

Fecha del CVA

18/04/2023

## Parte A. DATOS PERSONALES

Nombre *	Angel		
Apellidos *	Lanas Arbeloa		
Sexo *	Hombre	Fecha de Nacimiento *	03/08/1956
DNI/NIE/Pasaporte *	15808649	Teléfono *	(34) 976765786
URL Web			
Dirección Email	alanas@unizar.es		
Identificador científico	Open Researcher and Contributor ID (ORCID) *	0000-0001-5932-2889	
	Researcher ID		
	Scopus Author ID	7007589890	

\* Obligatorio

### A.1. Situación profesional actual

Puesto	Catedrático de Universidad		
Fecha inicio	2012		
Organismo / Institución	Universidad de Zaragoza		
Departamento / Centro	Medicina, Psiquiatría y Dermatología / Facultad de Medicina		
País		Teléfono	
Palabras clave			

### A.3. Formación académica

Grado/Master/Tesis	Universidad / País	Año
Medical Doctor	Universidad de Zaragoza	1984
Licenciado en Medicina y Cirugía	Universidad de Zaragoza	1979

### A.4. Indicadores generales de calidad de la producción científica

Dr. Lanas is or has been member of the Advisory Board of several high-impact factor Journals of the specialty, International Associate Editor of The American Journal of Gastroenterology and Chief Editor of Frontiers in Medicine-Gastroenterology. He has also been invited as Visiting Professor to different North- and South-American, Asian and European Universities. Over the years, he has held leadership positions and received numerous awards for his contributions. He was president of the Spanish Association of Gastroenterology and president of the Foundation of the same society. Dr. Lanas has published in PubMed more than 600 articles, of which at least 75 % were in first quartile journals. According to the ISI Web of Knowledge, the total citations of his articles are 24649 and his h-Index 67. In addition, he has 6 six-year research period and one of transfer.

## Parte B. RESUMEN LIBRE DEL CURRÍCULUM

Angel Lanas is Professor of Medicine at the University of Zaragoza, Vice-Dean for Research Affairs at the Medical School of Medicine University of Zaragoza, Head of the Digestive Diseases Service at the University Hospital "Lozano Blesa" of Zaragoza, and Scientific Director of the Aragón Health Research Institute. Dr. Lanas was visiting professor in the Department of Gastroenterology at the University of Alabama in Birmingham, Alabama, USA since November 1989 to Dicember1991. Since then, he has worked in the form and leading of a multidisciplinary research team made up of both clinical and basic researchers. The group has its own stable research staff, is nationally and internationally recognized and is part of the CIBERehd, and is a consolidated reference group recognized by the Government of Aragon. In his scientific work highlights the collaboration with two Institutes of the Unviersity of Zaragoza, the Institute of Nanoscience and the Institute of Biocomputing; nationally, with multiple groups of

different universities; internationally with the group of Professor Paola Patrignani of L'Annuncio University in Italy in the field of colorectal cancer chemoprevention; with Prof. Colin Baigen of Oxford University, Dr. Kuipers of Erasmus University in Holland, with Prof. Carmelo Scarpignato of Parma University in Italy; or with Prof. Ingvar Bjarnason of King's College Hospital in London in issues related to NSAIDS or ASA. More recently, Dr. Lanas has been appointed Honorary Professor of the Chinese University of Hong Kong and collaborates with Prof Francis JL Chan.

Public and private funding for the group has been constant since 1991. Prof. Angel Lanas is the most quoted teacher of the University of Zaragoza.

