CLAIMS:

1. An intravenous therapy system, comprising:

a curved needle; and

a curved catheter, wherein the curved needle extends through the curved catheter;

wherein, in response to insertion of a first length of the curved needle and a first length of the curved catheter into a patient's body, a curvature angle of the curved needle and the curved catheter causes the curved needle and the curved catheter to intersect axially with a blood vessel in the patient's body, wherein the curvature angle of the needle is between 5 and 15 degrees.

2. The intravenous therapy system of claim 1, wherein the first length of the curved needle is longer than the first length of the curved catheter.

3. The intravenous therapy system of claim 1, the curved needle further comprising a bevel formed at a distal end of the curved needle, wherein an edge of the bevel is formed to face towards a center point of a curvature of the curved needle.

4. The intravenous therapy system of claim 1, wherein in response to insertion of a second length of the curved needle and a second length of the curved catheter into a patient's body, the curved needle and the curved catheter are parallel with the blood vessel.

5. The intravenous therapy system of claim 1, wherein the curved catheter is made of a polymer.

6. The intravenous therapy system of claim 1, wherein a curvature of the curved needle and a curvature of the curved catheter are the same.

7. The intravenous therapy system of claim 1, wherein in response to complete insertion of the curved needle and curved catheter, a bevel of the needle is prevented from being pressed against a wall of the blood vessel.

8. A method of manufacturing an intravenous device, comprising:

introducing a heated metal at an extrusion die, wherein the extrusion die comprises an internal spider die;

extruding the heated metal through the extrusion die forming a hollow tube therefrom; and

adjusting an exit plane of the internal spider die to be non-orthogonal to an extrusion axis of the spider die to form a curve in the hollow tube, wherein the curve in the hollow tube is between 5 and 15 degrees.

9. The method of claim 8, wherein the metal is a stainless steel.

10. The method of claim 8, further comprising forming a plastic catheter around the outside surface of the hollow tube.

11. The method of claim 10, further comprising applying a heat to the catheter to relax the catheter against the outer surface of the hollow tube.

12. The method of claim 8, further comprising forming a bevel at a distal end of the hollow tube to form a sharp tip.

13. The method of claim 8, further comprising adjust an exit plane of the internal spider die during extrusion from being non-orthogonal to the extrusion axis of the spider die to being orthogonal to the extrusion axis to form the curve along a first distance of a total length of the

hollow tube and a straight portion of the hollow tube along a second distance of the total length of the hollow tube.

14. The method of claim 8, further comprising annealing the hollow tube.

15. A method of manufacturing an intravenous device, comprising:

introducing a heated metal at an extrusion die, wherein the extrusion die comprises an internal spider die;

extruding the heated metal through the extrusion die forming a hollow tube therefrom;

forming a bevel at a distal end of the hollow tube;

forming a plastic catheter around the outside surface of the curved metal; and

with a bend fixture, bending the hollow tube and catheter to form a curve in the hollow tube and the catheter, wherein the curve in the hollow tube and the catheter is between 5 and 15 degrees.

16. The method of claim 15, wherein the metal is a stainless steel.

17. The method of claim 15, further comprising applying a heat to the catheter to relax the catheter against the outer surface of the hollow tube.

18. The method of claim 15, further comprising annealing the hollow tube.