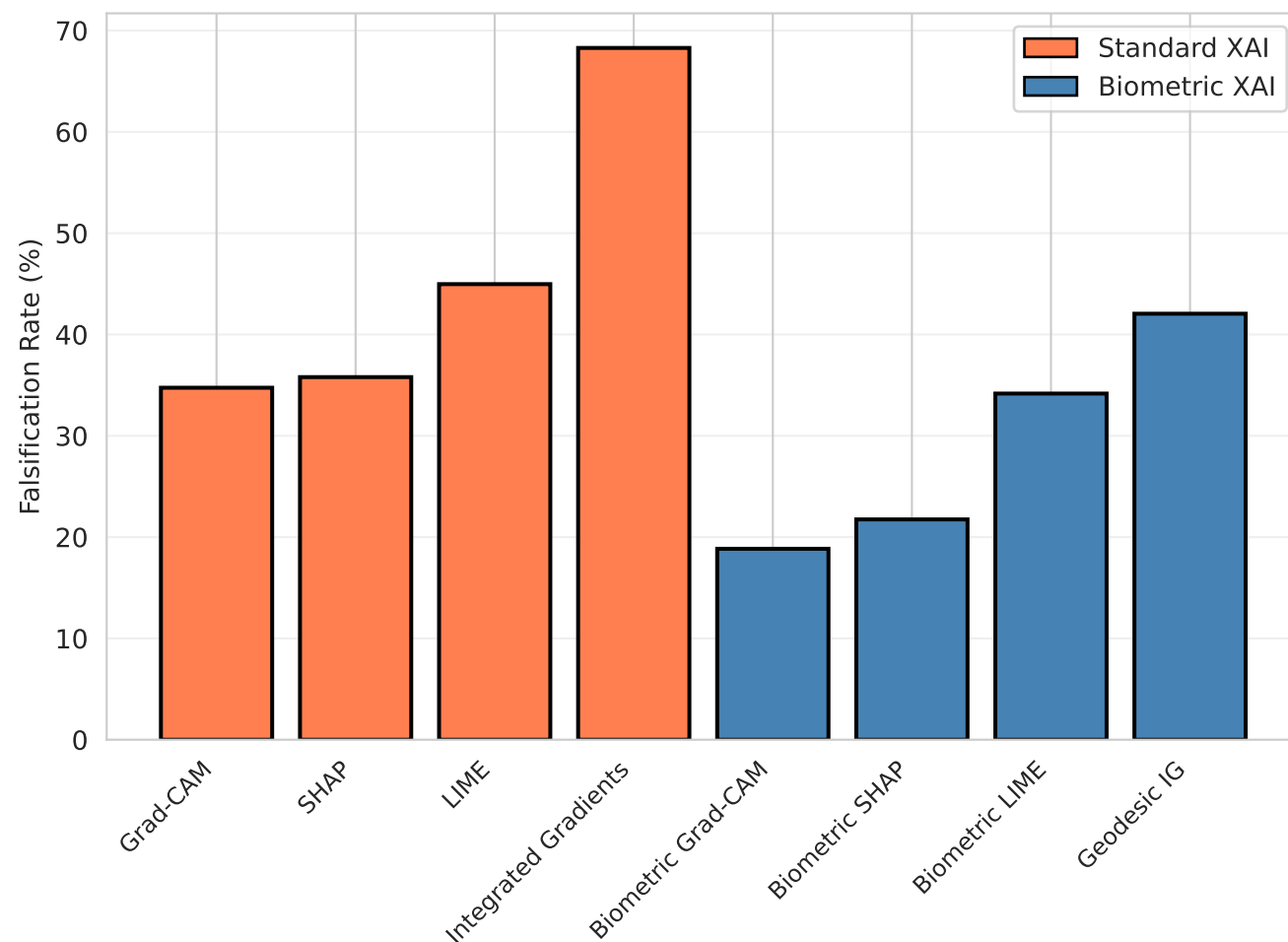
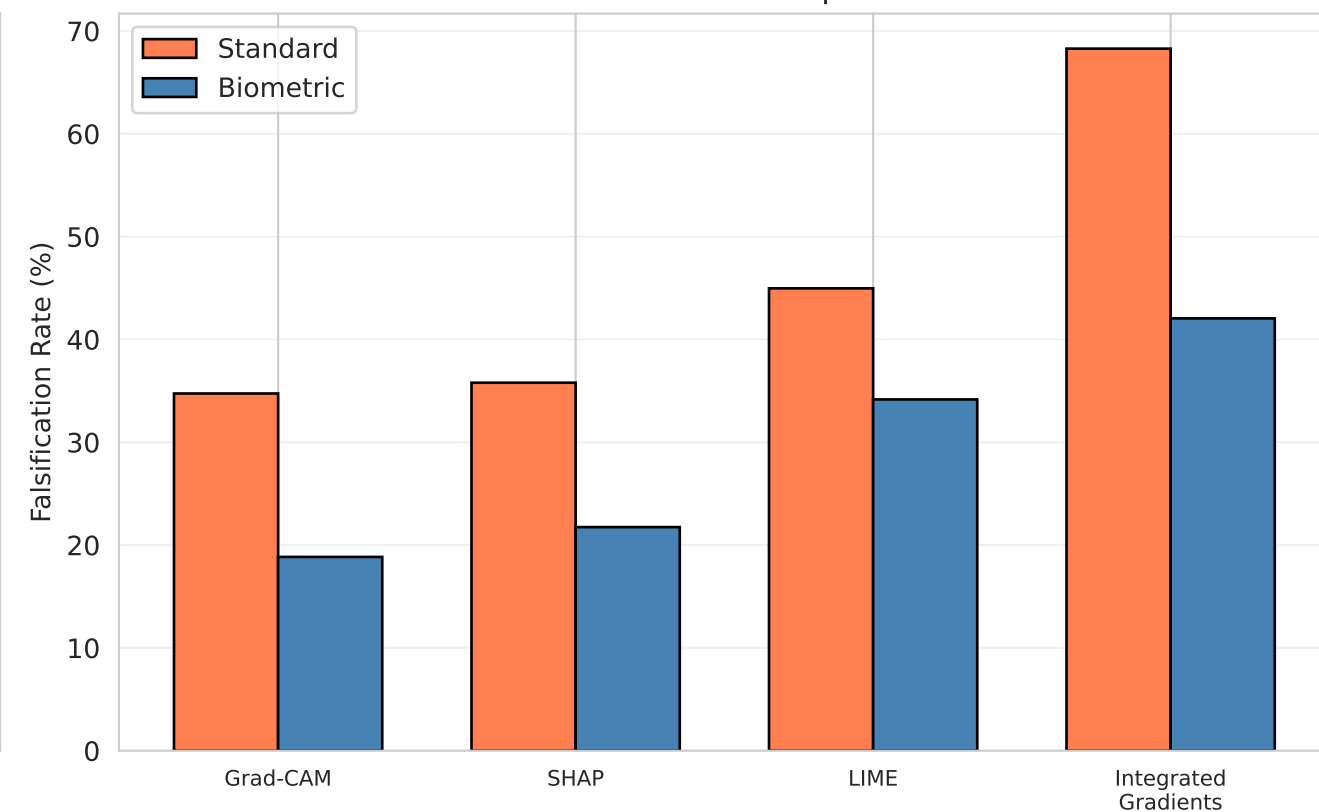