## Parte C. MÉRITOS MÁS RELEVANTES

### C.1. Publicaciones

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

- 1 **Artículo científico.** Sonia Hermoso Durán; María José Domper Arnal; Pilar Roncalés Lázaro; et al; Olga Abián Franco; Ángel Lanas Arbeloa. (7/9). 2023. Bowel Preparation for Colonoscopy Changes Serum Composition as Detected by Thermal Liquid Biopsy and Fluorescence Spectroscopy. *Cancers. Cancers.* 15-7, pp.1952. <https://doi.org/10.3390/cancers15071952>
- 2 **Artículo científico.** Hijos-Mallada, Gonzalo; Saura, Nuria; Lue, Alberto; et al; Sostres, Carlos; Lanas, Angel. (10/11). 2023. A Point-of-Care Faecal Test Combining Four Biomarkers Allows Avoidance of Normal Colonoscopies and Prioritizes Symptomatic Patients with a High Risk of Colorectal Cancer. *CANCERS.* 15. <https://doi.org/10.3390/cancers15030721>
- 3 **Artículo científico.** Arino-Perez, Ines; Martinez-Dominguez, Samuel J.; Enrique Alfaro Almajano; Carrera-Lasfuentes, Patricia; Lanas, Angel. (5/5). 2023. Mistakes in the diagnosis and treatment of Helicobacter pylori infection in daily clinical practice. *HELICOBACTER.* ISSN 1083-4389. <https://doi.org/10.1111/hel.12957>
- 4 **Artículo científico.** Lanas, A.; García-Rayado, G.(1/2). 2022. Editorial: Insights in gastroenterology: 2021. *Frontiers in Medicine* (Lausanne). 9. <https://doi.org/10.3389/fmed.2022.1008157>
- 5 **Artículo científico.** Domper Arnal MJ; Hijos-Mallada G; Lanas A. (3/3). 2022. Gastrointestinal and cardiovascular adverse events associated with NSAIDs. *Expert Opin Drug Saf.Expert Opin Drug Saf..* 21-3, pp.373-384. <https://doi.org/10.1080/14740338.2021.1965988>
- 6 **Artículo científico.** Gonzalez, Andres; Casado, Javier; Gunduz, Miyase Goezde; et al; Lanas, Angel; Lanas, Angel. (10/10). 2022. 1,4-Dihydropyridine as a Promising Scaffold for Novel Antimicrobials Against Helicobacter pylori. *FRONTIERS IN MICROBIOLOGY.* 13. WOS (1) <https://doi.org/10.3389/fmicb.2022.874709>
- 7 **Artículo científico.** Nyssen, Olga P.; Vaira, Dino; Aisa, Angeles Perez; et al; European Registry Helicobacter Pyl; Lanas, Angel. (10/52). 2022. Empirical Second-Line Therapy in 5000 Patients of the European Registry on Helicobacter pylori Management (Hp-EuReg). *CLINICAL GASTROENTEROLOGY AND HEPATOLOGY.* 20. ISSN 1542-3565. WOS (3) <https://doi.org/10.1016/j.cgh.2021.12.025>
- 8 **Artículo científico.** Alfaro, Enrique; Martinez-Dominguez, Samuel J.; Laredo, Viviana; Lanas, Angel; Sostres, Carlos. (4/5). 2022. Evaluation of Different Strategies to Improve the Management of Helicobacter pylori Infection at the Primary Care Level: Training Sessions Increase Prescription Appropriateness of Treatment Regimens. *ANTIBIOTICS-BASEL.* 11. ISSN 2079-6382. <https://doi.org/10.3390/antibiotics11121746>
- 9 **Artículo científico.** Arino Perez, Ines; Martinez-Dominguez, Samuel J.; Alfaro Almajano, Enrique; Carrera-Lasfuentes, Patricia; Lanas, Angel. (5/5). 2022. Management of Helicobacter pylori Infection and Effectiveness Rates in Daily Clinical Practice in Spain: 2010-2019. *ANTIBIOTICS-BASEL.* 11. ISSN 2079-6382. WOS (3) <https://doi.org/10.3390/antibiotics11050698>

