

# Medical PET

## Patent Landscape Report

This sample report showcases a landscape of advancements in Medical PET technology by analyzing 1408 patent from 2001 to 2025.

[WWW.STIMAnalytics.ai](http://WWW.STIMAnalytics.ai)

Sample

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## Executive Summary

This sample report showcases a landscape of advancements in Medical PET technology by analyzing 1408 patent from 2001 to 2025. The analysis reveals:

### Explosive Growth

Patent activity has expanded ~15× over the last 23 years, peaking in 2020 with 80+ filings. Momentum remains strong with 572 pending and 63% of all filings since 2013

### Geographic Dominance

The United States leads with 687 patents, followed by Europe with 240; together they account for ~65% of filings. China is a rising contributor, with filing growth becoming prominent since 2019.

### Technology Focus

Core areas include A61K9, A61L27, and A61L31, plus C08 macromolecular compounds. Emphasis is on drug-delivery systems, implant coatings, biocompatible polymers, and sterilization-resistant materials.

### Market Potential

The Medical PET market is valued at ~\$26.99B (2024) and projected to reach ~\$36.61B by 2029 (~6.29% CAGR). Demand is driven by pharma packaging, implantable devices, and surgical tools, alongside broader PET growth (~9.5% CAGR).



# Methodology

The methodology employed in this report integrates AI-driven data analytics, machine learning algorithms, and expert human analysis, thereby ensuring a thorough and precise assessment of patent trends within this technology sector.

## Data Collection

The analysis initiates with the collection of patent metadata from reputable global patent databases, including:

- WIPO PATENTSCOPE (World Intellectual Property Organization)
- Lens.org
- USPTO (United States Patent and Trademark Office)
- EPO (European Patent Office)
- National Patent Offices

These datasets encompass structured metadata, including patent titles, abstracts, claims, classifications (e.g., IPC, CPC), applicants, publication dates, citations, and legal status.

## AI & Machine Learning Analysis

Using proprietary artificial intelligence (AI) and machine learning models developed by STIMAnalytics, the acquired patent data undergoes the following processing stages:

- Text Mining and Natural Language Processing (NLP): Extracting critical technical terms, concepts, and innovation themes from patent documents.
- Clustering and Classification: Categorizing patents into relevant technological groups and subgroups.
- Trend Analysis: Identifying growth trajectories, emerging technologies, and shifts in innovation focus over time.
- Network Analysis: Mapping interrelationships among applicants, technologies, and jurisdictions.
- Predictive Insights: Forecasting future technological advancements and market trends based on historical and contemporary patenting activities.

## Reporting Infrastructure

The analytical results are subsequently integrated into a robust reporting infrastructure, which autonomously generates structured reports and interactive dashboards. These outputs are further enriched with:

- Visual Analytics (charts, graphs, maps)
- Strategic Insights
- Technology Roadmaps
- Company and Academic Profiles

## Expert Review

Finally, all reports undergo a rigorous quality assurance process conducted by domain experts and technical editors to ensure:

- Accuracy of technical interpretation
- Consistency in terminology and classification
- Relevance of strategic insights
- Professional formatting and readability

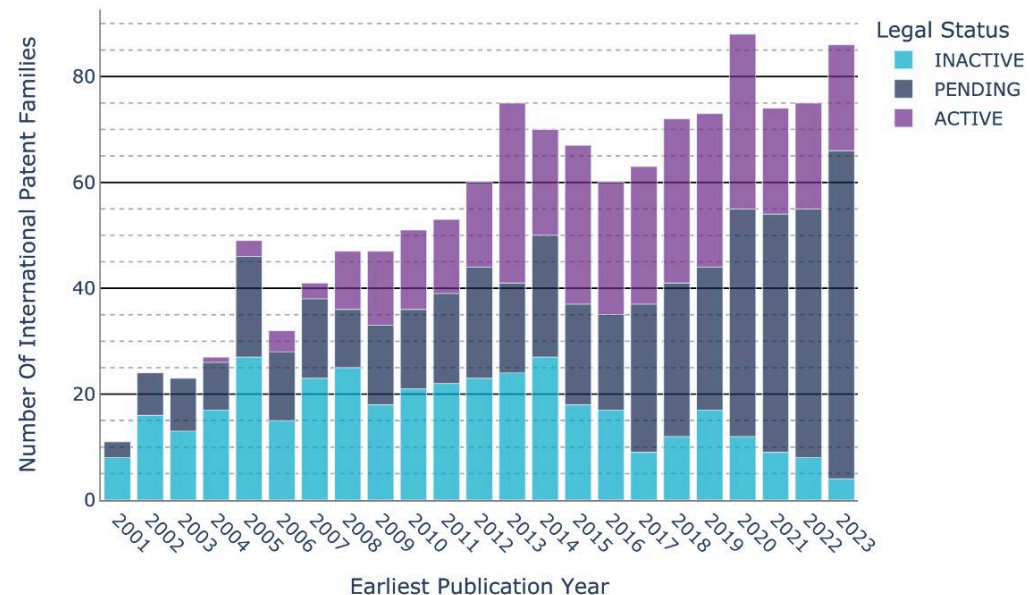
## Delivery Formats

The final outputs are delivered in two formats:

