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In Vitro Diagnostics

US Industry Study with Forecasts for **2011 & 2016**

Study #2175 | April 2007 | \$4500 | 359 pages

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Nucleic acid testing products will continue to see the fastest gains based on throughput, accuracy and speed advantages, especially in the detection of infectious diseases and cancer markers.

US demand to grow 5.1% annually through 2011

US demand for in vitro diagnostic (IVD) products is forecast to grow 5.1 percent annually to \$19.5 billion in 2011. Clinical chemistry and immunoassay methods will remain the top two IVD sciences, the former due largely to sales of personal blood glucose monitoring strips; the latter because of the penetration of high value-added chemiluminescent products into drug and infectious disease testing markets. Nucleic acid testing products will continue to generate the fastest gains based on throughput, accuracy and speed advantages, especially in the detection of infectious diseases and cancer markers. Based largely on increased blood glucose monitoring among diabetic patients, endocrine condition testing will remain the largest application, posting demand of \$4.4 billion in 2011.

Clinical chemistry products to remain dominant

Demand for clinical chemistry products will reach \$6.7 billion in 2011, up 4.0 percent annually from 2006. Gains will reflect an expanding number of diabetics engaging in self-blood glucose monitoring and the growth of general health screening as a routine part of patient examinations. Chemiluminescent tests with inherent sensitivity and selectivity advantages will keep immunoassays competitive in drug and infectious disease testing, driving immunoassay



demand up 5.3 percent annually to \$4.9 billion in 2011.

The market for blood testing diagnostics will continue to post below average growth as alternative clinical chemistry screens penetrate general patient screening applications. However, hemostasis tests for D-Dimer and other cardiac parameters will build up niche opportunities based on their ability to quantify heart attack and embolism risk prior to occurrence.

Nucleic acid testing to be fastest growing segment

Spurred by new generation PCR (polymerase chain reaction) and microar-

ray technologies, nucleic acid testing products will sustain the strongest gains in IVD demand, penetrating applications in the characterization of complex infections and tumors. DNA-based forensic, genetic and identity testing will comprise the fastest growing IVD application through 2011 as the vast potential of law enforcement and genetic screening markets begins to produce significant revenues. Among other IVD products, cellular analysis and anatomical pathology reagents and instruments will provide the best growth opportunities: the former based on trends in cervical cancer testing activities; the latter due to specialized applications in biopsy-based cancer and infectious disease detection.

Sample Text, Table & Chart

PRODUCTS

Clinical Chemistry Products

Clinical chemistry procedures measure levels of natural and externally consumed compounds (i.e., therapeutic and ill-tolerated toxicants) in the body for the detection of potential diseases and medical conditions, the assessment of general health status, and the selection and monitoring of therapies. Commonly tested compounds include carbohydrates, electrolytes, enzymes, lipids, minerals, and proteins as well as therapeutic medicines. A related field, toxicology, encompasses the detection and analysis of toxic substances including poisons and illicit drugs. Based on increasing applications such as self blood-glucose monitoring, pre-hospital admission testing, patient health screening, therapeutic drug monitoring, forensic testing, and other uses, such as pregnancy and drugs-of-abuse testing, the market for clinical chemistry products is expected to grow from \$6.7 billion in 2011.

To medical providers, clinical chemistry tests provide definitive diagnostic results related to various medical conditions. Abnormally high or low levels of these substances in the body, or the presence of non-endogenous substances, can indicate one or more of several health problems. For example, a deficiency in the protein albumin might be caused by ascites, Crohn's disease, cirrhosis of the liver, hepatitis, inflammation, liver cancer, lupus erythematosus, malnutrition or pregnancy. The detection and quantifying of such a deficiency only represent a starting point for further testing.

The value of clinical chemistry to the health care sector lies in the capability of measuring several substances simultaneously. Common clinical chemistry panels contain reagents for testing a group of compounds, all of which are known to play a role in the onset of specific medical conditions. For example, a typical liver function panel measures levels of the protein albumin; the enzymes alanine aminotransferase,

60

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**SAMPLE
TEXT**

TABLE IV-4

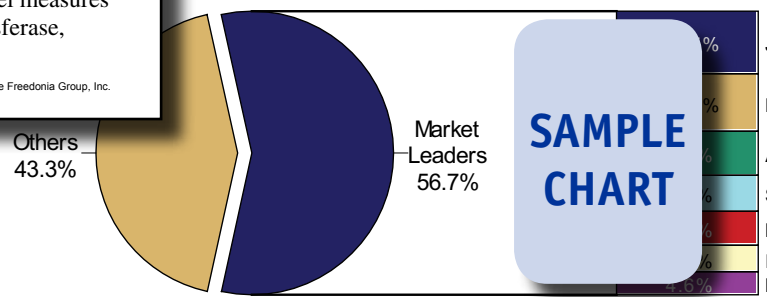
SEXUALLY TRANSMITTED DISEASE (STD) TESTING - IVD DEMAND BY METHODOLOGY (million dollars)

Item	1996	2001	2006	2011	2016
Population 15-44 Years (million)					
\$ STD IVD products/capita 15-44					
STD Testing - IVD Demand					
Immunoassays					
Nucleic Acid Testing					
Microbiology					
Cellular Analysis					
Blood Testing					
Other					
% STD testing					
Infectious Disease Testing - IVD Demand					

