

Global 3D Bioprinted Human Tissue Market Report and Forecast 2024-2032

Market Report (7 days) | 2024-02-12 | 160 pages | EMR Inc.

AVAILABLE LICENSES:

- Single User License \$5499.00
- Five User License \$7499.00
- Corporate License \$9499.00

Report description:

Global 3D Bioprinted Human Tissue Market Report and Forecast 2024-2032

Global 3D Bioprinted Human Tissue Market Outlook

The global 3D bioprinted human tissue market size was valued at USD 2.3 billion in 2023, driven by advancements in technology and a growing demand for personalized medical solutions across the globe. The market size is anticipated to grow at a CAGR of 8.4% during the forecast period of 2024-2032 to achieve a value of USD 4.8 billion by 2032.

3D Bioprinted Human Tissue: Introduction

3D bioprinted human tissue involves using 3D printing technology to create complex tissue structures layer by layer, using bio-inks composed of living cells, growth factors, and biomaterials. This innovative technique aims to replicate the function and microarchitecture of natural human tissues. Applications include drug testing, disease modeling, and eventually, the creation of transplantable organs. 3D bioprinting holds immense potential in personalized medicine, reducing animal testing, and addressing organ transplant shortages.

Key Trends in the Global 3D Bioprinted Human Tissue Market

The market for 3D bioprinted human tissue is witnessing several key trends across various regions, driven by advancements in technology and a growing demand for personalized medical solutions.

There's a surge in research activities and collaborations between academic institutions, biotech companies, and pharmaceutical firms. This trend is fueled by the potential of 3D bioprinted tissues in drug discovery, reducing the time and cost associated with traditional clinical trials.

Regions are increasingly focusing on regenerative medicine, with 3D bioprinted tissues being pivotal for tissue engineering and organ transplantation. This trend is particularly pronounced in areas with high organ transplant waiting lists, aiming to address the gap between organ demand and supply.

There's a growing emphasis on establishing ethical guidelines and regulatory frameworks specific to 3D bioprinting. This trend ensures that the development and application of bioprinted tissues adhere to safety standards, quality control, and ethical considerations, crucial for market acceptance and growth.

Continuous advancements in 3D printing technology, biomaterials, and stem cell research are propelling the market. These innovations are enhancing the precision, viability, and functionality of bioprinted tissues, expanding their potential applications in

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

medical research and treatment. The market is witnessing increased investment and funding for startups and research projects focused on 3D bioprinting. This financial support is accelerating technological developments, clinical studies, and the commercialization of 3D bioprinted products, driving market growth and innovation.

Global 3D Bioprinted Human Tissue Market Segmentation

Market Breakup by Tissue Type

- Skin
- Cartilage
- Liver
- Bone
- Heart
- Others

Market Breakup by Technology

- Inkjet-based Bioprinting
- Extrusion-based Bioprinting
- Laser-assisted Bioprinting
- Magnetic Bioprinting

Market Breakup by Applications

- Drug Discovery
- Regenerative Medicine
- Research
- Cosmetic Surgery
- Others

Market Breakup by End User

- Pharmaceutical and Biotechnology Companies
- Research Institutes and Academic Centers
- Hospitals and Clinics
- Others

Market Breakup by Region

- North America
- Europe
- Asia Pacific
- Latin America
- Middle East and Africa

Global 3D Bioprinted Human Tissue Market Overview

In North America, the market for 3D bioprinted human tissue is at the forefront, driven by cutting-edge research facilities, substantial healthcare investments, and a strong intellectual property environment. The U.S. leads in terms of technological advancements and the adoption of 3D bioprinting for drug development, tissue engineering, and regenerative medicine. Collaborations between academic institutions, government agencies, and biotech companies foster innovation and application of 3D bioprinting technologies.

Europe's market is characterized by robust research infrastructure, stringent regulatory standards for medical products, and substantial funding for biotechnology projects. The region is active in advancing 3D bioprinting technology, with a focus on ethical considerations and sustainable healthcare solutions. Collaborative research projects across EU countries, supported by public-private partnerships, drive the development and ethical integration of 3D bioprinted tissues in the medical sector.

