

# **Organ-on-a-Chip: Global Markets**

https://marketpublishers.com/r/O7812C88257EN.html Date: March 2022 Pages: 158 Price: US\$ 5,500.00 (Single User License) ID: O7812C88257EN

## **Abstracts**

Report Scope:

The scope of this report covers various types of products available in the organ-on-achip market and potential application sectors in various industries. The organ-on-a-chip market is broken down into various segments. Revenue forecasts from 2019 to 2026 are given for each type, application, offering and end user. Revenue generated from the installation and maintenance of instruments has been excluded from the report. The application segment is characterized by various types, including drug discovery and development, toxicological research, and physiological model development, and by enduse industry, including academic and research institutes, pharmaceutical and biotechnology companies, cosmetics industry and other end users. By type market is segmented to liver, lung, kidney, heart and others. The report also focuses on regional segmentation of the market.

Further, it explains the major drivers and regional dynamics of the global market and current trends within the industry. It also includes information about the industry structure and competitive landscape as well as the impact of COVID-19 on the market. The report includes detailed profiles of the major players in the global organ-on-a-chip market.

Report Includes:

55 data tables and 29 additional tables

An up-to-date review and analysis of the global markets for organ-on-a-chip within the biotech industry

Analyses of the global market trends, with data from 2019 to 2021, and



projections of compound annual growth rates (CAGRs) through 2026

Information on multi-channel 3-D microfluidic cell culture chip, and discussion of their ability to imitate human microenvironment in vitro

Evaluation and forecast the global organ-on-a-chip market size, and corresponding market share analysis by technology offering, organ type, application, end-user vertical and region

Discussion on how organ-on-a-chip is emerging as a priority testing alternative which is replacing animals in life science research, toxicology testing and drug development studies

Review of potential applications in pharmaceutical and life science research sectors, including preclinical drugs testing, drug screening, personalized medicine, phenotypic screening, lead optimization and disease modelling

Insights into the recent industry structure including the government programs and policies in support of organ-on-a-chip and coverage of revised laws involving animal testing

Review of patent grants for innovations in organ-on-a-chip technology across each major category

Descriptive company profiles of the leading global players, including 4Dcell, BiomimX, Emulate Inc., Kirkstall Ltd., Nortis and TissUse GmbH



## Contents

#### **CHAPTER 1 INTRODUCTION**

Study Goals and Objectives Reasons for Doing This Study What's New in This Update? Scope of Report Information Sources Methodology Geographic Breakdown Analyst's Credentials BCC Custom Research Related BCC Research Reports

## **CHAPTER 2 SUMMARY AND HIGHLIGHTS**

#### **CHAPTER 3 MARKET AND TECHNOLOGY BACKGROUND**

Introduction Developments in Drug Discovery 1950-1970 1970-1990 1990-2010 2010 to the Present Market Potential Strategic Initiatives Regulatory Framework U.S. European Union China Japan

### **CHAPTER 4 MARKET DYNAMICS**

Factors Affecting the Organ-on-a-Chip Market Market Drivers Increasing Incidence of Chronic Diseases Rising Demand for a Way to Enhance the Effectiveness of Clinical Trials



Increasing Investments for Drug Research and Development Increasing Demand for Personalized Medicine Market Restraints Lack of Standardization

### **CHAPTER 5 IMPACT OF COVID-19**

Introduction Outbreak Origins Symptoms of COVID-19 Progression of COVID-19 Incubation Period Epidemiology Collaboration Between Organizations and Governments Spread of Disease Impact of COVID-19 on the Organ-on-a-Chip Market

#### CHAPTER 6 GLOBAL ORGAN-ON-A-CHIP MARKET BY TYPE

Liver Liver-on-a-Chip Classifications Depending on Their Principal Actions Heart Kidney Lung Other Organs

#### CHAPTER 7 GLOBAL ORGAN-ON-A-CHIP MARKET BY END USER

Biotechnology and Pharmaceutical Companies Cosmetics Industry Academic and Research Institutes Increasing R&D Spending Other End Users

#### CHAPTER 8 GLOBAL ORGAN-ON-A-CHIP MARKET BY OFFERING

Products Services

Organ-on-a-Chip: Global Markets



#### CHAPTER 9 GLOBAL ORGAN-ON-A-CHIP MARKET BY APPLICATION

Drug Discovery and Development Toxicological Research Physiological Model Development

