model*. *PLoS ONE* 05/2010; 5(5):e10744., DOI:10.1371/journal.pone.0010744
- Carlos A Rodriguez, Maria Agudelo, Juan C Cataño, Andres F Zuluaga, Omar Vesga: *Potential therapeutic failure of generic vancomycin in a liver transplant patient with MRSA peritonitis and bacteremia*. *The Journal of infection* 09/2009; 59(4):277-80., DOI:10.1016/j.jinf.2009.08.005
- Andres F Zuluaga, Maria Agudelo, Carlos A Rodriguez, Omar Vesga: *Application of microbiological assay to determine pharmaceutical equivalence of generic intravenous antibiotics*. *BMC Clinical Pharmacology* 01/2009; 9(1):1., DOI:10.1186/1472-6904-9-1
- Jenny Cuesta, Lina Peña, Andrés F Zuluaga: *¿Es necesaria la profilaxis antibiótica en la ofidiotoxicosis?*. *Infectio* 03/2008; 12(1):280-289.
- Andres F Zuluaga, Beatriz E Salazar, Carlos A Rodriguez, Ana X Zapata, Maria Agudelo, Omar Vesga: *Neutropenia induced in outbred mice by a simplified low-dose cyclophosphamide regimen: Characterization and applicability to diverse experimental models of infectious diseases*. *BMC Infectious Diseases* 03/2006; 6(1):55., DOI:10.1186/1471-2334-6-55

- Andres F Zuluaga, Wilson Galvis, Juan G Saldarriaga, Maria Agudelo, Beatriz E Salazar, Omar Vesga: *Etiologic Diagnosis of Chronic Osteomyelitis: A Prospective Study*. Archives of Internal Medicine 01 / 2006; 166(1):95-100., DOI:10.1001/archinte.166.1.95
- Andrés F Zuluaga, Omar Vesga: *Aportes del modelo en ratón neutropénico de infección del muslo al conocimiento sobre la farmacología de antibióticos*. Infectio 05 / 2005; 9(2):79-90.
- Andrea V Restrepo, Beatriz E Salazar, María Agudelo, Carlos A Rodriguez, Andres F Zuluaga, Omar Vesga: *Optimization of culture conditions to obtain maximal growth of penicillin-resistant Streptococcus pneumoniae*. BMC Microbiology 02 / 2005; 5(1):34., DOI:10.1186 / 1471-2180-5-34
- Salazar Beatriz, Zuluaga Andrés, Rodriguez Carlos, Agudelo María, Vesga Omar: *Determinación de la profundidad y duración de la neutropenia inducida por ciclofosfamida en ratones hembras MPF de la cepa Udea: ICR(cd-1)*. Iatreia 02 / 2004; 17(2-S).
- Zuluaga Andrés, Salazar Beatriz, Rodriguez Carlos, Agudelo María, Vesga Omar: *Ausencia de equivalencia terapéutica de 7 productos genéricos de lincomicina comparados con el compuesto original*. Iatreia 02 / 2004; 17(2-S).
- C.A. Rodriguez, A.F. Zuluaga, B.E. Salazar, M. Agudelo, O. Vesga: *In vivo determination of bactericidal activity of 7 generic products of ceftriaxone compared with the innovator using the neutropenic mouse thigh infection model*. Infectio 01 / 2004; 8.
- M. Agudelo, A.F. Zuluaga, C.A. Rodriguez, B.E. Salazar, O. Vesga: *In vivo determination of bactericidal activity of 2 generic products of ceftazidime against two species of Gram-negative bacilli compared with the innovator using the neutropenic mouse thigh infection model*. Infectio 01 / 2004; 8.
- Andrés F. Zuluaga, Beatriz E. Salazar, Galvis Wilson, Sergio A. Loaiza, Agudelo María, Vesga Ómar: *Fundación del primer bioterio MPF funcional de Colombia Foundation of a functional murine pathogen free animal facility in Colombia*. Iatreia 02 / 2003; 16(2) :115-131.
- Andrés F Zuluaga, Wilson Galvis, Fabián Jaimes, Omar Vesga: *Lack of microbiological concordance between bone and non-bone specimens in chronic osteomyelitis: An observational study*. BMC Infectious Diseases 06 / 2002; 2(1):8., DOI:10.1186 / 1471-2334-2-8