- Written Report (PDF): A comprehensive, publication-ready document featuring executive summaries, technology breakdowns, market insights, and key player profiles.
- Interactive Dashboard: A web-based platform enabling users to explore patent trends, filter by technology, applicant, jurisdiction, and time period, and generate customized reports.

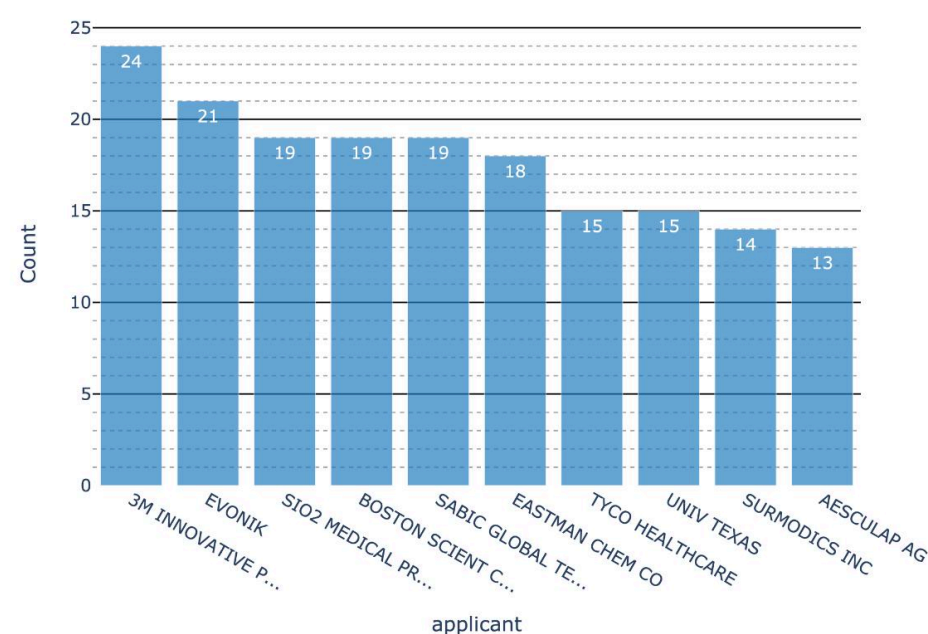
## Patent Landscape Overview

Patent Family Growth Over Time



Patent activity has grown steadily since 2001, with pending and active filings rising sharply since 2018. This upward trend signals increased innovation momentum and sustained investment in intellectual property protection.

## Top Patent Applicants



3M leads innovation in this space with 24 patent filings, followed closely by Evonik and SiO2 Medical. Broad industry participation highlights diverse R&D efforts across healthcare, materials, and chemical applications.



