

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 or 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 is extruded through the die to form the catheter adapter.
5. The catheter assembly of claim 1, wherein the anti-thrombogenic material comprises a fluoro moiety, a silicone moiety, or a PEG moiety.
6. The catheter assembly of claim 5, wherein the anti-thrombogenic material comprises a polymer, wherein the polymer comprises polyurethane or silicone elastomer.
7. 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.
8. The catheter assembly of claim 1, wherein an inner surface or an outer surface of the catheter is coated with an anti-thrombogenic coating.

9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. The catheter assembly of claim 1, wherein the anti-thrombogenic material are extruded through the die to form the catheter, wherein the catheter adapter is molded from another anti-thrombogenic material or the anti-thrombogenic material.
15. 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 the luer adapter; and

an introducer needle extending through the catheter,

wherein an anti-thrombogenic material is extruded through a die to form the catheter, the extension tube, the luer adapter, or the catheter adapter.

16. The catheter assembly of claim 15, wherein the anti-thrombogenic material is extruded through the die to form the catheter.
17. The catheter assembly of claim 16, wherein a distal end of the catheter comprises a plurality of fenestrations cut through a wall of the catheter.
18. The catheter assembly of claim 15, wherein the anti-thrombogenic material is extruded through the die to form the extension tube, the luer adapter, or the catheter adapter.
19. The catheter assembly of claim 15, wherein the anti-thrombogenic material comprises a fluoro moiety, a silicone moiety, or a PEG moiety.
20. The catheter assembly of claim 19, wherein the anti-thrombogenic material further comprises a polymer, wherein the polymer comprises polyurethane or silicone elastomer.