LANCING DEVICE WITH TRIGGER MECHANISM FOR PENETRATION DEPTH CONTROL

ABSTRACT OF THE DISCLOSURE

A lancing device includes a housing, a lancing mechanism operatively attached to the housing, a pressure tip and a trigger mechanism. The pressure tip is moveably attached to the housing and is configured to engage a target site and create a target site bulge. The trigger mechanism is configured for detecting a target site bulge of a predetermined height and, thereafter, triggering an immobilization of the pressure tip with respect to the housing. The immobilization of the pressure tip prevents further change in the location of the target site bulge relative to the housing. Since the location of target site bulge relative to the housing is controlled by the trigger mechanism, via immobilization of the pressure tip, penetration depth is consistent. A method for lancing a target site includes providing the lancing device described above and contacting a pressure tip of the lancing device with the target site. Next, the pressure tip is urged towards the target site, thereby creating target site bulge that is detected by a trigger mechanism of the lancing device. Subsequently, an immobilization of the pressure tip with respect to a housing of the lancing device is triggered. Thereafter, the target site bulge is lanced with a lancet mechanism of the lancing device.

Figure 1