

CapDisc: One-step point-of-care diagnostic testing of bodily fluids

## Sample—Twist—Test

SAFE-T-FILL	An existing device for sampling blood
	<ul> <li>Separate reagent reservoir</li> <li>Multi-part assembly</li> <li>Multi-step use</li> <li>Achieving correct sample and reagent volume requires careful measurement</li> <li>Biohazards require careful disposal</li> <li>Subject to environmental &amp; cross contamination</li> </ul>
CAPDISC	One-step simplifies use, reduces total cost and improves safety and accuracy
	<ul> <li>+ Pre-filled reagent</li> <li>+ Integrated assembly</li> <li>+ One-step process: sample, twist, test</li> <li>+ Sample and reagent volume defined by geometry of the device, increasing accuracy</li> <li>+ No capillary tube or reagent filling means human variable eliminated</li> <li>+ Single use, tamper-proof, contamination-proof</li> <li>+ Reduced total cost</li> </ul>

## **FABRICATION & FUNCTION**

- · Can use standard multi-cavity tooling or in-mold assembly
- · CapDisc orifice captures fluid by standard capillary action
- · Defined sample volumes: 10 μL to 100 μL
- Twist of cap transfers fluid to sealed, sterile, prefilled reservoir for testing
- · Compatible with any optical measurement
- · Compatible with "wet" and "dry" chemistry
- Simple and precise to use with minimal training
- Sealed system eliminates contamination and reduces biohazard