The market in the Asia-Pacific region is rapidly growing, with countries like China, Japan, South Korea, and Australia investing heavily in biotechnology and 3D printing research. The region shows a high potential for innovation in 3D bioprinting due to increasing healthcare demands, rising investments in R&D, and growing expertise in stem cell research and tissue engineering.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

However, market growth varies across countries, influenced by differences in regulatory environments, healthcare infrastructure, and research focus.

Global 3D Bioprinted Human Tissue Market: Competitor Landscape

The key features of the market report include patent analysis, grants analysis, clinical trials analysis, funding and investment analysis, partnerships, and collaborations analysis by the leading key players.

- 3D Systems, Inc.
- Materialise NV
- Oceanz 3D printing
- Organovo
- Prellis Biologics
- SOLS Systems
- Stratasys Ltd
- The Pexion Group
- Allevi, Inc.
- Aspect Biosystems Ltd.
- Biolife 4D
- Cellbricks
- Cellink
- Microdrop
- MicroFab Technologies Inc.

We at Expert Market Research always strive to provide you with the latest information. The numbers in the article are only indicative and may be different from the actual report.

Table of Contents:

- 1 Preface
 - 1.1 Objectives of the Study
 - 1.2 Key Assumptions
 - 1.3 Report Coverage - Key Segmentation and Scope
 - 1.4 Research Methodology
- 2 Executive Summary
- 3 Global 3D Bioprinted Human Tissue Market Overview
 - 3.1 Global 3D Bioprinted Human Tissue Market Historical Value (2017-2023)
 - 3.2 Global 3D Bioprinted Human Tissue Market Forecast Value (2024-2032)
- 4 Global 3D Bioprinted Human Tissue Market Landscape
 - 4.1 Global 3D Bioprinted Human Tissue Developers Landscape
 - 4.1.1 Analysis by Year of Establishment
 - 4.1.2 Analysis by Company Size
 - 4.1.3 Analysis by Region
 - 4.2 Global 3D Bioprinted Human Tissue Product Landscape
 - 4.2.1 Analysis by Type
 - 4.2.2 Analysis by Technology
 - 4.2.3 Analysis by Applications
- 5 Global 3D Bioprinted Human Tissue Market Dynamics
 - 5.1 Market Drivers and Constraints
 - 5.2 SWOT Analysis

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 5.3 Porter's Five Forces Model
- 5.4 Key Demand Indicators
- 5.5 Key Price Indicators
- 5.6 Industry Events, Initiatives, and Trends
- 5.7 Value Chain Analysis
- 6 Global 3D Bioprinted Human Tissue Market Segmentation
 - 6.1 Global 3D Bioprinted Human Tissue Market by Tissue Type
 - 6.1.1 Market Overview
 - 6.1.2 Skin
 - 6.1.3 Cartilage
 - 6.1.4 Liver
 - 6.1.5 Bone
 - 6.1.6 Heart
 - 6.1.7 Others
 - 6.2 Global 3D Bioprinted Human Tissue Market by Technology
 - 6.2.1 Market Overview
 - 6.2.2 Inkjet-based Bioprinting
 - 6.2.3 Extrusion-based Bioprinting
 - 6.2.4 Laser-assisted Bioprinting
 - 6.2.5 Magnetic Bioprinting
 - 6.3 Global 3D Bioprinted Human Tissue Market by Applications
 - 6.3.1 Market Overview
 - 6.3.2 Drug Discovery
 - 6.3.3 Regenerative Medicine
 - 6.3.4 Research
 - 6.3.5 Cosmetic Surgery
 - 6.3.6 Others
 - 6.4 Global 3D Bioprinted Human Tissue Market by End User
 - 6.4.1 Market Overview
 - 6.4.2 Pharmaceutical and Biotechnology Companies
 - 6.4.3 Research Institutes and Academic Centers
 - 6.4.4 Hospitals and Clinics
 - 6.4.5 Others
 - 6.5 Global 3D Bioprinted Human Tissue Market by Region
 - 6.5.1 Market Overview
 - 6.5.2 North America
 - 6.5.3 Europe
 - 6.5.4 Asia Pacific
 - 6.5.5 Latin America
 - 6.5.6 Middle East and Africa
- 7 North America 3D Bioprinted Human Tissue Market
 - 7.1 Market Share by Country
 - 7.2 United States of America
 - 7.3 Canada
- 8 Europe 3D Bioprinted Human Tissue Market
 - 8.1 Market Share by Country
 - 8.2 United Kingdom