Conferencias en eventos

Ivone Jimenez-Toro, Carlos A. Rodriguez, Julián David Otálvaro, Omar Vesga, Andres Felipe Zuluaga: *Pharmacodynamics of ampicillin (AMP) plus ceftriaxone (CRO) in the optimized neutropenic mouse thigh infection model for Enterococci*. ASM2018; 06 / 2018, DOI:10.13140 / RG.2.2.26516.60802

Carlos A. Rodriguez, Maria Agudelo, Andres Felipe Zuluaga, Omar Vesga: *A-479 Therapeutic Nonequivalent Generic (TNEG) Piperacillin-Tazobactam (TZP) Requires Longer Exposure In Vivo than the Innovator (INN) to Suppress Resistance in Escherichia coli*. ICAAC / ICC 2015; 09 / 2015, DOI:10.13140 / RG.2.2.11417.11361

Andres Felipe Zuluaga, Carlos A. Rodriguez, Maria Agudelo, Omar Vesga: *Pharmacodynamics (PD) of Tigecycline (TIG) in the Optimized Mouse Thigh Infection Model for Enterococcus spp*. ICAAC / ICC2015; 09 / 2015, DOI:10.13140 / RG.2.2.18128.00006

Omar Vesga, Maria Agudelo, Carlos A. Rodriguez, Andres Felipe Zuluaga: *Large Differences in the In Vivo Post-Antibiotic Effect (PAE) Against Staphylococcus aureus of Two FDA- Licensed Generics of Vancomycin (VAN): a Tribute to Bill Craig*. ICAAC / ICC2015; 09 / 2015, DOI:10.13140 / RG.2.2.21483.44325

Maria Agudelo, Carlos A Rodriguez, Javier M Gonzalez, Andres F Zuluaga, Omar Vesga: *A-1323 Some Generic of Vancomycin Prescribed in the United States Fail in vivo Despite Pharmaceutical Equivalence (PE) and Bioequivalence (BE) Demonstrated by the FDA*. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.; 09 / 2014, DOI:10.13140 / 2.1.2756.6083

