

Allegato B

**Marta Zerunian
Curriculum Vitae**

Rome
29.08.2024

Part I – General Information

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|------------------|------------------|
| Full Name | Marta Zerunian |
| Date of Birth | 21/08/1985 |
| Place of Birth | Rome, Italy |
| Citizenship | Italian |
| Spoken Languages | Italian, English |

Part II – Education

| Type | Year | Institution | Notes (Degree, Experience,...) |
|-----------------------|--------------|--|--|
| University graduation | 2015 | “Sapienza” University of Rome | Graduation in Medicine and Surgery, 110/110 cum laude |
| Licensure | 2016 | “Sapienza” University of Rome | Licensure at the Medical, Surgical and Odontologists Board of Rome |
| Specialty | 2020 | “Sapienza” University of Rome | Residency School in Radiology, 70/70 cum laude |
| Post-Graduate | 2020 | Cambridge University, Addenbrook’s Hospital, Cambridge | Clinical Fellow at Radiology Department, Cambridge University, Addenbrook’s Hospital, Cambridge, Prof. Evis Sala |
| Abilitation | 2023 | ASN-MIUR | National Scientific Qualification, Assistant Professor (ASN 2021-2023, Sector 06,I1) |
| PhD | 2024 | “Sapienza” University of Rome | Oncology, Department of Medical-Surgical and Traslational Medicine, Sapienza University, Sant’Andrea Hospital, Rome |
| Researcher | 2021-present | “Sapienza” University of Rome | Department of Surgical and Medical Sciences and Translational Medicine, Sant’Andrea Academic Hospital, “Sapienza” University of Rome |

Part III – Appointments

IIIA – Academic Appointments

| Start | End | Institution | Position |
|-------|-------|----------------------------------|--|
| 2022 | Today | “Sapienza” University of Rome | Assistant Professor in Imaging and Radiotherapy techniques – Graduating Class in Medical Radiology, Imaging and Radiotherapeutic Techniques; “Sapienza”University of Rome, sited in Sora (FR) |
| 2022 | Today | “Sapienza” University of Rome | Assistant Professor in Imaging and Radiotherapy techniques – Graduating Class in Medical Radiology, Imaging and Radiotherapeutic Techniques; “Sapienza”University of Rome, sited in Viterbo (FR) |

IIIB – Other Appointments

| Start | End | Institution | Position |
|-------|-------|--|-----------------------------------|
| 2023 | Today | La Radiologia Medica (Official Journal of the Italian Society of Medical and Interventional Radiology) | Scientific Editorial Board |
| 2023 | 2023 | Diagnostics | Editor of Special Issue |
| 2024 | Today | Cancers | Assistant Editor of Special Issue |
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Part IV – Teaching experience

| Year | Institution | Lecture/Course |
|------|-------------|--|
| 2023 | ESGAR | Acute Abdominal Emergencies in Oncology Patients |
| 2023 | ESOI-EORTC | ESOI-EORTC Workshop: Imaging in assessing response to cancer therapy – A hands-on course “Beyond RECIST” |

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| 2024 | European Society of Radiology | AI in MR examinations: no more compromise between time and quality |
| 2024 | ESGAR | Ultrasound-based techniques for presurgical assessment of liver function |

Part V - Society memberships, Awards and Honors

| Year | Title |
|------|--|
| 2018 | Member of Young Committee of ESOI (European Society of Oncologic Imaging) |
| 2020 | Member of Young ESGAR Committee (European Society of Gastrointestinal and Abdominal Radiology) |
| 2018 | “Invest in the youth” at ECR 2018, European Congress of Radiology |
| 2018 | “Certificate of Appreciation” top 20 presenter ESGAR Annual Congress 2017 |
| 2019 | “Invest in the youth” at ECR 2019, European Congress of Radiology |
| 2019 | “Honourable Mention” for oral presentation at Oncologic Imaging Course (OIC) 2019 |
| 2019 | Certificate of Appreciation” top 20 presenter ESGAR Annual Congress 2019 |
| 2022 | Winner of best poster at ISRM Italian Chapter congress, Pisa 2022 |

