

CLAIMS:

1. ——— A packaging system for storing a prosthetic valve and an elongated delivery system in a non fluid environment, the packaging system comprising:
 - a tray for securing both a prosthetic valve and an elongated delivery system, the prosthetic valve being maintained in a compressed state around a distal portion of the elongated delivery system by a valve cover coupled to the prosthetic valve, the tray including
 - a cavity comprising an open end, a floor, and a peripheral side wall defining a depth of the cavity, the cavity sized and shaped to house the valve cover and the prosthetic valve;
 - a mounting surface to removably couple the valve cover to the cavity floor;
 - an engaging surface peripherally of the cavity and elevated above the cavity floor; and
 - a ramp extending downwardly from the engaging surface and into the cavity through an opening defined in the peripheral side wall and adjacent the floor of the cavity;
 - wherein the engaging surface and the ramp are configured to secure at least a portion of the elongated delivery system externally of the cavity.
2. ——— The packaging system of claim 1, wherein the prosthetic valve comprises a stent and a plurality of leaflets coupled to the stent, the plurality of leaflets comprising a biological tissue.
3. ——— The packaging system of any one of the preceding claims, wherein the engaging surface comprises a channel formed in the tray and shaped to accommodate the elongated delivery system and wherein the channel comprises tabs to resiliently engage the elongated delivery system within the channel.
4. ——— The packaging system of any one of the preceding claims, wherein the ramp is angled downwardly from the engaging surface to the floor of the cavity.

5. — The packaging system of claim 4, wherein the ramp is provided at an angle of about 4 degrees to about 10 degrees relative to a horizontal plane bisecting the tray.

6. — The packaging system of any one of the preceding claims, further comprising a lock configured to be removably coupled to one or both of the valve cover and the distal portion of the elongated delivery system.

7. — The packaging system of claim 6, further comprising:
a lid removably coupled to the tray and partially enclosing the open end of the cavity, the lid defining an opening to the cavity.

8. — The packaging system of claim 7, wherein the lock comprises a first end and a second end, wherein the first end is removably coupled to one or both of the valve cover and the distal portion of the elongated delivery system.

9. — The packaging system of claim 8, wherein the second end is configured to protrude externally of the cavity through an aperture disposed on the lid, the second end being sized or shaped to prevent it from being passed through the aperture.

10. — The packaging system of claim 8, wherein second end is fixed to or integrated with the lid.

11. — The packaging system of claim 8, wherein removing the lid also removes the first end of the lock from the one or both of the valve cover and the elongated delivery system.

12. — The packaging system of any one of the preceding claims, wherein the valve cover comprises an internal cavity to house a nose piece, the prosthetic valve and part of the distal portion of the elongated delivery system.

13. — The packaging system of 12, further comprising a lock that is removably coupled to both the valve cover and the distal portion of the elongated delivery system, wherein a first end of the lock is positioned to maintain a separation between the nose piece and the prosthetic valve.

14. — The packaging system of any one of the preceding claims, wherein the valve cover comprises wings extending laterally from opposing sides of the valve cover and wherein the wings are configured to couple the mounting surface disposed from the cavity floor.

15. — The packaging system of claim 14, wherein the mounting surface is one of a pair of protrusions or a pair of recesses that are configured to mate with corresponding features of the wings, wherein the corresponding features of the wings are the other of the pair of protrusions or the pair of recesses and wherein the wings and the mounting surface are in resilient snap fit engagement.

16. — The packaging system of any one of the preceding claims, wherein the cavity further comprises a fill line disposed from the cavity peripheral side wall between the floor and the open end.

17. — The packaging system of any one of the preceding claims, wherein a free segment of the elongated delivery system externally of the cavity is not in direct physical contact with the tray and wherein a space is provided around the free segment to permit a user's hand to grasp the free segment and lift at least a portion of the elongated delivery system on both sides of the free segment out of engagement with the tray.

18. — The packaging system of any one of the preceding claims, wherein the proximal end of the elongated delivery device is engaged within a periphery of the tray and wherein the tray comprises a support surface for maintaining the proximal end of the elongated delivery system in position for coupling the proximal end with a handle when the proximal end is disengaged from and extends externally away from the periphery of the tray.

