

# Corrigenda for "Estimating heritability of complex traits from genome-wide association studies using IBS-based Haseman-Elston regression", Front Genet, 2014, 5:107

Guo-Bo Chen

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## 1 Correction

Page 4, the first column, lines below Equation 3:  $cov(\Omega_{ijk}, \Omega_{ijl}) = E(\Omega_{ijk}\Omega_{ijl}) - E(\Omega_{ijk})E(\Omega_{ijl})$ ,  
Should be:  $cov(\Omega_{ijk}, \Omega_{ijl}) = E(\Omega_{ijk}\Omega_{ijl}) - E(\Omega_{ijk})E(\Omega_{ijl})$ .

Page 6, the second column, lines above Equation 10,  $var(\Omega_{ijk}) = \sum_{k=1}^M \sum_{l=1}^M cov(\Omega_{ijk}, \Omega_{ijk})/M^2$ ,  
in which  $cov(\Omega_{ijk}, \Omega_{ijk}) = \rho_{kl}^2$ ,  
Should be:  $var(\Omega_{ijk}) = \sum_{k=1}^M \sum_{l=1}^M cov(\Omega_{ijk}, \Omega_{ijk})/M^2$ , in which  $cov(\Omega_{ijk}, \Omega_{ijk}) = \rho_{kl}^2$ .

Page 6, the second column,  $\hat{b}^2 cov(\Omega_{ij}) = 4\sigma_A^2 \Lambda^2 var(\Omega_{ij}) = 4\sigma_A^4 \frac{\bar{\rho}_Q^4}{\bar{\rho}_M^2}$   
Should be:  $\hat{b}^2 cov(\Omega_{ij}) = 4\sigma_A^2 \Lambda^2 var(\Omega_{ij}) = 4\sigma_A^4 \frac{\bar{\rho}_Q^4}{\bar{\rho}_M^2}$ .

In Table 6,  $\sqrt{\frac{8\sigma_y^4 - 4\sigma_A^4 \bar{\rho}_Q^4}{N'}}$  should be  $\sqrt{\frac{8\sigma_y^4 - 4\sigma_A^4 \bar{\rho}_Q^4}{N'}}$ .

In Equation 13 and 14, the element  $\bar{\rho}_Q^4$  should be  $\bar{\rho}_Q^4$ , slightly different font for the subscript.

Page 7, Equation 15 is established under the assumption that the phenotype has been standardized,  $\sigma_y = 1$ .

Page 8, first column, "Simulation IV" actually should be "Simulation V".