
BIOGRAPHICAL SKETCH

NAME Andrea S. Imperatori, MD	POSITION TITLE Full Professor of Thoracic Surgery Director of Research Center for Thoracic Surgery, University of Insubria, Varese, Italy Director of Thoracic Surgery Postgraduate School, University of Insubria, Varese, Italy Head of Thoracic Surgery Unit, ASST Sette Laghi, Varese, Italy
---	--

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Pavia, Italy	MD	1987-1994	Medicine
University of Pavia, Italy	State assessment examination for MD	1994	Medicine
University of Insubria, Varese, Italy	Postgraduate in Surgery	1994-2000	Surgery
Catholic University, Rome, Italy	Master in Mini-invasive Thoracic Surgery	2023-2004	Surgery

A. Personal Statement

I am a Thoracic Surgeon with a keen interest in surgical thoracic oncology (especially lung cancer and mediastinal tumors) and in mini-invasive surgery (VATS surgery). I am Associate Professor at the University of Insubria, where I teach Thoracic Surgery to Medical students, to postgraduate doctors and PhD students. Since 2011 I have been Director of Postgraduate School of Thoracic Surgery at the School of Medicine, University of Insubria, and since 2017 Director of the Scientific Committee of the Center for Thoracic Surgery of the University of Insubria.

Since 1991, as medical student, I have been involved in research programs related to surgical patients, initially in the field of surgical infections (identification of high-risk patient; high-dose immunoglobulins treatment in severely septic patients); the title of my degree thesis was "Treatment of severe surgical infections with high dose immunoglobulins" and the results have been published (Dig Surg 1996;13,430-4).

In 1997, I moved to the Thoracic Surgery Unit and my research field became lung cancer (epidemiology, screening, molecular diagnosis, surgical and multidisciplinary treatment).

I organized as scientific secretary or co-organizer 36 National or International scientific meetings on surgical infections, lung cancer, mini-invasive surgical techniques.

I am active member of International Association for the Study of Lung Cancer (IASLC), European Society of Thoracic Surgery (ESTS), of Italian Society of Thoracic Surgery (SICT) as Councillor (2016-2018), and of Italian VATS Group as Councillor (2016-2018).

I am author or co-author of more than 270 scientific papers on: lung cancer, pleural mesothelioma, thoracic surgery, surgical infections, oncological surgery. The 134 publications included in Scopus (Elsevier) have 2929 citations and an h-index=29, updated on April 12, 2026.

Since November 2018 I am Chief of the Thoracic Surgery Unit of the Ospedale di Circolo, ASST Sette Laghi, Varese, performing a mix case of major surgical procedures.

B. Positions and Honors

2001 – 2007	Research Fellow in Surgery, University of Insubria, Varese, Italy.
2008 – Aug 2024	Associate Professor in Thoracic Surgery, University of Insubria, Varese, Italy.
July 2000 - Dec 2000	Visiting Research Fellow at the University Hospital of North Tees, Stockton on Tees, United Kingdom (2000).
May 2005	Clinical Observer at the Department of Interdisciplinary Endoscopy Thoraxklinik, Heidelberg University (2005),
March 2008	Clinical Observer at the Department of Thoracic Surgery of the Osaka Medical Center for Cancer and Cardiovascular Diseases
Jan 2017 - Dec 2017	Clinical fellowship at Department of Thoracic Surgery, Leeds Teaching Hospitals Leeds, UK.
June 2019	Winner of ESTS Medtronic Prize (best presentation at the MITIG-VATS session 27 th European Conference on General Thoracic Surgery)
June 2023	Winner of ESTS Grillo Award (best abstract in the session Experimental Innovative Techniques at the 31 st European Conference on General Thoracic Surgery)