- Andres F Zuluaga, Carlos Rodriguez, Maria Agudelo, Omar Vesga: *Impact of in vivo Growth of Enterococci on the Pharmacodynamics (PD) of Linezolid (LZD) using the Neutropenic Mouse Thigh Infection Model (NMTIM)*. A-039. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.; 09/2014, DOI:10.13140/2.1.3436.9921
- Carlos A Rodriguez, Maria Agudelo, Andres F Zuluaga, Omar Vesga: *A-1347b In Vivo Pharmacodynamics of Piperacillin (PIP)-Tazobactam (TAZ) against Isogenic Escherichia coli Strains: PIP fT >MIC vs. TAZ fT >Threshold*. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.; 09/2014, DOI:10.13140/2.1.2388.4165
- Andres F Zuluaga, Carlos Rodriguez, Maria Agudelo, Omar Vesga: *THERAPEUTIC EQUIVALENCE OF AMPICILLIN (AMP) AND SULBACTAM-AMPICILLIN (SAM) AGAINST ENTEROCOCCI IN THE NEUTROPENIC MOUSE THIGH INFECTION MODEL (NMTIM)*. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, D.C.; 09/2014, DOI:10.13140/2.1.1339.8409
- Andres Felipe Zuluaga: *In vivo Pharmacodynamics of Moxifloxacin (MOX) against Enterococci*. 4th ASM Conference on Enterococci, Cartagena, Colombia; 03/2014
- Carlos andres rodriguez, Andres Felipe Zuluaga, Maria Agudelo, Omar Vesga: *Generic Piperacillin-Tazobactam (TZP) Enriches Resistant Subpopulations of Escherichia coli after Exposure in the Neutropenic Mouse Thigh Infection Model (NMTIM)*. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Denver; 09/2013, DOI:10.13140/2.1.4663.8406
- Andrés Felipe Zuluaga: *in vivo Pharmacodynamics (PD) of Daptomycin (DAP) against Stationary-Phase versus Actively Growing Enterococci*. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Denver; 09/2013, DOI:10.13140/2.1.2710.0485
- Andrés Felipe Zuluaga: *Redefining the Pharmacodynamics (PD) of Three Anti-Enteroccal Drugs in the Optimized Neutropenic Mouse Thigh Infection Model*. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Denver; 09/2013, DOI:10.13140/2.1.2185.7608
- J A Pérez, J M González, Rodriguez Ca, J J Cardeño, O Vesga, Andres F. Zuluaga: *A-1685 In Vivo Pharmacodynamics of Ampicillin-Sulbactam (ASB) and Vancomycin (VAN) Alone and in Combination with Gentamicin (GNT) Against Enterococcus faecium in the Neutropenic Mouse Thigh Infection Model*. 51st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL; 09/2011, DOI:10.13140/2.1.1011.7124
- Andres F. Zuluaga, Maria Agudelo, Jefferson A Perez, Javier M. Gonzalez, Carlos A. Rodriguez, Omar Vesga: *B-056 Successful Models of Thigh Infection in Neutropenic Mice by Vancomycin-Susceptible (VSE) and -Resistant Enterococci (VRE)*. 51st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL; 09/2011, DOI:10.13140/2.1.3870.7200
- Andres Zuluaga, Damaris Lopera, Luz Cano, Tonny Naranjo: *Immunomodulatory Effect of the Antifungal Itraconazole*. Infectious Diseases Society of America 2008 Annual Meeting; 10/2008
- Andres Zuluaga, Damaris Lopera, J Duque, L Rosas, Luz Cano, Tonny Naranjo: *Pulmonary Fibrosis due to Paracoccidioidomycosis (PCM) may be Reduced by Pentoxifylline (PTX) and Itraconazole (ITZ) Combined Therapy*. Infectious Diseases Society of America 2008 Annual Meeting; 10/2008, DOI:10.13140/2.1.3432.2887
- Jenny D. Cuesta, Alejandra M. Restrepo, Elizabeth Vanegas, Lina Pena, Carlos A. Rodriguez, Andres F. Zuluaga: *Lack of Benefit of Early Antimicrobial Treatment in Bothropic Snakebite: Historical Cohorts Study*. Infectious Diseases Society of America 2008 Annual Meeting; 10/2008, DOI:10.13140/2.1.1335.1365
- Andres F Zuluaga, Maria Agudelo, Carlos A Rodriguez, O Vesga: *In Vivo Efficacy of 4 Generic Products (GP) of Clindamycin (CLI) Compared with the Original Compound (OC) in the Neutropenic Mouse Thigh*

Infection Model (NMTIM). 47th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL; 09/2007, DOI:10.13140/2.1.3365.4088

Carlos A Rodríguez, María Agudelo, Noiver Graciano, Andres F Zuluaga, Omar Vesga: *Generic Vancomycin (VAN) Enriches Resistant Subpopulations of Staphylococcus aureus after Treatment in the Neutropenic Mouse Thigh Infection Model (NMTIM)*. 46th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco; 09/2006, DOI:10.13140/2.1.1006.1126

Andres F Zuluaga, Maria Agudelo, Carlos A Rodriguez, Omar Vesga: *Therapeutic Equivalence (TE) with the Original Compound of 3 Generic Products (GP) of Ampicillin-Sulbactam (AS) in the Neutropenic Mouse Thigh Infection Model (NMTIM)*. 46th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA; 09/2006, DOI:10.13140/2.1.3090.9763