19. — The packaging system of any one of claims 1-5 and 12, wherein the mounting surface resiliently engages at least a portion of the external surface of the valve cover.

20. — The packaging system of claim 19, wherein the valve cover comprises a flared open end, an opposing securing end, and a lock ring mounted slidably around the securing end between a locked position and an unlocked position.

21. — The packaging system of claim 20, wherein in the locked position, the lock ring exerts a radially inward force around the securing end of the valve cover to secure the valve cover onto the delivery system and wherein in the unlocked position, the radially inward force exerted by the lock ring is released to permit removal of the delivery device from the valve cover.

22. — The packaging system of claim 21, wherein the lock ring is housed within a spaced area of the mounting surface to permit the lock ring to slide between the locked and the unlocked positions.

23. — The packaging system of any one of the preceding claims, wherein the lid completely encloses the upper surface of the tray.

24. — The packaging system of any one of the preceding claims, further comprising a handle attached to the delivery system and packaged within the tray.

25. — The packaging system of any one of the preceding claims, further comprising a reservoir in fluid communication with the cavity.

26. — A method for preparing a prosthetic valve and its associated delivery system for implantation of the prosthetic valve in a patient, the method comprising:

(a) — obtaining a tray, the tray comprising a prosthetic valve in a first compressed state and coupled to an elongated delivery system, the tray including a cavity comprising an open end, a floor, and a peripheral side wall defining a depth of the cavity, the cavity sized and shaped to house the prosthetic valve and at least part of a distal portion of the elongated delivery system;

a mounting surface to substantially immobilize and maintain the prosthetic valve within the cavity; and

an engaging surface peripherally of the cavity, the engaging surface securing at least a part of the elongated delivery system externally of the cavity;

(b) — at least partially filling the cavity with a first hydrating fluid to completely immerse the prosthetic valve;

(c) — allowing the prosthetic valve to soak in the first hydrating fluid for a period of time;

(d) — flushing the elongated delivery system by delivering a second hydrating fluid into a proximal end of the elongated delivery system and causing the second hydrating fluid to pass through a lumen extending through the elongated delivery system and out of the distal portion of the elongated delivery system; and

(e) — causing the prosthetic valve to be loaded into a lumen of a delivery sheath associated with the elongated delivery system while the prosthetic valve is coupled to the cavity floor via the mounting surface;

wherein the loading is performed by causing the delivery sheath move axially over the prosthetic valve;

wherein the delivery sheath compresses and contains the prosthetic valve within a lumen of the delivery sheath in a second compressed state; and

wherein a diameter of the prosthetic valve in the first compressed state is larger than a diameter of the prosthetic valve in the second compressed state;

(f) — removing the elongated delivery device with the prosthetic valve loaded into the lumen of the delivery sheath from the tray, including disengaging the prosthetic valve from the mounting surface; and

wherein (a) through (e) are performed while the prosthetic valve is substantially immobilized and maintained within the cavity.

27. — The method of claim 26, further comprising coupling a handle to the proximal end of the elongated delivery system after (a) and before (d).

28. — A method for preparing a prosthetic valve and its associated delivery system for implantation of the prosthetic valve in a patient, the method comprising:

(a) — obtaining a tray, the tray comprising a prosthetic valve in a first compressed state and coupled to an elongated delivery system, the tray including

~~a cavity comprising an open end, a floor, and a peripheral side wall defining a depth of the cavity, the cavity sized and shaped to house a valve cover comprising the prosthetic valve and at least part of a distal portion of the elongated delivery system;~~

~~a mounting surface to substantially immobilize and maintain a valve cover coupled to a distal end of the elongated delivery system and the prosthetic valve within the cavity; and~~

~~an adjacent reservoir in fluid communication with the cavity;~~

~~(b) — at least partially filling the cavity with a first hydrating fluid until the first hydrating fluid overflows into the adjacent reservoir;~~

~~(c) — flushing the elongated delivery system by delivering a second hydrating fluid through a first lumen extending through the elongated delivery system;~~

~~(d) — causing the prosthetic valve to be loaded into a lumen of a delivery sheath associated with the elongated delivery system while the valve cover is coupled to the mounting surface;~~

~~wherein the delivery sheath compresses and contains the prosthetic valve within a lumen of the delivery sheath in a second compressed state; and~~

