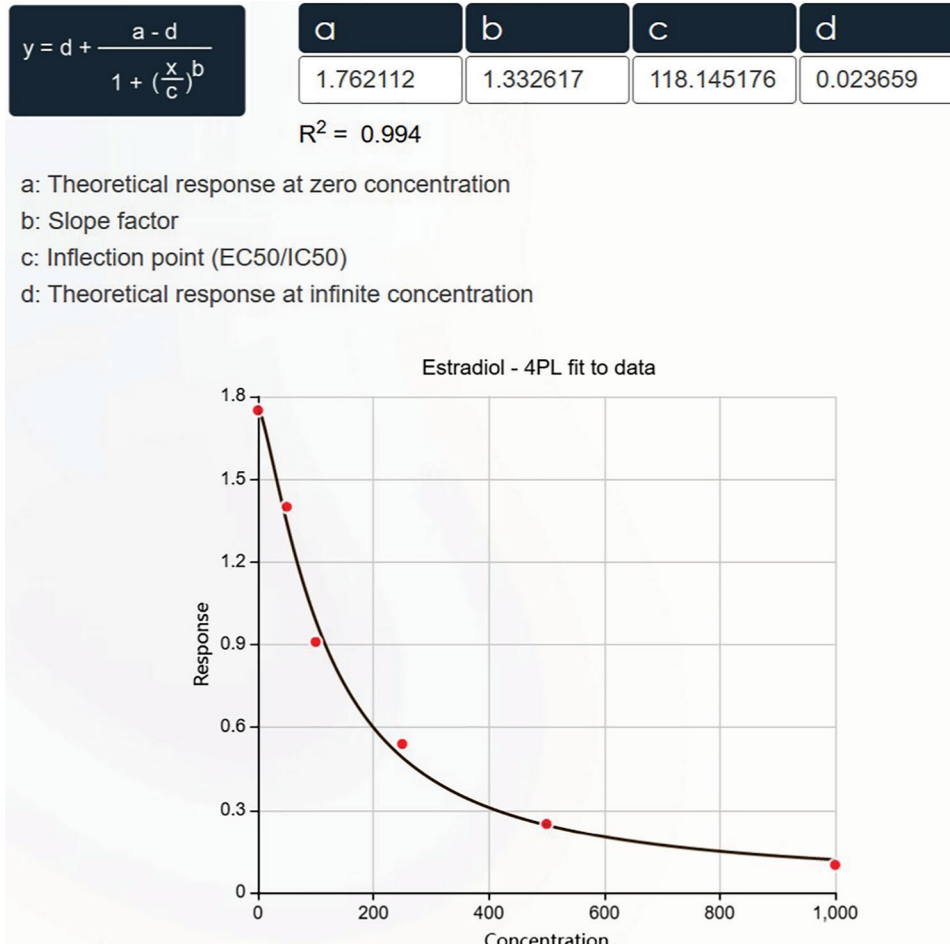
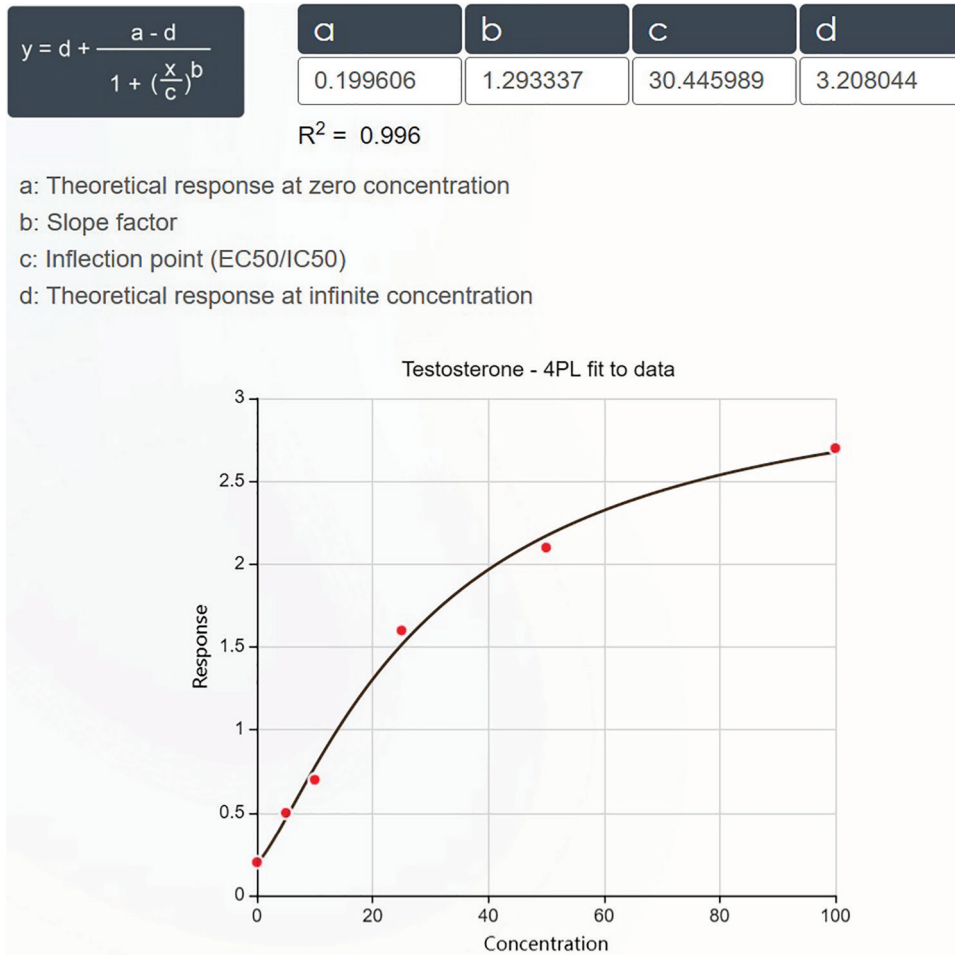