#### CHAPTER 10 GLOBAL ORGAN-ON-A-CHIP MARKET BY REGION

North America U.S. Canada Europe U.K. France Germany Spain Rest of Europe Asia-Pacific China Japan India Australia Rest of the World

#### **CHAPTER 11 INDUSTRY STRUCTURE**

Raw Material Suppliers Quality and Technology Terms and Conditions Cost-Effective Components Manufacturers Distributors End Users of Consumables Competitive Analysis Patent Landscape Patent Review by Year Patent Review by Country

### **CHAPTER 12 COMPANY PROFILES**



4DCELL AXOSIM BEONCHIP BIOMIMX BIOIVT CHERRY BIOTECH **CN BIO ELVEFLOW** EMULATE INC. FLUIGENT **HESPEROS INC.** HUREL CORP. **INSPHERO KIRKSTALL MESOBIO TECH** MICRONIT MIMETAS NORTIS **SYNVIVO** TARA BIOSYSTEMS INC. **TISSUSE GMBH** 



## **List Of Tables**

## LIST OF TABLES

Summary Table: Global Organ-on-a-Chip Market, Through 2026 Table 1: Drug Development Time Span Table 2: Advantages of Organ-on-a-Chip Compared to Traditional Methods of Drug Discovery Table 3: U.S. NIH Funding of Research for Various Diseases, 2014-2020 Table 4: Distribution of COVID-19 Clinical Symptoms Table 5: COVID-19 Cases, by WHO Region, February 18, 2022 Table 6: Global Organ-on-a-Chip Market, Through 2026 Table 7: Global Organ-on-a-Chip Market, by Type, Through 2026 Table 8: Liver-on-a-Chip Classifications Table 9: Global Liver Organ-on-a-Chip Market, by Region, Through 2026 Table 10: Global Heart Organ-on-a-Chip Market, by Region, Through 2026 Table 11: Deaths from CVD and Number of People Living with CVD in U.K., 2020 Table 12: Global Kidney Organ-on-a-Chip Market, by Region, Through 2026 Table 13: Global Burden of Chronic Kidney Disease, 2010 and 2019 Table 14: Global Lung Organ-on-a-Chip Market, by Region, Through 2026 Table 15: Mortality Rates Due to Leading Respiratory Causes, 2019 Table 16: Global Market for Other Types of Organ-on-a-Chip, by Region, Through 2026 Table 17: Global Organ-on-a-Chip Market, by End User, Through 2026 Table 18: Global Biotechnology and Pharmaceutical Company Revenues from the Organ-on-a-Chip Market, by Region, Through 2026 Table 19: Biopharmaceuticals R&D Spending, 2010-2024 Table 20: Global Cosmetics Industry Revenues from the Organ-on-a-Chip Market, by Region, Through 2026 Table 21: Global Academic and Research Institution Revenues from the Organ-on-a-Chip Market, by Region, Through 2026 Table 22: Cancer Research Grants, by Cancer Type, August 2021 Table 23: Global Prevalence of Dementia, 2020-2050 Table 24: Global Market for Other End Users of Organ-on-a-Chip, by Region, Through 2026 Table 25: Global Organ-on-a-Chip Market, by Offering, Through 2026 Table 26: Global Organ-on-a-Chip Products Market, by Region, Through 2026 Table 27: Global Organ-on-a-Chip Services Market, by Region, Through 2026 Table 28: Global Organ-on-a-Chip Market, by Application, Through 2026 Table 29: Global Pharmaceutical Market, 2019 and 2020



Table 30: Pharmaceutical Spending as a Percentage of Total Healthcare Spending, by Country, 2019

Table 31: PhRMA Member Company, Global R&D Spending, 2015-2019

Table 32: Medicines in Development, 2018

Table 33: Global Market for Organ-on-a-Chip in Drug Discovery and Development, by Region, Through 2026

Table 34: Global Market for Organ-on-a-Chip in Toxicological Research, by Region, Through 2026

Table 35: Total Number of New Cases and Deaths Due to Various Cancers Globally, 2020

Table 36: Global Market for Organ-on-a-Chip in Physiological Model Development, by Region, Through 2026

