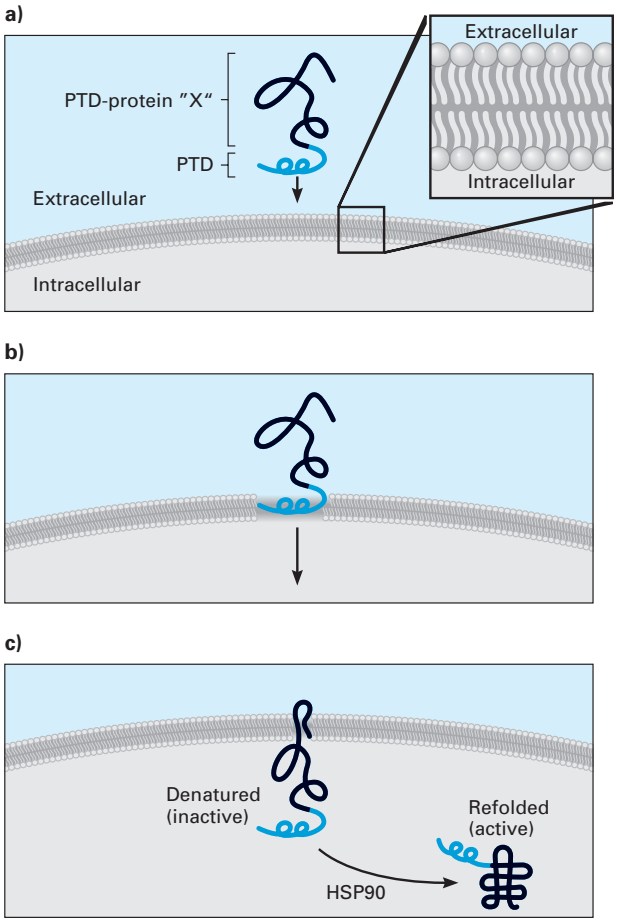

FIGURE 12.1 • Cellular internalization of a larger protein fused onto a protein transduction domain. a) The positively charged PTD makes contact with the negatively charged outer membrane. **b)** The protein translocates through the membrane in an unfolded state. **c)** Once inside the cell, members of the HSP90 protein family refold the larger protein into an active conformation.