~~wherein a diameter of the prosthetic valve in the first compressed state is larger than a diameter of the prosthetic valve in the second compressed state;~~

~~(e) — flushing the elongated delivery system by delivering a third hydrating fluid through a second lumen extending through the elongated delivery system; and~~

~~(f) — removing the elongated delivery device with the prosthetic valve loaded into the lumen of the delivery sheath from the valve cover and the tray;~~

~~wherein (a) through (e) are performed while the valve cover is substantially immobilized and maintained within the cavity.~~

1. A method for preparing a prosthetic valve and its associated delivery system for implantation of the prosthetic valve in a patient, comprising:

(a) obtaining a tray, the tray containing the delivery system and the prosthetic valve coupled to the delivery system, the tray comprising:

a storage cavity comprising an open end, a floor, and a peripheral side wall defining the depth of the cavity, wherein the prosthetic valve is disposed in the storage cavity;

(b) at least partially filling the storage cavity with a first hydrating fluid;

(c) loading the prosthetic valve into a lumen of the delivery system;

(d) removing the delivery system with the prosthetic valve from the tray;

wherein steps (a) through (c) are performed while the prosthetic valve is substantially contained within the storage cavity.

2. The method of claim 1, wherein the cavity further comprises a mounting surface to substantially immobilize and maintain the prosthetic valve within the storage cavity.

3. The method of any one of claims 1 to 2, further comprising completely immersing the prosthetic valve in the first hydrating fluid.

4. The method of any one of claims 1 to 2, further comprising allowing the prosthetic valve to soak in the hydrating fluid for a period of time.

5. The method of any one of claims 1 to 2, further comprising coupling a handle to the proximal end of the delivery system after obtaining the tray.

6. The method of any one of claims 1 to 2, further comprising flushing the delivery system by delivering a second hydrating fluid into a proximal end of the delivery system and causing the second hydrating fluid to pass through a lumen extending through the delivery system and out of the distal portion of the delivery system.

7. The method any one of claims 1 to 2, wherein loading the prosthetic valve into the lumen of the delivery system comprises causing a delivery sheath of

the delivery system to move axially over the prosthetic valve to radially compress the prosthetic valve.

8. The method of any one of claims 1 to 2, wherein the prosthetic valve is initially in a first, partially compressed state within a valve cover while coupled to the delivery system and loading the prosthetic valve into the delivery sheath moves the prosthetic valve from within the valve cover into the delivery sheath while radially compressing the prosthetic valve from the first, partially compressed state to a second, further compressed state.

9. The method of claim 2, wherein removing the delivery system with the prosthetic valve from the tray comprises disengaging the prosthetic valve from the mounting surface.

10. A method for preparing a prosthetic valve and its associated delivery system for implantation of the prosthetic valve in a patient, comprising:

(a) obtaining a tray, the tray containing the delivery system, the prosthetic valve coupled to the delivery system, and a valve cover in which the prosthetic valve is disposed, the tray comprising:

a storage cavity comprising an open end, a floor, and a peripheral side wall defining the depth of the cavity, wherein the prosthetic valve and the valve cover are disposed in the storage cavity; and

a mounting surface that substantially immobilizes and maintains the valve cover and prosthetic valve within the storage cavity;

(b) at least partially filling the storage cavity with a first hydrating fluid to completely immerse the prosthetic valve;

(c) removing the delivery device with the prosthetic valve from the tray, including disengaging the prosthetic valve from the mounting surface; and

wherein (a) and (b) are performed while the prosthetic valve is substantially immobilized and maintained within the storage cavity.

11. The method of claim 10, further comprising flushing the delivery system by:

delivering a second hydrating fluid into a proximal end of the delivery system;
and
causing the second hydrating fluid to pass through a lumen extending through the
delivery system and out of a distal portion of the delivery system after (b).

