

##Table description

REAL				
CANDIDATE	HETEROZYGOUS	HOMO. ALTER	HOMO. REF	NN
HETEROZYGOUS	A1*	A2	A3	A4
HOMO. ALTER	B1	B2**	B3	B4
HOMO. REF	C1	C2	C3	C4
NN	D1	D2	D3	D4

Coverage Rate: $1 - (D1+D2+D3)/(A1+A2+A3+B1+B2+B3+C1+C2+C3+D1+D2+D3)$

Sequencing accuracy: $(A1+B2+C3)/(A1+A2+A3+B1+B2+B3+C1+C2+C3)$

Variant accuracy: $(A1+B2)/(A1+A2+B1+B2+C1+C2)$

Sensitivity (recall): $(A1+A2+B1+B2)/(A1+A2+B1+B2+C1+C2)$

Precision (PPV): $(A1+A2+B1+B2)/(A1+A2+A3+B1+B2+B3)$

Specificity: $C3/(A3+B3+C3)$

F1-score: $2*((\text{recall}*\text{precision})/(\text{recall}+\text{precision}))$

kappa: $(\text{kappa_hits_obs} - \text{kappa_hits_expected})/(1 - \text{kappa_hits_expected})$,

where:

kappa_no_samples: $A1+A2+A3+B1+B2+B3+C1+C2+C3$

kappa_hits_obs: $(A1+B2+C3)/\text{kappa_no_samples}$

kappa_hits_expected: $((A1+B1+C1)/\text{kappa_no_samples})*((A1+A2+A3)/\text{kappa_no_samples}) + ((A2+B2+C2)/\text{kappa_no_samples})*((B1+B2+B3)/\text{kappa_no_samples}) + ((A3+B3+C3)/\text{kappa_no_samples})*((C1+C2+C3)/\text{kappa_no_samples})$

Youden's J: $\text{sensitivity} + \text{specificity} - 1$

fpr: $(A3+B3)/(A3+B3+C3)$

fdr: $(A3+B3)/(A1+A2+A3+B1+B2+B3)$

fnr: $(C1+C2)/(A1+A2+B1+B2+C1+C2)$

Variant discrepancy rate: $(A2+B1)/(A1+A2+B1+B2)$

* Errors: Both heterozygous, but different

** Errors: Both homozygous, but different