C. Contributions to Science

<https://orcid.org/0000-0001-6281-1800>

1. Lung cancer screening

- Dominioni L, Strauss GM, Imperatori A, Rovera F, Dionigi G. Screening for lung cancer. Chest Surg Clin N Am 2000;10:729-36
- Dominioni L, Imperatori A, Rovera F, Ochetti A, Torrigiotti G, Paolucci M. Stage I non-small cell lung cancer (NSCLC): analysis of survival and implication for screening. Cancer 2000;89:2334-44
- Dominioni L, Imperatori A, Rovera F, Ochetti A, Paolucci M, Dionigi G. Lung cancer screening in cigarette smokers in the province of Varese, Italy. Cancer 2000;89:2345-8
- Imperatori A, Harrison RN, Leitch DN, Rovera F, Lepore G, Dionigi G, Sutton P, Dominioni L. Lung cancer in Teesside (UK) and Varese (Italy): a comparison of management and survival. Thorax 2006;61:232-9

- Dominioni L, Rotolo N, Poli A, Paolucci M, Sessa F, D'Ambrosio V, Paddeu A, Mantovani W, Imperatori A. Self-selection effects in smokers attending lung cancer screening: a 9.5-year population-based cohort study in Varese, Italy. *J Thorac Oncol* 2010; 5:428-35
- Dominioni L, Rotolo N, Mantovani W, Poli A, Pisani S, Conti V, Paolucci M, Sessa F, Paddeu A, D'Ambrosio V, Imperatori A. A population-based cohort study of chest x-ray screening in smokers: lung cancer detection findings and follow-up. *BMC Cancer*. 2012; 12:18
- Dominioni L, Poli A, Mantovani W, Pisani S, Rotolo N, Paolucci M, Sessa F, Conti V, D'Ambrosio V, Paddeu A, Imperatori A. Assessment of lung cancer mortality reduction after chest X-ray screening in smokers: a population-based cohort study in Varese, Italy. *Lung Cancer*. 2013;80(1):50-4
- Imperatori A, Harrison RN, Dominioni L, Leitch N, Nardecchia E, Jeebun V, Brown J, Altieri E, Castiglioni M, Cattoni M, Rotolo N. Resection rate of lung cancer in Teesside (UK) and Varese (Italy): a comparison after implementation of the National Cancer Plan. *Thorax*. 2016;71(3):230-7

2. Mini-invasive videothoroscopic surgery and medical devices.

- Imperatori A, Rotolo N, Gatti M, Nardecchia E, De Monte L, Conti V, Dominioni L. Perioperative complications of video-assisted thoracoscopic surgery (VATS). *Int J Surg* 2008; 6:S78-S81
- Rotolo N, Imperatori A, Poli A, Nardecchia E, Castiglioni M, Cattoni M, Dominioni L. Assessment of the aggregate risk score to predict mortality after surgical biopsy for interstitial lung disease. *Eur J Cardiothorac Surg* 2015 Jun;47(6):1027-30
- Imperatori A, Rotolo N, Spagnoletti M, Festi L, Berizzi F, Di Natale D, Nardecchia E, Dominioni L. Risk factors for postoperative recurrence of spontaneous pneumothorax treated by video-assisted thoracoscopic surgery. *Interact Cardiovasc Thorac Surg* 2015;20(5):647-52
- Rotolo N, Imperatori A, Dominioni L, Facchini A, Conti V, Castiglioni M, Spanevello A. Efficacy and safety of surgical lung biopsy for interstitial disease. Experience of 161 consecutive patients from a single institution in Italy. *Sarcoidosis Vasc Diffuse Lung Dis* 2015;32(3):251-8
- Pompili C, Koller M, Velikova G, Franks K, Absolom K, Callister M, Robson J, Imperatori A, Brunelli A. EORTC QLQ-C30 summary score reliably detects changes in QoL three months after anatomic lung resection for Non-Small Cell Lung Cancer (NSCLC). *Lung Cancer* 2018; 123:149-154
- Brunelli A, Pompili C, Dinesh P, Bassi V, Imperatori A. Financial validation of the European Society of Thoracic Surgeons risk score predicting prolonged air leak after video-assisted thoracic surgery lobectomy. *J Thorac Cardiovasc Surg*. 2018;156(3):1224-1230
- Miyazaki T, Imperatori A, Jimenez M, Drosos P, Gomez-Hernandez MT, Varela G, Novoa N, Nagayasu T, Brunelli A. An aggregate score to stratify the technical complexity of video-assisted thoracoscopic lobectomy. *Interact Cardiovasc Thorac Surg* 2019; 28(5):728–34
- Imperatori A, Fontana F, Dominioni L, Piacentino F, Macchi E, Castiglioni M, Desio M, Cattoni M, Nardecchia E, Rotolo N. Video-assisted thoracoscopic resection of lung nodules localized with hydrogel plug. *Interact Cardiovasc Thorac Surg* 2019 29(1):137-143
- Cattoni M, Rotolo N, Nardecchia E, De Maio S, Dominioni L, Imperatori A. Energy devices safety and impact on video-assisted thoracoscopic lung lobectomy postoperative course: monopolar electrocautery versus ultrasonic dissector. *J Cardiothorac Surg* 2021;16(1):40
- Imperatori A, Nardecchia E, Cattoni M, Mohamed S, Di Natale D, Righi I, Mendogni P, Diotti C, Rotolo N, Dominioni L, Rosso L. Perioperative identifications of non-palpable pulmonary nodules: a narrative review. *J Thorac Dis* 2021;13(4):2524-2531
- Parini S, Azzolina D, Massera F, Mastromarino MG, Papalia E, Baietto G, Curcio C, Crisci R, Rena O;