12. The method of claim 10, further comprising allowing the prosthetic valve to
soak in the first hydrating fluid for a period of time.
13. The method of claim 10, further comprising coupling a handle to the proximal
end
of the delivery system after (a).
14. The method of claim 10, further comprising loading the prosthetic valve into
a lumen of a delivery sheath of the delivery system while the prosthetic valve
is coupled to the cavity floor via the mounting surface after (a) and before (c).
15. The method of claim 14, wherein the prosthetic valve is initially in a first,
partially compressed state within the valve cover and loading the prosthetic
valve into the delivery sheath moves the prosthetic valve from within the
valve cover into the delivery sheath while radially compressing the prosthetic
valve from the first, partially compressed state to a second, further
compressed state.
16. The method of claim 10, further comprising removing a lid from the tray to
expose the storage cavity prior to (b).
17. The method of claim 10, wherein a shaft of the delivery system is secured
against an engaging surface of the tray at an elevated position above the floor
of the storage cavity during steps (a) and (b).
18. The method of claim 10, further comprising removing the tray from a sterile
pouch prior to (b).

19. A packaging system for storing a prosthetic valve and an elongated delivery system in a non-fluid environment, the packaging system comprising:
a tray for securing both a prosthetic valve and an elongated delivery system; and
a valve cover, wherein the prosthetic valve is maintained in a compressed state inside the valve cover and around a distal portion of the elongated delivery system and the valve cover is removable from the prosthetic valve and the delivery system, the tray including
a cavity comprising an open end, a floor, and a peripheral side wall defining a depth of the cavity, the cavity sized and shaped to house the valve cover and the prosthetic valve;
a mounting surface to removably couple the valve cover to the cavity floor;
an engaging surface peripherally of the cavity and elevated above the cavity floor; and
a ramp extending downwardly from the engaging surface and into the cavity through an opening defined in the peripheral side wall;
wherein the engaging surface and the ramp are configured to secure at least a portion of the elongated delivery system externally of the cavity.
20. The packaging system of claim 19, wherein the prosthetic valve comprises a stent and a plurality of leaflets coupled to the stent, the plurality of leaflets comprising a biological tissue.
21. The packaging system of claim 19, wherein the engaging surface comprises a channel formed in the tray and shaped to accommodate the elongated delivery system and wherein the channel comprises tabs to resiliently engage the elongated delivery system within the channel.
22. The packaging system of claim 19, wherein the ramp is angled downwardly from the engaging surface to the floor of the cavity.

23. The packaging system of claim 22, wherein the ramp is provided at an angle of about 4 degrees to about 10 degrees relative to a horizontal plane bisecting the tray.
24. The packaging system of claim 19, further comprising a lock configured to be removably coupled to one or both of the valve cover and the distal portion of the elongated delivery system.
25. The packaging system of claim 19, further comprising:
a lid removably coupled to the tray and partially enclosing the open end of the cavity.
26. The packaging system of claim 24, wherein the lock comprises a first end and a second end, wherein the first end is removably coupled to one or both of the valve cover and the distal portion of the elongated delivery system.
27. The packaging system of claim 26, wherein the second end is configured to protrude externally of the cavity through an aperture disposed on the lid, the second end being sized or shaped to prevent it from being passed through the aperture.
28. The packaging system of claim 26, wherein second end is fixed to or integrated with the lid.
29. The packaging system of claim 26, wherein removing the lid also removes the first end of the lock from the one or both of the valve cover and the elongated delivery system.
30. The packaging system of claim 19, wherein the valve cover comprises an internal cavity to house a nose piece, the prosthetic valve and part of the distal portion of the elongated delivery system.

31. The packaging system of 30, further comprising a lock that is removably coupled to both the valve cover and the distal portion of the elongated delivery system, wherein a first end of the lock is positioned to maintain a separation between the nose piece and the prosthetic valve.
32. The packaging system of claim 19, wherein the valve cover comprises wings extending laterally from opposing sides of the valve cover and wherein the wings are configured to couple the mounting surface disposed from the cavity floor.
33. The packaging system of claim 32, wherein the mounting surface is one of a pair of protrusions or a pair of recesses that are configured to mate with corresponding features of the wings, wherein the corresponding features of the wings are the other of the pair of protrusions or the pair of recesses and wherein the wings and the mounting surface are in resilient snap-fit engagement.
34. The packaging system of claim 19, wherein the cavity further comprises a fill line disposed from the cavity peripheral side wall between the floor and the open end.
35. The packaging system of claim 19, wherein a free segment of the elongated delivery system externally of the cavity is not in direct physical contact with the tray and wherein a space is provided around the free segment to permit a user's hand to grasp the free segment and lift at least a portion of the elongated delivery system on both sides of the free segment out of engagement with the tray.
36. The packaging system of claim 19, wherein the proximal end of the elongated delivery device is engaged within a periphery of the tray and wherein the tray comprises a support surface for maintaining the proximal end of the elongated delivery system in position for coupling the proximal end with a handle when the proximal end is disengaged from and extends externally away from the periphery of the tray.
37. The packaging system of claim 19, wherein the mounting surface resiliently engages at least a portion of an external surface of the valve cover.

