

er TIME, lookback=10) — Random Search (Refit by ROC-AUC) — VLO

Generated: 2026-02-26 01:30:02

TRAIN period: \leq 2022-12-31 | TEST period: \geq 2023-01-01

TRAIN size (rows): 2,672 | TEST size (rows): 787

Note: windowing reduces effective samples by 9 per split segment.

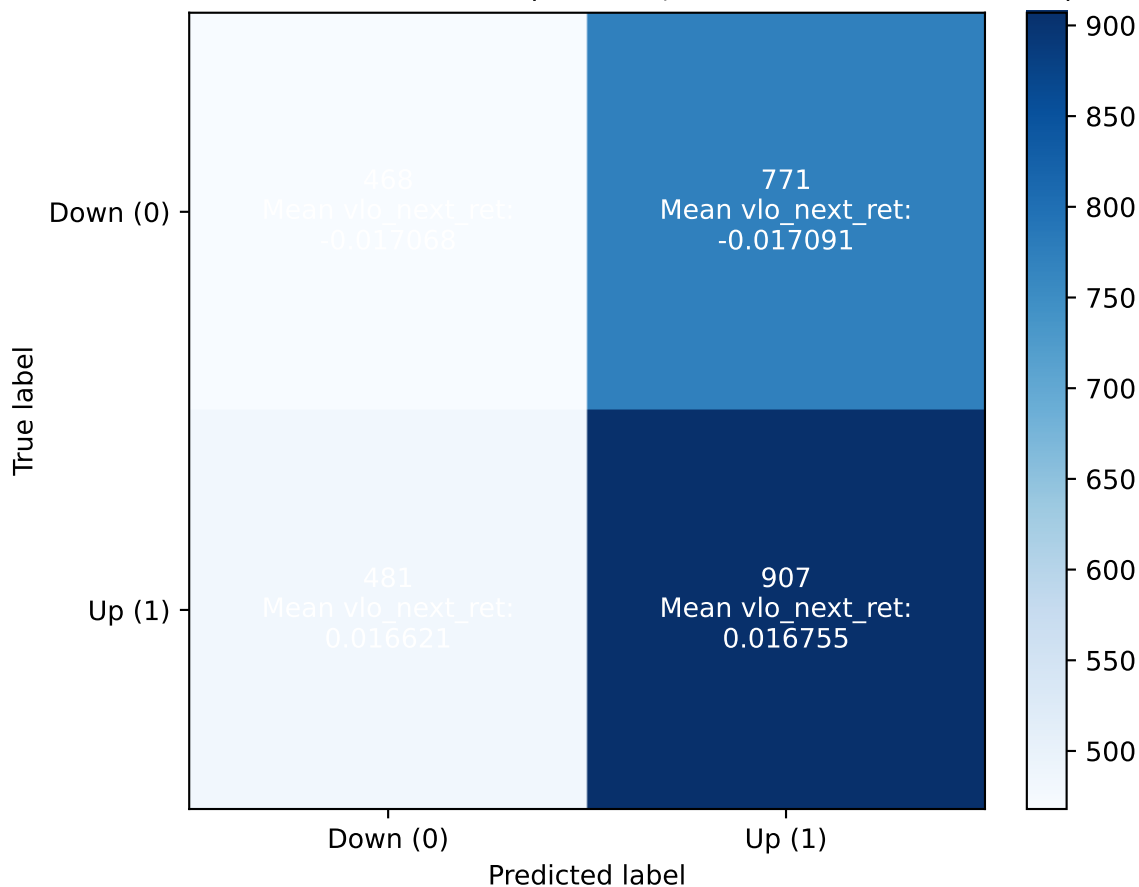
Features — scaled (float + VOL_*): 72 | passthrough: 5

Random Search: n_iter=50, refit='roc_auc'

