CLAIMS

1. A medical device assembly comprising:

a tissue-penetrating medical device including a distal tip, a shaft mounted to a hub, the hub having a hub magnet; and

a removable cover including a sleeve member comprising a hollow tubular body to form a protective closure over the shaft of the tissue-penetrating medical device prior to use, the sleeve member comprising a length that covers the shaft, an open end of the hollow body providing a receiving space for receiving at least the shaft of the tissue-penetrating medical device, and a first magnet slidably mounted within a first slot on the sleeve member and a second magnet slidably mounted within a second slot on the sleeve member, the first magnet and the second magnet partially surround the receiving space to passively magnetize the shaft of the tissue-penetrating medical device when the sleeve member is removed from the shaft of a tissue-penetrating medical device.

2. The medical device assembly of claim 1, wherein the tissue-penetrating medical device is a needle assembly, a stylet, catheter, introducer needle, scalpel or guidewire.

3. The medical device assembly of claim 1, wherein the hub magnet comprises a fixed permanent magnet.

4. The medical device assembly of claim 1, wherein a distal portion of the shaft of the tissue-penetrating medical device includes a notch to provide immediate confirmation of vessel entry at a point of insertion.

5. The medical device assembly of claim 1, wherein the receiving space permits movement of the shaft of the tissue-penetrating medical device in the receiving space in a direction parallel to the longitudinal axis of the tissue-penetrating medical device.

6. The medical device assembly of claim 1, wherein the receiving space permits movement of the shaft of the tissue-penetrating medical device into and out of the receiving space.

7. The medical device assembly of claim 1, wherein the one or more magnets are on one side of the sleeve member.

8. The medical device assembly of claim 1, wherein there are two or more magnets disposed on the sleeve member.

9. The medical device assembly of claim 1, wherein the cover is sterile.

10. The medical device assembly of claim 1, wherein the cover is disposable.

11. The medical device assembly of claim 1, wherein the cover comprises plastic.

12. The medical device assembly of claim 2, wherein the tissue-penetrating medical device includes a needle assembly including a needle and the shaft, and when the shaft is

magnetized, the tissue-penetrating medical device is configured for use in a procedural guidance system to locate and project a position of the shaft during an invasive medical procedure.

13. A method of providing visualization of a subdermal anatomy and the medical device assembly positioning comprising:

positioning at least a shaft of the tissue-penetrating medical device in a cover of the medical device assembly as defined in any of claims 1-12;

removing the tissue-penetrating medical device from the receiving space to magnetize the shaft of the tissue-penetrating medical device in said receiving space, the hub magnet providing for a fixed magnetic reference point when the tissue-penetrating needle is used with a combination of ultrasound and magnetic technologies.