38. The packaging system of claim 37, wherein the valve cover comprises a flared open end, an opposing securing end, and a lock ring mounted slidably around the securing end between a locked position and an unlocked position.
39. The packaging system of claim 38, wherein in the locked position, the lock ring exerts a radially inward force around the securing end of the valve cover to secure the valve cover onto the delivery system and wherein in the unlocked position, the radially inward force exerted by the lock ring is released to permit removal of the delivery device from the valve cover.
40. The packaging system of claim 39, wherein the lock ring is housed within a spaced area of the mounting surface on the cavity floor to permit the lock ring to slide between the locked and the unlocked positions, wherein the mounting surface resiliently engages at least a portion of an external surface of the valve cover.
41. The packaging system of claim 25, wherein the lid completely encloses the upper surface of the tray.
42. The packaging system of claim 19, further comprising a handle attached to the delivery system and packaged within the tray.
43. The packaging system of claim 19, further comprising a reservoir in fluid communication with the cavity.
44. A method for preparing a prosthetic valve and its associated delivery system for implantation of the prosthetic valve in a patient, the method comprising:
(a) obtaining a tray, the tray comprising a prosthetic valve in a first compressed state inside a valve cover and coupled to an elongated delivery system, the valve cover being removable from the prosthetic valve and the delivery system, and the tray including

a cavity comprising an open end, a floor, and a peripheral side wall defining a depth of the cavity, the cavity sized and shaped to house the valve cover, the prosthetic valve and at least part of a distal portion of the elongated delivery system;

a mounting surface to substantially immobilize and maintain the valve cover and the prosthetic valve within the cavity;

an engaging surface peripherally of the cavity and elevated above the cavity floor; and

a ramp extending downwardly from the engaging surface and into the cavity through an opening defined in the peripheral side wall;

wherein the engaging surface and the ramp are configured to secure at least a portion of the elongated delivery system externally of the cavity;

(b) at least partially filling the cavity with a first hydrating fluid to completely immerse the prosthetic valve;

(c) allowing the prosthetic valve to soak in the first hydrating fluid for a period of time;

(d) flushing the elongated delivery system by delivering a second hydrating fluid into a proximal end of the elongated delivery system and causing the second hydrating fluid to pass through a lumen extending through the elongated delivery system and out of the distal portion of the elongated delivery system; and

(e) causing the prosthetic valve to be loaded into a lumen of a delivery sheath associated with the elongated delivery system while the prosthetic valve is coupled to the cavity floor via the mounting surface;

wherein the loading is performed by causing the delivery sheath move axially over the prosthetic valve;

wherein the delivery sheath compresses and contains the prosthetic valve within a lumen of the delivery sheath in a second compressed state; and

wherein a diameter of the prosthetic valve in the first compressed state is larger than a diameter of the prosthetic valve in the second compressed state;

(f) removing the elongated delivery device with the prosthetic valve loaded into the lumen of the delivery sheath from the tray, including

removing the distal portion of the delivery system from the valve cover and disengaging the prosthetic valve from the mounting surface; and
wherein (a) through (e) are performed while the prosthetic valve is substantially immobilized and maintained within the cavity.

45. A packaging system (1; 1000) for storing a prosthetic valve (10) and an elongated delivery system (400; 1200) in a non-fluid environment, the packaging system (1; 1000) comprising:

an elongated delivery system (400; 1200) comprising a main catheter (418) and a shaft extending coaxially through the main catheter (418), wherein the shaft comprises a nose cone (412) secured to a distal end of the shaft, and the main catheter (418) comprises a delivery sheath (416) coupled to a distal end of the main catheter (418) so as to be axially moveable in a direction towards or away from the nose cone (412);

a prosthetic valve (10) mounted around a portion of the shaft adjacent the nose cone (412);

