(a) ATLAS [19]

(b) ISLES [12]

(c) ADNI3-T1w [29]

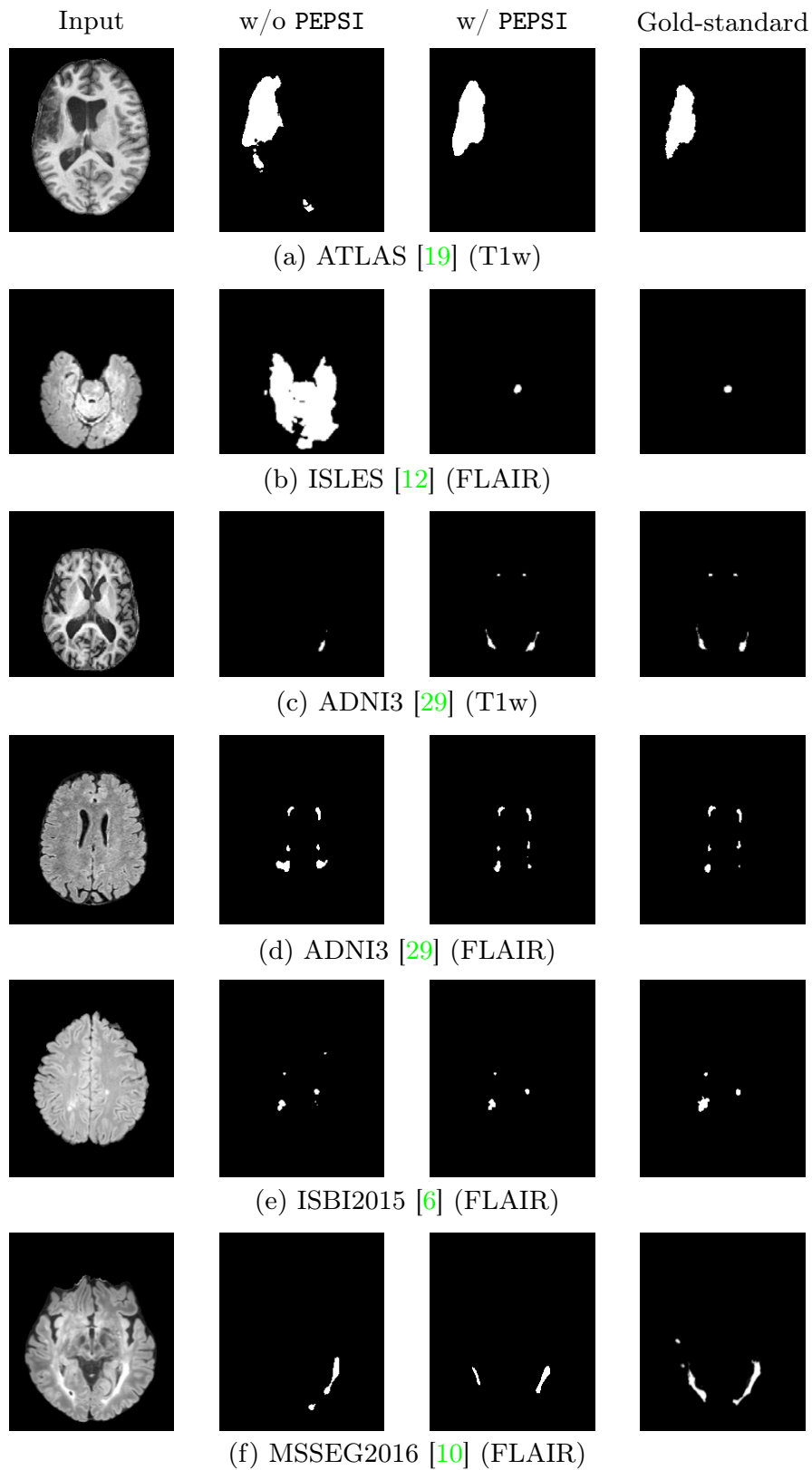(d) ADNI3-FLAIR [29]

w/ PEPSI   w/o PEPSI

Fig. 5. Comparison of the training progress between w/ PEPSI and w/o PEPSI for downstream pathology segmentation. The horizontal axis indicates training epochs ("w/ PEPSI" epochs / "w/o PEPSI" epochs). Results are obtained by evaluating models collected throughout the epochs.

| Input | w/o PEPSI | w/ PEPSI | Gold-standard |

(a) ATLAS [19] (T1w)

(b) ISLES [12] (FLAIR)

(c) ADNI3 [29] (T1w)

(d) ADNI3 [29] (FLAIR)

(e) ISBI2015 [6] (FLAIR)

(f) MSSEG2016 [10] (FLAIR)

Fig. 6. Qualitative comparisons on downstream pathology segmentation, w/o or w/ PEPSI pre-trained features.