- 10 Artículo científico.** Malfertheiner, Peter; Megraud, Francis; Rokkas, Theodore; et al; European Helicobacter Microbiota S; European Helicobacter Microbiota S. (16/16). 2022. Management of Helicobacter pylori infection: the Maastricht VI/Florence consensus report. GUT. 71. ISSN 0017-5749. WOS (55) <https://doi.org/10.1136/gutjnl-2022-327745>
- 11 Artículo científico.** McMahon SB; Dargan P; Lanas A; Wiffen P. (3/4). 2021. The burden of musculoskeletal pain and the role of topical non-steroidal anti-inflammatory drugs (NSAIDs) in its treatment. Ten underpinning statements from a global pain faculty. Curr Med Res Opin.37-2, pp.287-292. <https://doi.org/10.1080/03007995.2020.1847718>
- 12 Artículo científico.** Hijos-Mallada, Gonzalo; Velamazan, Raul; Martí, Raul; et al; Sostres, Carlos; Lanas, Angel. (8/9). 2021. A Patient Self-Made Point-of-Care Fecal Test Improves Diagnostic Accuracy Compared with Fecal Calprotectin Alone in Inflammatory Bowel Disease Patients. DIAGNOSTICS. 11. <https://doi.org/10.3390/diagnostics11122323>
- 13 Artículo científico.** Aznar-Gimeno, Rocio; Carrera-Lasfuentes, Patricia; del-Hoyo-Alonso, Rafael; Doblare, Manuel; Lanas, Angel. (5/5). 2021. Evidence-Based Selection on the Appropriate FIT Cut-Off Point in CRC Screening Programs in the COVID Pandemic. FRONTIERS IN MEDICINE. 8. WOS (3) <https://doi.org/10.3389/fmed.2021.712040>
- 14 Artículo científico.** Domper Arnal, M. J.; Garcia Mateo, S.; Hermoso-Duran, S.; Abad, D.; Carrera-Lasfuentes, P.; Velazquez-Campoy, A.; Abian Franco, O.; Lanas, A.(8/8). 2021. False-positive fecal immunochemical test results in colorectal cancer screening and gastrointestinal drug use. INTERNATIONAL JOURNAL OF COLORECTAL DISEASE. 36. ISSN 0179-1958. WOS (3) <https://doi.org/10.1007/s00384-021-03947-1>
- 15 Artículo científico.** Gargallo-Puyuelo, Carla J.; Lanas, Angel; Carrera-Lasfuentes, Patricia; Ferrandez, Angel; Quintero, Enrique; Carrillo, Marta; Alonso-Abreu, Inmaculada; Asuncion Garcia-Gonzalez, Maria. (2/8). 2021. Familial Colorectal Cancer and Genetic Susceptibility: Colorectal Risk Variants in First-Degree Relatives of Patients With Colorectal Cancer. CLINICAL AND TRANSLATIONAL GASTROENTEROLOGY. 12. <https://doi.org/10.14309/ctg.0000000000000301>
- 16 Artículo científico.** Vennelaganti, Sreekar; Cuatrecasas, Miriam; Vennelaganti, Prashanth; et al; Sharma, Prateek; Lanas, Angel. (8/20). 2021. Interobserver Agreement Among Pathologists in the Differentiation of Sessile Serrated From Hyperplastic Polyps. GASTROENTEROLOGY. 160. ISSN 0016-5085. WOS (16) <https://doi.org/10.1053/j.gastro.2020.09.015>
- 17 Artículo científico.** Contursi, Annalisa; Schiavone, Simone; Dovizio, Melania; et al; Patrignani, Paola; Lanas, Angel. (13/15). 2021. Platelets induce free and phospholipid-esterified 12-hydroxyeicosatetraenoic acid generation in colon cancer cells by delivering 12-lipoxygenase. JOURNAL OF LIPID RESEARCH. 62. ISSN 0022-2275. WOS (5) <https://doi.org/10.1016/j.jlr.2021.100109>
- 18 Artículo científico.** Biccler, Jorne; Bollaerts, Kaatje; Vora, Pareen; Sole, Elodie; Rodriguez, Luis Alberto Garcia; Lanas, Angel; Langley, Ruth E.; Gabarro, Montse Soriano. (6/ 8). 2021. Public health impact of low-dose aspirin on colorectal cancer, cardiovascular disease and safety in the UK - Results from micro-simulation model. IJC HEART & VASCULATURE. 36. <https://doi.org/10.1016/j.ijcha.2021.100851>
- 19 Artículo científico.** Hermoso-Duran, Sonia; Garcia-Rayado, Guillermo; Ceballos-Laita, Laura; et al; Abian, Olga; Lanas, Angel. (9/11). 2021. Thermal Liquid Biopsy (TLB) Focused on Benign and Premalignant Pancreatic Cyst Diagnosis. JOURNAL OF PERSONALIZED MEDICINE. 11. WOS (5) <https://doi.org/10.3390/jpm11010025>
- 20 Artículo científico.** Garcia-Rayado, Guillermo; Varela-Moreiras, Gregorio; Lanas, Angel; et al; de-Madaria, Enrique. (3/26). 2020. Dietary Fat Patterns and Outcomes in Acute Pancreatitis in Spain. FRONTIERS IN MEDICINE. 7. WOS (3) <https://doi.org/10.3389/fmed.2020.00126>
- 21 Artículo científico.** Garcia Rodriguez, Luis A.; Lanas, Angel; Soriano-Gabarro, Montse; Vora, Pareen; Cea Soriano, Lucia. (2/5). 2020. Effect of Proton Pump Inhibitors on Risks of Upper and Lower Gastrointestinal Bleeding among Users of Low-Dose Aspirin: A Population-Based Observational Study. JOURNAL OF CLINICAL MEDICINE. 9. WOS (6) <https://doi.org/10.3390/jcm9040928>

