

Global Cell Based Immunotherapy - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 110 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The Global Cell Based Immunotherapy Market size is estimated at USD 5.24 billion in 2025, and is expected to reach USD 10.54 billion by 2030, at a CAGR of 14.98% during the forecast period (2025-2030).

COVID-19 had a significant impact on the cell-based immunotherapy market during the initial phases owing to the factors such as delayed elective surgeries, follow-up appointments, and some types of cancer treatments being canceled or postponed as hospitals prioritized beds and care for those patients who were seriously ill with COVID-19. For instance, as per an article published in March 2022 in PubMed, affected by the epidemic, many patients who were receiving subcutaneous immunotherapy (SCIT) were compelled to discontinue or postpone it.

Interestingly, cell-based immunotherapies were used for COVID-19 treatments during the pandemic. For instance, as per an article published in June 2022 in PubMed, innovative adaptive immune cell treatment gave patients with moderate-to-severe COVID-19 a viable preventative or therapeutic option. This strategy aimed to increase security, provide safe and efficient therapy, and supplement routine therapy for all COVID-19-infected patients. Post-pandemic, the market is anticipated to witness growth due to the rising prevalence of cancer, technological advancement in developing target-based anticancer therapy, and launches and approval of different cell-based immunotherapy.

For instance, as per an American Cancer Society 2022 update, the estimated number of new cancer cases was 1.9 million in 2022 in the United States. Additionally, the advancements in products, increasing approvals, clinical trials along with partnerships and collaborations by key players are helping the market growth. In June 2022 Immuneel Therapeutics, a biotech start-up commenced patient dosing in a CAR-T trial named IMAGINE. This phase II trial, which is currently actively enlisting patients in Bengaluru for clinical trial development, is one of the first industry-sponsored CAR-T trials in India. Such clinical trial developments are expected

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

to augment the demand for cell-based immunotherapy. Furthermore, a rise in research and development in cell-based cancer therapy is likely to drive market growth over the forecast period. For instance, as per an article published in June 2022 in *Frontiers*, the majority of the current evaluation-stage strategies take advantage of the safety of T-cell activation and incorporate tumor-targeting mechanisms, such as chimeric antigen receptors (CARs) or bispecific T cell engagers (bsTCEs), which is likely to be essential to achieving more robust and reliable clinical responses.

Therefore, due to several factors, the cell-based immunotherapy market is anticipated to witness growth over the analysis period. However, the high cost of technology and lack of awareness in developing markets is likely to impede the market growth.

Cell-Based Immunotherapy Market Trends

Chimeric Antigen Receptor (CAR) T-Cell Therapy Is Expected To Witness Significant Growth Over The Forecast Period

Chimeric antigen receptor (CAR) T-cell therapy is a significant advancement in cancer treatment. In this therapy, the patient's T cells are genetically engineered to express an artificial receptor that binds to a tumor antigen. CAR-T cell therapy acts against CD19-coded cancer antigens to treat B-cell cancers. The rising prevalence of cancer, technological advancement in developing target-based anti-cancer therapies, and the increased adoption of cell-based therapy for therapeutic purposes are the key driving factors in the chimeric antigen receptor (CAR) T-cell therapy segment.

For instance, as per an American Cancer Society 2022 update, an estimated 10,470 children (ages 0 to 14 years) and 5,480 adolescents (ages 15-19 years) were likely to be diagnosed with cancer in the United States in 2022.

The advancements in therapy, approvals, launches, partnerships, and acquisitions by the key market players are also likely to boost segment growth. For instance, in May 2022, The European Commission (EC) approved Janssen's CAR-T therapy, Carvykti, for adults with heavily pre-treated, relapsed, and refractory multiple myeloma, marking the treatment's first approval outside of the US. Also, in March 2021 the FDA approved Abecma (idecabtagene vicleucel), the first cell-based gene therapy to treat adult multiple myeloma patients who have not responded to at least four prior rounds of therapy. It is a genetically engineered chimeric antigen receptor (CAR) T-cell therapy directed by the B-cell maturation antigen (BCMA).

North America is Expected to Witness a Growth in the Cell Based Immunotherapy Market Over The Forecast Period

North America is expected to hold a significant market share in the global cell-based immunotherapy market due to the rising prevalence of cancer, the growing awareness of cell-based therapies, the strong presence of industry players, and better healthcare infrastructure in this region. For instance, according to an American Cancer Society 2022 update, in the United States, 290,560 new cases of breast cancer, 89,010 cases of lymphoma, 62,210 cases of pancreatic cancer, 106,180 cases of colon cancer, and 44,850 cases of rectum cancer were anticipated to be diagnosed in 2022.