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 8.3 Germany
- 8.4 France
- 8.5 Italy
- 8.6 Others
- 9 Asia Pacific 3D Bioprinted Human Tissue Market
 - 9.1 Market Share by Country
 - 9.2 China
 - 9.3 Japan
 - 9.4 India
 - 9.5 ASEAN
 - 9.6 Australia
 - 9.7 Others
- 10 Latin America 3D Bioprinted Human Tissue Market
 - 10.1 Market Share by Country
 - 10.2 Brazil
 - 10.3 Argentina
 - 10.4 Mexico
 - 10.5 Others
- 11 Middle East and Africa 3D Bioprinted Human Tissue Market
 - 11.1 Market Share by Country
 - 11.2 Saudi Arabia
 - 11.3 United Arab Emirates
 - 11.4 Nigeria
 - 11.5 South Africa
 - 11.6 Others
- 12 Patent Analysis
 - 12.1 Analysis by Type of Patent
 - 12.2 Analysis by Publication year
 - 12.3 Analysis by Issuing Authority
 - 12.4 Analysis by Patent Age
 - 12.5 Analysis by CPC Analysis
 - 12.6 Analysis by Patent Valuation
 - 12.7 Analysis by Key Players
- 13 Grants Analysis
 - 13.1 Analysis by year
 - 13.2 Analysis by Amount Awarded
 - 13.3 Analysis by Issuing Authority
 - 13.4 Analysis by Grant Application
 - 13.5 Analysis by Funding Institute
 - 13.6 Analysis by NIH Departments
 - 13.7 Analysis by Recipient Organization
- 14 Funding Analysis
 - 14.1 Analysis by Funding Instances
 - 14.2 Analysis by Type of Funding
 - 14.3 Analysis by Funding Amount
 - 14.4 Analysis by Leading Players
 - 14.5 Analysis by Leading Investors

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 14.6 Analysis by Geography
- 15 Partnership and Collaborations Analysis
 - 15.1 Analysis by Partnership Instances
 - 15.2 Analysis by Type of Partnership
 - 15.3 Analysis by Leading Players
 - 15.4 Analysis by Geography
- 16 Regulatory Framework
 - 16.1 Regulatory Overview
 - 16.1.1 US FDA
 - 16.1.2 EU EMA
 - 16.1.3 INDIA CDSCO
 - 16.1.4 JAPAN PMDA
 - 16.1.5 Others
- 17 Supplier Landscape
 - 17.1 3D Systems, Inc.
 - 17.1.1 Financial Analysis
 - 17.1.2 Product Portfolio
 - 17.1.3 Demographic Reach and Achievements
 - 17.1.4 Mergers and Acquisition
 - 17.1.5 Certifications
 - 17.2 Materialise NV
 - 17.2.1 Financial Analysis
 - 17.2.2 Product Portfolio
 - 17.2.3 Demographic Reach and Achievements
 - 17.2.4 Mergers and Acquisition
 - 17.2.5 Certifications
 - 17.3 Océanx 3D printing
 - 17.3.1 Financial Analysis
 - 17.3.2 Product Portfolio
 - 17.3.3 Demographic Reach and Achievements
 - 17.3.4 Mergers and Acquisition
 - 17.3.5 Certifications
 - 17.4 Organovo
 - 17.4.1 Financial Analysis
 - 17.4.2 Product Portfolio
 - 17.4.3 Demographic Reach and Achievements
 - 17.4.4 Mergers and Acquisition
 - 17.4.5 Certifications
 - 17.5 Prellis Biologics
 - 17.5.1 Financial Analysis
 - 17.5.2 Product Portfolio
 - 17.5.3 Demographic Reach and Achievements
 - 17.5.4 Mergers and Acquisition
 - 17.5.5 Certifications
 - 17.6 SOLS Systems
 - 17.6.1 Financial Analysis
 - 17.6.2 Product Portfolio