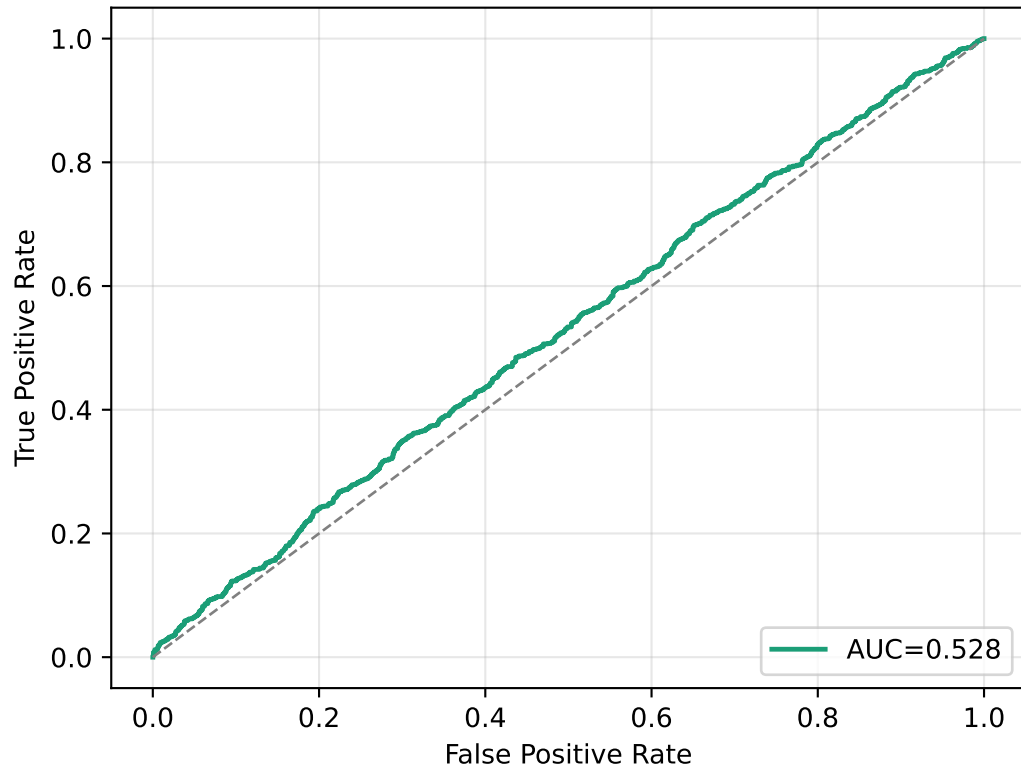
'l2': 0.001, 'kernel_size': 2, 'filters2': 0, 'filters1': 32, 'epochs': 120, 'dropout': 0.3, 'dense_units': 16, 'batch_size': 32

Best CV ROC-AUC: 0.5550

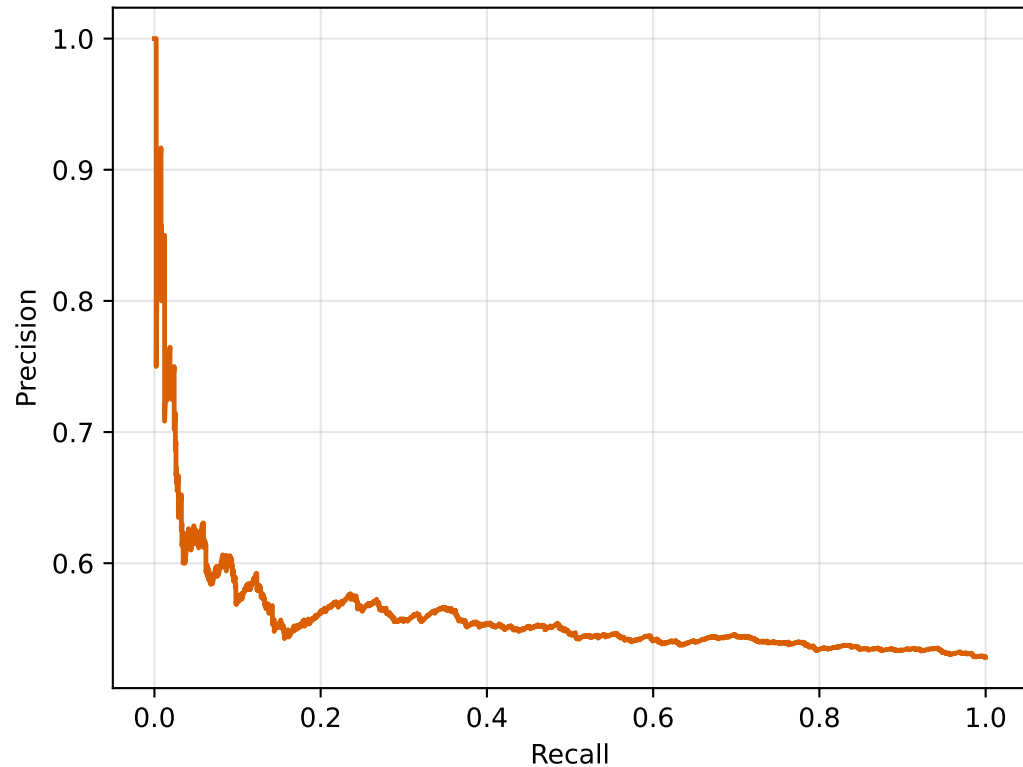
Confusion Matrix — TRAIN (CV OOF, windowed lookback=10)



