

# **Circulating Tumor Cells (CTC) Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028**

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## **Abstracts**

### **Market Overview:**

The global circulating tumor cells (CTC) market size reached US\$ 10.7 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 20.0 Billion by 2028, exhibiting a growth rate (CAGR) of 10.2% during 2023-2028.

Circulating tumor cells (CTC) are cancer cells that split away from the primary tumor and appear in the circulatory system as singular units or clusters. They have different biological phenotypes, such as epithelial, mesenchymal, and mixed epithelial-mesenchymal. CTC levels in a patient's blood can allow early detection of cancer and act as a prognostic indicator. As they are in minimal quantity, several technologies are used for the isolation, enrichment, and detection of CTC, such as immunocapture, size-based separation, density-based separation, and microscopy. It also has wide-ranging applications in liquid biopsy, cancer research, drug development, and clinical biomarkers.

### **Circulating Tumor Cells (CTC) Market Trends:**

The increasing prevalence of cancer due to genetic disorders, rising alcohol consumption, and rapid lifestyle changes are key factors driving the market growth. CTC assists in the early identification and real-time monitoring of lung, breast, digestive tract, and prostate cancer. In line with this, the increasing utilization of CTC in patient screening for metastasis and preclinical studies of new cancer drugs is favoring the market growth. Furthermore, the growing demand for minimally invasive (MI) diagnostic procedures and widespread adoption of CTC-based liquid biopsy to enable rapid

recovery and limit trauma are providing a considerable boost to the market growth. Apart from this, the introduction of nanotechnology to improve the sensitivity and efficiency of CTC isolation and detection is providing an impetus to market growth. Moreover, increasing utilization in medical research to develop cell culture models for drug screening, disease modeling, genome editing, and tumor immunity is creating a positive outlook for the market. Additionally, the increasing awareness amongst healthcare professionals and patients about the importance of early cancer diagnosis is positively influencing the market growth. Other factors, including rapid advancements in biomedical imaging and bioengineering technology, extensive research and development (R&D) activities, and the rising demand for preventive medicine and companion diagnostics, are anticipated to drive the market growth.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global circulating tumor cells (CTC) market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on technology, application, product, specimen and end user.

#### Breakup by Technology:

- CTC Detection and Enrichment Method
- CTC Direct Detection Methods
- CTC Analysis

#### Breakup by Application:

- Clinical/Liquid Biopsy
- Risk Assessment
- Screening and Monitoring
- Research
- Cancer Stem Cell and Tumorigenesis Research
- Drug/Therapy Development

#### Breakup by Product:

- Kits and Reagents
- Blood Collection Tubes
- Devices and Systems

#### Breakup by Specimen:

Blood  
Bone Marrow  
Other Body Fluids

#### Breakup by End User:

Hospital and Clinics  
Research and Academic Institutes  
Diagnostic Centres

#### Breakup by Region:

North America  
United States  
Canada  
Asia-Pacific  
China  
Japan  
India  
South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

## Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being BioFluidica Inc, Creatv MicroTech Inc., CytoLumina Technologies Corp., Fluxion Biosciences Inc., Greiner Bio-One International GmbH, Ikonisys Inc, Menarini Silicon Biosystems, Miltenyi Biotec, Qiagen N.V, Rarecells Diagnostics and Stemcell Technologies.

## Key Questions Answered in This Report:

How has the global circulating tumor cells (CTC) market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global circulating tumor cells (CTC) market?

What are the key regional markets?

What is the breakup of the market based on the technology?

What is the breakup of the market based on the application?

What is the breakup of the market based on the product?

What is the breakup of the market based on the specimen?

What is the breakup of the market based on the end user?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global circulating tumor cells (CTC) market and who are the key players?

What is the degree of competition in the industry?

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