

- [0037]** According to another example, in step (B), a gap is located between the insertion tube and an inner surface of the cartridge tube to allow for pressure venting.
- [0038]** According to another example, in step (D) the insertion tube is retracted prior to the insertion pin.
- [0039]** According to another example, in step (E) the insertion tube and the insertion pin are retracted sequentially or simultaneously.
- [0040]** According to another example, the stopper comprises an elastomeric body and a polymer layer thereon.
- [0041]** According to another example, the polymer layer comprises an expanded fluoropolymer.
- [0042]** According to another example, the expanded fluoropolymer comprises an expanded polytetrafluoroethylene.
- [0043]** According to another example, further including delivering a therapeutic compound to the cartridge tube prior to lowering the insertion tube into the cartridge tube.
- [0044]** According to another example, the therapeutic substance contains therein a biologic, a therapeutic compound, or a combination thereof.
- [0045]** According to another example, the insertion tube has been electropolished, extrude honed, or a combination thereof.
- [0046]** According to another example, the insertion tube has an average surface roughness (S_a) from about 20 nm to about 400 nm.
- [0047]** According to another example, the body of the insertion tube has an average kurtosis (S_{ku}) less than about 8.
- [0048]** According to another example, the stoppered syringe has a helium leak rate that is not greater than 6×10^{-6} sccs.