



## **BD Ultra-Fine™ Nano: World's Smallest Pen Needle** *Shorter Needles Deliver Added Benefits*

### **What is the BD Nano?**

- The new BD Nano 4mm x 32G pen needle is the world's smallest pen needle and is easier to use and offers greater comfort for people with diabetes who inject insulin compared to other pen needles.
- BD Nano's thin gauge (32G) and short length (4mm) can help make people with diabetes feel less intimidated about the insulin injection experience.<sup>1</sup>
  - Studies prove that injection with BD Nano is less painful than using a 5mm or 8mm pen needle.<sup>1</sup>
  - BD Nano offers greater injection site flexibility than other pen needles.<sup>1</sup>
- BD Nano's comfort and ease of use may help people with diabetes adhere to an insulin injection regimen and provide improved outcomes for patients who inject insulin.
  - No "pinch-up" of the skin is required.
  - The BD Nano injection technique is easy to teach and easy for patients to learn.
- BD Nano fits all diabetes injection pens.

### **Clinical efficacy**

- BD Nano is as clinically effective as and is proven to be less painful than longer insulin pen needles for patients of all body types.<sup>1</sup>
  - BD Nano provides equivalent glycemic control to 5mm and 8mm pen needles.
  - Patients reported less pain when using BD Nano than with either 5mm or 8mm pen needles.
  - BD Nano effectively delivers an insulin dose to subcutaneous tissue – the recommended tissue layer for insulin injections<sup>2</sup> – while reducing the risk of injecting into muscle.

### **Patient preference**

- In a survey of people with diabetes involved in a recent clinical trial, 65 percent of insulin-injecting people selected BD Nano as the pen needle of choice.<sup>1</sup>
  - BD Nano was preferred over 5mm and 8mm pen needles for ease of use, as well as for ease of entering into the skin.
  - BD Nano offers greater overall injection comfort and less injection-site pain than other pen needles.
  - Experienced insulin-injecting patients trying BD Nano experienced little or no anxiety before injecting. A greater proportion of patients reported feeling "not at all anxious" before injecting themselves with BD Nano than with either 5mm or 8mm pen needles.
- BD Nano was significantly preferred over both the 5mm and 8mm pen needles on every attribute tested, and received highest satisfaction ratings (90 percent or more) for the following attributes:<sup>1</sup>
  - Ease of entering the pen needle into the skin

- Ease of learning injection technique
- Injection site flexibility
- Needle gauge

### **BD needle technology, design, and manufacturing**

- BD uses advanced technology and design to offer pen needles that provide injection comfort, needle glide, and a smooth needle finish.
  - **Fine point technology:** A three-step process that shapes the tip of every needle as finely as possible for easier penetration.
  - **Electro-polishing:** A technique that polishes away microscopic burrs, giving every needle a smooth finish.
- Every BD Ultra-Fine Pen Needle is engineered to be so thin and so smooth that we can guarantee a more comfortable injection.

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<sup>1</sup> Hirsch LJ, Gibney M, Albanese J, et al. Comparative glycemic control, safety and patient ratings for a new 4 mm\32G insulin pen needle in adults with diabetes [Electronic version]. *Curr Med Res Opin* 2010; 26(6): 15316 1541.

<sup>2</sup> Gibney MA, Arce CH, Byron KJ, Hirsch LJ. Skin and subcutaneous adipose layer thickness in adults with diabetes at sites used for insulin injections: Implications for needle length recommendations [Electronic version]. *Curr Med Res Opin* 2010; 26(6): 151961530.