

In Vivo Toxicology Market by Product (Animal Models, Reagents & Kits), Test Type (Chronic, Sub-acute), Toxicity Endpoints (Systemic, Immunotoxicity), Testing Facility (Outsourced, In-house), End User (Academic & Research Institute, CROs) - Forecast to 2025

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Abstracts

The global in vivo toxicology market size is projected to reach USD 6.6 billion by 2025 from USD 5.0 billion in 2020, at a CAGR of 5.5% during the forecast period. Market growth is driven largely by the increasing pharmaceutical R&D activities, innovations in animal models, the development of exclusive in vivo toxicology tests, and the increasing demand for personalized medicine.

“By Product, the consumables accounted for the largest share of the in vivo toxicology market.”

The in vivo toxicology market is categorized into instruments and consumables. The consumables segment is further categorized into animal models and reagents & kits. Animal models is sub segmented into mice, rat and other animals. The consumables segment accounted for the largest share of the in vivo toxicology market in 2019. The widespread use of reagents & kits in research activities, increase in funds for research projects, and their extensive application in the in vivo toxicology studies are fueling the growth of this segment.

“By toxicity endpoint, the immunotoxicity segment accounted for the largest share of the in vivo toxicology market.”

The global in vivo toxicology market is segmented into immunotoxicity, systemic toxicity, carcinogenicity, genotoxicity, developmental & reproductive toxicity (DART), and other toxicity endpoints (includes organ toxicity, endocrine disruptor toxicity, juvenile toxicity, phototoxicity, ocular toxicity, and skin irritation). In 2019, the immunotoxicity segment accounted for the largest share of the global in vivo toxicology market, followed by the systemic toxicity segment. The rising demand for the development of biologics and biosimilars is driving the growth of the immunotoxicity segment

“By test type, chronic test type segment accounted for the largest share of the in vivo toxicology market”

The global in vivo toxicology market is segmented into acute, sub-acute, sub-chronic, and chronic test type. The chronic test type segment is expected to dominate the market during the forecast period. In 2019, the chronic test type segment held the largest share of the market, followed by sub-chronic test type. Increasing research on drugs used for longer-duration therapy such as anti-cancer, anti-convulsive, anti-arthritis, and anti-hypertensives drives the growth of the chronic test type market.

“By End user, Academic and Research Institutes accounted for the largest share of the in vivo toxicology market”

The global in vivo toxicology market has been broadly segmented into academic & research institutes, pharmaceutical & biotechnology companies, contract research organizations, and other end users (cosmetic companies and food laboratories). The academic and research institutes segment accounted for the largest share of the in vivo toxicology market in 2019. The increasing number of research activities in the field of in vivo toxicology and funding to the academic and research institutes to conduct in vivo toxicology research are the factors responsible for the largest share of the segment

“Asia Pacific: The fastest-growing region in the in vivo toxicology market.”

The Asia Pacific market is projected to grow at the highest CAGR during the forecast period. Several global pharmaceutical firms have entered the APAC market to tap the significant growth opportunities in emerging Asian countries and lower their production costs by shifting their drug discovery R&D operations and manufacturing to the region. A large number of qualified researchers and low-cost operations in APAC countries, such as India and China, are some of the major factors supporting this trend.

“North America: The largest share of the in vivo toxicology market.”

North America, which includes the US and Canada, accounted for the largest share of the in vivo toxicology market. The large share of the North America region can be attributed to the presence of major players operating in the in vivo toxicology market in the US, growing biomedical research in the US, and rising preclinical activities by CROs and pharmaceutical companies in the region.

Breakdown of primaries

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Respondent— Supply Side- 80%, Demand Side-20%

By Designation— Executives- 25%, CXOs- 20%, Managers - 55%

By Region— North America - 50%, Europe - 20%, APAC – 20%, RoW- 10%

The in vivo toxicology market is dominated by a few globally established players such as Charles River Laboratories (US), The Jackson Laboratory (US), Envigo (US), Taconic Biosciences, Inc. (US), and JANVIER LABS (France), Thermo Fisher Scientific (US), Danaher Corporation (US), Waters Corporation (US), Agilent Technologies (US), Shimadzu Corporation (Japan), Bruker Corporation (US), PerkinElmer (US). Other prominent players include Merck KGaA (Germany), GE Healthcare (US), and Bio-Rad Laboratories (US), genOway (France), Cyagen Biosciences (US), GVK BIO (India), PolyGene (Switzerland), Crown Biosciences (US), TransCure bioServices (France), Ozgene Pty Ltd. (Australia), and Harbour BioMed (US)

Research Coverage:

The report segments the in vivo toxicology market based on region (North America, Asia Pacific, Europe, Latin America and Middle East & Africa), product (instruments, consumables((Animal models (mice, rat and other animal models), Reagents & kits)) test type (acute, sub-acute, sub-chronic, and chronic) , Testing facility (outsourced and in-house), toxicity end point (immunotoxicity, systemic toxicity, carcinogenicity, end user(academic and research institutes, pharmaceutical & biotechnology companies, contract research organizations, and other end users). Company type (Tier 1, tier 2, Tier

3 providers of in vivo toxicology instruments and services). The report also provides a comprehensive review of market drivers, challenges, and opportunities in the in vivo toxicology market.

Key Benefits of Buying the Report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the in vivo toxicology market and provides them information on key market drivers, challenges, and opportunities.

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