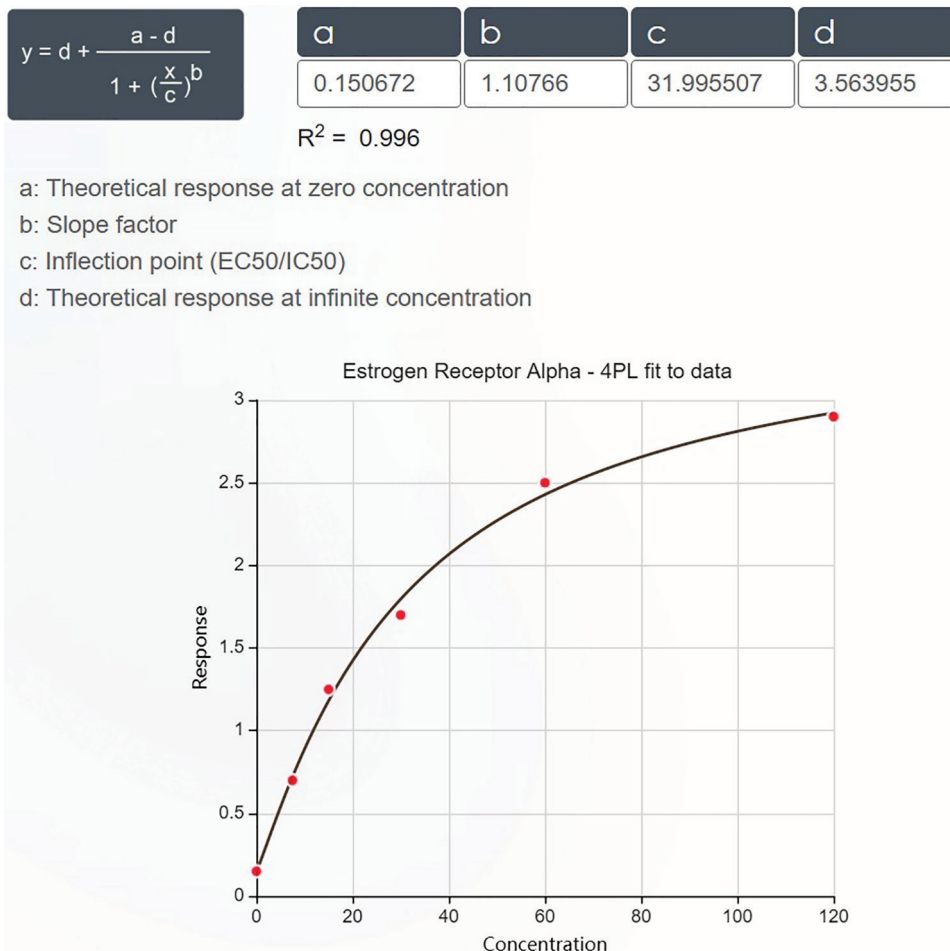
Standard curves were validated by <https://www.arigobio.com/elisa-analysis>.



