

Claims:

1. An intravenous catheter system, comprising:

a delivery device, comprising:

a housing having a distal end, a proximal end, and a slot;

a first catheter having a proximal end and a distal end; and

a catheter hub disposed within the housing, wherein the first catheter is secured to the catheter hub, wherein a portion of the catheter hub extends through the slot and is moveable along the slot to advance the first catheter in a distal direction;

a catheter assembly, comprising:

a catheter adapter having a distal end, a proximal end, a lumen extending between the distal end of the catheter adapter and the proximal end of the catheter adapter; and

a second catheter secured to the catheter adapter and extending distally from the catheter adapter; and

an extension set coupled to the catheter adapter, comprising:

an extension tube having a distal end and a proximal end; and

a connector coupled to the proximal end of the extension tube, wherein the distal end of the first catheter is disposed beyond a distal end of the second catheter when the first catheter is advanced,

wherein the first catheter comprises a first portion, a second portion, and a transition portion disposed between the first portion and the second portion, wherein the first portion includes a first inner diameter along an entire length of the first portion and a first outer diameter along the entire length of the first portion, wherein the second portion is disposed proximal to the first portion, wherein the second portion includes a second inner diameter and a second outer

diameter along an entire length of the second portion, wherein the second inner diameter is greater than the first inner diameter, wherein the second outer diameter is greater than the first outer diameter, wherein the transition portion is disposed within the lumen of the catheter adapter when the first catheter is advanced,

wherein the first catheter further comprises a third portion and a second transition portion disposed between the second portion and the third portion, wherein the third portion is disposed proximal to the second portion, wherein the third portion includes a third inner diameter along an entire length of the third portion and a third outer diameter along the entire length of the third portion, wherein the third inner diameter is greater than the second inner diameter, wherein the third outer diameter is greater than the second outer diameter, wherein the second transition portion is disposed within a lumen of the extension tube when the first catheter is advanced.

2. The intravenous catheter system of claim 1, wherein the catheter adapter further comprises a side port, wherein the extension tube extends from the side port.

3. The intravenous catheter system of claim 1, wherein the extension tube extends from the proximal end of the catheter adapter.

4. The intravenous catheter system of claim 1, further comprising:

a guidewire having a proximal end and a distal end, wherein the guidewire is disposed within the first catheter; and

a guidewire hub disposed within the housing proximal to the catheter hub, wherein the guidewire is secured to the guidewire hub, wherein a portion of the guidewire hub extends through the slot and is moveable along the slot to advance the guidewire in the distal direction,

wherein the distal end of the guidewire is disposed distal to the distal end of the second catheter when the guidewire is advanced.

5. The intravenous catheter system of claim 4, wherein the guidewire is configured to be retracted when the first catheter is advanced.