

CLAIMS

1. A catheter assembly, comprising:

a catheter adapter comprising a distal end, a proximal end, and an inner surface forming a lumen, wherein the lumen extends between the proximal end and the distal end; a catheter tube extending distally from the catheter adapter;

a cannula hub configured to slide with respect to the catheter adapter from a distal, unlocked position to a proximal, locked position;

a cannula comprising a sharp distal tip and a notch, wherein the cannula extends distally from the cannula hub and wherein a position of the cannula is secured relative to the catheter adapter when the cannula hub is in the locked position; and

a septum disposed within the lumen, wherein the notch is secured within the septum when the cannula hub is in the locked position, thereby preventing fluid from leaking out of the notch into the lumen, wherein the sharp distal tip of the cannula is disposed distal to the septum and within the catheter adapter when the cannula hub is in the locked position; and a winged element coupled with the catheter adapter and comprising one or more wings, wherein the cannula hub comprises an outer portion disposed outside of the catheter adapter and configured to slide proximally along an outer surface of the catheter adapter towards the proximal end of the catheter adapter monolithically formed as a single unit with the distal end of the catheter adapter until the cannula hub reaches the locked position, wherein the winged element is configured to contact a distal end of the outer portion to act as a stop for the cannula hub and prevent the cannula hub from sliding distally beyond the winged element.
2. The catheter assembly of claim 1, further comprising a wedge disposed within the catheter adapter and configured to couple the catheter tube to the catheter adapter.
3. The catheter assembly of claim 2, wherein the wedge is funnel-shaped.
4. The catheter assembly of claim 1, wherein when the cannula hub is in the unlocked position, a distal end of the outer portion is disposed proximate the winged element.
5. The catheter assembly of claim 1, wherein the cannula hub comprises an inner portion disposed within the lumen, wherein the inner portion comprises a first interlock portion and the

inner surface of the catheter adapter comprises a second interlock portion, wherein the second interlock portion is monolithically formed as a single unit with the distal end of the catheter adapter, wherein the first interlock portion and the second interlock portion are configured to interlock when the cannula hub is in the locked position to prevent movement of the cannula hub with respect to the catheter adapter.

6. The catheter assembly of claim 1, wherein the outer portion is generally cylindrical.

7. The catheter assembly of claim 2, wherein the wedge is constructed of metal.

8. A catheter assembly, comprising:

a catheter adapter comprising a distal end, a proximal end, and an inner surface forming a lumen, wherein the lumen extends between the proximal end and the distal end; a catheter tube extending distally from the catheter adapter;

a cannula hub configured to slide with respect to the catheter adapter from a distal, unlocked position to a proximal, locked position;

a cannula comprising a sharp distal tip and a notch, wherein the cannula extends distally from the cannula hub and wherein a position of the cannula is secured relative to the catheter adapter when the cannula hub is in the locked position; and

a septum disposed within the lumen, wherein the notch is secured within the septum when the cannula hub is in the locked position, thereby preventing fluid from leaking out of the notch into the lumen, wherein the sharp distal tip of the cannula is disposed distal to the septum and within the catheter adapter when the cannula hub is in the locked position, wherein the cannula hub comprises an outer portion disposed outside of the catheter adapter and configured to slide proximally along an outer surface of the catheter adapter towards the proximal end of the catheter adapter monolithically formed as a single unit with the distal end of the catheter adapter until the cannula hub reaches the locked position.