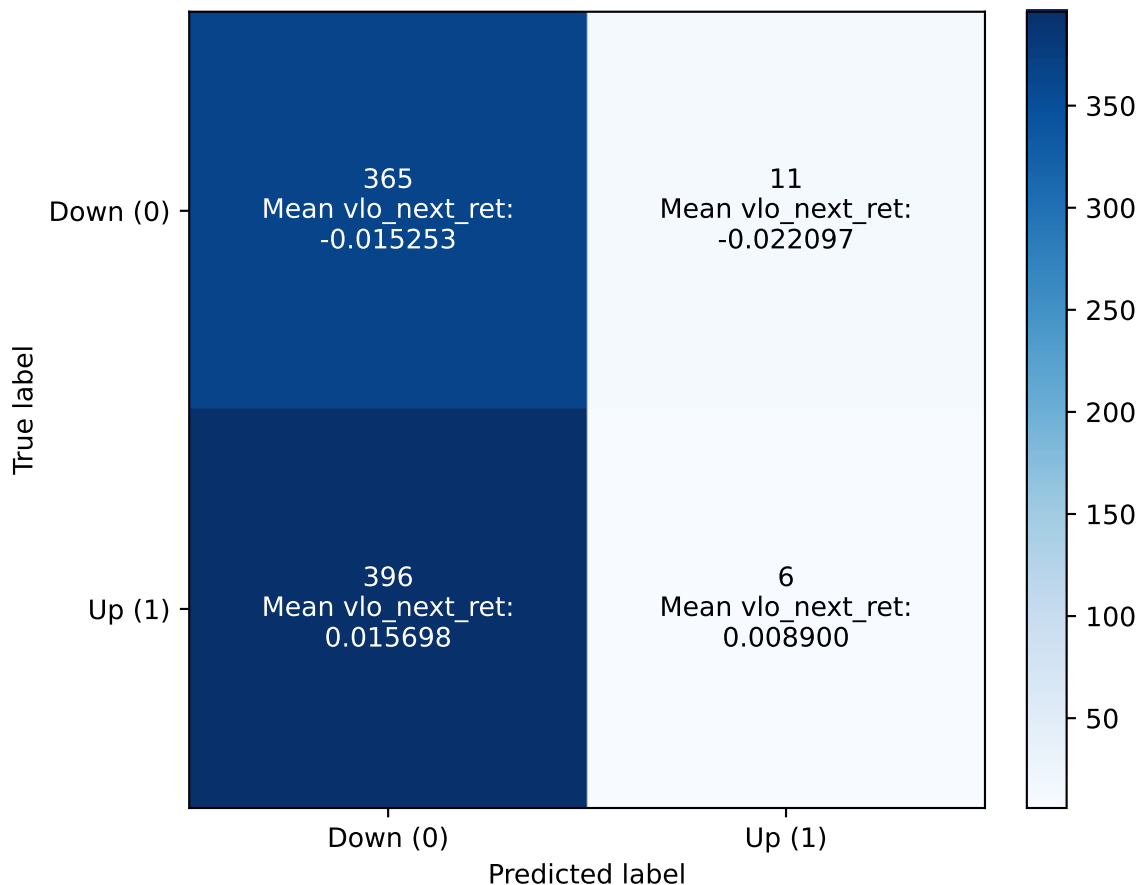
ROC Curve — TRAIN (CV pooled, windowed)