**SAMPLE
TABLE**

CHART VI-1

PRODUCTS US MARKET SHARE BY COMPANY, 2006 (\$15.2 billion)

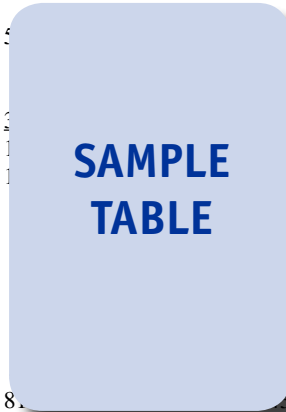


**SAMPLE
CHART**

Sample Profile, Table & Forecast

TABLE V-2
HOSPITAL IVD PRODUCT DEMAND
 (million dollars)

Item	1996	2001	2006	2011	2016
Number of Acute Care Hospitals mil \$ IVD products/hospital	5	5	5	5	60
Hospital IVD Product Demand	2	2	2	2	00
Clinical Chemistry	1	1	1	1	00
Immunoassays	1	1	1	1	00
Blood Testing					20
Nucleic Acids					20
Microbiology					20
Cellular Analysis					20
Other					20
% hospitals					5.8
IVD Product Demand by Market	8	8	8	8	00



COMPANY PROFILES

Invitrogen Corporation
 1600 Faraday Avenue
 Carlsbad, CA 92008
 760-603-7200
 http://www.invitrogen.com

Revenues: \$ million (2006)
 Research and Development: \$ million (2006)
 Employment: 1,000

SAMPLE PROFILE

Key Products: human leukocyte antigen diagnostics for transplantation, molecular diagnostic research products, and cell and tissue culture media

Invitrogen develops, manufactures and markets more than 10,000 products for customers engaged in life science research and the commercial manufacture of biological products. The Company operates through two product segments: BioDiscovery and Cell Culture.

Invitrogen participates in the in vitro diagnostic industry through both the BioDiscovery and Cell Culture segments. Among these operations, the Company's BioDiscovery segment, which had 2006 revenues of \$822 million, includes the DYNAL line of human leukocyte antigen (HLA) diagnostics. DYNAL HLA molecular typing tests are used to determine compatibility between a patient and donor for solid organ and bone marrow transplantation. This product line includes assays based on several methodologies, including DYNAL RELI sequence specific oligonucleotide typing kits; DYNAL ALLSET+ SSP and PEL-FREEZ SSP UNITRAY kits, which are based on sequence specific primers for DNA-based tissue typing applications; and the SECORE line of high resolution HLA typing products, which are based on DNA

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"Demand for IVD reagents, consumables and instruments in independent clinical laboratories -- including freestanding clinical reference and pathology labs, esoteric testing labs and community blood banks -- will increase 5.1 percent annually to \$6.1 billion in 2011. Growth will match the industry average due to..."

--Section V, pg. 246

OTHER STUDIES

Disposable Medical Supplies

US demand for disposable medical supplies will grow 4.9% annually through 2011. Best prospects include dry powder inhalers, prefilled syringes and transdermal patches for drug delivery; blood glucose test strips for diabetes monitoring; tissue sealants for wound closure; and daily contact lenses. This study analyzes the US disposable medical supply industry, with forecasts for 2011 and 2016 presented by product, market and raw material. It also evaluates company market share and profiles industry players.

#2196 05/2007..... \$4500

Nanotechnology in Health Care

US demand for nanotechnology medical products will grow 17.5% annually through 2011, driven by the critical need for new or improved therapies and diagnostics. The greatest short-term impact will be in cancer and central nervous system disorders, followed by orthopedic nanoimplants. This study analyzes the \$23.6 billion US nanotech medical product industry to 2011, 2016 and 2021 by material, product and application. The study also reviews product development activities and profiles major players.

#2168 02/2007..... \$4500

Medical Imaging (Equipment, Agents, Consumables)

US demand for medical imaging products will grow 6% annually through 2010 based on technological advances, aging demographics and changing health care approaches. Equipment will outpace consumables, led by CT scanners and by MRI and PET machines. Radiopharmaceuticals will lead gains among consumables. This study analyzes the \$16 billion US medical imaging product industry to 2010 and 2015 by type and market. It also evaluates company market share and profiles leading competitors.

#2137 12/2006..... \$4400

Biocompatible Materials

US demand for biocompatible materials will grow 6.6% yearly through 2010. Synthetic polymers will remain dominant based on quality, performance and cost advantages in most applications. Ceramics will grow the fastest, driven by improved properties and processing ease. Hyaluronic acid and collagen will pace the natural polymer segment. This study analyzes the \$2.7 billion US biocompatible industry to 2010 and 2015 by material and application. It also evaluates market share and profiles major players.

#2111 09/2006..... \$4400

Implantable Medical Devices

US medical implant demand will rise 9.3% yearly through 2011. Cardiac implants will remain the top-selling group, led by stents and defibrillators. Bone cement, tissue and spinal implants will pace gains in the orthopedic segment. Other fast-growing types include neurological stimulators, cochlear devices and gastric bands. This study analyzes the \$27.9 billion US medical implant industry, with forecasts for 2011 and 2016 by material and product. It also evaluates market share and profiles major players.

#2255 10/2007..... \$4500

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