

PERSONAL INFORMATION

Giuseppe S. Sica

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🔑 Scopus Author's ID _____

Sex M | Date of birth 23/03/1965 | Nationality Italian

Current Position:

Associate Professor of General Surgery SSD Med 18, SC 06/C

Head of Gastrointestinal & Minimally Invasive Surgery, Policlinico Tor Vergata Rome Italy

PhD awarded less than 10 Years ago:No

Scientific Profile: Giuseppe Sica is Associate Professor of Surgery at the University of Rome Tor Vergata, Italy. Received his Ph.D. in Microsurgery in 1995 from “La Sapienza” (Rome, Italy). He did his pre-doctoral training at Harvard, Boston-USA and NYU-USA, working on radiation and microvascular anastomoses. After being appointed assistant professor of surgery, Department of Surgical Science at Tor Vergata, Professor Sica spent 4 Years at the Nuffield Department of Surgery, Oxford-UK as surgical fellow first and then as consultant surgeon and surgical teacher for the Oxford University. Professor Sica is Head of Gastro-Intestinal and Minimally Invasive Surgery at Policlinico Tor Vergata in Rome. He is Director of the Master program in “Colorectal and IBD Surgery” and Faculty for the PhD program “Biochemistry and Molecular Biology” of Tor Vergata University. Professor Sica was the Italian representative and is now the central region of Europe representative for the European Society Colo-Proctology; he is Director of the residency program for general surgery of University Mother of Good Council, Tirana Albania; he is also director of the didactic laboratory for surgeons in training “Laparoscopic Training Centre” (LTC-Rome). His research interests are within the field of IBD and colorectal cancer. More specifically, Giuseppe’s research interests focus on the mechanisms of recurrence of colorectal cancer after surgical resection: Matrix metalloproteinase-7 (MMP-7) is over-expressed by CRC cells and supposed to play a major role in CRC cell diffusion and metastasis. MMP-7 RNA expression was assessed by real-time PCR using specific primers in peritoneal washing fluid obtained during surgical procedure. Transcripts for MMP-7 were detected in 54%. Recurrence was diagnosed in 11%. Notably, all the patients who had relapsed were positive for MMP-7. Sensitivity and specificity of the test were 100% and 49% respectively. Data from patients have also been corroborated by computational approaches. Publicly available colon carcinoma datasets have been employed to confirm MMP7 clinical impact on the disease. Interestingly MMP-7 expression appeared correlated to Tgfb-1, and correlation of the two factors represented a poor prognostic factor. This study proposes positivity of MMP-7 in peritoneal cavity as a novel biomarker for predicting disease recurrence in patients with CRC.

Currently Giuseppe’s working on the correlation of histotype with clinical presentation in colon cancer, to evaluate the influence on oncological outcomes and survival.

Personal data from patients undergoing colorectal resection for cancer of the colon shows that emergency presentation is more likely to occur in mucinous ($p < 0.05$) and signet ring cell ($p < 0.01$) tumours. T3 emergency patients show worse prognosis than the elective ($p < 0.03$). Lymph node invasion, laparoscopy, histology, and blood transfusions are independent variables to influence survival. Distribution assessed for pTNM stage shows T3 cancers are more common in emergency ($p < 0.01$). Mucinous and signet ring cell tumours are related to emergency presentation, pT3 stage, poorest outcomes, and survival. Disease-free survival in patients who had emergency surgery for T3 colon cancer seems related to the histotype.

GOLDEN PARAGRAPH

More data are required to confirm these findings. International dataset may contribute to expand preliminary results and protocols of neo-adjuvant therapy may be offered to subset of patients.

Bibliometric Indicators:

Publications: 178 H index 39 Scopus

3 most relevant publications or patents:

European evidence based consensus on surgery for ulcerative colitis. Oresland T, Bemelman W, Sampietro G, Spinelli A, Windsor A, Turet E, Sica G, Panis Y, Faerden A, Biancone L, Angriman I, Serclova Z, De Buck A, Gionchetti P, Stassen L, Warusavitarne J, Adamina M, Dignass A, Eliakim R, Magro F, D'Hoore A; On behalf of the European Crohn's and Colitis Organisation (ECCO). J Crohns Colitis. 2014 Oct 8. pii: S1873-9946(14)00263-3. doi: 10.1016/j.crohns.2014.08.012. PMID: 25304060

Long-term oncological outcome of segmental versus extended colectomy for colorectal cancer in Crohn's disease: results from an international multicentre study.