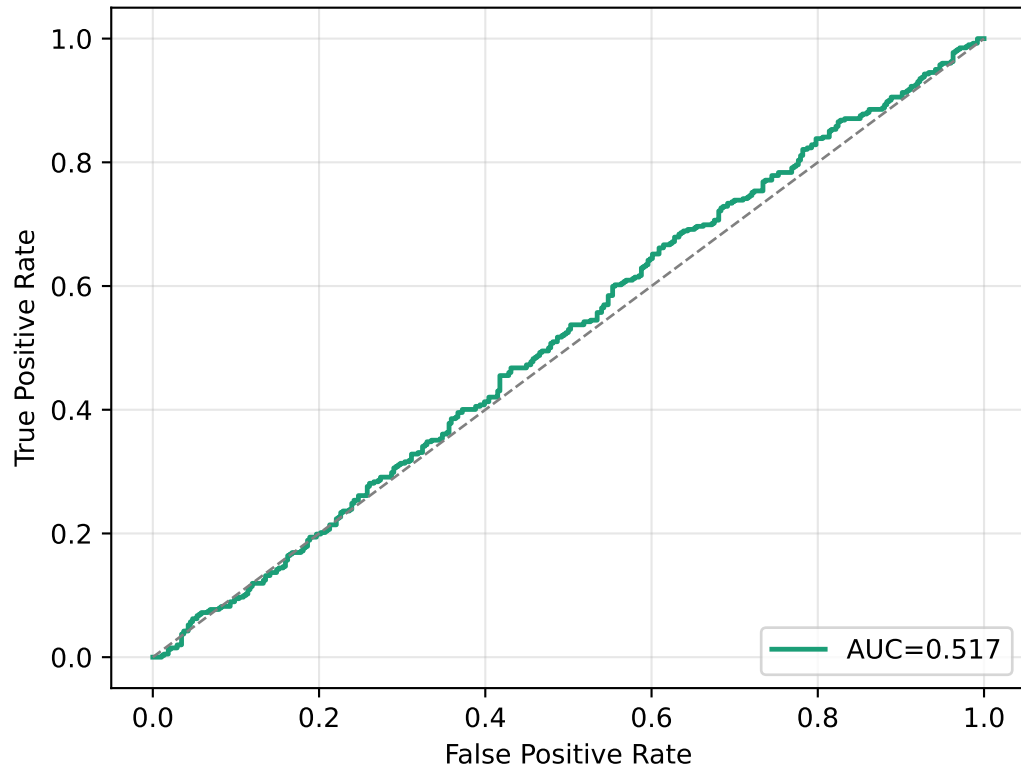
Precision-Recall — TRAIN (CV pooled, windowed)