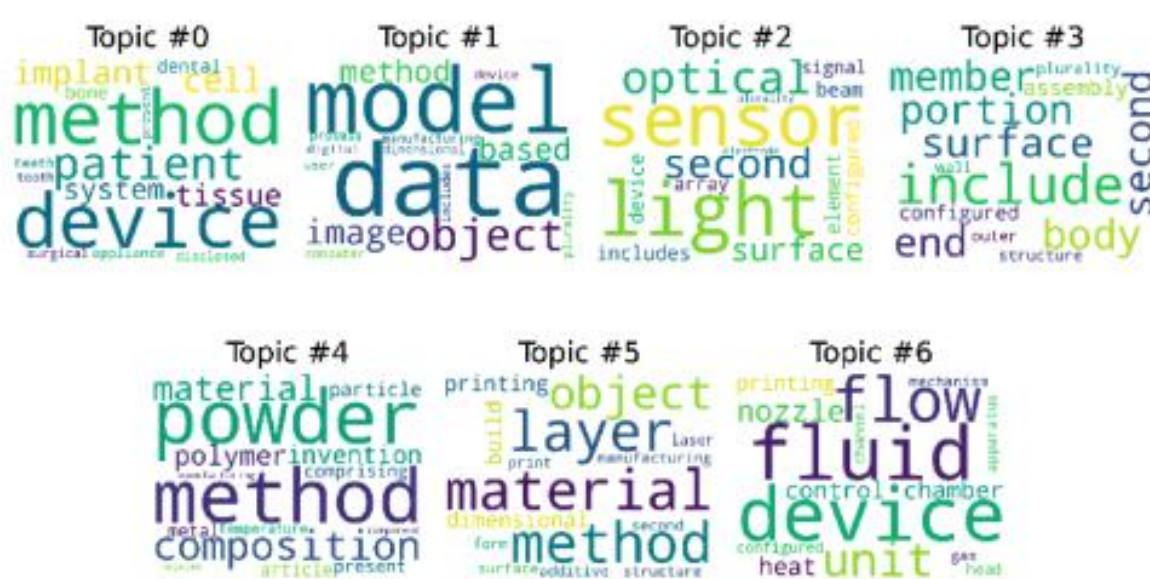
# Technology Trends

## Top Technologies by Sub-Class



Medical and pharmaceutical innovations dominate, with A61K and A61L leading patent activity. The U.S. holds the majority of filings, highlighting its strong position in healthcare-related technologies across multiple sub-classes.

## Key Patent Themes





## Strategic Recommendations:



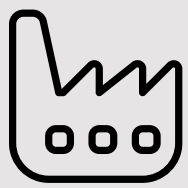
Policy Makers

1. Focus on fostering innovation in high-growth sectors.
2. Encourage investments in sustainable technologies.
3. Support industry-specific research and development initiatives.



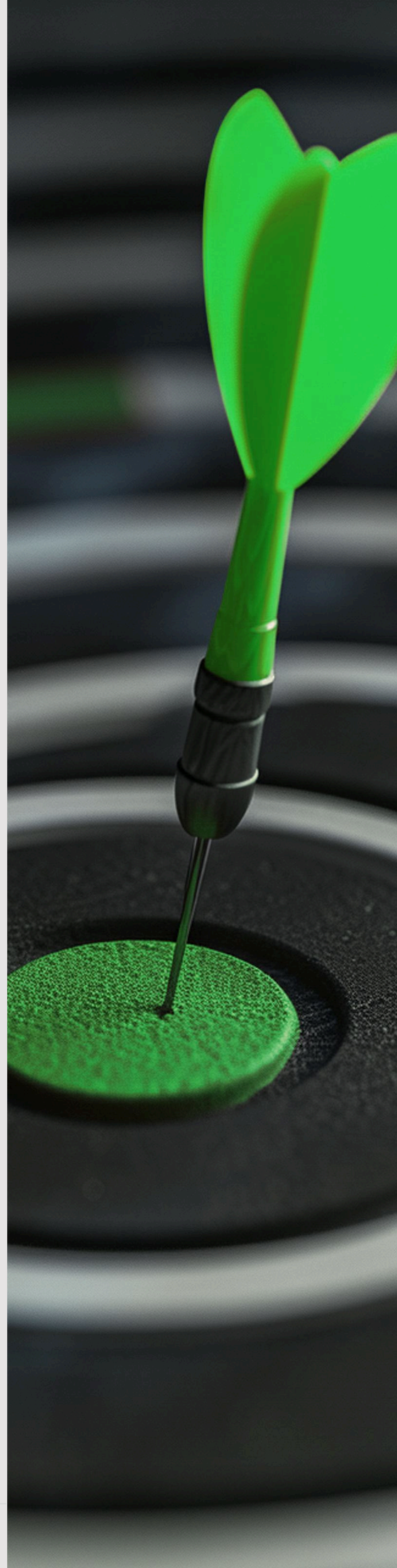
Investors

1. Prioritize companies with strong intellectual property in emerging technologies.
2. Monitor the latest advancements in new industrial applications and sectors.



Manufacturers

1. Embrace new technology adoption to improve operational efficiency.
2. Invest in scalable solutions for long-term growth.
3. Focus on sustainability and circular economy practices.

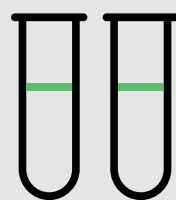


# Our Industrial Expertise



## Energy

Exploring innovations in the oil, gas, electricity, and renewable energy sectors.



## Chemical

Advancing chemical processes, products, and catalysts for industrial applications.



## Health and Pharma

Analyzing new pharmaceutical products, health services, and medical technologies.



## ICT & Software

Examining trends in information and communication technology, software, and hardware.



## Mining Industry

Investigating improvements in iron, steel, aluminum, copper, and other related industries.



## New Materials

Researching advancements in advanced materials, nanotechnology, and their applications.

# Our Global Allies





# Medical PET

Patent Landscape Report



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