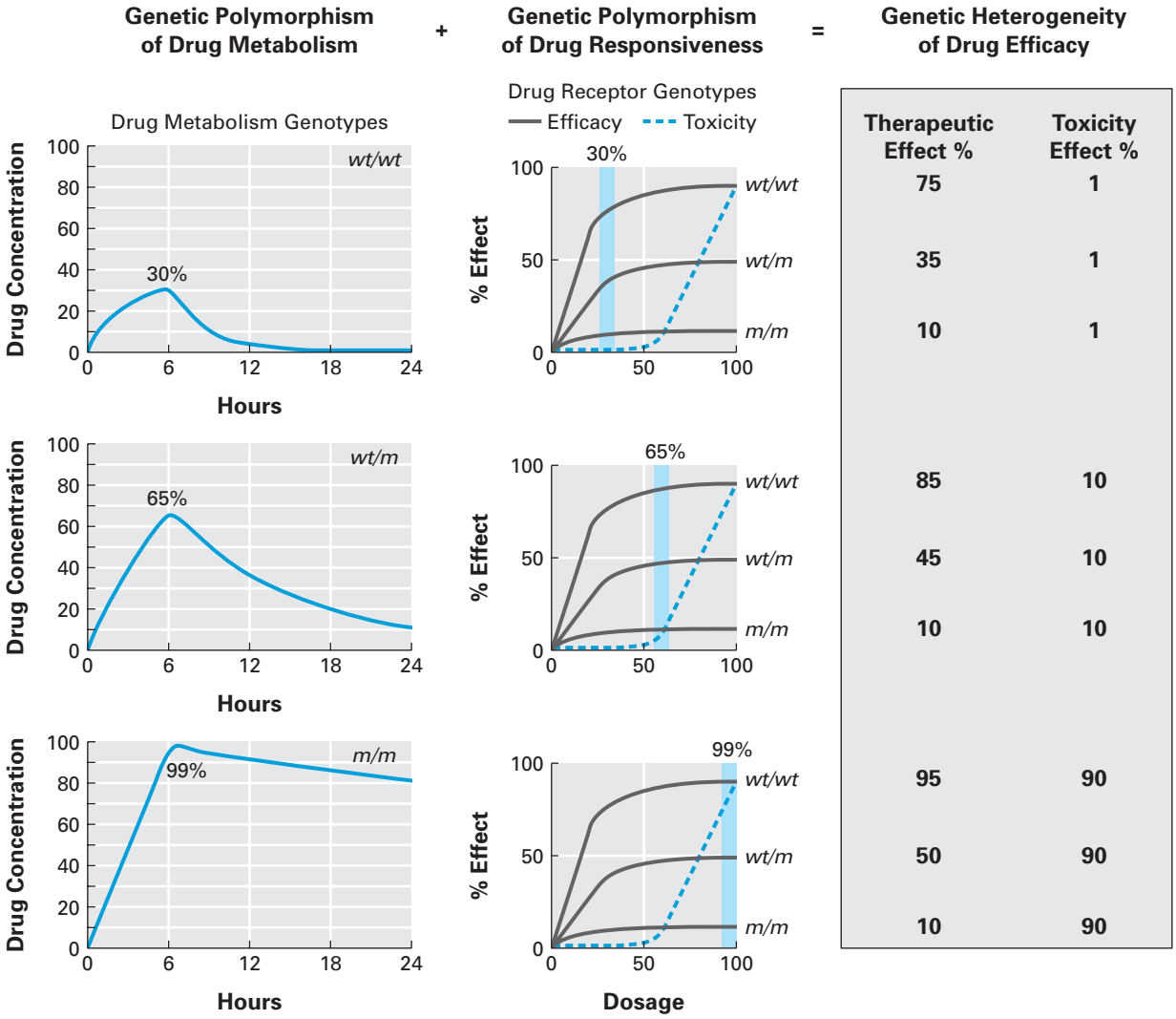

FIGURE 12.2 • Two loci that can affect a person's response to medications. In the left column, three graphs illustrate the amount of active medication present in a person's circulation, depending on their genotype. The second column illustrates the effectiveness of three different concentrations of medication due to three genotypes for the drug receptor. Superimposed in the second column is a dotted line that shows the toxicity of the drug. The final table summarizes the consequences of medication for each of the nine genotypes.

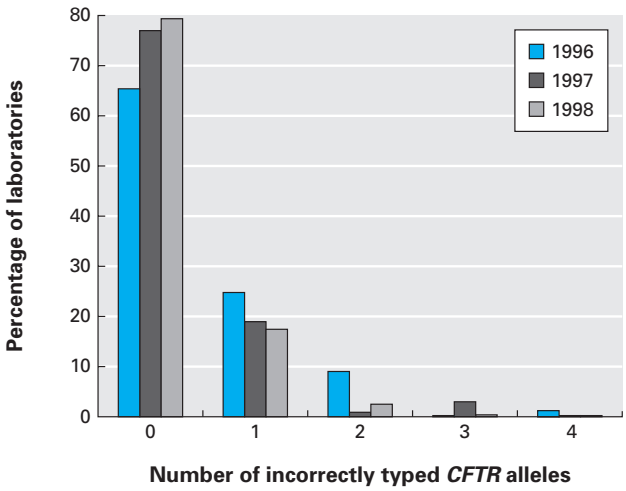

FIGURE 12.3 • The percentage of laboratories that produced incorrect genotype determinations. Interestingly, 10% of the mistakes were due to reporting mistakes despite the correct sequence data. 1996 is blue; 1997 is dark gray; 1998 is light gray.

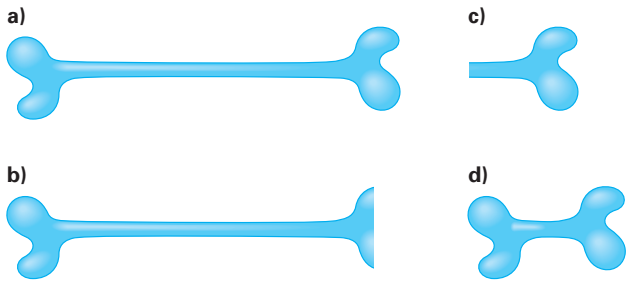

FIGURE 12.4 • Three truncated versions of dystrophin. **a)** Wild-type protein. **b)** Carboxyl-terminus truncation. **c)** Lacking most of the amino-terminus. **d)** Mini-dystrophin protein produced for gene therapy.