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

| Year | Title | Program | Grant value |
|------|------------------------|--|-------------|
| 2017 | Principal Investigator | Biliary Leak after percutaneous biliary stenting: prevention with collagen foam. “Avvio alla Ricerca” project, Sapienza Università di Roma | 1.000.000 € |
| 2018 | Principal Investigator | Response to therapy prediction with Perfusion RM in rectal cancer. “Avvio alla Ricerca” project, Sapienza Università di Roma | 700.000 € |
| 2019 | Principal Investigator | Non-small-cell lung cancer treated with pembrolizumab: correlation between texture analysis and iRECIST. “Avvio alla Ricerca” project, Sapienza Università di Roma | 200.000 € |
| 2020 | Investigator | Investigator CHAIMELEON “Accelerating the lab to market transition of AI tools for cancer management” – <i>Horizon 2020</i> | 6.000.000 € |
| 2020 | Investigator | “ATTRACT” - Artificial Intelligence-based RAdiogenomics in Colon Tumors AIRC IG 2020 – ID 24974 | 1.000.000 € |
| 2021 | Investigator | The impact of artificial intelligence on Magnetic Resonance Imaging: assessment | 500.000 € |

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| | | of a deep learning-based protocol in clinical practice - “Progetti Piccoli” project, Sapienza Università di Roma | |
| 2022 | Investigator | Radiomics cancer hallmarks to identify High-risk patients in non-metastatic colon cancer - “Progetti Medi” project, SapienzaUniversità di Roma | |
| 2022 | Investigator | PRIN 2022 n. 2022MPAE29, “Setting up and validation of measurement of the total length of the small intestine by computed tomography and MRI with 3D reconstruction and artificial intelligence in obese patients undergoing metabolic surgery”. | |
| 2023 | Investigator | Identification of CT-based radiomic model for predicting response to treatment in patients with advanced gastro-entero-pancreatic neuroendocrine neoplasms | |

Part VII – Research Activities

Keywords

Brief Description

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|-------------------------|---|
| Artificial Intelligence | Dr. Zerunian’s research activities are based on artificial intelligence, radiomics, oncologic and abdominal radiology with great attention in MRI and CT. She is active participant of Tumor Board. Dr. Zerunian is member of Young Committee of ESOI and part of the Young ESGAR Committee. She is member of the Radiological Society of North America (RSNA), European Society of Radiology (ESR), Italian Society of Medical Radiology (SIRM), European Society of Gastrointestinal and Abdominal Radiology (ESGAR) and, European Society of Oncologic Imaging (ESOI). |
| Abdominal Imaging | |
| Oncologic Imaging | |
| Thoracic Imaging | |
| Radiomics | |
| MRI, CT | |

Part VIII – Summary of Scientific Achievements

| Product type | Number | Data Base | Start | End |
|------------------------|--------|----------------|-------|-------|
| Papers [international] | 48 | Scopus, Pubmed | 2017 | Today |

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|--------------------|---|--------|------|-------|
| Papers [national] | | | | |
| Books [scientific] | | | | |
| Books [teaching] | 3 | Scopus | 2019 | Today |

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|----------------------------------|---------|
| Total Impact factor | 248,786 |
| Total Citations | 1278 |
| Average Citations per Product | 26,625 |
| Hirsch (H) index | 17 |
| Normalized H index* | 2,125 |
| Last five years Hirsch (H) index | 14 |

*H index divided by the academic seniority.

Part IX– Selected Publications

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

| N | Title | Authors | Reference Data | Journal IF | Citations |
|---|---|--|---|------------|-----------|
| 1 | Chest CT Features of COVID-19 in Rome, Italy. | Caruso D, <u>Zerunian M</u> , Polici M, Pucciarelli F, Polidori T, Rucci C, Guido G, Bracci B, de Dominicis C, Laghi A. | <i>Radiology</i> . 2020 Aug;296(2):E79-E85. | 11,105 | 426 |
| 2 | Visceral fat shows the strongest association with the need of intensive Care in Patients with COVID-19. | Watanabe M, Caruso D, Tuccinardi D, Risi R, <u>Zerunian M</u> , Polici M, Pucciarelli F, Tarallo M, Strigari L, Manfrini S, Mariani S, Basciani S, Lubrano C, Laghi A, Gnessi L. | <i>Metabolism</i> . 2020 Oct;111:154319. | 8,697 | 151 |
| 3 | Optimization of contrast medium volume for abdominal CT in oncologic patients: prospective comparison between fixed and lean body weight-adapted dosing protocols | Caruso D, Rosati E, Panvini N, Rengo M, Bellini D, Moltoni G, Bracci B, Lucertini E, <u>Zerunian M</u> , Polici M, De Santis D, Iannicelli E, Anibaldi P, Carbone I, Laghi A | <i>Insights Imaging</i> . 2021 Mar 20;12(1):40. | 5,036 | 21 |

