

CLAIMS

What is claimed is:

1. A guidewire-management device, comprising:
a guidewire;
a first sleeve configured for distally feeding the guidewire out of the guidewire-management device or proximally feeding the guidewire into the guidewire-management device; and
a second sleeve proximal of the first sleeve configured for feeding the guidewire in concert with the first sleeve, at least a length of the guidewire extending between the first sleeve and the second sleeve disposed within a sterile barrier configured to maintain sterility of the guidewire, the sterile barrier being a splittable casing configured to split off the guidewire while distally feeding the guidewire out of the guidewire-management device.
2. The guidewire-management device of claim 1, wherein the first sleeve has a distal portion configured as a male connector with a Luer taper for connecting the first sleeve to a complementary female connector.
3. The guidewire-management device of either claim 1 or 2, wherein the first sleeve is configured to straighten the guidewire when proximally feeding the guidewire into the guidewire-management device.
4. The guidewire-management device of any claim of claims 1-3, wherein the first sleeve includes a seal configured to block fluid from entering or escaping the guidewire-management device when proximally feeding the guidewire into the guidewire-management device.
5. The guidewire-management device of any claim of claims 1-4, wherein the first sleeve has a proximal portion including a bore configured to house a distal portion of the sterile barrier.
6. The guidewire-management device of any claim of claims 1-5, wherein the second sleeve has a distal portion including a bore configured to house a proximal portion of the sterile barrier.

7. The guidewire-management device of any claim of claims 1-6, wherein the second sleeve has a proximal portion including another bore configured to stop an end of the guidewire from completely passing through the second sleeve.

8. The guidewire-management device of any claim of claims 1-7, wherein the guidewire has a distal portion including a 'J'-shaped tip configured to straighten as the tip of the guidewire enters the first sleeve when proximally feeding the guidewire into the guidewire-management device.

9. The guidewire-management device of any claim of claims 1-8, wherein the guidewire has a proximal portion including a ball end configured to stop the guidewire from completely passing through the second sleeve.

10. The guidewire-management device of any claim of claims 1-9, wherein the guidewire-management device is configured to redispense the splittable casing over the guidewire while proximally feeding the guidewire into of the guidewire-management device.

11. A guidewire-management device, comprising:
a handle;
a guidewire;
a first sleeve formed in a distal portion of the handle;
a second sleeve formed in a proximal portion of the handle, at least a length of the guidewire extending between the first sleeve and the second sleeve disposed within a sterile barrier configured to maintain sterility of the guidewire, the sterile barrier being a splittable casing configured to split off the guidewire while distally feeding the guidewire out of the guidewire-management device; and
a thumb wheel disposed under the guidewire between the first sleeve and the second sleeve configured to assist in distally feeding the guidewire out of the guidewire-management device by way of the first sleeve or proximally feeding the guidewire into the guidewire-management device by way of the first sleeve.

12. The guidewire-management device of claim 11, wherein the first sleeve has a distal portion configured as a male connector with a Luer taper for connecting the first sleeve to a complementary female connector.

13. The guidewire-management device of either claim 11 or 12, wherein the first sleeve is configured to straighten a 'J'-shaped tip in a distal portion of the guidewire as the tip of the guidewire enters the first sleeve when proximally feeding the guidewire into the guidewire-management device.

14. The guidewire-management device of any claim of claims 11-13, wherein the second sleeve has a proximal portion including a bore with a constriction configured to capture a ball end of the guidewire and stop the guidewire from completely passing through the second sleeve.

15. The guidewire-management device of any claim of claims 11-14, wherein the splittable casing is over an entirety of the guidewire excepting that within or distal to the first sleeve.

16. The guidewire-management device of any claim of claims 11-15, further comprising:
a guidewire conduit coupled to the second sleeve configured to distally feed the guidewire into the second sleeve; and
a casing conduit coupled to both a first split sleeve in the distal portion of the handle and a second split sleeve in the proximal portion of the handle, the casing conduit configured to collect therein the splittable casing that splits off the guidewire while distally feeding the guidewire out of the guidewire-management device.

17. The guidewire-management device of claim 16, wherein the handle includes a channel configured to hold the guidewire conduit therein when the guidewire conduit is in a coiled configuration.

18. The guidewire-management device of any claim of claims 11-15, further comprising a guidewire-casing conduit coupled to both the second sleeve and a first split sleeve in the distal portion of the handle, the guidewire-casing conduit configured to distally feed the guidewire into the second sleeve, as well as collect therein by way of the first split sleeve the splittable casing that splits off the guidewire while distally feeding the guidewire out of the guidewire-management device.

19. The guidewire-management device of claim 18, wherein a distal end of the splittable casing that splits off the guidewire is configured to chase a proximal end of the guidewire around the guidewire-casing conduit while distally feeding the guidewire out of the guidewire-management device.

20. The guidewire-management device of either claim 18 or 19, wherein the handle includes a channel configured to hold the guidewire-casing conduit therein when the guidewire-casing conduit is in a coiled configuration.

21. The guidewire-management device of any claim of claims 11-20, further comprising a flexible membrane extending from the distal portion of the handle, over the thumb wheel, and to the proximal portion of the handle configured to be pressed down onto the thumb wheel for distally feeding the guidewire out of the guidewire-management device or proximally feeding the guidewire into the guidewire-management device.