Table 37: Global Organ-on-a-Chip Market, by Region, Through 2026

 Table 38: North American Organ-on-a-Chip Market, by Type, Through 2026

Table 39: North American Organ-on-a-Chip Market, by Application, Through 2026

Table 40: North American Organ-on-a-Chip Market, by End User, Through 2026

Table 41: North American Organ-on-a-Chip Market, by Offering, Through 2026

Table 42: NIH Spending on Stem Cell Research in the U.S., 2015-2020

Table 43: Shares of the Annual Budget of the Canadian Institutes of Health Research, by Type of Research, 2020

Table 44: European Organ-on-a-Chip Market, by Type, Through 2026

Table 45: European Organ-on-a-Chip Market, by Application, Through 2026

Table 46: European Organ-on-a-Chip Market, by End User, Through 2026

Table 47: European Organ-on-a-Chip Market, by Offering, Through 2026

Table 48: R&D Expenditure in Spain, 2015 and 2019

Table 49: Asia-Pacific Organ-on-a-Chip Market, by Type, Through 2026

Table 50: Asia-Pacific Organ-on-a-Chip Market, by Application, Through 2026

Table 51: Asia-Pacific Organ-on-a-Chip Market, by End User, Through 2026

Table 52: Asia-Pacific Organ-on-a-Chip Market, by Offering, Through 2026

Table 53: R&D Spending, by India's Top Pharma Companies, 2018

Table 54: Rest of the World Organ-on-a-Chip Market, by Type, Through 2026

Table 55: Rest of the World Organ-on-a-Chip Market, by Application, Through 2026

Table 56: Rest of the World Organ-on-a-Chip Market, by End User, Through 2026

Table 57: Rest of the World Organ-on-a-Chip Market, by Offering, Through 2026

Table 58: Raw Material/Part Manufacturers

Table 59: Competitive Analysis of Organ-on-a-Chip Market, 2020

Table 60: Patent Review of Organ-on-a-Chip, 2018-2021

 Table 61: Patent Review of Organ-on-a-Chip, by Country, 2018-2021

Table 62: 4Dcell: Product Portfolio





Table 63: AxoSim Inc.: Product Portfolio

Table 64: BEOnChip: Product Portfolio

Table 65: BiomimX: Product Portfolio

Table 66: BiomimX: Product Pipeline

Table 67: BioIVT: Product Portfolio

Table 68: Cherry Biotech: Product Portfolio

Table 69: CN Bio: Product Portfolio

Table 70: Elveflow: Product Portfolio

Table 71: Emulate Inc.: Product Portfolio

Table 72: Fluigent: Research Product Portfolio

Table 73: Hesperos Inc.: Product Portfolio

Table 74: Hurel Corp.: Product Portfolio

Table 75: InSphero: Product Portfolio

Table 76: Kirkstall Ltd.: Product Portfolio

Table 77: MesoBio Tech: Product Portfolio

Table 78: Micronit: Product Portfolio

Table 79: Mimetas B.V.: Product Portfolio

Table 80: Nortis: Product Portfolio

Table 81: SynVivo: Product Portfolio

Table 82: Tara Biosystems Inc.: Product Portfolio

Table 83: TissUse GmbH: Product Portfolio





## **List Of Figures**

#### LIST OF FIGURES

Summary Figure: Global Organ-on-a-Chip Market, 2019-2026 Figure 1: Development of Organ-on-a-Chip Figure 2: Drug Development Process Figure 3: FDA Stages of New Medicine Review and Regulation Figure 4: Research and Development Process of a Drug Figure 5: Global Pharmaceutical R&D Spending, 2010-2019 Figure 6: Personalized Medicines on Market, 2008-2020 Figure 7: Global Organ-on-a-Chip Market, 2019-2026 Figure 8: Global Organ-on-a-Chip Market, by Type, 2019-2026 Figure 9: Global Liver Organ-on-a-Chip Market, by Region, 2019-2026 Figure 10: Global Heart Organ-on-a-Chip Market, by Region, 2019-2026 Figure 11: Share of Heart Disease Deaths in the U.S., by Disease Type, 2021 Figure 12: Global Kidney Organ-on-a-Chip Market, by Region, 2019-2026 Figure 13: Global Lung Organ-on-a-Chip Market, by Region, 2019-2026 Figure 14: Global Market for Other Types of Organ-on-a-Chip, by Region, 2019-2026 Figure 15: Organ-on-a-Chip Market, by End Users Figure 16: Global Organ-on-a-Chip Market, by End User, 2019-2026 Figure 17: Major Factors Driving the Growth of the Organ-on-a-Chip Market Figure 18: Global Biotechnology and Pharmaceutical Company Revenues from the Organ-on-a-Chip Market, by Region, 2019-2026 Figure 19: Biopharmaceuticals R&D Spending, 2010-2024 Figure 20: Global Cosmetics Industry Revenues from the Organ-on-a-Chip Market, by Region, 2019-2026 Figure 21: Global Academic and Research Institution Revenues from the Organ-on-a-Chip Market, by Region, 2019-2026 Figure 22: Shares of Global R&D Funding, by Region, 2020 Figure 23: Top Ten Countries' R&D Expenditures, 2020 Figure 24: Global Market for Other End Users of Organ-on-a-Chip, by Region, 2019-2026 Figure 25: Global Organ-on-a-Chip Market, by Offering, 2019-2026 Figure 26: Key Products: Organ-on-a-Chip Figure 27: Global Organ-on-a-Chip Products Market, by Region, 2019-2026 Figure 28: Global Organ-on-a-Chip Services Market, by Region, 2019-2026 Figure 29: Global Organ-on-a-Chip Market, by Application, 2019-2026 Figure 30: Global Pharmaceutical Market Shares, by Region, 2020



Figure 31: Pharmaceutical Spending as a Percentage of Total Healthcare Spending, by Country, 2019 Figure 32: PhRMA Member Company, Global R&D Spending, 2015-2019 Figure 33: Global Market for Organ-on-a-Chip in in Drug Discovery and Development, by Region, 2019-2026 Figure 34: Global Market for Organ-on-a-Chip in Toxicological Research, by Region, 2019-2026 Figure 35: Global Prevalence of Cancer, by Type, 2019 Figure 36: Global Market for Organ-on-a-Chip in Physiological Model Development, by Region, 2019-2026 Figure 37: Global Organ-on-a-Chip Market, by Region, 2019-2026 Figure 38: North American Organ-on-a-Chip Market, by Type, 2019-2026 Figure 39: North American Organ-on-a-Chip Market, by Application, 2019-2026 Figure 40: North American Organ-on-a-Chip Market, by End User, 2019-2026 Figure 41: North American Organ-on-a-Chip Market, by Offering, 2019-2026 Figure 42: NIH Spending on Stem Cell Research in the U.S., 2015-2020 Figure 43: Shares of the Annual Budget of the Canadian Institute of Health Research, by Type of Research, 2020 Figure 44: European Organ-on-a-Chip Market, by Type, 2019-2026 Figure 45: European Organ-on-a-Chip Market, by Application, 2019-2026 Figure 46: European Organ-on-a-Chip Market, by End User, 2019-2026 Figure 47: European Organ-on-a-Chip Market, by Offering, 2019-2026 Figure 48: R&D Expenditure in Spain, 2015 and 2019 Figure 49: Asia-Pacific Organ-on-a-Chip Market, by Type, 2019-2026 Figure 50: Asia-Pacific Organ-on-a-Chip Market, by Application, 2019-2026 Figure 51: Asia-Pacific Organ-on-a-Chip Market, by End User, 2019-2026 Figure 52: Asia-Pacific Organ-on-a-Chip Market, by Offering, 2019-2026 Figure 53: R&D Spending, by India's Top Pharma Companies, 2018 Figure 54: Rest of the World Organ-on-a-Chip Market, by Type, 2019-2026 Figure 55: Rest of the World Organ-on-a-Chip Market, by Application, 2019-2026 Figure 56: Rest of the World Organ-on-a-Chip Market, by End User, 2019-2026 Figure 57: Rest of the World Organ-on-a-Chip Market, by Offering, 2019-2026 Figure 58: Industry Structure of Instruments Used in the Organ-on-a-Chip Market Figure 59: Patent Shares of Organ-on-a-Chip, by Year, 2018-2021 Figure 60: Patent Review of Organ-on-a-Chip, by Country, 2018-2021



### I would like to order

Product name: Organ-on-a-Chip: Global Markets

Product link: https://marketpublishers.com/r/O7812C88257EN.html

Price: US\$ 5,500.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/O7812C88257EN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970