

# Global 3D Printed Drugs Market Research and Forecast 2018-2027

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## Abstracts

The global 3D Printed Drugs market is still more research-based entity and with approval and commercialization of 3D printed drugs the market is expected to gain momentum in next decade (2017-2027). 3D printing as a technology in already has a broad reach and widely used in industries such as automobile, healthcare (primarily in dental and ortho), and retail. In the late 1980s, 3D printing (3DP) technology was developed at the Massachusetts Institute of Technology (MIT) as a rapid-prototyping technique. In this technology, an aqueous fluid is used to bind multiple layers of powder to create a wide range of drugs. 3D printed drugs are used to fuel innovation and progress across pharmaceutical industries. 3D-printed drugs may be useful for orphan drugs and/or personalized medications as these drugs are produced in small amount. In August 2015, the first 3D-printed drug approved by FDA, however, is produced in commercial scale. Aprelia pharmaceuticals introduced first 3D printed drug named Spritam (levetiracetam) uses a specially developed platform to produce rapidly disintegrating high-dose drugs that are easy to swallow.

Drawbacks of conventional pharmaceutical unit operations is driving the demand for 3D printed drugs across the globe. For instance, the conventional manufacturing unit operation involving milling, mixing, granulation and compression which can result in disparate qualities of the final products with respect to drug loading, drug release, drug stability and pharmaceutical dosage form stability. 3D printed drugs are being developed in such way that they do not alter the qualities of the final product. Further, high prevalence of chronic diseases such as arthritis, asthma, cancer and diabetes and integration of 3D printing with conventional pharmaceutical technologies are major factors in the growth of the market. Other factors that are contributing in the market growth include growing usage of 3D printing technology in healthcare and high demand of instantaneous soluble tablets.

However, high investment for continuous clinical development of 3D printing and complex clinical trial protocols will limit the growth of the market. Side effects of 3D printed drugs are also major concern in the market. Despite of this constraints, the market will show prominence growth during forecast period due to the increase in healthcare investment in emerging nations and rising demand of medicine customization and personalization.

The global 3D Printed Drugs can be segmented on the basis of dosage form, technology and region. On the basis of dosage form, the market is segmented into tablet, capsules, multi-drug implant, nanoparticles, solutions, nanosuspension, encapsulated within a polymer, and implant. Further, on the basis of technology, the market is bifurcated into inkjet printing, direct-write, zip dose, thermal inkjet (TIJ) printing, fused deposition modelling (FDM), powder bed printing and stereolithography (SLA). On the basis of geography, the market is segmented into North America, Europe, Asia-Pacific (APAC) and Rest of the World (RoW). North America holds a dominant position in the global 3D Printed Drugs research and development, followed by Europe. The increasing investments in research and development in 3D printed drug development is expected to drive the growth of the 3D Printed Drugs in the region. Asia Pacific is projected to exhibit a good growth in the global market over the forecast period.

There are very few players in the global 3D Printed Drugs market include Aprecia Pharmaceuticals LLC, Fabrx Ltd., and GlaxoSmithKline PLC. In order to sustain in the competitive market, these players adopt various strategies such as acquisitions, mergers, expansions, joint ventures, and product development, among others. For instance, GlaxoSmithKline PLC (GSK) has been investing in 3D printing technology for a few years now. Their R&D department dedicated to 3D printing uses the technology in a variety of ways including prototyping, packaging, and tissue sampling. GSK is developing 3D printing personalized medicine for each patient.

## **RESEARCH METHODOLOGY**

The market study of 3D Printed Drugs is incorporated by extensive primary and secondary research conducted by research team at OMR. Secondary research has been conducted to refine the available data to breakdown the market in various segments, derive total market size, market forecast, and growth rate. Different approaches have been worked on to derive the market value and market growth rate. Our team collects facts and data related to the market from different geography to

provide a better regional outlook. In the report, the country level analysis is provided by analyzing various regional players, regional tax laws and policies, consumer behavior, and macro-economic factors. Numbers extracted from secondary research have been authenticated by conducting proper primary research. It includes tracking down key people from the industry and interviewing them to validate the data. This enables our analyst to derive the closest possible figures without any major deviations in the actual number. Our analysts try to contact as many executives, managers, key opinion leaders, and industry experts. Primary research brings the authenticity in our reports.

Secondary sources include:

Financial reports of companies involved in the market  
Whitepapers, research-papers, and news blogs  
Company websites and their product catalogue  
Supplier Websites such as Alibaba, amazon for pricing analysis

The report is intended for hospitals, pharmaceuticals companies, government organizations for overall market analysis, and competitive analysis. The report provides in-depth analysis on pricing, market size, intended quality of the product preferred by consumers, initial norms and vehicle segment. The report will serve as a source for 360-degree analysis of the market thoroughly integrating different models delivering insights into the market for better business decisions.

## **MARKET SEGMENTATION:**

Global 3D Printed Drugs is segmented on the basis of regional outlook and following segments:

Global 3D Printed Drugs Research and Analysis, By Dosage Form  
Global 3D Printed Drugs Research and Analysis, By Technology  
Global 3D Printed Drugs Research and Analysis, By Region

## **THE REPORT COVERS:**

Comprehensive research methodology of global 3D Printed Drugs Market

This report also includes detailed and extensive market overview with key analyst insights

Exhaustive analysis of macro and micro factors influencing the market guided by key

recommendations

Analysis of regional regulations and other government policies impacting the global 3D Printed Drugs Market

Insights about market determinants which are stimulating the global 3D Printed Drugs Market

Detailed and extensive market segments with regional distribution of forecasted revenues

Extensive profiles and recent developments of market players

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2. CYCLE PHARMACEUTICALS LTD.
3. FABRX LTD.
4. GLAXOSMITHKLINE PLC
5. LINX PRINTING TECHNOLOGIES

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