



Improving cancer diagnosis
and prediction with
AI and big data

**A Multimodal AI-based Toolbox and an Interoperable Health Imaging Repository
for the Empowerment of Imaging Analysis related to the Diagnosis, Prediction
and Follow-up of Cancer**

INCISIVE data on Breast cancer

Grant Agreement n 952179



Data Contributor	Oncology Institute of Vojvodina, University of Novi Sad
Primary Investigator	Jasmina Boban
Prior de-identification tools used	no
Modalities	MG, MRI, CT, PET
Body parts examined	breast
Number of patients	1433 (retrospective) 30 (prospective training)
Gender Percentage	99.6%F and 0.4%M (retro) 96.7%F and 3.3%M (pro)
Age mean & std values	54 +/- 10 (retro), 62 +/- 14 (pro)
Country of origin	Serbia
Ethnicity percentage	100% white
Studies per patient	min: 1, max: 13, average: 3.38, std: 2.56 (retro) min: 1, max: 17, average: 4.10, std: 2.60 (pro)
Approximate date range of image studies	2008-2021 (retrospective), 2009-2022 (prospective)
Series per study	min: 1, max: 50, average: 6.50, std: 7.06 (retro) min: 1, max: 8, average: 2.64, std: 1.75 (pro)
Percentage of complete cases (Clinical metadata include all mandatory fields and imaging data at baseline and at least one timepoint)	25
Details of DICOM Series Descriptions	Mammographies: CC, MLO Projections Tomosynthesis MRI: T2W axial, T1W pre-contrast, T1W post-contrast sequences, DWI CT scan
Vendor(s)	HOLOGIC, Inc.(4211) SIEMENS (488) retro, HOLOGIC, Inc.(42) SIEMENS (29) - pro.

Data Contributor	Theageneio Hospital
Primary Investigator	Ioanna Chouvarda
Prior de-identification tools used	None
Modalities	MG, CT, PET/CT, MRI
Body parts examined	chest, breast
Number of patients	80
Gender Percentage	100% female
Age mean & std values	60 +/- 11,79
Country of origin	Greece
Ethnicity percentage	100% 'Any other white background'
Studies per patient	min: 1, max: 8, average: 2,3 , std: 1.74
Approximate date range of image studies	2018-present
Series per study	min: 1, max: 22, average: 5,87 , std: 4,64
Percentage of complete cases (Clinical metadata include all mandatory fields and imaging data at baseline and at least one timepoint)	48,93%
Details of DICOM Series Descriptions	Mammographies: CC, MLO Projections - CT scan - MRI: T1W post-contrast sequences
Vendor(s)	GE MEDICAL SYSTEMS, HOLOGIC, Inc., Philips, Philips Digital Mammography Sweden AB, SIEMENS

Data Contributor	Hellenic Cancer Society, "Agios Savvas" Cancer Hospital, "Theagenio" Cancer Hospital of Thessaloniki, IASO Hospital Breast Clinic
Primary Investigator	Grigoris Xepapadakis, Dimitrios Nasikas
Prior de-identification tools used	no
Modalities	MG
Body parts examined	breast
Number of patients	4518 cases (3888 patients & 630 TPs)
Gender Percentage	99.5% female, 0.5%male
Age mean & std values	56 +/- 11
Country of origin	Greece
Ethnicity percentage	95% white, 5% arab, roma
Studies per patient	1 or 2
Approximate date range of image studies	2015-2023
Series per study	1 , 2 ,3 ,4
Percentage of complete cases (Clinical metadata include all mandatory fields and imaging data at baseline and at least one timepoint)	11,70%
Details of DICOM Series Descriptions	Mammographies: CC, MLO Projections
Vendor(s)	mostly FUJIFILM, Lorad Selenia and Dicom from jpg

Data Contributor	German Oncology Center
Primary Investigator	Yiannis Roussakis
Prior de-identification tools used	no
Modalities	MG, MRI, CT, PET/CT
Body parts examined	Breast
Number of patients	
Gender Percentage	~99% female, ~1%male
Age mean & std values	
Country of origin	Cyprus
Ethnicity percentage	100% 'Any other white background'
Studies per patient	
Approximate date range of image studies	
Series per study	
Percentage of complete cases (Clinical metadata include all mandatory fields and imaging data at baseline and at least one timepoint)	
Details of DICOM Series Descriptions	
Vendor(s)	GE, Siemens

Data Contributor	University of Rome Tor Vergata, Rome, Italy
Primary Investigator	Prof Agostino Chiaravalloti
Prior de-identification tools used	no
Modalities	PET/CT
Body parts examined	breasts, chest
Number of patients	120
Gender Percentage	96.6% F, 3.4% M
Age mean & std values	61.7 +/-14.4
Country of origin	Italy
Ethnicity percentage	9.1% black, 90.9% white
Studies per patient	1 or 2
Approximate date range of image studies	2015-2023
Series per study	2 (one for PET and one for CT)
Percentage of complete cases (Clinical metadata include all mandatory fields and imaging data at baseline and at least one timepoint)	38%
Details of DICOM Series Descriptions	
Vendor(s)	GE

Data Contributor	University of Naples Federico II, Naples, Italy
Primary Investigator	Prof Alberto Cuocolo
Prior de-identification tools used	no
Modalities	PET/CT, MRI, MG, US, CT
Body parts examined	breast
Number of patients	49 cases (38 retro + 11 prosp)
Gender Percentage	99% female, 1% male
Age mean & std values	
Country of origin	Italy
Ethnicity percentage	100% white
Studies per patient	1 to 4 studies
Approximate date range of image studies	2016-2023
Series per study	
Percentage of complete cases (Clinical metadata include all mandatory fields and imaging data at baseline and at least one timepoint)	
Details of DICOM Series Descriptions	
Vendor(s)	Philips, Siemens, GE