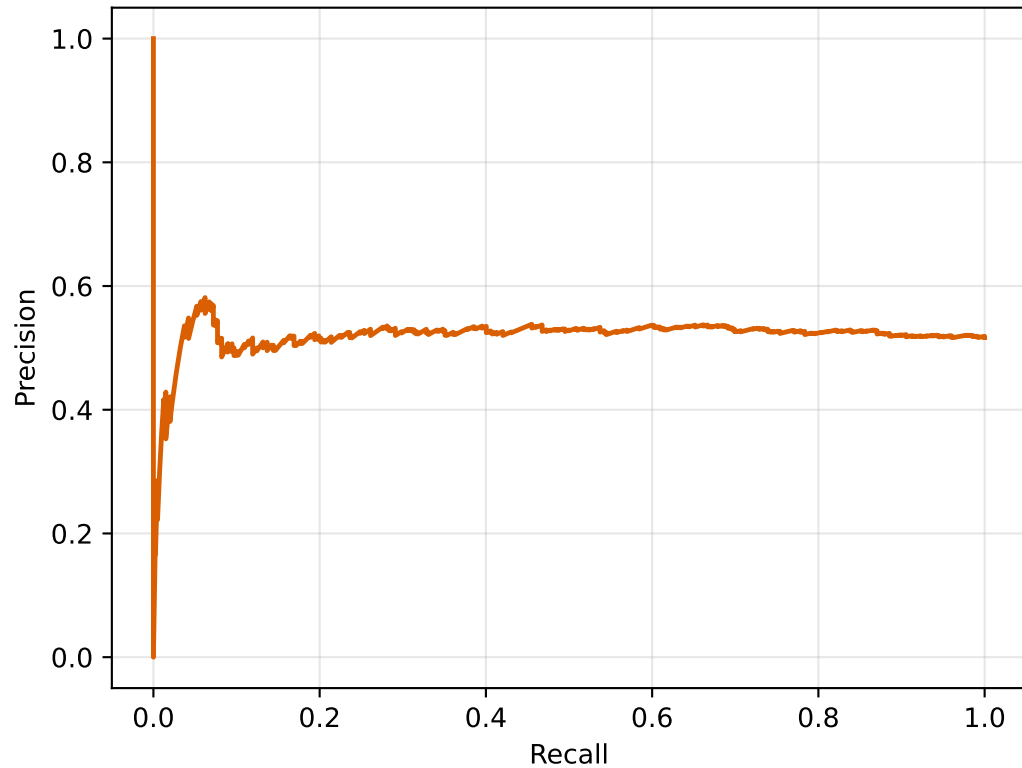
Confusion Matrix — TEST (2023+, windowed lookback=10)



ROC Curve — TEST (2023+, windowed)



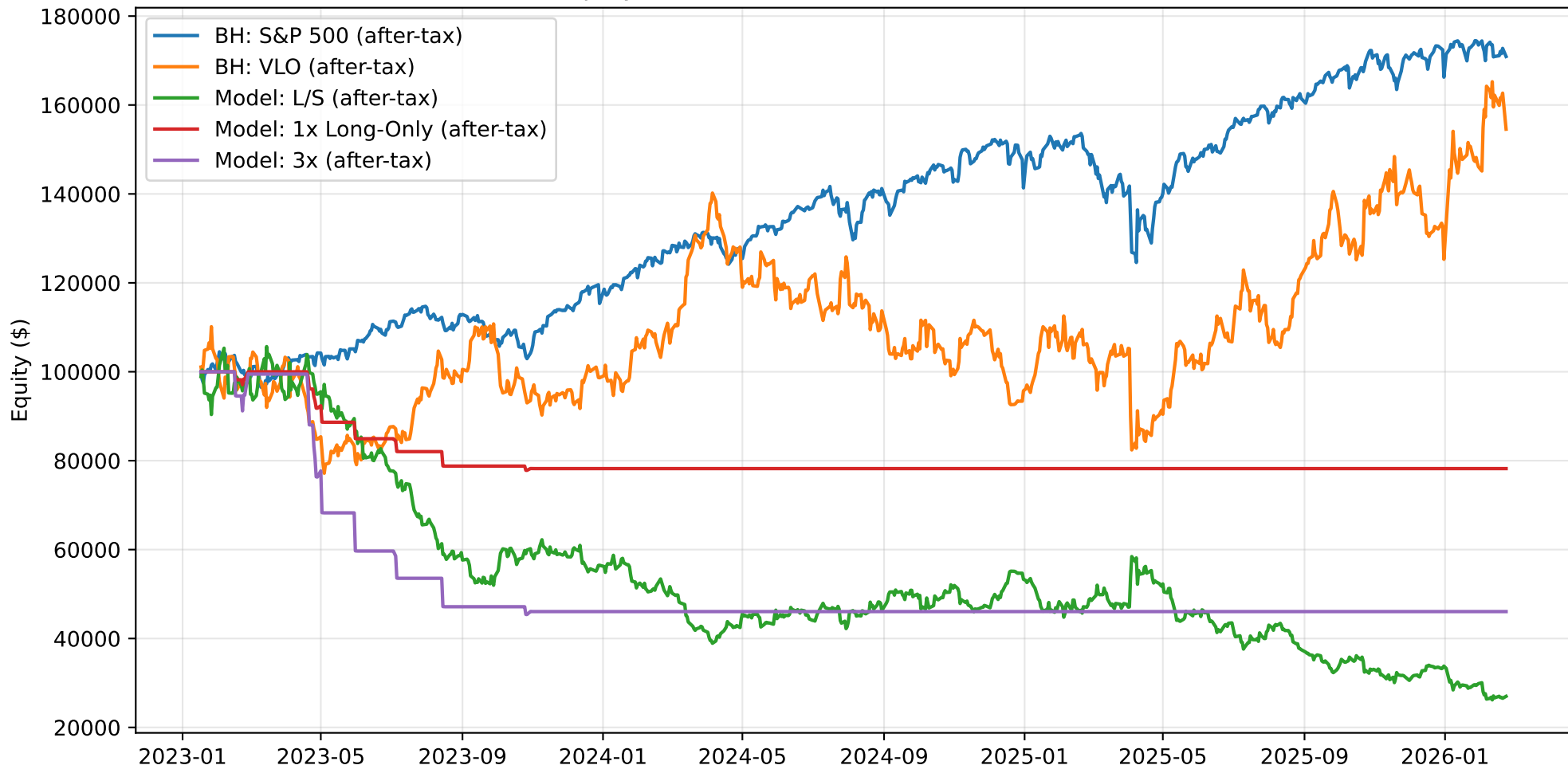
Precision-Recall — TEST (2023+, windowed)