a tray (100; 1100) for securing both the prosthetic valve (10) and the elongated delivery system (400; 1200),

a valve cover (400; 1200) coupled to the elongated delivery system (400; 1200) so as to store the prosthetic valve (10) in a compressed state within the valve cover (600; 1210), the tray (100; 1100) including

a cavity (110; 1130) comprising an open end (112), a floor (114), and a peripheral side wall (120) defining a depth of the cavity (110; 1130), the cavity (110; 1130) sized and shaped to house the valve cover (600; 1210) and the prosthetic valve (10);

a mounting surface (116; 1112) to removably couple the valve cover (600; 1210) to the cavity floor (114);

an engaging surface (140; 1132) peripherally of the cavity (110; 1130) and elevated above the cavity floor (114); and

a ramp (150; 1129) extending downwardly from the engaging surface (140; 1132) and into the cavity (110; 1130) through an opening (152) defined in the peripheral side wall (120) and adjacent the floor (114) of the cavity (110; 1130);

wherein the engaging surface (140; 1132) and the ramp (150; 1129) are configured to secure at least a portion of the elongated delivery system (400; 1200) externally of the cavity (110; 1130).

46. The packaging system (1; 1000) of claim 45, wherein the prosthetic valve (10) comprises a stent (12) and a plurality of leaflets (14) coupled to the stent (12), the plurality of leaflets (14) comprising a biological tissue.
47. The packaging system (1; 1000) of any one of claims 45 to 46, wherein the ramp (150; 1129) is angled downwardly from the engaging surface (140; 1132) to the floor (114) of the cavity (110; 1130).
48. The packaging system (1) of any one of claims 45 to 47, further comprising a lock (300) configured to be removably coupled to one or both of the valve cover (600) and the distal portion (410) of the elongated delivery system (400).
49. The packaging system (1) of claim 48, further comprising:
a lid (200) removably coupled to the tray (100) and partially enclosing the open end (112) of the cavity (110), the lid (200) defining an opening (210) to the cavity (110).
50. The packaging system (1) of claim 49, wherein the lock (300) comprises a first end (310) and a second end (320), wherein the first end (310) is removably coupled to one or both of the valve cover (600) and the distal portion (410) of the elongated delivery system (400).
51. The packaging system (1) of claim 50, wherein the second end (320) is configured to protrude externally of the cavity (110) through an aperture (220) disposed on the lid (200), the second end (320) being sized or shaped to prevent it from being passed through the aperture (220).
52. The packaging system (1; 1000) of any one of claims 45 to 51, wherein the valve cover (600; 1210) comprises an internal cavity to house a nose piece (412), the prosthetic valve (10) and part of the distal portion (410) of the elongated delivery system (400; 1200).
53. The packaging system (1) of claim 52, further comprising a lock (300) that is removably coupled to both the valve cover (600) and the distal portion (410) of the elongated delivery system (400), wherein a first end (310) of the lock (300) is positioned to maintain a separation between the nose piece (412) and the prosthetic valve (10).
54. The packaging system (1) of any one of claims 45 to 53, wherein the valve cover (600) comprises wings (625) extending laterally from opposing sides of the valve cover (600) and wherein the wings (625) are configured to couple the mounting surface (140) disposed from the cavity floor (114).

55. The packaging system (1000) of any one of claims 45 to 47 and 52, wherein the mounting surface (1132) resiliently engages at least a portion of the external surface of the valve cover (1210).
56. The packaging system (1000) of claim 55, wherein the valve cover (1210) comprises a flared open end (1212), an opposing securing end (1214), and a lock ring (1216) mounted slidably around the securing end (1214) between a locked position and an unlocked position.
57. The packaging system (1000) of claim 56, wherein in the locked position, the lock ring (1216) exerts a radially inward force around the securing end (1214) of the valve cover (1210) to secure the valve cover (1210) onto the delivery system (1200) and wherein in the unlocked position, the radially inward force exerted by the lock ring (1216) is released to permit removal of the delivery system (1200) from the valve cover (1210).
58. A method for preparing a prosthetic valve (10) and its associated delivery system (400) for implantation of the prosthetic valve (10) in a patient, the method comprising:
- (a) obtaining a tray (100), the tray (100) storing a prosthetic valve (10) in a first compressed state and coupled to an elongated delivery system (400), the tray (100) including
- a cavity (110) comprising an open end (112), a floor (114), and a peripheral side wall (120) defining a depth of the cavity (110), the cavity (110) sized and shaped to house the prosthetic valve (10) and at least part of a distal portion (410) of the elongated delivery system (400);
- a mounting surface (140) to substantially immobilize and maintain the prosthetic valve (10) within the cavity (110); and
- an engaging surface (150) peripherally of the cavity (110), the engaging surface (150) securing at least a part of the elongated delivery system (400) externally of the cavity (110);
- (b) at least partially filling the cavity (110) with a first hydrating fluid (1000) to completely immerse the prosthetic valve (10);
- (c) allowing the prosthetic valve (10) to soak in the first hydrating fluid (1000) for a period of time;
- (d) flushing the elongated delivery system (400) by delivering a second hydrating fluid (2000) through a lumen extending through the elongated delivery system (400); and

