Claims:

1. A catheter system, comprising:

a catheter assembly, comprising:

a catheter hub having a distal end, a proximal end, a lumen extending between the distal end and the proximal end, and a side port;

a catheter extending distally from the distal end of the catheter hub;

an extension tube having a distal end and a proximal end, wherein the distal end of the extension tube is fixed within the side port; and

an adapter coupled to the proximal end of the extension tube; and

a fluid storage unit coupled to the adapter, wherein the fluid storage unit includes a compressible reservoir, a barrier coupled to the compressible reservoir, and a hollow spike aligned with the barrier, wherein the compressible reservoir contains fluid and is entirely disposed on a first side of the barrier, wherein a longitudinal axis of the compressible reservoir is aligned with the hollow spike, wherein the hollow spike in fluid communication with the lumen of the catheter hub is configured to breach the barrier, wherein in response to squeezing of the compressible reservoir that is entirely disposed on the first side of the barrier, the fluid passes from the first side of the barrier to a second side of the barrier.

2. The catheter system of claim 1, wherein the adapter includes a Y-adapter.
3. The catheter system of claim 1, wherein a distal end of the fluid storage unit includes a luer adapter directly coupled to the adapter.
4. The catheter system of claim 1, wherein the barrier includes a septum.
5. The catheter system of claim 1, wherein the barrier includes a membrane.
6. The catheter system of claim 5, wherein the membrane is hydrophobic.
7. The catheter system of claim 1, wherein in response to compression of the compressible reservoir on the first side of the barrier towards an axis of the fluid storage unit aligned with

the longitudinal axis of the compressible reservoir aligned with the hollow spike, the hollow spike breaches the barrier such that the fluid passes from the first side of the barrier to the second side of the barrier and the compressible reservoir is in fluid communication with the lumen of the catheter hub.

8. The catheter system of claim 1, wherein in response to compression of the compressible reservoir on the first side of the barrier towards an axis of the fluid storage unit perpendicular to the longitudinal axis of the compressible reservoir aligned with the hollow spike, the hollow spike breaches the barrier such that the fluid passes from the first side of the barrier to the second side of the barrier and the compressible reservoir is in fluid communication with the lumen of the catheter hub.

9. A method of priming a catheter assembly, comprising:

compressing a compressible reservoir of a fluid storage unit coupled to an adapter of a catheter assembly, wherein the catheter assembly comprises:

a catheter hub having a distal end, a proximal end, a lumen extending between the distal end and the proximal end, and a side port;

a catheter extending distally from the distal end of the catheter hub;

an extension tube having a distal end and a proximal end, wherein the distal end of the extension tube is coupled to the side port; and

the adapter coupled to the proximal end of the extension tube;

wherein the fluid storage unit includes the compressible reservoir, a barrier, and a hollow spike aligned with the barrier, wherein the compressible reservoir contains fluid and is entirely disposed on a first side of the barrier, wherein a longitudinal axis of the compressible reservoir is aligned with the hollow spike, wherein in response to compression of the compressible reservoir that is entirely disposed on the first side of the barrier, the fluid passes

from the first side of the barrier to a second side of the barrier and the compressible reservoir is in fluid communication with the lumen of the catheter hub;

breaching the barrier with the hollow spike in response to compressing the compressible reservoir; and

after compressing the compressible reservoir of the fluid storage unit coupled to the adapter, inserting the catheter of the catheter assembly into vasculature.

10. The method of claim 9, wherein the adapter comprises a first port and a second port, wherein the proximal end of the extension tube is coupled to the first port.
11. The method of claim 9, wherein a distal end of the fluid storage unit includes a luer adapter.
12. The method of claim 9, wherein the barrier includes a septum or a membrane.
13. The method of claim 9, wherein compressing the compressible reservoir of the fluid storage unit coupled to the adapter comprises compressing the compressible reservoir towards an axis of the fluid storage unit aligned with the hollow spike.
14. The method of claim 9, wherein compressing the compressible reservoir of the fluid storage unit coupled to the adapter comprises compressing the compressible reservoir towards an axis of the fluid storage unit perpendicular to the longitudinal axis of the compressible reservoir aligned with the hollow spike.
15. The method of claim 9, wherein compressing the compressible reservoir of the fluid storage unit coupled to the adapter of the catheter assembly comprises squeezing by a clinician of the compressible reservoir entirely disposed on the first side of the barrier.
16. The method of claim 9, wherein the distal end of the extension tube is fixed within the side port.