

## **Global primary cells market trends and forecasts**

Market Research Report | 2022-10-12 | 108 pages | BCC Research

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### **Report description:**

Description

Report Scope:

This report aims to provide a comprehensive study of the global market for primary cells, both in terms of quantitative and qualitative data, to help develop business/growth strategies, assess the market landscape, analyze their position in the current marketplace, and make informed business decisions regarding primary cells. Segmentation is based on biological source type, tissue source type, application, end user, and region.

Industry growth drivers, restraints, trends, and opportunities in the primary cells market are also discussed in detail. The report also provides information on the competitive landscape, elaborative company profiles, and the impact of COVID-19 on the market.

Report Includes:

- 30 tables
- A comprehensive overview of the global market for primary cells
- Analyses of the global and regional market trends, with historic market revenue from 2019 to 2021, estimates for 2022, and projections of compound annual growth rates (CAGRs) through 2027
- Highlights of the upcoming market potential for primary cells, growth driving factors, and areas of focus to forecast this market into various segments and sub-segments
- Estimation of the actual market size and revenue forecast for primary cells market in USD million terms, and corresponding market share analysis based on product type, product origin, application, end user, and region
- Discussion of the industry value chain analysis providing a systematic study of key intermediaries involved, with emphasis on manufacturers, suppliers, and major types of end users

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- Identification of the companies that are best positioned to meet the demand for primary cells because of their proprietary technologies, strategic alliances, or other advantages
- Analysis of the vendor landscape based on their recent developments, financials, and segmental revenues
- Descriptive company profiles of the leading global players, including Charles River Laboratories, Lonza, Merck KGaA and Thermo Fisher Scientific

## Executive Summary

### Summary:

Primary cells are cells isolated directly from living tissue (e.g., biopsy material) and maintained for growth in vitro under optimized culture conditions. Primary cells can be categorized according to the genus from which they are isolated, as well as by species or tissue type. Epithelial cells, fibroblasts, keratinocytes, melanocytes, endothelial cells, muscle cells, hematopoietic cells, and mesenchymal stem cells are the most frequently used in primary cell types.

Since primary cells are non-transformed, non-immortalized cells directly derived from tissue, they most closely represent the tissue of origin. These cells have undergone very few population doublings. Therefore, they provide excellent model systems for studying the normal physiology and biochemistry of cells (e.g., metabolic studies, aging, signaling studies), the effects of drugs and toxic compounds on the cells, and mutagenesis and carcinogenesis.

Primary cell isolation is a tedious and time-consuming task. Due to the difficulties in obtaining tissue samples and successfully isolating primary human cells, ready-to-use primary cells have become increasingly popular. Harmonized cell culture media and reagents are essential to support optimal, consistent primary cell growth and maintain the tissue-specific characteristics to ensure the experiment's reliability and validity. Improvements in cell isolation and cryopreservation, optimized media, and reagents, and streamlined use protocols have contributed to the explosion of primary cell use in research programs globally. Commercial primary cell providers are bridging the gap to enable scientists to leverage their time and resources to focus on their own R&D.

Demand for primary cells is increasing globally, with a drive toward effective and efficient cell cultures for basic and applied research. Human primary cells are increasingly being used in basic research, and drug discovery and development. Other applications driving the growth of this market include 3D cell culture, cell therapy, and personalized medicine research. As regulatory bodies around the globe increase scrutiny on the selection of animal models, there is greater utilization of in vitro models using human primary cells for drug screening and toxicology and pharmacology studies. The scarcity of tissue samples and evolving legal and ethical regulatory frameworks are the key factors hindering the primary cells market to achieve its full growth potential.

The global market for primary cells was valued at REDACTED in 2021. The market is projected to reach REDACTED in 2027, growing at a CAGR of REDACTED through the forecast period.

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CELL APPLICATIONS INC.

CELL BIOLOGICS

CHARLES RIVER LABORATORIES

DISCOVERY LIFE SCIENCES

LIFENET HEALTH

LONZA

MERCK KGAA

PELOBIOTECH GMBH

PROMOCELL GMBH

SCIENCECELL RESEARCH LABORATORIES

THERMO FISHER SCIENTIFIC INC.

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