

URINARY TECHNOLOGIES CORP.

Faster, better UTI testing — so clinicians can prescribe the *right* antibiotic the *first* time



THE PROBLEM

Urinary tract infections (UTIs) are the second most common bacterial infections, affecting over 13 million people annually in the US and over 200 million people world-wide, predominantly women. Over 2.6 million UTI patients in the US are admitted to the hospital and 13,000 patients *die* of urosepsis – sepsis caused by a UTI – making UTIs the fourth most lethal infectious disease.

The gold standard for UTI testing uses 1950s-era Petri dishes to diagnose UTIs. This is followed by an antibiotic susceptibility test (AST), which is required because almost 50% of UTIs are now resistant to common antibiotics. Running both tests takes up to 4 days. Worse, urine samples often are contaminated, requiring re-sampling, re-starting the clock and delaying treatment.

Since the tests take so long, most clinicians initially skip testing for a suspected UTI. Instead, patients are sent home with a 'best-guess' antibiotic. Half fail due to rising resistance, further worsening the growing problem of antibiotic resistance. The patients who come back are eventually tested and finally get an antibiotic that works after another delay of up to 4 days.

UTIs cost US\$30 billion in global healthcare costs. A faster test would *eliminate* US\$20 billion of those costs.

OUR APPROACH

Urinary Technologies Corp. (UTC) is developing a next-generation UTI diagnostic platform that delivers species identification and antibiotic susceptibility results in *1–4 hours instead of 4 days*. UTC uses antibodies to identify the 10 species that cause over 99% of UTIs in the US. This makes our testing dramatically faster and inherently contaminant resistant. We conduct ASTs at the same time we identify the bacteria – not afterward like today's tests. Running both tests will take 1-4 hours (depending on species) and can be done easily on-site at a clinic or hospital, eliminating transport time.

UTC's patented system is based on a single-use lab-on-a-chip in an automated benchtop medical instrument. The instrument will analyze and report the results, with minimal training. We use well-established technologies in new, unique ways. The far shorter test time will save lives and enable rapid discharge of in-hospital patients, while enabling better, cheaper care for outpatients, reducing hospital admissions.

Allowing clinicians to prescribe the *right* antibiotic the *first* time will provide better care, reduce pain and discomfort, save lives and be far less expensive.

DEVELOPMENT STATUS & TEAM

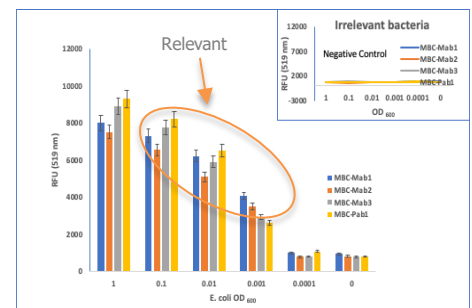
UTC has completed proof-of-concept using off-the-shelf antibodies and bacterial samples and developed prototypes of the cartridge and instrument.

- Measurement of *E. coli* from morbid infection levels down to healthy levels (see top chart), while ignoring other bacteria (chart insert).
- Assessment of *E. coli* susceptibility to multiple antibiotics (see bottom chart), distinguishing resistant strains from normal strains (bottom right).
- Microfluidic cartridge design developed and prototyped.
- Third generation prototype benchtop instrument (see photo) can accurately handle and read cartridges.
- The system should qualify for FDA Breakthrough status, which will dramatically shorten time to market.

UTC has assembled a highly experienced and proven team to commercialize this product.

FUNDING REQUEST

UTC is seeking \$600,000 in funding, which will enable completion of Technical Readiness Level 4 (TRL4) within 9 months. UTC proposes a simple agreement for future equity (SAFE) but is open to other options such as a convertible note. UTC is pursuing several grants and has strong indications that non-dilutive funding could become available upon completion of TRL4. Thank you for your interest. For more information, please contact Chuck Dennis at charles.l.dennis.ii@urinarytechnologies.com



Morbid ← → Healthy