- 22 Artículo científico.** Laredo, Viviana; Sostres, Carlos; Garcia, Sandra; Carrera-Lasfuentes, Patricia; Revilla-Martí, Pablo; Lanas, Angel. (6/6). 2020. No Differences in Gastrointestinal Bleeding Risk among Clopidogrel-, Ticagrelor-, or Prasugrel-Based Dual Antiplatelet Therapy. *JOURNAL OF CLINICAL MEDICINE*. 9. WOS (1) <https://doi.org/10.3390/jcm9051526>
- 23 Artículo científico.** Navarro, Mercedes; Hijos, Gonzalo; Sostres, Carlos; Lue, Alberto; Puente-Lanzarote, Juan Jose; Carrera-Lasfuentes, Patricia; Lanas, Angel. (7/7). 2020. Reducing the Cut-Off Value of the Fecal Immunochemical Test for Symptomatic Patients Does Not Improve Diagnostic Performance. *FRONTIERS IN MEDICINE*. 7. WOS (7) <https://doi.org/10.3389/fmed.2020.00410>
- 24 Artículo científico.** Gonzalez, Andres; Casado, Javier; Chueca, Eduardo; Salillas, Sandra; Velazquez-Campoy, Adrian; Sancho, Javier; Lanas, Angel. (7/7). 2020. Small Molecule Inhibitors of the Response Regulator ArsR Exhibit Bactericidal Activity against Helicobacter pylori. *MICROORGANISMS*. 8. WOS (11) <https://doi.org/10.3390/microorganisms8040503>
- 25 Artículo científico.** Lue, Alberto; Hijos, Gonzalo; Sostres, Carlos; et al; Gomollon, Fernando; Lanas, Angel. (10/11). 2020. The combination of quantitative faecal occult blood test and faecal calprotectin is a cost-effective strategy to avoid colonoscopies in symptomatic patients without relevant pathology. *THERAPEUTIC ADVANCES IN GASTROENTEROLOGY*. 13. ISSN 1756-283X. WOS (10) <https://doi.org/10.1177/1756284820920786>
- 26 Artículo científico.** Salillas, Sandra; Alias, Miriam; Michel, Valerie; et al; Sancho, Javier; Lanas, Angel. (16/18). 2019. Design, Synthesis, and Efficacy Testing of Nitroethylene- and 7-Nitrobenzoxadiazol-Based Flavodoxin Inhibitors against Helicobacter pylori Drug-Resistant Clinical Strains and in Helicobacter pylori-Infected Mice. *JOURNAL OF MEDICINAL CHEMISTRY*. 62. ISSN 0022-2623. WOS (16) <https://doi.org/10.1021/acs.jmedchem.9b00355>
- 27 Artículo científico.** Navarro, Mercedes; Hijos, Gonzalo; Ramirez, Teresa; Omella, Ignacio; Carrera-Lasfuentes, Patricia; Lanas, Angel. (6/6). 2019. Fecal Hemoglobin Concentration, a Good Predictor of Risk of Advanced Colorectal Neoplasia in Symptomatic and Asymptomatic Patients. *FRONTIERS IN MEDICINE*. 6. WOS (9) <https://doi.org/10.3389/fmed.2019.00091>
- 28 Artículo científico.** Gargallo, Carla J.; Lanas, Angel; Carrera-Lasfuentes, Patricia; Fernandez, Angel; Quintero, Enrique; Carrillo, Marta; Alonso-Abreu, Inmaculada; Asuncion Garcia-Gonzalez, Maria. (2/8). 2019. Genetic susceptibility in the development of colorectal adenomas according to family history of colorectal cancer. *INTERNATIONAL JOURNAL OF CANCER*. 144. ISSN 0020-7136. WOS (8) <https://doi.org/10.1002/ijc.31858>
- 29 Artículo científico.** Gonzalez, Andres; Salillas, Sandra; Velazquez-Campoy, Adrian; Angarica, Vladimir Espinosa; Fillat, Maria F.; Sancho, Javier; Lanas, Angel. (7/7). 2019. Identifying potential novel drugs against Helicobacter pylori by targeting the essential response regulator HsRA. *SCIENTIFIC REPORTS*. 9. ISSN 2045-2322. WOS (27) <https://doi.org/10.1038/s41598-019-47746-9>
- 30 Artículo científico.** Soriano, Lucia Cea; Lanas, Angel; Soriano-Gabarro, Montse; Garcia Rodriguez, Luis A.(2/4). 2019. Incidence of Upper and Lower Gastrointestinal Bleeding in New Users of Low-Dose Aspirin. *CLINICAL GASTROENTEROLOGY AND HEPATOLOGY*. 17. ISSN 1542-3565. WOS (15) <https://doi.org/10.1016/j.cgh.2018.05.061>
- 31 Artículo científico.** Garcia Rodriguez, Luis A.; Lanas, Angel; Soriano-Gabarro, Montse; Cea Soriano, Lucia. (2/4). 2019. Low-dose aspirin and risk of upper/lower gastrointestinal bleeding by bleed severity: a cohort study with nested case-control analysis using primary care electronic health records from the United Kingdom. *ANNALS OF MEDICINE*. 51. ISSN 0785-3890. WOS (7) <https://doi.org/10.1080/07853890.2019.1591635>
- 32 Artículo científico.** Laredo, Viviana; Sostres, Carlos; Alfaro, Enrique; Teresa Arroyo, Maria; Lanas, Angel. (5/5). 2019. Management of Helicobacter pylori infection at the primary care level. The implementation of specific counseling improves eradication rates. *HELICOBACTER*. 24. ISSN 1083-4389. WOS (6) <https://doi.org/10.1111/hel.12586>

