CLAIMS

1. A system for facilitating instrument delivery through a peripheral intravenous catheter, comprising:

a catheter adapter comprising an integrally formed body having a proximal end, a distal end, and a lumen extending there through, the catheter adapter having a side port;

an extension tube extending from the side port;

~~a blood control valve disposed in the lumen of the catheter adapter; and~~

a blood control valve disposed in the lumen of the integrally formed body of the catheter adapter, wherein the blood control valve is disc-shaped and configured to vent air when closed, wherein a proximal end of the blood control valve is distal to the side port, wherein in response to coupling of a distal connector to the proximal end of the catheter adapter, the blood control valve is configured to be opened by a cannula of the distal connector, wherein the lumen of the catheter adapter does not include a separate actuator; and

a peripheral intravenous catheter extending distally from the catheter adapter.

~~2. The system of claim 1, wherein the blood control valve is disposed proximal to the side port, wherein the blood control valve does not allow air venting.~~

~~3. The system of claim 1, wherein the blood control valve is disposed distal to the side port, wherein the blood control valve allows air venting.~~

~~4. The system of claim 1, wherein the blood control valve allows air venting.~~

~~5.~~2. The system of ~~claim 4~~claim1, further comprising:

a Y-adapter coupled to a proximal end of the extension tube, the Y-adapter having a first port and a second port;

a needleless connector coupled to the first port; and

a needleless connector coupled to the second port.

~~6.~~3. The system of claim 1, further comprising a cap coupled to the proximal end of the catheter adapter.

~~7.~~4. The system of claim 1, further comprising a needleless connector coupled to the proximal end of the catheter adapter.

~~8.~~5. The system of claim 1, further comprising an extension set, the extension set comprising:

a distal connector coupled to the proximal end of the catheter adapter, wherein the distal connector comprises a cannula that penetrates the blood control valve in response to the distal connector being coupled to the proximal end of the catheter adapter;

a proximal connector; and

tubing disposed between the distal connector and the proximal connector.

~~9.~~6. The system of claim ~~8~~5, wherein the proximal connector comprises a needleless connector.

~~10.~~7. The system of claim ~~8~~5, wherein the cannula is blunt and constructed of plastic or steel.

~~11.~~8. The system of claim ~~8~~5, wherein the cannula comprises a plurality of flushing windows.

~~12.~~9. The system of claim 1, further comprising an extension set coupled to the proximal end of the catheter adapter, the extension set comprising:

a distal connector coupled to the proximal end of the catheter adapter, wherein the distal connector comprises a male luer;

a proximal connector; and

tubing disposed between the distal connector and the proximal connector.

~~13.~~10. The system of claim ~~12~~9, wherein the proximal connector comprises a needleless connector.

~~14.~~11. The system of claim ~~12, wherein the lumen of the catheter adapter includes an actuator configured to penetrate the blood control valve in response to~~1, further comprising the distal connector ~~being~~ coupled to the proximal end of the catheter adapter, wherein the distal connector comprises a male luer having the cannula penetrating the blood control valve.

~~15. The system of claim 12, wherein the actuator comprises an extension of the male luer.~~

~~16.~~12. The system of claim ~~12~~9, further comprising an instrument delivery device coupled to the proximal end of the catheter adapter, wherein the instrument delivery device comprises an instrument configured to advance distally through the blood control valve and the

peripheral intravenous catheter, wherein the instrument comprises a guidewire, a probe with a sensor, tubing for fluid infusion or blood draw or a light tube for disinfection.

~~17.~~13. The system of claim 1, further comprising a needle assembly removably coupled to the proximal end of the catheter adapter, an introducer needle of the needle assembly extending through the blood control valve.

~~18.~~14. The system of claim 1, wherein the proximal end of the catheter adapter comprises a luer adapter.

~~19.~~15. The system of claim 1, wherein the proximal end of the catheter adapter comprises a non-luer adapter.

~~20.~~16. The system of claim 1, wherein a distal portion of the lumen is narrowed to provide a guide feature.