

Organ-on-Chip Market to Surpass \$1.6Bn, Revolutionizing Drug Discovery and Personalized Medicine Forecast, 2024-2030

PORTLAND, OR, UNITED STATES,
October 9, 2024 /EINPresswire.com/ --
□□□ □ □□□□□□ □□□□ □□ □□□□□□:
<https://www.alliedmarketresearch.com/request-sample/2555>

The [organ-on-chip market](#) is rapidly growing and transforming research in drug discovery and personalized medicine. Here's a snapshot of this emerging industry:

Key Highlights:

- **Market Growth:** Valued at \$103.44 million in 2020, projected to reach \$1.6 billion by 2030, growing at a CAGR of 31.1% (2021-2030).
- **Technology:** Organ-on-chip combines tissue engineering and microfluidics, simulating human organ functions in a lab environment.
- **Application Areas:** Predominantly used in drug screening, disease modeling, and research into lung, kidney, heart, and liver functions.

Market Drivers:

- **Rise in Drug Screening:** Organ-on-chip devices help researchers test new drugs, potentially reducing the need for animal testing.
- **Demand for Personalized Medicine:** Facilitates real-time analysis of cellular and genetic functions, aiding personalized healthcare solutions.
- **Shortage of Donor Organs:** Laboratory-engineered chips simulate organ functions, addressing the shortage of transplantable organs.

Challenges:

- **High Development Costs:** Initial costs and the nascent stage of technology development are major restraints.

Segmentation:



- By Organ Type: Includes heart-on-chip, liver-on-chip, lung-on-chip, kidney-on-chip, and intestine-on-chip devices.
- Regional Insights: North America leads the market, but Asia-Pacific is expected to witness significant growth due to rising healthcare investments in India and China.

Key Players:

Companies like Emulate, Inc., Organovo Holdings, and AxoSim Technologies are at the forefront of this technology, driving research and commercial development.

Future Outlook:

- Increased adoption of organ-on-chip technologies in emerging economies.
- A shift towards replacing animal testing with organ-on-chip models for ethical and efficiency reasons.

This game-changing technology is expected to play a pivotal role in the future of healthcare, particularly in drug development and organ transplantation research.

□□□□□□ □□□□□□ □□□□□□: <https://www.alliedmarketresearch.com/purchase-enquiry/2555>

David Correa

Allied Market Research

+1 800-792-5285

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/750256669>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.