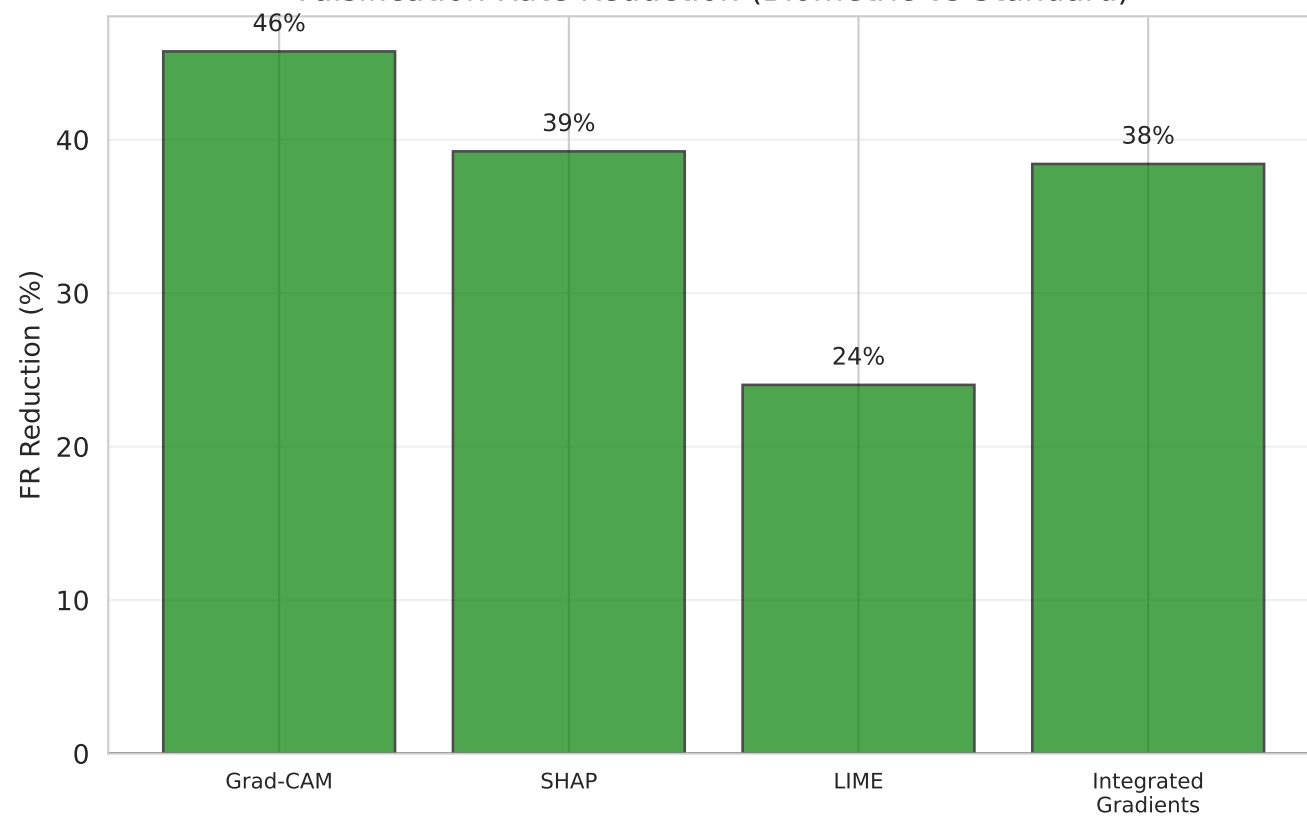
Standard vs Biometric XAI Methods



Paired Method Comparison



Falsification Rate Reduction (Biometric vs Standard)



STATISTICAL COMPARISON SUMMARY

Standard XAI Methods:

Mean FR: 45.9%

Biometric XAI Methods:

Mean FR: 29.2%

Overall Reduction: 36%

Paired t-test:

 $t = 5.02$ $df = 3$ $p = 0.0152$ Cohen's $d = 2.90$

Result: SIGNIFICANT

 $(0.0152 < 0.05)$

Effect size: LARGE