Malleable metal introducer sheath

* Sharp point for transcutaneous puncture, will also traverse liver parenchyma
* Malleable to accommodate arc of biliary system
* Some rigidity to support catheter during anchor wire deployment

Indwelling plastic catheter

* Plastic and flexible to reside in biliary system while device is in place (5-7 days)
* Wire anchor sheath built-in to tip of catheter to straighten anchoring portion of wires prior to deployment
* Wire anchor sheath stiff to allow wires to be retracted back into catheter for device removal

Anchor wires

* 2 component system
  - Distal tip: intrinsic curve ("hook") when released from wire anchor sheath at end of catheter
  - Proximal component: firm wire to allow “push / pull” action for deployment and removal
* Proximal component needs to be flexible enough to accommodate the contour of the biliary system
* 6-8 prongs at distal component with sharp tips to anchor in intestinal mucosa