گزارش بازار فناوری نانو در دارورسانی

بازار محصولات مراقبت‌های بهداشتی در حال مشاهده برخی از اولین مزایای فناوری نانو است. در طول دهه آینده، این حوزه یکی از بخش‌های فناوری نانو با بالاترین رشد خواهد شد. دارورسانی هدفمند برای درمان سرطان یکی از رایج‌ترین مزایای ثبت شده نانوپزشکی است. گزارش موسسه Cientifica، با عنوان "فناوری نانو در دارورسانی ۲۰۱۱"، تجزیه و تحلیل جامع و بررسی جغرافیایی بازار فعلی دارورسانی نانویی و فناوری‌های مرتبط با آن را ارائه می‌کند. این گزارش همچنین پیش‌بینی‌هایی برای اندازه کل بازارهای قابل شناسایی و درصد سهم آن دسته فناوری‌های کلیدی را تا ۲۰۲۱ فراهم می‌نماید.

برخی آینده‌نگاری‌ها پیش‌بینی کرده‌اند که بازار فناوری نانو به نزدیک یک تریلیون دلار تا سال ۲۰۱۵ خواهد رسید، و برای سرمایه‌گذاران فرصت‌های منحصر به فردی فراهم می‌نماید. با این حال، بازار کاربردهای فناوری نانو پیچیده، چند رشته‌ای و بسیار بخشی[1] است. بنابراین ضروری است تا درکی از آن دسته از بخش‌های بازار که به احتمال زیاد فناوری نانو در کوتاه مدت تأثیر عمیقی بر آن خواهد گذاشت بدست آید.

از آنجا که ما اکنون اکثر (اگر نه همه) فرآیندهای بیولوژیکی که در مقیاس نانو رخ می‌دهند را می‌شناسیم، استفاده از اصول علم زیستی - مطالعه علل پدیده‌های زیستی در سطح مولکولی- به معنای آن است که پژوهش-های پزشکی و زیست پزشکی به طور فزاینده با استفاده از رویکرد پایین به بالا[2] (به جای بالا به پایین[3]) استفاده می‌نمایند. فراهمی زیستی پایین ناشی از روش‌های دارورسانی سنتی به روش خوراکی و تزریقی و نیروهای بازار در صنعت داروسازی- که اختراعات ثبت شده پس از یک دوره نسبتا کوتاه از زمان منقضی شده مگر اینکه روش نوین دارورسانی توسعه یافته تا گواهی ثبت اختراع را طولانی‌تر نماید- دو نیروی اصلی است که پیشران رشد بازار دارورسانی نانویی است. عامل سوم در این بازی، ترکیب بهبود سلامت جهانی و افزایش چشمگیر در میزان جمعیت پیر جهان است.

این گزارش درک و بینشی نسبت به امکان دارورسانی هدفمند با استفاده از فناوری نانو و پتانسیل بازار آن را در طول دهه آینده فراهم می کند.

---

1 . segmented
2 . bottom-up
3 . top-down

آینده بازار

این گزارش تحلیل عمیق تحولات اخیر در نانودارو سانی را فراهم می‌کند و فرصت‌های بازار را تا ۲۰۲۱ برای بزرگترین اقتصادها در آمریکا، آسیا، اروپا و سایر نقاط جهان ارائه می‌نمای. دو تحلیل بازار ارائه شده؛

- رشد بازار تاریخی برای نانودارو سانی بین سال‌های ۲۰۰۰-۲۰۱۰
- پیش بینی بازار برای نانودارو سانی از ۲۰۱۱ تا ۲۰۲۱

