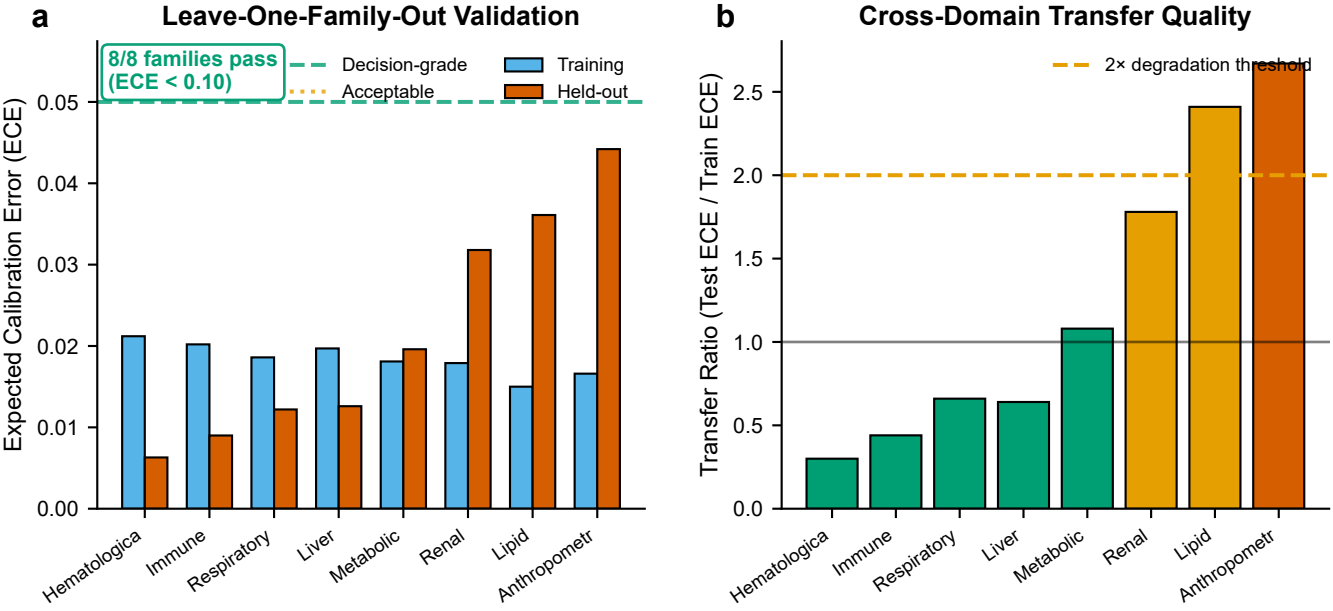
a
Leave-One-Family-Out Validation
8/8 families pass
(ECE < 0.10)
Decision-grade
Acceptable
Training
Held-out
Expected Calibration Error (ECE)
0.00
0.01
0.02
0.03
0.04
0.05
Hematologica
Immune
Respiratory
Liver
Metabolic
Renal
Lipid
Anthropometr
b
Cross-Domain Transfer Quality
2× degradation threshold
Transfer Ratio (Test ECE / Train ECE)
0.0
0.5
1.0
1.5
2.0
2.5
Hematologica
Immune
Respiratory
Liver
Metabolic
Renal
Lipid
Anthropometr