- 33 Artículo científico.** Gonzalez, Andres; Casado, Javier; Chueca, Eduardo; et al; Lanas, Angel; Lanas, Angel. (12/12). 2019. Repurposing Dihydropyridines for Treatment of Helicobacter pylori Infection. PHARMACEUTICS. 11. WOS (14) <https://doi.org/10.3390/pharmaceutics11120681>
- 34 Artículo científico.** Sostres, Carlos; Marcen, Beatriz; Laredo, Viviana; Alfaro, Enrique; Ruiz, Lara; Camo, Patricia; Carrera-Lasfuentes, Patricia; Lanas, Angel. (8/8). 2019. Risk of rebleeding, vascular events and death after gastrointestinal bleeding in anticoagulant and/or antiplatelet users. ALIMENTARY PHARMACOLOGY & THERAPEUTICS. 50. ISSN 0269-2813. WOS (20) <https://doi.org/10.1111/apt.15441>
- 35 Artículo científico.** Gargallo, Carla J.; Fernandez, Angel; Carrera, Patricia; Simon, Miguel Angel; Ducons, Julio; Lanas, Angel. (6/6). 2019. Short- and long-term clinical outcomes of self-expandable metal stents inserted for colorectal obstruction and efficacy of different insertion techniques. GASTROENTEROLOGIA Y HEPATOLOGIA. 42. ISSN 0210-5705. WOS (3) <https://doi.org/10.1016/j.gastrohep.2018.07.014>
- 36 Artículo científico.** Rodrigo, Alberto; Ojeda, Jorge L.; Vega, Sonia; Sanchez-Gracia, Oscar; Lanas, Angel; Isla, Dolores; Velazquez-Campoy, Adrian; Abian, Olga. (5/8). 2019. Thermal Liquid Biopsy (TLB): A Predictive Score Derived from Serum Thermograms as a Clinical Tool for Screening Lung Cancer Patients. CANCERS. 11. WOS (8) <https://doi.org/10.3390/cancers11071012>
- 37 Artículo científico.** Garcia-Rayado G; Lanas A. 2018. Upper gastrointestinal bleeding in critically ill patients: proton-pump inhibitors, histamine-2 receptor antagonists or placebo? Many questions remain unanswered.Curr Med Res Opin.34-11, pp.1881-1883.
- 38 Artículo científico.** Sung, Joseph J. Y.; Chiu, Philip C. Y.; Chan, Francis K. L.; et al; Lanas, Angel; Lanas, Angel. (18/18). 2018. Asia-Pacific working group consensus on non-variceal upper gastrointestinal bleeding: an update 2018. GUT. 67. ISSN 0017-5749. <https://doi.org/10.1136/gutjnl-2018-316276>
- 39 Artículo científico.** Bjarnason, Ingvar; Sancak, Ozgur; Crossley, Anne; Penrose, Andrew; Lanas, Angel. (5/5). 2018. Differing disintegration and dissolution rates, pharmacokinetic profiles and gastrointestinal tolerability of over the counter ibuprofen formulations. JOURNAL OF PHARMACY AND PHARMACOLOGY. 70. ISSN 0022-3573. WOS (5) <https://doi.org/10.1111/jphp.12827>
- 40 Artículo científico.** Pastushenko, Ievgenia; Brisebarre, Audrey; Sifrim, Alejandro; et al; Blanpain, Cedric; Lanas, Angel. (19/25). 2018. Identification of the tumour transition states occurring during EMT. NATURE. 556. ISSN 0028-0836. WOS (745) <https://doi.org/10.1038/s41586-018-0040-3>
- 41 Artículo científico.** Sostres C; Carrera-Lasfuentes P; Lanas A. 2017. Non-steroidal anti-inflammatory drug related upper gastrointestinal bleeding: types of drug use and patient profiles in real clinical practice.Curr Med Res Opin.33-10, pp.1815-1820.
- 42 Artículo científico.** García-Rayado G; Sostres C; Lanas A. 2017. Aspirin and Omeprazole for Secondary Prevention of Cardiovascular Disease in Patients at Risk for Aspirin-associated Gastric Ulcers.Expert Rev Clin Pharmacol.10-8, pp.875-888.
- 43 Artículo científico.** Scarpignato C; et all.(3/8). 2017. Rifaximin Reduces Number and Severity of Intestinal Lesions Associated With use of Non-steroidal Anti-inflammatory Drugs in Humans.Gastroenterology. 152-5, pp.980-982. ISSN 0016-5085. <https://doi.org/10.1053/j.gastro.2016.12.007>
- 44 Artículo científico.** García Rodríguez LA; et al.(5/5). 2016. Bleeding Risk with Long-Term Low-Dose Aspirin: A Systematic Review of Observational Studies.PLoS One.11-8, pp.e0160046. ISSN 1932-6203. <https://doi.org/10.1371/journal.pone.0160046>
- 45 Artículo científico.** Sostres C; Lanas A. 2016. Appropriate prescription, adherence and safety of non-steroidal anti-inflammatory drugs. A global overview. Med Clin (Barc). 146-6, pp.267-272.
- 46 Artículo científico.** C Sostres; et all.(9/9). 2015. Peptic Ulcer Bleeding Risk. The Role of Helicobacter Pylori Infection in NSAID/Low-Dose Aspirin Users.Am J Gastroenterol.110-5, pp.684-689. ISSN 0002-9270. <https://doi.org/10.1038/ajg.2015.98>

