CLAIMS

We claim:

1. A vascular access system, comprising:

a housing, comprising a distal end, a proximal end, a lumen extending between the distal end and the proximal end, and a first slot disposed between the distal end and the proximal end, wherein the first slot comprises a notch, wherein the distal end of the housing comprises a second slot separate from the first slot, wherein the second slot is L-shaped slot and configured to receive a protrusion of a proximal end of a catheter adapter;

a cannula hub disposed within the housing and movable with respect to the slot, wherein the cannula hub comprises a tab extending through the first slot;

a cannula extending distally from the cannula hub, wherein the cannula comprises a distal tip, wherein in response to the tab being disposed within the notch, the distal tip of the cannula is disposed within the housing, wherein in response to advancing the tab along the first slot to a distal end of the first slot, the distal tip of the cannula is disposed distal to the distal end of the housing.

2. The vascular access system of claim 1, further comprising an extension tube coupled to a proximal end of the cannula hub and extending through the proximal end of the housing.

3. The vascular access system of claim 1, wherein the proximal end of the housing comprises a cap.

4. The vascular access system of claim 1, further comprising a catheter assembly, comprising: a catheter adapter, comprising: a body disposed within a distal opening of the housing, wherein the body comprises a distal end, a proximal end, a lumen extending through the distal end and the proximal end, wherein the proximal end of the body is coupled to the distal end of the housing; and a catheter extending from the distal end of the body of the catheter adapter.

5. The vascular access system of claim 4, wherein the catheter adapter comprises a side port, wherein the catheter assembly further comprises a pinch clamp device and an extension tube extending from the side port and through the pinch clamp device, wherein the pinch clamp device comprises: a first arm, comprising a first end and a second end, wherein the first end

comprises a first lip and a second lip, wherein the second end comprises a first clamping surface; a second arm, comprising a first end comprising a terminal end and a second end comprising a second clamping surface positioned opposite the first clamping surface; and a hinge interconnecting the second end of the first arm and the second end of the second arm, wherein in response to the terminal end being engaged with the first lip, the pinch clamp is configured to partially occlude a portion of the extension tube disposed between the first clamping surface and the second clamping surface such that air passes the portion but blood does not, wherein in response to the terminal end being engaged with the second lip, the pinch clamp is configured to occlude a portion of the extension tube disposed between the first clamping surface and the second clamping surface such that neither air nor blood pass the portion.

6. The vascular access system of claim 4, wherein the catheter assembly further comprises a metal wedge disposed within the lumen of the catheter adapter, wherein the metal wedge secures the catheter within the catheter adapter, wherein in response to advancing the tab along the slot to the distal end of the slot, the distal tip of the cannula is disposed within the metal wedge.