Italian VATS Group; Alloisio M, Amore D, Ampollini L, Ardò N, Argnani D, Baisi A, Bandiera A, Benato C, Benvenuti MR, Bertani A, Bortolotti L, Bottoni E, Breda C, Campese P, Carbognani P, Cardillo G, Carleo F, Cavallesco G, Cherchi R, De Palma A, Dell'Amore A, Della Beffa V, Divisi D, Dolci G, Droghetti A, Ferrari P, Fontana D, Gasparri R, Gavezzoli D, Ghisalberti M, Giovanardi M, Gonfiotti A, Guerrera F, Imperatori A, Infante M, Lausi P, Lo Giudice F, Londero F, Lopez C, Mancuso M, Maniscalco P, Margaritora S, Marulli G, Mazza F, Meacci E, Melloni G, Morelli A, Mucilli F, Natali P, Negri G, Nicotra S, Nosotti M, Paladini P, Pariscenti G, Perkmann R, Pernazza F, Pirondini E, Puma F, Raveglia F, Refai M, Rinaldo A, Risso C, Rizzardi G, Rotolo N, Scarci M, Solli P, Sollitto F, Spaggiari L, Stefani A, Stella F, Surrente C, Tancredi G, Terzi A, Torre M, Tosi D, Vinci D, Viti A, Voltolini L, Zaraca F. The Overweight Paradox: Impact of Body Mass Index on Patients Undergoing VATS Lobectomy or Segmentectomy. *Semin Thorac Cardiovasc Surg* 2023;35(1):164-176. doi: 10.1053/j.semtcvs.2022.02.004

- Grossi S, Cattoni M, Rotolo N, Imperatori A. Video-assisted thoracoscopic surgery simulation and training: a comprehensive literature review. *BMC Med Educ* 2023;23(1):535. doi: 10.1186/s12909-023-04482-z.
- Grossi S, Cattoni M, Filipponi L, Marzorati A, Rotolo N, Carcano G, Imperatori A. Training simulator efficacy in developing thoracic and general surgical skills in a residency programme: a pilot study. *Eur J Cardiothorac Surg* 2024;65(2):ezae044. doi: 10.1093/ejcts/ezae044
- Nachira D, Congedo MT, Calabrese G, Senatore A, Kuzmych K, Santoro G, Marinucci BT, Piccioni G, Salati M, Nanto AC, Orlandi R, Cantatore MG, Romano R, Ricciardi S, Imperatori A, Bertoglio P, De Palma A, Ibrahim M, Refai M, Mendogni P, Gavezzoli D, Cardillo G, Marulli G, Solli P, Meacci E, Margaritora S. Oncological and Surgical Outcomes of Left Trisegmentectomy or Lingulectomy Versus Upper Lobectomy for Early-Stage Non-Small Cell Lung Cancer: A Multicentre Study. *Eur J Cardiothorac Surg* 2025;67(12):ezaf427. doi: 10.1093/ejcts/ezaf427.

