

$$PA(DD|DD)=A_1/(A_1+A_2+A_3);$$

$$PA(Dd|DD)=A_2/(A_1+A_2+A_3); \text{ and } PA(dd|DD)=1- PA(DD|DD)- PA(Dd|DD).$$

$$PA(Dd|Dd)=B_2/(B_1+B_2+B_3);$$

$$PA(DD|Dd)=B_1/(B_1+B_2+B_3); \text{ and } PA(dd|Dd)=1-PA(DD|Dd)-PA(Dd|Dd).$$

$$PA(dd|dd)=C_3/(C_1+C_2+C_3);$$

$$PA(Dd|dd)=C_2/(C_1+C_2+C_3) \text{ and } PA(DD|dd)=1-P(Dd|dd)-PA(dd|dd).$$