Beatriz E Salazar, Maria Agudelo, Carlos A Rodriguez, Andrea Restrepo, Andres F Zuluaga, Omar Vesga: *Development of a Reproducible Model of Murine Pneumonia with Diverse Strains of Penicillin-Resistant Streptococcus pneumoniae (PRSP)*. 45th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 12/2005, DOI:10.13140/2.1.2566.6886

Andres F. Zuluaga, Beatriz E. Salazar, Carlos A. Rodriguez, Ximena Zapata, Maria Agudelo, Omar Vesga: *In Vivo Bactericidal Efficacy of 19 Generic Products (GP) of Gentamicin (GNT) Compared with the Original Compound (OC) in the Neutropenic Murine Thigh Infection Model (NMTIM)*. 45th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 12/2005, DOI:10.13140/2.1.2435.6160

Andres F Zuluaga, Carlos A Rodriguez, Beatriz E Salazar, Natalia Rivera, Marcial Tapias, Maria Agudelo, Omar Vesga: *Therapeutic Equivalence (TE) of 5 Generic Products (GP) of Cefotaxime (TAX) Compared with the Original Compound (OC) in the Neutropenic Mouse Thigh Infection Model (NMTIM) Presentation # A-436*. 45th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 12/2005, DOI:10.13140/2.1.1780.2568

Andres F. Zuluaga, Beatriz E. Salazar, Wilson Galvis, Maria Agudelo, Omar Vesga: *In Vivo Bactericidal Efficacy of 10 Generic Products (GP) of Amikacin (AMK) Compared with the Original Compound (OC) in the Neutropenic Murine Thigh Infection Model (NMTIM)*. 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 11/2004, DOI:10.13140/2.1.2173.4721

Andres Felipe Zuluaga, Beatriz E. Salazar, Sergio A. Loaiza, Maria Agudelo, Omar Vesga: *Therapeutic equivalence (TE) with the original compound (OC) of 8 genetic products (GP) of Ampicillin (AMP) determined in the neutropenic murine thigh infection model*. 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 11/2004, DOI:10.13140/2.1.4991.5207

Beatriz E. Salazar, Andres Felipe Zuluaga, Carlos A. Rodriguez, Maria Agudelo, Omar Vesga: *Experimental Comparison of 7 Generic Products (GP) of Lincomycin (LIN) with the Original Compound (OC) in Terms of Concentration of Active Principle (CAP), in vitro Activity and in vivo Efficacy, using the Neutropenic Murine Thigh Infection Model (NMTIM)*. 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 11/2004, DOI:10.13140/2.1.3287.5840

Maria Agudelo, Andres F. Zuluaga, Carlos A. Rodriguez, Beatriz E. Salazar, Omar Vesga: *Determination of Therapeutic Equivalence (TE) for 5 Generic Products (GP) of Penicillin G (PEN) Using the Neutropenic Murine Thigh Infection Model (NMTIM)*. 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 11/2004, DOI:10.13140/2.1.3156.5124

Carlos A Rodriguez, Andres F Zuluaga, Beatriz E Salazar, Maria Agudelo, Omar Vesga: *Experimental Comparison of 11 Generic Products (GP) of Oxacillin (OXA) with the Original Compound (OC) in Terms of Concentration of Active Principle (CAP), in Vitro Activity and in Vivo Efficacy, Using the Neutropenic*

Murine Thigh Infection Model (NMTIM).. 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC; 11 / 2004, DOI:10.13140 / 2.1.1059.3603

Andres F Zuluaga, W Galvis, Jg Saldarriaga, Be Salazar, O Vesga: *SPECIMENS OTHER THAN BONE ARE NOT ACCEPTABLE FOR MICROBIOLOGICAL DIAGNOSIS OF CHRONIC OSTEOMYELITIS. PROSPECTIVE STUDY WITH 100 PATIENTS*. 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL; 09 / 2003, DOI:10.13140 / 2.1.4106.7847

Software registrado en Colombia

- Easycon
- Optimmas+