CLAIMS

We claim:

1. A catheter assembly, comprising:

a catheter adapter, comprising a distal end, a proximal end, and a lumen extending through the distal end of the catheter adapter and the proximal end of the catheter adapter;

a catheter extending distally from the distal end of the catheter adapter; and

an introducer needle extending through the catheter,

wherein an anti-thrombogenic material is extruded through a die to form the catheter adapter.

2. The catheter assembly of claim 1, wherein the anti-thrombogenic material is extruded through the die to form the catheter.

3. The catheter assembly of claim 2, wherein a distal end of the catheter comprises a plurality of fenestrations cut through a wall of the catheter.

4. The catheter assembly of claim 1, wherein the anti-thrombogenic material comprises a fluoro moiety, a silicone moiety, or a PEG moiety.

5. The catheter assembly of claim 4, wherein the anti-thrombogenic material comprises a polymer, wherein the polymer comprises polyurethane or silicone elastomer.

6. The catheter assembly of claim 1, wherein the anti-thrombogenic material comprises two or more of: a fluoro moiety, a silicone moiety, and a PEG moiety.

7. The catheter assembly of claim 1, wherein an inner surface or an outer surface of the catheter is coated with an anti-thrombogenic coating.

8. The catheter assembly of claim 1, wherein an inner surface or an outer surface of the introducer needle is coated with an anti-thrombogenic coating.

9. The catheter assembly of claim 1, further comprising a wedge disposed within the lumen of the catheter adapter, wherein the catheter is secured within the catheter adapter by the wedge, wherein the wedge is coated with an anti-thrombogenic coating.

10. The catheter assembly of claim 1, further comprising a septum disposed within the lumen of the catheter adapter, wherein the septum is coated with an anti-thrombogenic coating.

11. The catheter assembly of claim 1, further comprising a septum, actuator, and spring disposed within the lumen of the catheter adapter, wherein the septum, the actuator, or the spring are coated with an anti-thrombogenic coating.

12. The catheter assembly of claim 1, further comprising a septum disposed within the lumen of the catheter adapter, wherein the septum is molded from the anti-thrombogenic material or another anti-thrombogenic material.

13. The catheter assembly of claim 1, wherein the anti-thrombogenic material is extruded through the die to form the catheter, wherein the catheter adapter is molded from another anti-thrombogenic material or the anti-thrombogenic material.

14. A catheter assembly, comprising:

a catheter adapter, comprising a distal end, a proximal end, a lumen extending through the distal end of the catheter adapter and the proximal end of the catheter adapter, and a side port in

between the distal end of the catheter adapter and the proximal end of the catheter adapter and in fluid communication with the lumen;

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

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

an introducer needle extending through the catheter,

wherein an anti-thrombogenic material is extruded through a die to form the catheter adapter.

15. The catheter assembly of claim 14, wherein the anti-thrombogenic material is extruded through the die to form the catheter.

16. The catheter assembly of claim 15, wherein a distal end of the catheter comprises a plurality of fenestrations cut through a wall of the catheter.

17. The catheter assembly of claim 14, wherein the anti-thrombogenic material is extruded through the die to form the extension, or the luer adapter.

18. The catheter assembly of claim 14, wherein the anti-thrombogenic material comprises a fluoro moiety, a silicone moiety, or a PEG moiety.

19. The catheter assembly of claim 18, wherein the anti-thrombogenic material further comprises a polymer, wherein the polymer comprises polyurethane or silicone elastomer.