The main objective of a Phase I clinical trial is to determine an acceptable dose of a new drug. An acceptable dose is often defined as a maximum dose that achieves an acceptable rate of adverse events. This is generally termed the maximal tolerated dose (MTD). A traditional dose-finding method is the “3 + 3 design” which is still widely used in Phase I clinical trials. However, there are ethical and statistical issues with the use of this design. The continual reassessment method (CRM) was introduced by O’Quigley, Pepe, and Fisher (1990) to these shortcomings. The CRM has been modified over last two decades to overcome various concerns with regard to prior misspecification and the number of early adverse events that can be observed with this method. Despite some improvements to the CRM, it is still not a primary choice of current investigators because of safety concerns and prior-dependency. In this paper, two statistical methods are extensively compared. One method is the CRM and is devised from the perspective of a trial participant by allocating new patients to the best available guess of the MTD. The second method (IG) is devised from the perspective of a future patient by allocating trial patients to the dose that maximizes the expected amount of information to be gained regarding the true MTD. In addition to comparing the two methods, we present that a simple modification of the IG method that serves as a compromise between the two conflicting perspectives.