- 47 Artículo científico.** Lanas A (AC); et all.(1/12). 2015. Risk of Upper and Lower Gastrointestinal Bleeding in Patients Taking Nonsteroidal Anti-inflammatory Drugs, Antiplatelet Agents, or Anticoagulants.Clin Gastroenterol H.13-5, pp.906-912. ISSN 1542-3565. <https://doi.org/10.1016/j.cgh.2014.11.007>
- 48 Artículo científico.** Lanas A (AC); et all.(1/3). 2015. Gastrointestinal events in at-risk patients starting non-steroidal anti-inflammatory drugs (NSAIDs) for rheumatic diseases: the EVIDENCE study of European routine practice.Ann Rheum Dis. 74-4, pp.675-681. ISSN 0003-4967. <https://doi.org/10.1136/annrheumdis-2013-204155>
- 49 Artículo científico.** C Scarpignato; et all.(2/6). 2015. Safe prescribing of non-steroidal anti-inflammatory drugs in patients with osteoarthritis - an expert consensus addressing benefits as well as gastrointestinal and cardiovascular risks.BMC Med.13-1, pp.55. ISSN 1741-7015. <https://doi.org/10.1186/s12916-015-0285-8>
- 50 Artículo científico.** Angel Lanas; P Benito; J Alonso; et al; JR González Juanatey. 2014. Safe prescription recommendations for non steroidal anti-inflammatory drugs: Consensus document ellaborated by nominated experts of three scientific associations (SER-SEC-AEG).Reumatol Clin. 10-2, pp.68-84.
- 51 Artículo científico.** C Baigent; et all.(20/30). 2013. Vascular and upper gastrointestinal effects of non-steroidal anti-inflammatory drugs: meta-analyses of individual participant data from randomised trials. Lancet. 382-3894, pp.769-779. ISSN 0140-6736. [https://doi.org/10.1016/S0140-6736\(13\)60900-9](https://doi.org/10.1016/S0140-6736(13)60900-9)
- 52 Artículo científico.** C Sostres; Gargallo CJ; A Lanas. 2013. Nonsteroidal anti-inflammatory drugs and upper and lower gastrointestinal mucosal damage.Arthritis Res Ther.15-Suppl. 3, pp.S3.
- 53 Artículo científico.** Lanas A; Goldstein JL; Chan FK; Wilcox CM; Peura DA; Li C; Sands GH; Scheiman JM. 2012. Risk factors associated with a decrease  $\geq$  2 g/dL in haemoglobin and/or  $\geq$  10% haematocrit in osteoarthritis patients taking celecoxib or a nonselective NSAID plus a PPI in a large randomised controlled trial (CONDOR)". Aliment Pharmacol Ther.36(5), pp.485-492.
- 54 Artículo científico.** Arber N; Lieberman D; Wang TC; et al; Levin B. 2012. The APC and PreSAP trials A post hoc noninferiority analysis using a comprehensive new measure for gastrointestinal tract injury in 2 randomized, double-blind studies comparing celecoxib and placebo". Clin Ther.34(3), pp.569-579.
- 55 Artículo científico.** Goldstein JL; Chan FK; Lanas A; et al; Scheiman JM.2011. Haemoglobin decreases in NSAID users over time: an analysis of two large outcome trials". Aliment Pharmacol Ther.34(7), pp.808-816.
- 56 Artículo científico.** Chan F; et all.(2/6). 2010. Celecoxib versus omeprazole and diclofenac in patients with osteoarthritis and rheumatoid arthritis (CONDOR): a randomised trial.The Lancet. 376-9736, pp.173-179. ISSN 0140-6736. [https://doi.org/10.1016/S0140-6736\(10\)60673-3](https://doi.org/10.1016/S0140-6736(10)60673-3)
- 57 Artículo científico.** Baron JA; et all.(4/8). 2008. Cardiovascular events associated with rofecoxib: final analysis of the APPROVe trial.Lancet.372-9651, pp.1756-1764. ISSN 0140-6736. [https://doi.org/10.1016/S0140-6736\(08\)61490-7](https://doi.org/10.1016/S0140-6736(08)61490-7)
- 58 Artículo científico.** Lanas A (AC); et al.(1/15). 2006. Risk of upper gastrointestinal ulcer bleeding associated with selective cyclo-oxygenase-2 inhibitors, traditional non-aspirin non-steroidal anti-inflammatory drugs, aspirin and combinations. Gut. 55-12, pp.1731-1738. ISSN 0017-5749. <https://doi.org/10.1136/gut.2005.080754>
- 59 Artículo científico.** Lanas A (AC); et al.(1/9). 2000. Nitrovasodilators, low-dose aspirin, other nonsteroidal antiinflammatory drugs, and the risk of upper gastrointestinal bleeding. N Engl J Med. 343, pp.834-839. ISSN 0028-4793. <https://doi.org/10.1056/NEJM200009213431202>
- 60 Revisión bibliográfica.** Tursi, Antonio; Scarpignato, Carmelo; Strate, Lisa L.; Lanas, Angel; Kruis, Wolfgang; Lahat, Adi; Danese, Silvio. (4/7). 2020. Colonic diverticular disease. NATURE REVIEWS DISEASE PRIMERS. 6. ISSN 2056-676X. WOS (57) <https://doi.org/10.1038/s41572-020-0153-5>

