Automated Diagnostics
Innovative, Rapid Diagnostic Testing and Characterization of Antibiotic Resistant Bacterial Pathogens

Automated Diagnostic Systems, Inc. ("ADS, Inc.") is a clinical research organization which designed and developed an automated blood collection, processing, and analysis system for performing research, clinical and field laboratory testing. The focus of the company is to commercialize this miniature, digital, and portable medical laboratory for hematology and diagnostic point of-care testing, and to establish a digital diagnostic network. ADS, Inc. plans to implement joint ventures and license agreements with selected and complimentary corporate partners to manufacture and market its instruments and services. An expert networking system (the core technology) will remain an in-house operation. ADS, Inc. also plans to collaborate for DoD/federal R&D grant/contract proposals applications (expand diagnostic capabilities) and partner with a CDMO for development/support of commercial products, FDA premarket notification 51O (K), and pilot plant manufacturing for supply contracts. Additionally, ADS, Inc. plans to service/license unique real time toxicology detection/clinical infomatics of new pharmaceuticals to select drug developers.

Products/Services: ADS, Inc. has developed a diagnostic testing device which will offer cheaper, faster and safer methods of diagnostic testing. ADS, Inc. bas created the "*Digital Diagnostic System*" – a small, lightweight, rugged, totally automated, highly-reliable medical (clinical) laboratory. This system is composed of three integrated components: i) a "*SpecPrep*," a pre-loaded self-contained disposable cassette that collects or receives blood and/or other samples; ii) *"Specimen Handler*," which processes the sample; iii) "*Digital Instrument*," which receives the sample directly or a digital scan of the sample from a remote site and subjects it to computer-aided analysis; iv). an antimicrobial resistant detection kit.

Technologies/Special Know-how: Unique design of an advanced system that:
- equipment is small (3 cubic feet) size and lightweight (<50 lbs.) device;
-reduces human diagnostic error using automated processing and analyses equipment;
-offers rapid point-of-care testing to physician/hospital laboratories and remote areas;
-is capable of analyzing and communicating data and images via telemetry, wire, or light guide channels, and -will provide secure lab results and consultation over the internet.
Market: The $60 billion Global In Vitro Diagnostic (IVD) Market (clinical laboratory testing, near-patient testing, self-testing) is growing at a CAGR of 7.8% The major factors driving the growth of the IVD market are increased patient awareness, patient self-testing, advancement in automated testing, and the rise in the number of diseases like respiratory infections, hospital acquired infections. Analyzers (high, medium, and low throughput) analyzers are the main instruments used for conducting the tests. Target Markets: Hospitals, clinical reference and research laboratories, private physician offices, physician office laboratories (over 140,000 U.S.), mobile medical laboratory and telemedicine services. All branches of the U.S. military have expressed a keen interest in the "Digital Diagnostic System" for uses ranging from battlefields to scenes of natural disasters, Med-Evac helicopters and other mobile medical rescue units, shipboard sick bays, and manned gravity-free space environments.