

CLAIMS

1. A cap for a port of an intravenous device, the cap comprising:
a body having a proximal end and a distal end, the body including a cavity formed in the distal end of the body;
an actuator having a proximal end and a distal end, the proximal end of the actuator being contained within the cavity, the distal end of the actuator extending out from the cavity and being configured to insert into the port of the intravenous device, the proximal end of the actuator being configured to move within the cavity between a distal position and a proximal position;
and
an absorbent material containing an antimicrobial solution, the absorbent material being contained within the cavity between the proximal end of the body and the proximal end of the actuator, the absorbent material being compressible;
wherein when the cap is connected to the port of the intravenous device, the proximal end of the actuator is advanced proximally into the cavity from the distal position to the proximal position thereby compressing the absorbent material causing the antimicrobial solution to flow through the distal end of the actuator and onto an intraluminal surface of the port.
2. The cap of claim 1, wherein the distal end of the actuator comprises a lumen, the antimicrobial solution flowing through the lumen into a lumen of the port.
3. The cap of claim 2, wherein the distal end of the actuator comprises a male luer in which the lumen is formed.
4. The cap of claim 1, wherein the proximal end of the actuator is configured such that a gap exists between the proximal end of the actuator and an inner surface of the cavity as the proximal end of the actuator is advanced towards the proximal position, and wherein the antimicrobial solution flows through the gap and onto an exterior surface of the port.
5. The cap of claim 1, wherein, when in the proximal position, the proximal end of the actuator contacts an inner surface of the cavity thereby forming a seal between the actuator and the body.

6. The cap of claim 1, wherein the concentration of an antimicrobial agent within the antimicrobial solution is selected such that when the antimicrobial solution mixes with fluid contained within the lumen of the port, the concentration of the antimicrobial agent remains higher than the minimum inhibitory concentration of the antimicrobial agent.

7. The cap of claim 1, wherein the port is a female luer into which the distal end of the actuator inserts.

8. The cap of claim 1, wherein the port is a needleless connector into which the distal end of the actuator inserts.

9. The cap of claim 1, wherein the distal end of the body forms a lumen, and wherein the distal end of the actuator forms a protrusion that is positioned within the a-lumen formed by the distal end of the body, the protrusion having a lumen through which the antimicrobial solution flows.

10. The cap of claim 9, wherein the actuator includes a plurality of prongs that extend through corresponding openings in the distal end of the body.

11. The cap of claim 10, wherein the antimicrobial solution flows through the openings when the proximal end of the actuator is advanced proximally ~~forced~~ into the cavity.

12. The cap of claim 1, wherein the distal end of the actuator includes a lumen, the lumen having an antimicrobial coating.

13. A cap for a port of an intravenous device, the cap comprising:
a body having a proximal end and a distal end, the body including a cavity formed in the distal end of the body;

an actuator having a proximal end and a distal end, the proximal end of the actuator being contained within the cavity, the distal end of the actuator extending out from the cavity and being configured to insert into the port of the intravenous device, the distal end of the actuator

including a lumen, the proximal end of the actuator being configured to move within the cavity between a distal position and a proximal position; and

an absorbent material containing an antimicrobial solution, the absorbent material being contained within the cavity between the proximal end of the actuator and an inner surface of the body;

wherein prior to the cap being connected to the a-port of the an-intravenous device, the absorbent material remains uncompressed, and when the cap is connected to the a-port of the an intravenous device, the actuator compresses the absorbent material causing the antimicrobial solution to flow through the lumen of the distal end of the actuator and into a lumen of the port.

14. The cap of claim 13, wherein the proximal end of the actuator is sized such that a gap exists between an outer edge of the proximal end of the actuator and a wall of the cavity, the antimicrobial solution also flowing through the gap onto an exterior surface of the port.

15. The cap of claim 14, wherein the actuator includes a plurality of prongs which extend through corresponding openings in the body, the antimicrobial solution flowing through the openings onto the exterior surface of the port.

16. The cap of claim 13, wherein, when in the proximal position, the proximal end of the actuator forms a seal with an inner surface of the cavity.

17. The cap of claim 13, wherein the distal end of the actuator comprises a male luer.

18. A cap for a needleless connector of an intravenous device, the cap comprising:
a body having a proximal end and a distal end, the body including a cavity formed in the distal end of the body;

an absorbent material positioned within the cavity, the absorbent material containing an antimicrobial solution; and

an actuator having a proximal end and a distal end, the proximal end of the actuator being contained within the cavity, the distal end of the actuator extending out from the cavity and being configured to insert into the needleless connector, the proximal end of the actuator being

configured to move within the cavity between a distal position and a proximal position such that upon the cap being connected to the a-needleless connector, the needleless connector causes the proximal end of the actuator to compress the absorbent material thereby releasing the antimicrobial solution onto an intraluminal surface of the needleless connector.

19. The cap of claim 18, wherein the distal end of the actuator comprises a lumen, the antimicrobial solution flowing through the lumen of the distal end of the actuator and onto the intraluminal surface of the needleless connector.

20. The cap of claim 19, wherein the antimicrobial solution also flows around an exterior surface of the proximal end of the actuator and onto an exterior surface of the needleless connector.