## Statistical Analysis Summary by Phase

Methodological overview for manuscript methods section

Analysis Phase	Model IDs	Number of Tests	Sample Size Range	Phase Objective
Biological Validation	PROOF-1, PROOF-2	2	305-336	Biological Relevance Proof
Biological Validation	PROOF-1, PROOF-2	2	305-336	Biological Relevance Proof
Cross-Population Translation	TRANS-1	1	305-305	Gene Conservation Assessment
Field Translation	FIELD-1, FIELD-2, FIELD-3	3	169-305	Field Application Success
Field Translation	FIELD-1, FIELD-2, FIELD-3	3	169-305	Field Application Success
Field Translation	FIELD-1, FIELD-2, FIELD-3	3	169-305	Field Application Success
Laboratory Development	DISC-1, DISC-2, DISC-3	3	136-136	Model Development & Validation
Laboratory Development	DISC-1, DISC-2, DISC-3	3	136-136	Model Development & Validation
Laboratory Development	DISC-1, DISC-2, DISC-3	3	136-136	Model Development & Validation