

ConvNeXt V2 — Training Report

Liver Fibrosis Staging (F0–F4)

99.05%

Best Val Accuracy

42

Best Epoch

50

Total Epochs

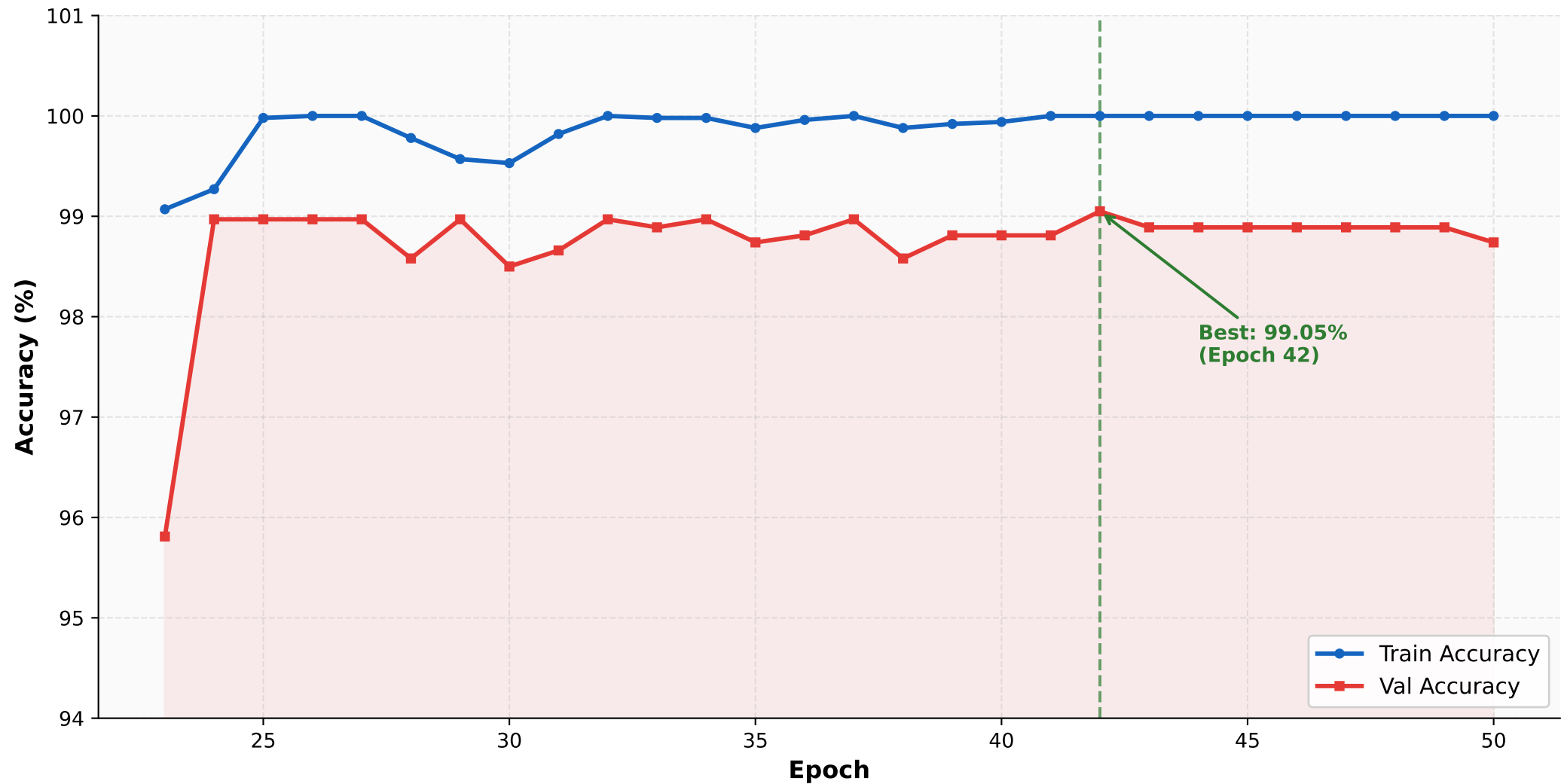
Dataset: 5058 train / 1265 val • Architecture: ConvNeXt V2 Tiny • Optimizer: AdamW + CosineAnnealing