Furthermore, ongoing research in cancer treatment, technological advancements, product approvals, launches, partnerships, and acquisitions by the key market players also fuels the growth of the overall regional market to a large extent. For instance, in May 2022, the U.S. Food and Drug Administration (FDA) expanded its approval for a personalized cellular therapy developed at the University of Pennsylvania's Abramson Cancer Center, this time for the treatment of adults with relapsed or refractory follicular lymphoma (FL) after two or more lines of systemic therapy. The accelerated approval was granted to Novartis for the chimeric antigen receptor (CAR) T-cell therapy Kymriah (tisagenlecleucel), making it the third indication for personalized cellular therapy for cancer. It remains the only CAR-T cell therapy approved for both adult and pediatric patients.

Cell-Based Immunotherapy Industry Overview

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

The cell-based immunotherapy market is consolidated, moderately competitive, and has a few major players. The companies currently dominating the market are Novartis AG, Gilead Sciences, Inc (Kite Pharma), Apac Biotech, Dendreon Pharmaceuticals LLC, JW CreaGene Co., Ltd, and GC Biopharma Corporation.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

1 INTRODUCTION

- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

- 4.1 Market Overview
- 4.2 Market Drivers
 - 4.2.1 Rising Prevalence of Cancer
 - 4.2.2 Technological Advancement in Developing Target Based Anti-Cancer Therapies
 - 4.2.3 Launches and Approval of Different Cell-based Immunotherapy Drugs
- 4.3 Market Restraints
 - 4.3.1 High Cost of Technology
 - 4.3.2 Lack of Awareness in the Developing Markets
- 4.4 Porter's Five Forces Analysis
 - 4.4.1 Threat of New Entrants
 - 4.4.2 Bargaining Power of Buyers/Consumers
 - 4.4.3 Bargaining Power of Suppliers
 - 4.4.4 Threat of Substitute Products
 - 4.4.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION (Market Size by Value - USD million)

- 5.1 By Therapy
 - 5.1.1 Autologous Cellular Immunotherapy
 - 5.1.2 Chimeric Antigen Receptor (CAR) T-Cell Therapy
 - 5.1.3 Dendritic Cell-based Vaccine Therapy
- 5.2 By Primary Indication
 - 5.2.1 B-cell Malignancies
 - 5.2.2 Prostate Cancer
 - 5.2.3 Renal Cell Carcinoma
 - 5.2.4 Liver Cancer
 - 5.2.5 Other Primary Indications
- 5.3 Geography
 - 5.3.1 North America

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.3.1.1 United States
- 5.3.1.2 Canada
- 5.3.1.3 Mexico
- 5.3.2 Europe
 - 5.3.2.1 Germany
 - 5.3.2.2 United Kingdom
 - 5.3.2.3 France
 - 5.3.2.4 Italy
 - 5.3.2.5 Spain
 - 5.3.2.6 Rest of Europe
- 5.3.3 Asia-Pacific
 - 5.3.3.1 China
 - 5.3.3.2 Japan
 - 5.3.3.3 India
 - 5.3.3.4 Australia
 - 5.3.3.5 South Korea
 - 5.3.3.6 Rest of Asia-Pacific
- 5.3.4 Middle East and Africa
 - 5.3.4.1 GCC
 - 5.3.4.2 South Africa
 - 5.3.4.3 Rest of Middle East and Africa
- 5.3.5 South America
 - 5.3.5.1 Brazil
 - 5.3.5.2 Argentina
 - 5.3.5.3 Rest of South America

6 COMPETITIVE LANDSCAPE

- 6.1 Company Profiles
 - 6.1.1 Novartis AG
 - 6.1.2 Gilead Sciences, Inc (Kite Pharma)
 - 6.1.3 GC Biopharma Corporation
 - 6.1.4 Dendreon Pharmaceuticals LLC
 - 6.1.5 JW CreaGene Co., Ltd
 - 6.1.6 GC Biopharma Corporation
 - 6.1.7 Johnson and Johnson (Janssen Global Services, LLC)
 - 6.1.8 Pfizer Inc.
 - 6.1.9 F. Hoffmann-La Roche Ltd
 - 6.1.10 GlaxoSmithKline plc
 - 6.1.11 Celyad
 - 6.1.12 Bristol-Myers Squibb Company

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Global Cell Based Immunotherapy - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 110 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-28"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

