



REPORT OVERVIEW



POT OF GOLD

OPPORTUNITIES FOR ANALYTICAL INSTRUMENTS IN CANNABIS TESTING (2017-2022)

18-025 | NOVEMBER 2018

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Overview

As the cannabis industry emerges from the black market to the grey market to the open market, it faces forces of standardization and regulation. Among other effects, this has stimulated the development of analytical testing methods for cannabis, and these new applications and methods are available not only in areas where the market is open, but also in geographies where the industry remains clandestine.

A variety of instruments and techniques, such as Gas Chromatography, HPLC, Supercritical Fluid Chromatography, Thin-layer Liquid Chromatography, GC/MS, LC/MS, ICP-OES, ICP-MS, X-Ray Diffraction Spectroscopy, and qPCR, are all employed for a variety of testing uses — including potency testing, heavy metal testing, and safety testing. And although many cannabis suppliers prepare samples before sending them to be tested, there also exists a small but quickly growing market for sample preparation.

Objectives of a Market Analysis & Perspective Publication

1. Estimate the market size for 11 categories of analytical technologies and provide segmentation by product type, end market sector, and unit shipments.
2. Provide the 5-year growth rate for the cannabis testing instrumentation for all covered technologies including the growth rate for each category for seven relevant end markets.
3. Provide qualitative insights about market forces for each category.
4. Evaluate market share for technology suppliers.
5. Assess the opportunities and threats that attend this novel marketplace.

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■ Report Contents

INTRODUCTION

- Report Description
- Executive Summary
- Scope & Definitions

BACKGROUND ON CANNABIS

- Overview of the Cannabis Market
- Overview of Cannabis Testing Applications
- Technology Overview
- Historical Background
- Market Opportunities and Threats

MARKET DEMAND

- Overall (2017-2022)
- Chromatography
 - Initial Systems
 - GC
 - HPLC
 - Other Chromatography

- Aftermarket
 - Components
 - Consumables
 - Total Aftermarket

- Service

■ Mass Spectrometry

- Initial Systems
 - GC/MS
 - LC/MS
 - Total Initial Systems

- Aftermarket
 - Components
 - Consumables
 - Total Aftermarket

- Service

■ Spectroscopy

- Initial Systems
 - ICP/MS
 - ICP/OES
 - XRF
 - Total Initial Systems

- Aftermarket
 - Components
 - Consumables
 - Total Aftermarket

- Service

■ qPCR

- Initial Systems
- Aftermarket
 - Components
 - Consumables
 - Total Aftermarket