3. Lung cancer biology and risk factors.

- Bruno A, Focaccetti C, Pagani A, Imperatori AS, Spagnoletti M, Rotolo N, Cantelmo AR, Franzi F, Capella C, Ferlazzo G, Mortara L, Albin A, Noonan DM. The proangiogenic phenotype of natural killer cells in patients with non-small cell lung cancer. *Neoplasia* 2013;15(2):133-42
- Imperatori A, Sahnane N, Rotolo N, Franzi F, Nardecchia E, Libera L, Romualdi C, Cattoni M, Sessa F, Dominioni L, Furlan D. LINE-1 hypomethylation is associated to specific clinico-pathological features in Stage I non-small cell lung cancer. *Lung Cancer* 2017;108:83-9
- Bosi A, Zanellato S, Bassani B, Albin A, Musco A, Cattoni M, Desio M, Nardecchia E, D'Urso DG, Imperatori A, Dominioni L, Noonan DM, Mortara L, Bruno A. Natural Killer cells from malignant pleural effusion are endowed with a decidual-like proangiogenic polarization. *J Immunol Res* 2018;29;2018:2438598
- Coelho M, Imperatori A, Chiaravalli AM, Franzi F, Castiglioni M, Rasini E, Luini A, Legnaro M, Marino F, Ribeiro L, Cosentino M. Beta1- and Beta2-Adrenoceptors Expression Patterns in Human Non-small Cell Lung Cancer: Relationship with Cancer Histology. *J Neuroimmune Pharmacol* 2019;14(4):697-708
- Bertoglio P, Querzoli G, Ventura L, Aprile V, Cattoni MA, Nachira D, Lococo F, Rodriguez Perez M, Guerrera F, Minervini F, Gnetti L, Bacchin D, Franzi F, Rindi G, Bellafiore S, Femia F, Viti A, Bogina GS, Kestenholz P, Ruffini E, Paci M, Margaritora S, Imperatori A, Lucchi M, Ampollini L, Terzi AC. Prognostic impact of lung adenocarcinoma second predominant pattern from a large European database. *J Surg Oncol* 2021;123(2):560-569. doi: 10.1002/jso.26292

- Baci D, Cekani E, Imperatori A, Ribatti D, Mortara L. Host-Related Factors as Targetable Drivers of Immunotherapy Response in Non-Small Cell Lung Cancer Patients. *Front Immunol* 2022 6;13:914890. doi: 10.3389/fimmu.2022.914890. eCollection 2022

4. MiRNA in lung cancer.

- Campomenosi P, Gini E, Noonan DM, Poli A, D'Antona P, Rotolo N, Dominioni L, Imperatori A. A comparison between quantitative PCR and droplet digital PCR technologies for circulating microRNA quantification in human lung cancer. *BMC Biotechnol* 2016;16(1):60
- Moretti F, D'Antona P, Finardi E, Barbetta M, Dominioni L, Poli A, Gini E, Noonan DM, Imperatori A, Rotolo N, Cattoni M, Campomenosi P. Systematic review and critique of circulating miRNAs as biomarkers of stage I-II lung cancer. *Oncotarget* 2017;8(55):94980-96
- D'Antona P, Cattoni M, Dominioni L, Poli A, Moretti F, Cinquetti R, Gini E, Daffrè E, Noonan DM, Imperatori A, Rotolo N, Campomenosi P. Serum miR-223: A Validated Biomarker for Detection of Early-Stage Non-Small Cell Lung Cancer. *Cancer Epidemiol Biomarkers Prev* 2019;(11):1926-1933
- Precazzini F, Detassis S, Imperatori AS, Denti MA, Campomenosi P. Measurements methods for the development of microRNA-based tests for cancer diagnosis. *Int J Mol Sci* 2021;22(3):1176