CLAIMS

1. A catheter system, comprising:

a needleless connector, comprising a distal end, a proximal end, and a valve disposed between the distal end of the needleless connector and the proximal end of the needleless connector;

a vent assembly, comprising:

a proximal component, comprising a male luer adapter comprising a male luer; and

a distal component, comprising:

a distal end coupled to the proximal end of the needleless connector; and

a proximal end coupled to the male luer adapter,

wherein the proximal component is movable between a proximal position and a distal position with respect to the distal component, wherein in response to movement of the proximal component from the proximal position to the distal position, the male luer of the male luer adapter opens the valve.

2. The catheter system of claim 1, wherein the male luer adapter comprises a first set of threads, wherein the distal end of the distal component comprises a second set of threads, wherein the first set of threads is a different direction than the second set of threads.

3. The catheter system of claim 1, wherein the first set of threads is left-handed threads, wherein the second set of threads is right-handed threads.

4. The catheter system of claim 3, wherein an outer surface of the distal component comprises a third set of threads, wherein the third set of threads is left-handed.

5. The catheter system of claim 4, wherein an outer surface of the needleless connector comprises a fourth set of threads, wherein the fourth set of threads is right-handed.

6. The catheter system of claim 1, wherein an inner surface of the proximal component comprises a first protrusion, wherein an outer surface of the distal component comprises a second protrusion and a third protrusion distal to the second protrusion, wherein in response to movement of the proximal component from the proximal position to the distal position, the first protrusion moves distal to the third protrusion.

7. The catheter system of claim 6, wherein in response to the proximal component being in the distal position, the first protrusion is distal to the second protrusion.

8. The catheter system of claim 7, wherein an outer surface of the distal component further comprises a channel, wherein the second protrusion and the third protrusion are disposed within the channel, wherein in response to movement of the proximal component from the proximal position to the distal position, the first protrusion moves distally within the channel.

9. The catheter system of claim 1, wherein the male luer adapter comprises a first set of threads, wherein the distal end of the distal component comprises a second set of threads, wherein the first set of threads is a same direction as the second set of threads.

10. A catheter system, comprising:

a needleless connector, comprising a distal end, a proximal end, and a valve disposed between the distal end of the needleless connector and the proximal end of the needleless connector;

a vent assembly, comprising:

a proximal component, comprising a male luer, a proximal protrusion extending from the male luer, and a distal protrusion extending from the male luer; and

a distal component, comprising:

a distal end coupled to the proximal end of the needleless connector;

a proximal end, wherein the male luer extends through the proximal end of the distal component; and

an inner surface comprising another protrusion;

wherein the proximal component is movable between a proximal position and a distal position with respect to the distal component, wherein in response to movement of the proximal component from the proximal position to the distal position, the proximal protrusion moves distal to the other protrusion.

11. The catheter system of claim 10, wherein in response to the proximal component being in the proximal position, the distal protrusion is distal to the other protrusion and the proximal protrusion is proximal to the other protrusion.

12. The catheter system of claim 10, further comprising a catheter assembly coupled to the distal end of the needleless connector, wherein the catheter assembly comprises:

a catheter adapter, comprising a distal end, a proximal end, and a side port;

an extension tube extending from the side port;

an adapter coupled to the extension tube, wherein the distal end of the needleless connector is coupled to the adapter; and

a catheter extending from the distal end of the catheter adapter.

~~13. A method, comprising;~~

~~activating a vent assembly coupled to a needleless connector, wherein the needleless connector is coupled to a catheter assembly, wherein the needleless connector comprises a distal~~

end, a proximal end, and a valve disposed between the distal end of the needleless connector and the proximal end of the needleless connector, wherein the vent assembly comprises:

a proximal component, comprising a male luer adapter comprising a male luer; and

a distal component, comprising:

a distal end coupled to the proximal end of the needleless connector; and

a proximal end coupled to the male luer adapter,

wherein the proximal component is movable between a proximal position and a distal position with respect to the distal component, wherein activating the vent assembly comprises moving the proximal component from the proximal position to the distal position, wherein in response to moving the proximal component from the proximal position to the distal position, the male luer of the male luer adapter opens the valve;

inserting the catheter assembly into vasculature of a patient and priming the catheter assembly with blood; and

flushing the blood back into the vasculature.

14. The method of claim 13, wherein the male luer adapter comprises first set of threads, wherein the distal end of the distal component comprises a second set of threads, wherein the first set of threads is a different direction than the second set of threads.

15. The method of claim 13, wherein the first set of threads is left-handed threads, wherein the second set of threads is right-handed threads.

16. The method of claim 15, wherein an outer surface of the distal component comprises a third set of threads, wherein the third set of threads is left-handed.

17. The method of claim 16, wherein an outer surface of the needleless connector comprises a fourth set of threads, wherein the fourth set of threads is right-handed.

~~18. The method of claim 13, wherein an inner surface of the proximal component comprises a first protrusion, wherein an outer surface of the distal component comprises a second protrusion and a third protrusion proximal to the second protrusion, wherein in response to movement of the proximal component from the proximal position to the distal position, the first protrusion moves proximal to the third protrusion.~~

~~19. The method of claim 18, wherein in response to the proximal component being in the distal position, the first protrusion is proximal to the second protrusion.~~

~~20. The method of claim 13, wherein the proximal component comprises a proximal protrusion extending from the male luer and a distal protrusion extending from the male luer, wherein an inner surface of the distal component comprises another protrusion, wherein activating the vent assembly coupled to the needleless connector comprises moving the proximal component from a proximal position to a distal position, wherein in response to the moving the proximal component from the proximal position to the distal position, the proximal protrusion moves distal to the other protrusion .~~