From Modules 11 - 12 to Modules 13 - 14

H.M. James Hung

Some Key Messages from Modules 1-10:

- In these modules, we have learned the <u>linear</u> regression models and how to check, diagnose, and validate the linear regression models to use

Some Key Messages from Modules 11 - 12

- In these two modules we learn a set of models to handle binary or categorical response variables, such as "disease/non-disease" variable or categorical variable like "0, 1, 2" nights a person sleeps well in a week. With some transformation, a kind of "linear" model may be useful to describe the relationship between the special kind of response variables and regressors. This is so-called **Generalized Linear Model**.

Now Move on to Modules 13 - 14

- Generalized Linear Models are nonlinear regression models. For example, the logit/logistic function is a nonlinear function. In Modules 13 – 14, we shall learn how to deal with any nonlinear regression models. Nonlinear regression models are more often seen in science and technology. For example, "Emax" models are often seen in pharmacology or biology.