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- 62 Revisión bibliográfica.** Scally, Benjamin; Emberson, Jonathan R.; Spata, Enti; et al; Baigent, Colin; Lanas, Angel. (14/16). 2018. Effects of gastroprotectant drugs for the prevention and treatment of peptic ulcer disease and its complications: a meta-analysis of randomised trials. *LANCET GASTROENTEROLOGY & HEPATOLOGY.* 3. WOS (86) [https://doi.org/10.1016/S2468-1253\(18\)30037-2](https://doi.org/10.1016/S2468-1253(18)30037-2)
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- 68 Guía de práctica clínica.** Gralnek, Ian M.; Stanley, Adrian J.; Morris, A. John; et al; van Hooft, Jeanin E.; Lanas, Angel. (6/18). 2021. Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2021. *ENDOSCOPY.* 53. ISSN 0013-726X. WOS (75) <https://doi.org/10.1055/a-1369-5274>
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- 70 Editorial.** Lanas, Angel (AC). (1/1). 2019. International Consensus Guidelines for Nonvariceal Gastrointestinal Bleeding: A Step Forward. *ANNALS OF INTERNAL MEDICINE.* 171. ISSN 0003-4819. WOS (3) <https://doi.org/10.7326/M19-2789>
- 71 Editorial.** Sostres, Carlos; Lanas, Angel (AC). (2/2). 2018. Low dose aspirin, H. pylori infection, and the risk of upper gastrointestinal bleeding. *MEDICAL JOURNAL OF AUSTRALIA.* 209. ISSN 0025-729X. WOS (1) <https://doi.org/10.5694/mja18.00742>

### C.3. Proyectos y Contratos

- 1 Proyecto.** Inteligencia Artificial distribuida para el diagnóstico y tratamiento temprano de enfermedades con gran prevalencia en el envejecimiento.. Comisión Europea. (Fundación Instituto de Investigación Sanitaria Aragón). 2021-2024. 17.035.675 €.
- 2 Proyecto.** PI20/01514, Effect of obesity on acetylation of COX-1 and COX-2 by aspirin as biomarker of efficacy in chemoprevention and co-therapy of colorectal cancer: A phase 2 clinical trial. Instituto de Salud Carlos III. (Hospital Clínico Universitario Lozano Blesa). 01/01/2021-31/12/2023. 220.220 €.
- 3 Proyecto.** EndoMapper: Real-time mapping from endoscopic video.. European Commission, programa H2020-FETOPEN-2018-2019-2020-01. 01/12/2019-30/11/2023. 3.697.227,5 €.
- 4 Proyecto.** 60633, GastricAITool. Early diagnosis & prevention of gastric cancer. Comisión Europea. (Fundación Instituto de Investigación Sanitaria Aragón). 01/01/2022-31/12/2022. 99.939,95 €.