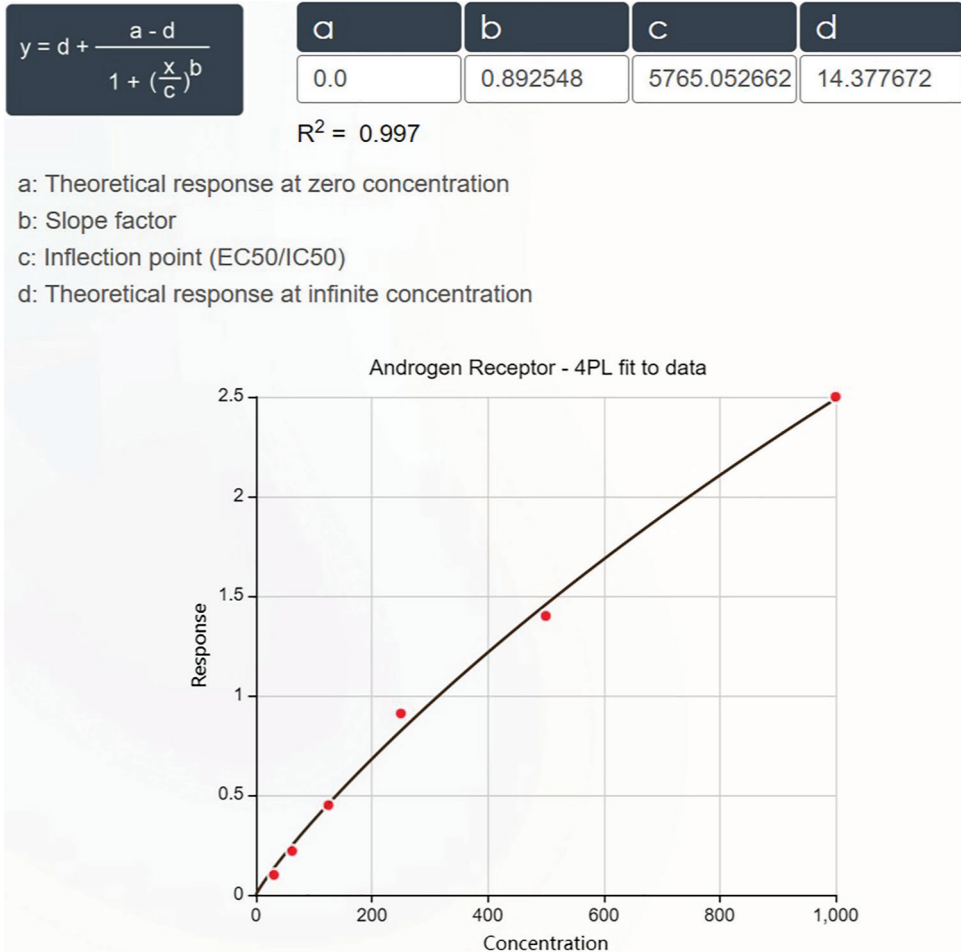
**Supplementary figure 1:** Elisa standard curve fitting for Estradiol hormone by four parameters logistic (4PL) model. An  $R^2$  value of 1 would be perfect.



**Supplementary figure 2:** Elisa standard curve fitting for Testosterone hormone by four parameters logistic (4PL) model. An  $R^2$  value of 1 would be perfect.



**Supplementary figure 3:** Elisa standard curve fitting for Estrogen Receptor by four parameters logistic (4PL) model. An  $R^2$  value of 1 would be perfect.



**Supplementary figure 4:** Elisa standard curve fitting for Androgen Receptor by four parameters logistic (4PL) model. An  $R^2$  value of 1 would be perfect.