A APPENDIX

A.1 HYPERPARAMETER CONFIGURATION OF SEFAR

	EuroSAT	ISIC	ChestX	CropDisease	CIFAR-10
Baseline	$\lambda = 5, t = 10, s = 0.3$	$\lambda = 1, t = 1, s = 0.8$	$\lambda = 1, t = 1, s = 0.8$	$\lambda = 5, t = 10, s = 0.3$	$\lambda = 5, t = 5, s = 0.3$
linear probing	$\lambda = 5, t = 1, s = 0.3$	$\lambda = 5, t = 1, s = 0.3$	$\lambda = 5, t = 1, s = 0.3$	$\lambda = 5, t = 5, s = 0.3$	$\lambda = 5, t = 1, s = 0.3$
L2-SP	$\lambda = 5, t = 10, s = 0.3$	$\lambda = 0.5, t = 5, s = 0.8$	$\lambda = 5, t = 10, s = 0.8$	$\lambda = 5, t = 10, s = 0.3$	$\lambda = 5, t = 5, s = 0.9$
DELTA	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 1, s = 0.3$
Surgical tuning	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 1, s = 0.3$

Table 5: SEFAR's hyperparameter configuration of Table 1. λ represents the weight of L_3, t means the distillation temperature coefficient and s means the sparsity of $\mathbf{M}$.

	EuroSAT	ISIC	CropDisease	ChestX
Baseline	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.6$
linear probing	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 2, s = 0.6$

	EuroSAT	ISIC	CropDisease	ChestX
Baseline	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.3$	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 1, s = 0.6$
linear probing	$\lambda = 5, t = 1, s = 0.8$	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 2, s = 0.6$	$\lambda = 5, t = 2, s = 0.6$

Table 6: SEFAR's hyperparameter configuration of Table 2. Above: 5-way 1-shot. Below: 5-way 5-shot.