

Individuals

0	2	2	1	1	0	1
0	2	1	0	1		
2	...					

X

$$E[\mathbf{x}_{ij}|T] = 2p_i^T,$$

$$\text{Var}(\mathbf{x}_{ij}|T) = 2p_i^T (1 - p_i^T) (1 + f_j^T),$$

$$\text{Cov}(\mathbf{x}_{ij}, \mathbf{x}_{ik}|T) = 4p_i^T (1 - p_i^T) \varphi_{jk}^T,$$

$$(1 - F_{IT}) = (1 - F_{IS}) (1 - F_{ST}),$$

$$(1 - f_j^T) = (1 - f_j^{L_j}) (1 - f_{L_j}^T),$$

$$F_{ST} = \sum_{j=1}^n w_j f_{L_j}^T,$$

$$\hat{p}_i^T = \frac{1}{2} \sum_{j=1}^n w_j \mathbf{x}_{ij},$$

$$\hat{\varphi}_{jk}^{T,\text{new}} \xrightarrow[m \rightarrow \infty]{\text{a.s.}} \varphi_{jk}^T.$$

E, Var, Cov, round, sgn,
logit, $\xrightarrow[m \rightarrow \infty]{\text{a.s.}}$, $\xrightarrow[n \rightarrow \infty]{\text{a.s.}}$,

$\xrightarrow[n, m \rightarrow \infty]{\text{a.s.}}$, \mathbf{x}_{ij} , \mathbf{x}_i , \mathbf{X} , p_i^T ,

\hat{p}_i^T , F_{ST} , F_{IT} , F_{IS} , f_B^A , f_j^T ,

$f_j^{L_j}$, $f_{L_j}^T$, φ_{jk}^T , Φ^T , $\varphi_{jk}^{L_{jk}}$,

$f_{L_{jk}}^T$, $f_{L_j}^{L_{jk}}$, R_{ST} , ϕ_{ST} , G_{ST} ,

G'_{ST} , $\hat{F}_{ST,i}^{\text{sample}}$, \hat{F}_{ST} , $\hat{F}_{ST}^{\text{indep}}$,

\hat{F}_{ST}^{WC} , $\hat{F}_{ST}^{\text{Hudson}}$, $\hat{F}_{ST}^{\text{HudsonK}}$,

$\hat{\varphi}_{jk}^T$, \hat{f}_j^T , $\hat{\varphi}_{jk}^{T,\text{std}}$, $\hat{f}_j^{T,\text{std}}$,

$\hat{f}_j^{T,\text{stdII}}$, $\hat{f}_j^{T,\text{stdIII}}$, $\hat{F}_{ST}^{\text{std}}$, \hat{F}_{ST}' ,

\hat{F}_{ST}'' , $\hat{\varphi}_{jk}^{T,\text{new}}$, $\hat{\varphi}_{\min}^{T,\text{new}}$,

$\hat{f}_j^{T,\text{new}}$, $\hat{F}_{ST}^{\text{new}}$, $\hat{\varphi}_{jk}^{L_{jk},\text{beagle}}$,

$\hat{f}_j^{L_{jk},\text{beagle}}$, $\overline{p(1-p)}^T$, A_{jk} ,

\hat{A}_{\min} , SRMSD_p , AUC_{PR} .