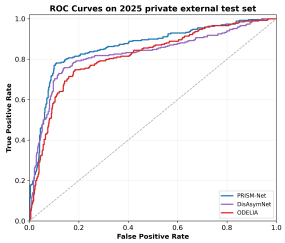
Supplementary Information for PRISM-Net: Patient-specific reference-guided inter-breast symmetry matching for three-class breast DCE-MRI classification

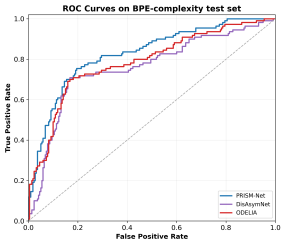
Table S1: DCE-MRI acquisition protocols of the public and private cohorts.

Parameter	Public multicenter cohort	Private institutional cohort
Dataset	ODELIA public breast MRI dataset	Private institutional breast DCE-MRI cohort
Scanner vendor	GE, Siemens, and Philips	GE Discovery MR750
Field strength	1.5 T and 3.0 T	3.0 T
Breast coil	Dedicated bilateral breast coils, 4–18 channels depending on center	8-channel dedicated breast coil
Sequence used for model input	Dynamic T1-weighted sequence	VIBRANT dynamic T1-weighted imaging
Imaging plane	Axial	Axial
TR/TE, ms	4.4–7.1 / 1.7–4.6 for most 3D protocols	7.7 / 4.3
Flip angle	9.8–18° for most 3D protocols	10°
Field of view, mm	201–427	320
Acquisition matrix	256–672	320 × 320
Slice thickness, mm	1.0–3.1	1.0
Post-contrast phases	2–7	4
Contrast dose	0.1 mmol/kg	0.1 mmol/kg
Injection rate	1–3 mL/s	2 mL/s
Saline flush	25–30 mL	20 mL

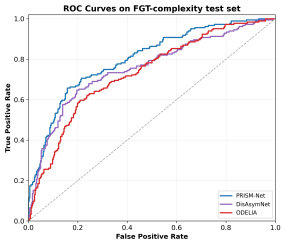
Public-cohort values are summarized as ranges across centers from the original dataset supplementary material. DCE-MRI, dynamic contrast-enhanced magnetic resonance imaging; TE, echo time; TR, repetition time.



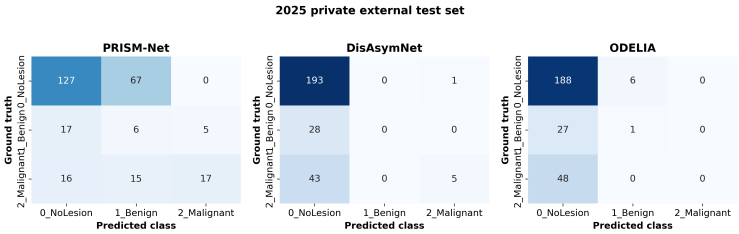
(a) 2025 private external test set.



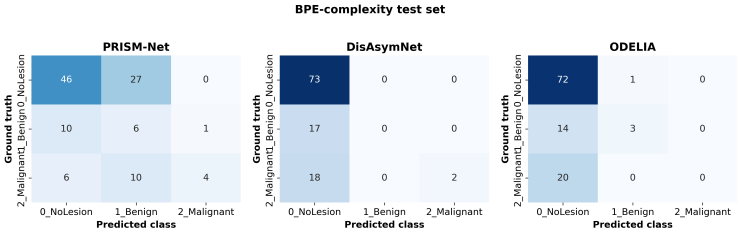
(b) BPE-complexity test set.



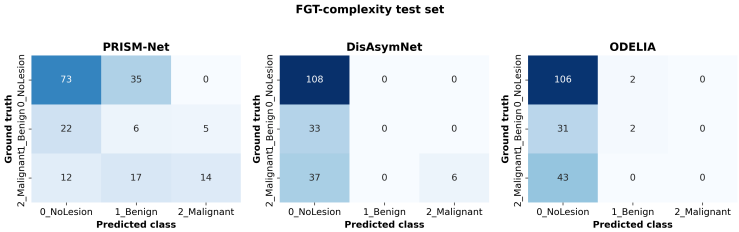
(c) FGT-complexity test set.



(d) Confusion matrices on the 2025 private external test set.



(e) Confusion matrices on the BPE-complexity test set.



(f) Confusion matrices on the FGT-complexity test set.

Fig. S1: ROC curves and confusion matrices of PRISM-Net, DisAsymNet, and ODELIA on the private institutional cohorts. Panels (a)–(c) show the ROC curves on the 2025 private external test set, the BPE-complexity test set, and the FGT-complexity test set, respectively. Panels (d)–(f) present the corresponding confusion matrices for three-class classification.