- Service

■ Sample Preparation Techniques

- Initial Systems
 - Extraction
 - Volatile Extraction
 - Total Initial Systems

- Aftermarket
 - Components
 - Consumables
 - Total Aftermarket

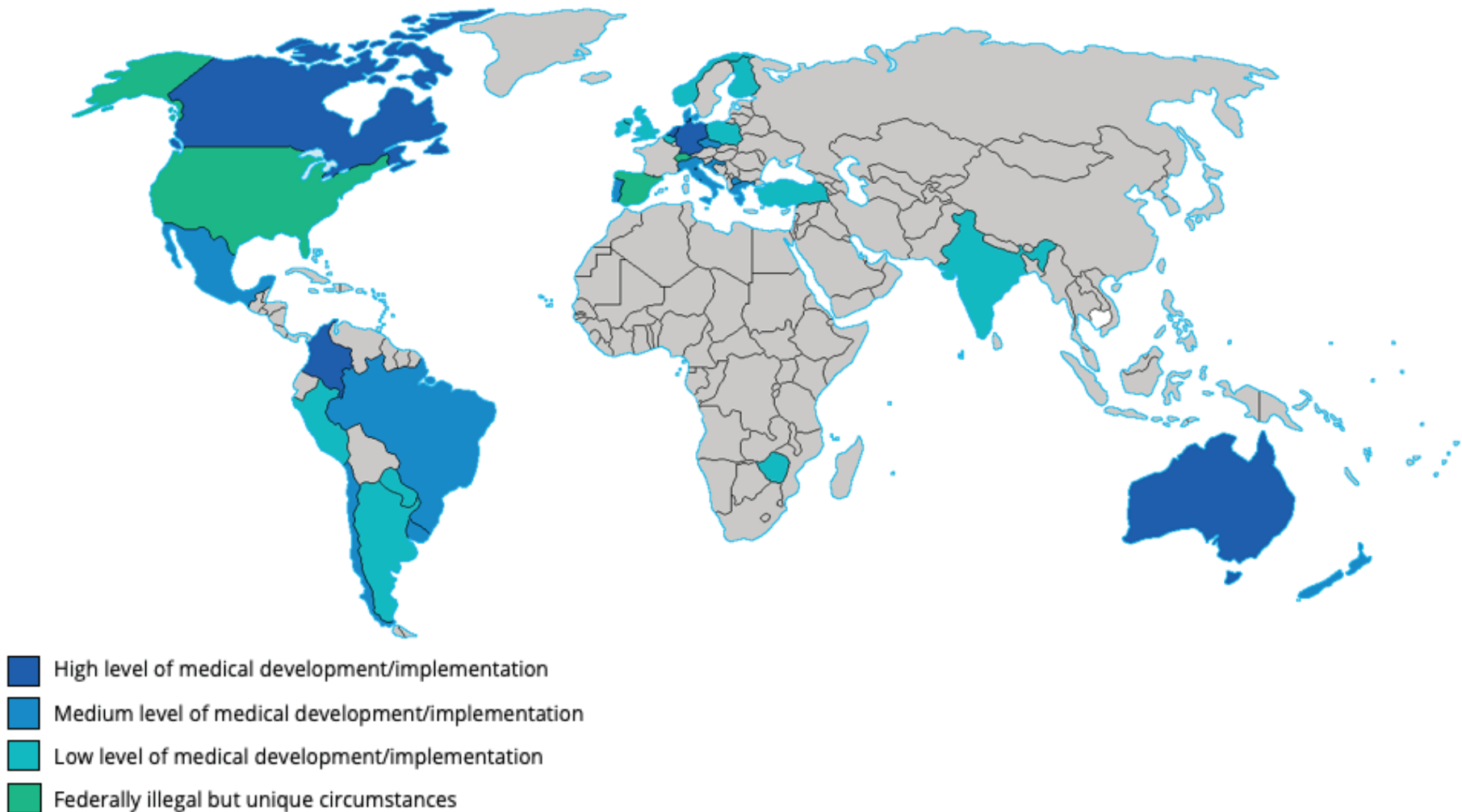
- Service

■ Methodologies

Strategic Directions International (SDi) maintains a database spanning decades of the corporate financial performance of life science and analytical instrument companies that is updated continuously. Proprietary algorithms, adjusted by market knowledge and client feedback, allocate revenues across dozens of product categories to create reliable models of market size, share, segmentation and growth. Our analysts also employ primary research that involves substantial interactions with knowledgeable sources, including end-users, individuals within regulatory agencies, marketing and technical personnel of participating vendors, and other informed observers. The bulk of the information contained in this edition was gathered specifically in preparation of **Pot of Gold- Opportunities for Analytical Instruments in Cannabis Testing**, with an emphasis on primary sources. Secondary research was also conducted to provide background perspective, to derive and substantiate market estimates, and to supplement those insights gleaned from primary research activities.