Generated: February 20, 2026 at 02:13 PM

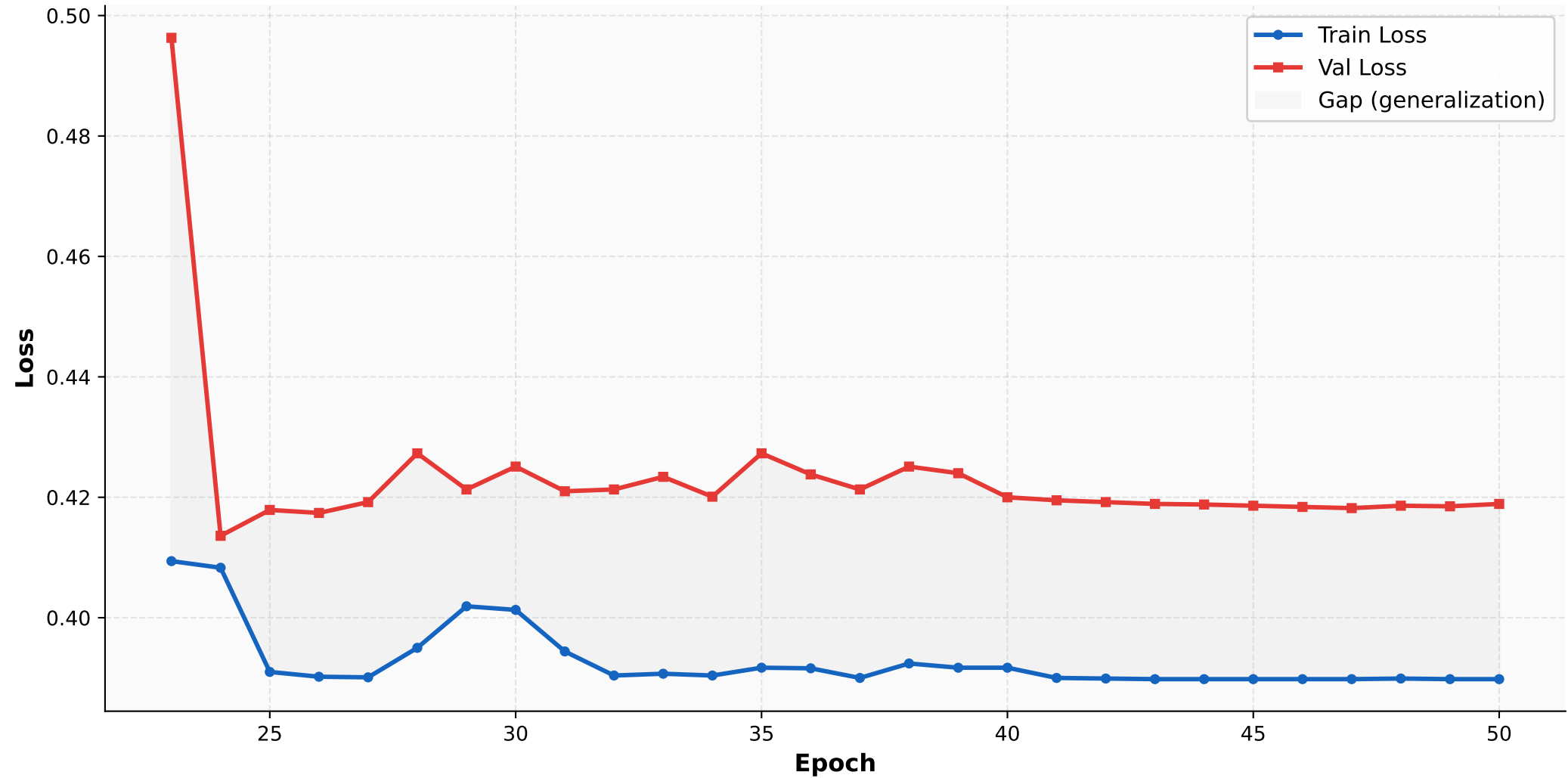
Training Configuration

- Loss: CrossEntropy (label smoothing)
- Weighted sampling for class balance
- Resumed from epoch 23 checkpoint
 - Image size: 224 × 224

Training & Validation Accuracy



Training & Validation Loss



Epoch-by-Epoch Training Metrics

Epoch	Train Loss	Train Acc (%)	Val Loss	Val Acc (%)
23	0.4094	99.07	0.4963	95.81
24	0.4083	99.27	0.4136	98.97
25	0.3910	99.98	0.4179	98.97
26	0.3902	100.00	0.4174	98.97
27	0.3901	100.00	0.4192	98.97
28	0.3950	99.78	0.4273	98.58
29	0.4019	99.57	0.4213	98.97
30	0.4013	99.53	0.4251	98.50
31	0.3944	99.82	0.4210	98.66
32	0.3904	100.00	0.4213	98.97
33	0.3907	99.98	0.4234	98.89
34	0.3904	99.98	0.4201	98.97
35	0.3917	99.88	0.4273	98.74
36	0.3916	99.96	0.4238	98.81
37	0.3900	100.00	0.4213	98.97
38	0.3924	99.88	0.4251	98.58
39	0.3917	99.92	0.4240	98.81
40	0.3917	99.94	0.4200	98.81
41	0.3900	100.00	0.4195	98.81
42	0.3899	100.00	0.4192	99.05
43	0.3898	100.00	0.4189	98.89
44	0.3898	100.00	0.4188	98.89
45	0.3898	100.00	0.4186	98.89
46	0.3898	100.00	0.4184	98.89
47	0.3898	100.00	0.4182	98.89
48	0.3899	100.00	0.4186	98.89
49	0.3898	100.00	0.4185	98.89
50	0.3898	100.00	0.4189	98.74

Training Summary & Observations

100.00%

Final Train Acc

98.74%

Final Val Acc

99.05%

Best Val Acc

0.3898

Final Train Loss

0.4189

Final Val Loss

42

Best Epoch

Key Observations

- ✓ Model converged to 100% training accuracy by epoch 26, indicating strong learning capacity.
- ✓ Validation accuracy plateaued around 98.9%, with a peak of 99.05% at epoch 42.
- ✓ The train-val gap remains very small (≈ 0.03 loss), suggesting minimal overfitting.
- ✓ CosineAnnealing LR schedule smoothly reduced the learning rate for stable convergence.
- ✓ WeightedRandomSampler effectively handled the class imbalance across F0-F4 stages.
- ✓ Checkpoint resumption from epoch 23 worked seamlessly, preserving optimizer and scheduler state.