Sensi B, Khan J, Warusavitarne J, Nardi A, Spinelli A, Zaghiyan K, Panis Y, Sampietro G, Fichera A, Garcia-Granero E, Espin-Basany E, Konishi T, Siragusa L, Stefan S, Bellato V, Carvello M, Adams E, Frontali A, Artigue M, Frasson M, Marti-Gallostra M, Pellino G, Sica GS. J Crohns Colitis. 2022 16,6:954-962. doi: 10.1093/ecco-jcc/jjab215. PMID: 34897426

Peritoneal expression of Matrilysin helps identify early post-operative recurrence of colorectal cancer. Sica GS, Fiorani C, Stolfi C, Monteleone G, Candi E, Amelio I, Catani V, Sibio S, Divizia A, Tema G, Iaculli E, Gaspari AL. Oncotarget. 2015 May 30;6(15):13402-15. PubMed PMID: 25596746; PubMed Central PMCID: PMC4537023.

ROLE IN THE PROJECT

Microbial metabolites impact on disease: from translational models to bedside. As a clinician, responsible for a surgical unit, I shall be involved in the observation of degenerative inflammatory diseases and metabolic disorders to understand immunometabolic diseases and to develop novel diagnostic and therapeutic opportunities. Gut microbial diversity, lipid/glucose metabolism, low-grade inflammation preceding common multimorbidity will help understanding individual patients' disease mechanisms, with potential for early intervention approaches. Will participate in bioinformatic immunometabolism analysis and identification of morbidity markers. Specimen of diseased organs, will be sampled during diagnostic and therapeutic procedures such as endoscopies and surgeries when necessary and clinical follow-up will be necessary to correlate the experimental models into clinical practice.

WORK EXPERIENCE

2013 – Current

Associate Professor of Surgery. University Tor Vergata, Rome Italy

2016 – Current

Head of Gastrointestinal and Minimally Invasive Surgery. Policlinico Tor Vergata, Rome, Italy

2008 – 2016

Head of Service Gastrointestinal Surgery. Policlinico Tor Vergata, Rome, Italy

2004 – 2008

Staff Surgeon. Policlinico Tor vergata

2000 – 2003

Senior Surgical Fellow and Consultant (2002) Surgeon, Nuffield Department of Surgery, Oxford Radcliffe Hospitals, Oxford UK.

October 1999 Assistant Professor of Surgery University Tor Vergata, Rome Italy

Sector: Academic sector, Research sector, Health sector.

2020-Current

Director Residency Program in General Surgery. University Mother Theresa of the good council, Tirana, Albania

Sector: Academic sector

EDUCATION AND TRAINING

- 1990 Master degree cum laude in Medicine and Surgery “La Sapienza” University of Rome
- 1993 Pre-doctoral training Harvard Medical School Boston USA
- 1994 Pre-doctoral training New York University, N.Y., USA
- 1995 PhD effect of radiotherapy on microvascular anastomoses “La Sapienza University of Rome
- 1998 Awarded the title cum laude of Specialist in General Surgery, University Tor Vergata, Rome
- 1999: Assistant Professor of Surgery University Tor Vergata, Rome
- 1999 General Medical Council, Specialist Register General Surgeon London UK
- 2011 Associate Professor of Surgery, University Tor Vergata, Rome
- 2013 Abilitazione Scientifica Nazionale ruolo degli Ordinari (Full Professor National Registry)

PERSONAL SKILLS

Organisational / managerial skills

- Currently responsible for a team of 15 or more person: Medical Doctors, including staff surgeons and surgeons in training, 2 Phd Students and administrative person
- Director of a School of Surgery in a foreign country University (Tirana Albania)
- Director of a Fellowship program for colorectal surgeons
- Italian national representative for the European society coloproctology 2019-22 and now central Europe representative
- Member of the working group for the development of the European guidelines on IBD, (2014, 2023)

ADDITIONAL INFORMATION

Most relevant publications in the last 10 Years

- Long-term oncological outcome of segmental versus extended colectomy for colorectal cancer in Crohn's disease: results from an international multicentre study. Sensi B, Khan J, Warusavitarne J, Nardi A, Spinelli A, Zaghiyan K, Panis Y, Sampietro G, Fichera A, Garcia-Granero E, Espin-Basany E, Konishi T, Siragusa L, Stefan S, Bellato V, Carvello M, Adams E, Frontali A, Artigue M, Frasson M, Marti-Gallostra M, Pellino G, Sica GS. J Crohns Colitis. 2022 16,6:954-962. doi: 10.1093/ecco-jcc/jjab215. PMID: 34897426
- Mortality and pulmonary complications in patients undergoing surgery with perioperative SARS-CoV-2 infection: an international cohort study. COVIDSurg Collaborative. Lancet. 2020 May 29:S0140-6736(20)31182-X. doi: 10.1016/S0140-6736(20)31182-X. Online ahead of print. PMID: 32479829
- Interleukin-34 sustains pro-tumorigenic signals in colon cancer tissue. Franzè E, Dinallo V, Rizzo A, Giovangiulio MD, Bevivino G, Stolfi C, Caprioli F, Colantoni A, Ortenzi A, Grazia AD, Sica G, Sileri PP, Rossi P, Monteleone G. Oncotarget. 2017 Dec 15;9(3):3432-3445.

doi: 10.18632/oncotarget.23289. eCollection 2018 Jan 9. PubMed PMID: 29423057; PubMed Central PMCID: PMC5790474.