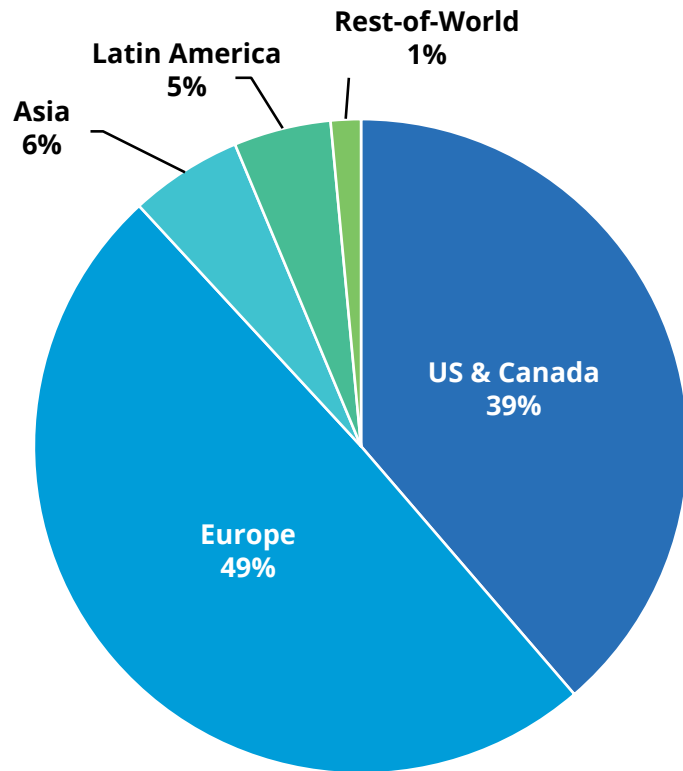
Sample Data

WORLD MAP OF CANNABIS LEGALIZATION & DEVELOPMENT FOR MEDICAL USE

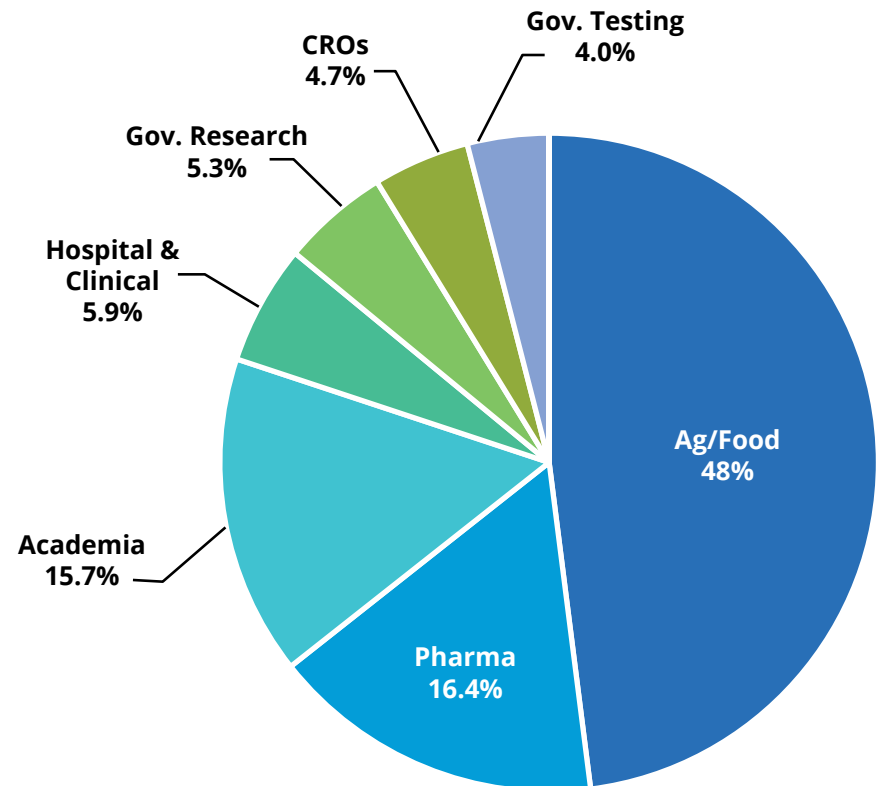


Source: *MJB Daily International Report*

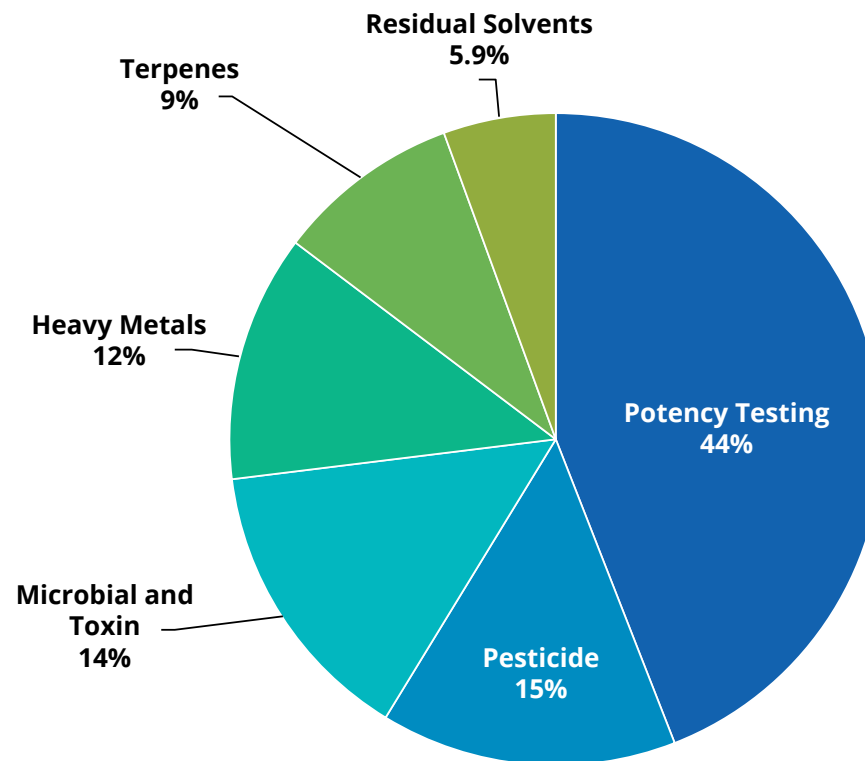
DEMAND BY REGION



DEMAND BY INDUSTRY



DEMAND BY APPLICATION



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 **About Strategic Directions International**
part of Science and Medicine Group

Strategic Directions International (SDi) is the leading business intelligence firm in the highly specialized field of analytical and life science instruments. Its client list includes virtually every major analytical instrumentation company in the United States, Europe, and Japan. Founded in 1981, the Los Angeles-based company has published hundreds of market reports and provided proprietary consulting services for a multitude of clients.

The library of market knowledge and data that SDi has cultivated over the years has been researched by senior consultants and a team of expert scientific market researchers who actively update and cross-check information through both primary and secondary sources.

Each year we also develop publications that focus on the market for a particular technology segment, geographical region, industry, or application. These reports rely heavily on secondary sources and provide the reader with valuable market figures and representations, including segmented market demand, unit sales, five-year growth

forecast, competitive situation, and other relevant insights or summaries. Many of these reports also include a section devoted to end user perspectives, based on results from a survey of scientists and researchers whose work reflects the focus of the publication.

SDi often works in close association with BioInformatics Inc., the leading research and advisory company serving life science markets. This Arlington, Virginia-based firm leverages the world's largest panel of scientific and clinical customers, The Science Advisory Board, for both quantitative survey research and in-depth thought leader interviews. SDi and BioInformatics are both part of Science and Medicine Group, an expanding collection of companies focused on research and advisory services that span the laboratory, scientific, and medical space.

For more information about SDi's product and service offerings, please visit www.strategic-directions.com, call **703.778.3080 x19**, or email reports@strategic-directions.com