Classification Report — TEST (2023+, windowed)

	precision	recall	f1-score	support
0	0.480	0.971	0.642	376
1	0.353	0.015	0.029	402
accuracy			0.477	778
macro avg	0.416	0.493	0.335	778
weighted avg	0.414	0.477	0.325	778

After-Tax Equity Curves — TEST: 2023 to most recent (windowed)



Annual After-Tax Performance (2023+), incl. Average

	BH: S&P 500 (after-tax)	BH: VLO (after-tax)	Model: L/S (after-tax)	Model: 1x Long-Only (after-tax)	Model: 3x (after-tax)
2023	15.61%	-2.41%	-42.89%	-21.78%	-53.94%
2024	19.21%	-3.45%	-5.12%	0.00%	0.00%
2025	13.32%	30.30%	-36.31%	0.00%	0.00%
2026	-0.32%	16.09%	-18.87%	0.00%	0.00%
Average	11.95%	10.13%	-25.80%	-5.45%	-13.49%

Run Metadata & Time-Split Summary

Report saved: /mnt/batch/tasks/shared/LS_root/mounts/clusters/dvandyk1/code/Users/dva
Scaler/Normalizer saved: /mnt/batch/tasks/shared/LS_root/mounts/clusters/dvandyk1/cod
Preprocessor saved: /mnt/batch/tasks/shared/LS_root/mounts/clusters/dvandyk1/code/Use
Model saved: /mnt/batch/tasks/shared/LS_root/mounts/clusters/dvandyk1/code/Users/dvan

LOOKBACK: 10

TRAIN rows: 2,672 | TEST rows: 787

Effective TRAIN windowed samples: 2,663 (within whole TRAIN; folds differ)

Effective TEST windowed samples: 778

Best params: {'use_batchnorm': True, 'pool_type': 'max', 'patience': 12, 'normalizer'

Best CV ROC-AUC: 0.5550

TEST ROC-AUC: 0.5172 | TEST Acc: 0.4769

Backtest assumptions: tx cost 2.00 bps/side, taxes LT 0.20, ST 0.37