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|----|---|---|--|--------|----|
| 4 | CT based radiomic approach on first line pembrolizumab in lung cancer | Zerunian M , Caruso D, Zucchelli A, Polici M, Capalbo C, Filetti M, Mazzuca F, Marchetti P, Laghi A. | <i>Sci Rep. 2021 Mar 23;11(1):6633.</i> | 4,997 | 26 |
| 5 | Postacute Sequelae of COVID-19 Pneumonia: 6-month Chest CT Follow-up | Caruso D, Guido G, Zerunian M , Polidori T, Lucertini E, Pucciarelli F, Polici M, Rucci C, Bracci B, Nicolai M, Cremona A, De Dominicis C, Laghi A | <i>Radiology. 2021 Nov;301(2):E396-E405.</i> | 29,146 | 83 |
| 6 | Artificial intelligence based image quality enhancement in liver MRI: a quantitative and qualitative evaluation | Zerunian M , Pucciarelli F, Caruso D, Polici M, Masci B, Guido G, De Santis D, Polverari D, Principessa D, Benvenga A, Iannicelli E, Laghi A. | <i>Radiol Med. 2022 Oct;127(10):1098-1105.</i> | 8,9 | 34 |
| 7 | Diagnostic performance of CT lung severity score and quantitative chest CT for stratification of COVID-19 patients | Caruso D, Zerunian M , Polici M, Pucciarelli F, Guido G, Polidori T, Rucci C, Bracci B, Tremamunno G, Laghi A. | <i>Radiol Med. 2022 Mar;127(3):309-317</i> | 8,9 | 8 |
| 8 | Explainable AI in radiology: a white paper of the Italian Society of Medical and Interventional Radiology | Neri E, Aghakhanyan G, Zerunian M , Gandolfo N, Grassi R, Miele V, Giovagnoni A, Laghi A; SIRM expert group on Artificial Intelligence | <i>Radiol Med. 2023 Jun;128(6):755-764.</i> | 9,7 | 6 |
| 9 | Fast high-quality MRI protocol of the lumbar spine with deep learning-based algorithm: an image quality and scanning time comparison with standard protocol | Zerunian M , Pucciarelli F, Caruso D, De Santis D, Polici M, Masci B, Nacci I, Del Gaudio A, Argento G, Redler A, Laghi A. | <i>Skeletal Radiol. 2024 Jan;53(1):151-159.</i> | 1,9 | 5 |
| 10 | Liver Magnetic Resonance Elastography: Focus on Methodology, Technique, and Feasibility. | Zerunian M , Masci B, Caruso D, Pucciarelli F, Polici M, Nardacci S, De Santis D, Iannicelli E, Laghi A | <i>Diagnostics (Basel). 2024 Feb 9;14(4):379</i> | 3,0 | 0 |

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| 11 | Integrated radiogenomics models predict response to neoadjuvant chemotherapy in high grade serous ovarian cancer | Crispin-Ortuzar M, Woitek R, Reinius MAV, Moore E, Beer L, Bura V, Rundo L, McCague C, Ursprung S, Escudero Sanchez L, Martin-Gonzalez P, Mouliere F, Chandrananda D, Morris J, Goranova T, Piskorz AM, Singh N, Sahdev A, Pintican R, Zerunian M , Rosenfeld N, Addley H, Jimenez-Linan M, Markowitz F, Sala E, Brenton JD | <i>Nat Commun.</i> 2023 Oct 24;14(1):6756. | 14,7 | 3 |
| 12 | Is CT Radiomics Superior to Morphological Evaluation for pN0 Characterization? A Pilot Study in Colon Cancer. | Zerunian M , Nacci I, Caruso D, Polici M, Masci B, De Santis D, Mercantini P, Arrivi G, Mazzuca F, Paolantonio P, Pillozzi E, Vecchione A, Tarallo M, Fiori E, Iannicelli E, Laghi A | <i>Cancers (Basel).</i> 2024 Feb 4;16(3):660. | 4,5 | 0 |

Roma, 29/08/2024

Marta Zerunian, MD, PhD

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