Organ-on-Chip Market: Global Industry Analysis and Opportunity Assessment, 2019 – 2023

New Report on Global Organ-on-Chip Market 2019 Edition

PUNE , MAHARASHTRA, INDIA, October 9, 2019 /EINPresswire.com/ -- Global Organ-on-Chip Industry

Overview

An organ-on-chip, commonly known as OOC, is a form of multi-channel 3D microfluidic cell culture chip. It is one of the varieties of the artificial organ that simulates activities, mechanics, and physiological and physical responses of the organs and organ systems. It is a kind of microfluidic cell culture device that comprises of perfused chambers. This chip develops a thin channel for the purpose of blood and airflow in organs, such as the gut, lung, liver, heart, and other crucial organs. Such devices offer varying organ functionalities, which are not possible utilizing formal 2D and 3D culture systems.

Try Sample of Global Organ-on-Chip Market @ https://www.wiseguyreports.com/sample-request/3672024-global-organ-on-chip-market-research-and-forecast-2018-2023

Organ-on-chip offers a broad range of applications, such as infection modelling, phenotypic screening, and patient stratification. According to the market study, enhanced demand for advanced and efficient alternatives for animal testing, a requirement for timely detection of drug toxicity, improvement in R&D and product innovation strategies, and advancements in technology are expected to drive the global OOC market. Likewise, some of the prominent pharmaceutical organizations have shown their interest in investing in drug repurposing employing organs-on-chips models. The increased demand for personalized medication and a broad range of applications of OCD beyond the pharmaceutical vertical are the factors presenting growth opportunities for global market players.

As a result of advanced R&D and product innovation strategies, there is a considerable surge in product launches by leading market players. These activities are intended to expand the organization's portfolio, which is further expected to support market growth. The pharmaceutical industry is encountering several challenges due to the surging cost and decreasing efficiency of drug R&D. Therefore, there is a significant requirement for modern testing strategies for generating valid predictions of drug potency. Organ-on-chip devices have the capability to serve as an enabling platform for the identification and validation of effectiveness, safety, and strength of potential drugs, thus improving the possibilities of success in clinical trials.

Market Segmentation

The global organ-on-chip market can be analyzed on the basis of product types, manor offerings, crucial application areas, regional markets, and prominent market players.

Based on the product type, the global Organ-on-chip market can be segmented into-

Liver-on-a-chip
Kidney-on-a-chip
Lung-on-a-chip
Heart-on-a-chip
Other Organs

Major offerings-

Products
Services

Dominant application areas-

Pharmaceutical & Biotechnology organizations
Cosmetics Industry
Academic and Research Institute
Others

Organ-on-chip models play a key role in facilitating clinical trial procedures. For instance, the advanced stem cell engineering services can be incorporated into the modern OOC technology devices to develop personalized models that are capable to predict patient-specific toxicity and efficacy. This process will result in more efficient human trials with considerably reduced preclinical testing provisions.

Regional Analysis

North America, Europe, and the Asia Pacific are the primary regions driving the global organ-on-chip market. According to market research, in the year 2017, North America held a substantial market share. The growth of the region is attributed to improvement in product innovation and R&D practices, advancements in technology and the rise in healthcare and pharmaceutical applications. Further, the improvement in toxicological testing of various chemicals on the different types of organ cells is expected to drive the demand for Organ-on-chip in this region. Asia-Pacific is foreseen to register the highest growth rate during the forecast period. The healthcare and pharmaceutical organizations operating in India, China, and Japan are expected to offer growth opportunities for the OOC device manufacturers and service providers.

Important Facts

InSphero AG, one of the prominent Organ-on-chip device manufacturers, has found the 3D InSight Monkey Liver Microtissues, which resulted in the development of the organization's suite of organotypic 3D liver prototypes for efficacy testing and in vitro safety. Recently, the Wyss Institute obtained the amount of US$5.6 million from the U.S. FDA to utilize its organ-on-chip technology to examine human physiological responses towards active radiation and to evaluate the performance of drugs designed to prevent those effects.

For Detailed Reading Please visit WiseGuy Reports @
https://www.wiseguyreports.com/reports/3672024-global-organ-on-chip-market-research-and-forecast-2018-2023

For more information or any query mail at sales@wiseguyreports.com

Norah Trent
WISEGUY RESEARCH CONSULTANTS PVT LTD
08411985042
email us here