- 5 **Proyecto.** LMP225\_18, EFECTO DE LA SUPLEMENTACIÓN NUTRICIONAL CON ÁCIDO EICOSAPENTAENÓICO (EPA) EN LA COMPOSICIÓN CORPORAL Y MEDIADORES SISTÉMICOS PRO-INFLAMATORIOS/PRO-RESOLVEDORES EN PACIENTES DIAGNOSTICADOS DE HEPATOCARCINOMA NO RESECALE. CENTRO DE ACUSTICA APLICADA Y EVALUACION NO DESTRUCTIVA; Centro de Investigación y Tecnología Agroalimentaria de Aragón. (Hospital Clínico Universitario Lozano Blesa). 01/09/2018-01/09/2020. 43.049,25 €.
- 6 **Proyecto.** PI17/01109, Assessment of direct biomarkers of aspirin action to develop a precision chemoprevention therapy of colorectal cancer.. Instituto de Salud Carlos III. (Hospital Clínico Universitario Lozano Blesa). 2018-2020. 169.400 €.
- 7 **Proyecto.** PI14/01218, Acetil salicilic acid and platelets in colon cancer.. Instituto de Salud Carlos III. (Hospital Clínico Universitario Lozano Blesa). 2015-2017. 122.815 €.
- 8 **Proyecto.** Proposal nº 660554, Ex vivo Re-vascularization in Porcine Liver Bioengineering-A critical First Step Towards Effective Transplantation on Bioengineered Livers. Unión Europea. 2015-2017. 158.121,6 €.
- 9 **Proyecto.** Evaluación del riesgo de hemorragia digestiva alta y baja y de los factores de riesgo asociados al tratamiento con anti-inflamatorios no esteroideos o agentes antiagregantes plaquetarios.. Instituto de Salud Carlos III. (Hospital Clínico Universitario Lozano Blesa). 2009-2012. 154.500 €.
- 10 **Proyecto.** Efecto del Ácido Acetilsalicílico en la prevención y tratamiento del esófago de Barret y adenocarcinoma de esófago. Gobierno de Aragón. (Hospital Clínico Universitario Lozano Blesa). 2005-2007.
- 11 **Proyecto.** Efectos de los antiinflamatorios no esteroideos sobre el curso de la enfermedad inflamatoria intestinal. Estudio de los mecanismos de susceptibilidad y desarrollo de herramientas diagnósticas.. Fundación La Mataró de TV3. (Hospital Clínico Universitario Lozano Blesa). 2004-2006.
- 12 **Proyecto.** Efecto de la inhibición selectiva de la ciclooxygenasa-2 en la prevención y tratamiento de esófago de Barrett y adenocarcinoma de esófago.. Instituto de Salud Carlos III. (Hospital Clínico Universitario Lozano Blesa). 2003-2005. 117.100 €.
- 13 **Proyecto.** Selective inhibition of COX-2 and progression of Barrett's esophagus to adenocarcinoma. Gobierno de Aragón. (Hospital Clínico Universitario Lozano Blesa). 2002-2002.
- 14 **Proyecto.** Infección por HP y antiinflamatorios no esteroideos como factores de riesgo en el desarrollo de esófago de Barrett. Club de Helicobacter Pylori. Desde 2000.

#### C.4. Actividades de transferencia y explotación de resultados

- 1 P202230102. Compuestos para el tratamiento y/o prevención de una infección o enfermedad causada por Helicobacter o Campylobacter. España. 2022.
- 2 WO 2020/079307 A1. Derivados de 4-fenildihidropiridina para el tratamiento y/o prevención de una infección o enfermedad causada por Helicobacter. 2020.
- 3 PCT/ES2019/070710. Derivados de 4-fenildihidropiridina para el tratamiento y/o prevención de una infección o enfermedad causada por Helicobacter España. 18/10/2019. IIS Aragón (56%), Universidad de Zaragoza (39%), Fundación ARAID (5%).
- 4 P201930445. Compounds for the treatment of diseases caused by Helicobacter España. 21/05/2019.