(e) causing the prosthetic valve (10) to be loaded into a lumen of a delivery sheath (416) associated with the elongated delivery system (400) while the prosthetic valve (10) is coupled to the cavity floor (114) via the mounting surface (140);

wherein the loading is performed by causing the delivery sheath (416) to move axially over the prosthetic valve (10);

wherein the delivery sheath (416) compresses and contains the prosthetic valve (10) within the lumen of the delivery sheath (416) in a second compressed state; and

wherein a diameter of the prosthetic valve (10) in the first compressed state is larger than a diameter of the prosthetic valve (10) in the second compressed state;

(f) removing the elongated delivery system (400) with the prosthetic valve (10) loaded into the lumen of the delivery sheath (416) from the tray (100), including disengaging the prosthetic valve (10) from the mounting surface (140); and

wherein (a) through (e) are performed while the prosthetic valve (10) is substantially immobilized and maintained within the cavity (110).

59. A method for preparing a prosthetic valve (10) and its associated delivery system (1200) for implantation of the prosthetic valve (10) in a patient, the method comprising:

(a) obtaining a tray (1100), the tray (1100) storing a prosthetic valve (10) in a first compressed state and coupled to an elongated delivery system (1200), the elongated delivery system (1200) including a main catheter (418) and a shaft extending coaxially through the main catheter (418), wherein the shaft comprises a nose cone (412) secured to a distal end of the shaft, and the main catheter (418) comprises a delivery sheath (416) coupled to a distal end of the main catheter (418) so as to be axially moveable in a direction towards or away from the nose cone (412), wherein the prosthetic valve (10) is mounted around a portion of the shaft adjacent the nose cone (412), the tray (1100) including

a cavity (1130) comprising an open end, a floor, and a peripheral side wall defining a depth of the cavity (1130), the cavity (1130) sized and shaped to house a valve cover (1210) comprising the prosthetic valve (10) and at least part of a distal portion (410) of the elongated delivery system (1200);

a mounting surface (1112) to substantially immobilize and maintain a valve cover (1210) coupled to a distal end of the elongated delivery system (1200) and the prosthetic valve (10) within the cavity (1130); and

an adjacent reservoir (1135) in fluid communication with the cavity (1130);

(b) at least partially filling the cavity (1130) with a first hydrating fluid until the first hydrating fluid overflows into the adjacent reservoir (1135);

(c) flushing the elongated delivery system (1200) by delivering a second hydrating fluid through a first lumen extending through the elongated delivery system (1200);

(d) causing the prosthetic valve (10) to be loaded into a lumen of the delivery sheath (416) (1200) while the valve cover (1210) is coupled to the mounting surface (1112);

wherein the delivery sheath (416) compresses and contains the prosthetic valve (10) within the lumen of the delivery sheath (416) in a second compressed state; and

wherein a diameter of the prosthetic valve (10) in the first compressed state is larger than a diameter of the prosthetic valve (10) in the second compressed state;

(e) flushing the elongated delivery system (1200) by delivering a third hydrating fluid through a second lumen extending through the elongated delivery system (1200); and

(f) removing the elongated delivery system (1200) with the prosthetic valve (10) loaded into the lumen of the delivery sheath (416) from the valve cover (1210) and the tray (1100);

wherein (a) through (e) are performed while the valve cover (1210) is substantially immobilized and maintained within the cavity (1130).