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 17.6.3 Demographic Reach and Achievements
- 17.6.4 Mergers and Acquisition
- 17.6.5 Certifications
- 17.7 Stratasy Ltd
 - 17.7.1 Financial Analysis
 - 17.7.2 Product Portfolio
 - 17.7.3 Demographic Reach and Achievements
 - 17.7.4 Mergers and Acquisition
 - 17.7.5 Certifications
- 17.8 The Pexion Group
 - 17.8.1 Financial Analysis
 - 17.8.2 Product Portfolio
 - 17.8.3 Demographic Reach and Achievements
 - 17.8.4 Mergers and Acquisition
 - 17.8.5 Certifications
- 17.9 Allevi, Inc.
 - 17.9.1 Financial Analysis
 - 17.9.2 Product Portfolio
 - 17.9.3 Demographic Reach and Achievements
 - 17.9.4 Mergers and Acquisition
 - 17.9.5 Certifications
- 17.10 Aspect Biosystems Ltd.
 - 17.10.1 Financial Analysis
 - 17.10.2 Product Portfolio
 - 17.10.3 Demographic Reach and Achievements
 - 17.10.4 Mergers and Acquisition
 - 17.10.5 Certifications
- 17.11 Biolife 4D
 - 17.11.1 Financial Analysis
 - 17.11.2 Product Portfolio
 - 17.11.3 Demographic Reach and Achievements
 - 17.11.4 Mergers and Acquisition
 - 17.11.5 Certifications
- 17.12 Cellbricks
 - 17.12.1 Financial Analysis
 - 17.12.2 Product Portfolio
 - 17.12.3 Demographic Reach and Achievements
 - 17.12.4 Mergers and Acquisition
 - 17.12.5 Certifications
- 17.13 Cellink
 - 17.13.1 Financial Analysis
 - 17.13.2 Product Portfolio
 - 17.13.3 Demographic Reach and Achievements
 - 17.13.4 Mergers and Acquisition
 - 17.13.5 Certifications
- 17.14 Microdrop
 - 17.14.1 Financial Analysis

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 17.14.2 Product Portfolio
- 17.14.3 Demographic Reach and Achievements
- 17.14.4 Mergers and Acquisition
- 17.14.5 Certifications
- 17.15 MicroFab Technologies Inc.
 - 17.15.1 Financial Analysis
 - 17.15.2 Product Portfolio
 - 17.15.3 Demographic Reach and Achievements
 - 17.15.4 Mergers and Acquisition
 - 17.15.5 Certifications
- 18 Global 3D Bioprinted Human Tissue Market - Distribution Model (Additional Insight)
 - 18.1 Overview
 - 18.2 Potential Distributors
 - 18.3 Key Parameters for Distribution Partner Assessment
- 19 Key Opinion Leaders (KOL) Insights (Additional Insight)
- 20 Company Competitiveness Analysis (Additional Insight)
 - 20.1 Very Small Companies
 - 20.2 Small Companies
 - 20.3 Mid-Sized Companies
 - 20.4 Large Companies
 - 20.5 Very Large Companies
- 21 Payment Methods (Additional Insight)
 - 21.1 Government Funded
 - 21.2 Private Insurance
 - 21.3 Out-of-Pocket

*Additional insights provided are customisable as per client requirements.

Global 3D Bioprinted Human Tissue Market Report and Forecast 2024-2032

Market Report (7 days) | 2024-02-12 | 160 pages | EMR Inc.

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	\$5499.00
	Five User License	\$7499.00
	Corporate License	\$9499.00
		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="2025-05-08"/>
		Signature	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com