Interleukin-21 sustains inflammatory signals that contribute to sporadic colon tumorigenesis. De Simone V, Ronchetti G, Franzè E, Colantoni A, Ortenzi A, Fantini MC, Rizzo A, Sica GS, Sileri P, Rossi P, MacDonald TT, Pallone F, Monteleone G, Stolfi C. *Oncotarget*. 2015 Apr 30;6(12):9908-23. PubMed PMID: 25839161;PMCID: PMC4496406.

Interleukin-34 sustains inflammatory pathways in the gut. Franzè E, Monteleone I, Cupi ML, Mancina P, Caprioli F, Marafini I, Colantoni A, Ortenzi A, Laudisi F, Sica G, Sileri P, Pallone F, Monteleone G. *Clin Sci (Lond)*. 2015 Aug;129(3):271-80. doi: 10.1042/CS20150132. PubMed PMID: 25800277.

Th17-type cytokines, IL-6 and TNF- α synergistically activate STAT3 and NF- κ B to promote colorectal cancer cell growth. De Simone V, Franzè E, Ronchetti G, Colantoni A, Fantini MC, Di Fusco D, Sica GS, Sileri P, MacDonald TT, Pallone F, Monteleone G, Stolfi C. *Oncogene*. 2015 Sep 1. doi: 10.1038/onc.2014.286. [Epub ahead of print] PMID: 25174402

European evidence based consensus on surgery for ulcerative colitis. Oresland T, Bemelman W, Sampietro G, Spinelli A, Windsor A, Turet E, Sica G, Panis Y, Faerden A, Biancone L, Angriman I, Serclova Z, De Buck A, Gionchetti P, Stassen L, Warusavitarne J, Adamina M, Dignass A, Eliakim R, Magro F, D'Hoore A; On behalf of the European Crohn's and Colitis Organisation (ECCO). *J Crohns Colitis*. 2014 Oct 8. pii: S1873-9946(14)00263-3. doi: 10.1016/j.crohns.2014.08.012. PMID: 25304060

Plasma cells in the mucosa of patients with inflammatory bowel disease produce granzyme B and possess cytotoxic activities. Cupi ML, Sarra M, Marafini I, Monteleone I, Franzè E, Ortenzi A, Colantoni A, Sica G, Sileri P, Rosado MM, Carsetti R, MacDonald TT, Pallone F, Monteleone G. *J Immunol*. 2014 Jun 15;192(12):6083-91. doi: 10.4049/jimmunol.1302238. Epub 2014 May 16. PubMed PMID:24835396.

Defective expression of SIRT1 contributes to sustain inflammatory pathways in the gut. Caruso R, Marafini I, Franzè E, Stolfi C, Zorzi F, Monteleone I, Caprioli F, Colantoni A, Sarra M, Sedda S, Biancone L, Sileri P, Sica GS, MacDonald TT, Pallone F, Monteleone G. *Mucosal Immunol*. 2014 May 21. doi:10.1038/mi.2014.35. [Epub ahead of print] PubMed PMID: 24850427.

A functional role for Smad7 in sustaining colon cancer cell growth and survival. Stolfi C, De Simone V, Colantoni A, Franzè E, Ribichini E, Fantini MC, Caruso R, Monteleone I, Sica GS, Sileri P, Macdonald TT, Pallone F, Monteleone G. *Cell Death Dis*. 2014 Feb 20;5:e1073. doi: 10.1038/cddis.2014.49. PMID: 24556688

Projects/Grants

2008-2010

PRIN: 2008X8NRH4

Variables and indicators of biological therapy response in IBD patients
127.680 EUROS

2010-2015

RBFR14555

New therapeutic targets for the century
450.000 EUROS

2016

MIUR, UTV

Laparoscopic training centre: didactic lab, Rome Italy
45.000 EUROS

Conferences

Invited Lectures

2023: European Society Colorectal Surgeons, Vilnius Lithuania

2023: Italian Society of Surgery, Pisa Italy

2023: Association of Italian Surgeons, Rome Italy

2022: Portsmouth Colorectal, UK
2022: European Crohn & Colitis Organization, Stockholm Sweden
2022: European Society Colorectal Surgeons, Vienna Austria
2022: Italian Society of Surgery, Milan Italy
2022: Association of Italian Surgeons, Garda Italy
2022: European Society Surgical Oncology
Many more..

Honours and awards

2023-26 Central Regions (including Italy) Representative for the European Society Colorectal Surgeons
2019-22 Italian colorectal surgeons Representative for the European Society Colorectal Surgeons
2017-23 Responsible center of surgical excellence and training of the Italian society of colorectal surgeons
2002 and 203 Best teacher, awarded by University of Oxford, Oxford UK
1999 Young researcher award, University Tor Vergata

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Location, Date Rome, 13/04/2023
Signature

Prof. Giuseppe sica