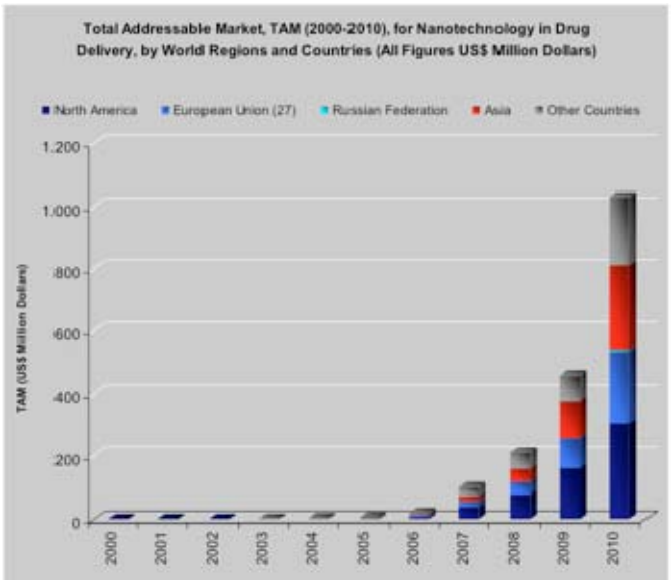
هر دو مجموعه از داده‌ها در دسته‌بندی بازار جغرافیایی (میلیون دلار آمریکا، درصد سهم، نرخ رشد سالانه ترکیبی[۴] برای هر کشور) برای آمریکا، آسیا، اروپا و سایر نقاط جهان (تنها اقتصادهای کلیدی) و بر اساس نوع فناوری (میلیون دلار آمریکا، درصد سهم و نرخ رشد سالیانه ترکیبی) گزارش شده است. بررسی نوع فناوری شامل موارد زیر است:

- حلالیت و فراهمی زیستی
- رسانش هدفمند
- نانوکریستال‌های دارویی
- مجموع حامل‌های نانویی
- لیپوزوم‌ها
- نانولوله‌های کربنی
- نانوحامل‌های طلا
- دندریمرها
- میسل‌ها
- نانوحامل‌های برپایه پلیمر
- نانوپوسته‌ها
- نانوحامل‌های سرامیکی
- نانوحامل‌های فسفات کلسیم

4 . compound annual growth rate, CAGR

خلاصه یافته‌ها (حال حاضر و آینده)

رشد بازار نانودارو رسانی در دوره ۲۰۰۰ تا۲۰۱۰ نشان می دهدکه در سال ۲۰۱۰ به ۱۰۳۰ میلیون دلار آمریکا رسیده است.



پیش‌بینی برای دارورسانی با استفاده از فناوری نانو تا سال ۲۰۲۱ نشان می‌دهد که کل بازار قابل شناسایی به ۱۳۶۱۳۴ میلیون دلار آمریکا تا سال ۲۰۲۱ برسد و نرخ رشد سالانه ترکیبی ۴۹.۹۶٪ بیش از دوره ۲۰۱۰-۲۰۲۱ تخمین زده می شود.

این گزارش همچنین شامل

- مروری بر فناوری نانو؛
- شناسایی پیشران‌های کلیدی متعدد برای پذیرش فناوری نانو در پزشکی و پزشکی زیستی؛
- مهم‌ترین زمینه‌ها برای پذیرش فناوری نانو در پزشکی؛ و
- توضیح چگونگی تاثیر داشتن فناوری نانو در حال حاضر بر بخش دارورسانی از طریق چندین مطالعات موردی مرتبط

علاوه بر بررسی روندهای کلی، گزارش فناوری نانو در دارورسانی ۲۰۱۱، پنج چالش فعلی و آینده، همچنین موانع عمده پذیرش فناوری نانو در پزشکی و پزشکی زیستی را شناسایی نموده و نقشه راه پذیرش فناوری را تعیین نموده است.

این گزارش مرحله توسعه فناوری کلیدی نانو مورد استفاده در دارورسانی را به ترتیب کاربرد بررسی نموده که، شامل

- نانوداروها
- نانوبیوتکنولوژی در دارو رسانی
- تکنیک‌های عددی برای دارو رسانی نانوذرات
- فرمولاسیون مبتنی بر نانوحامل‌ها دارای تاییدیه‌های بالینی و حاضر در بازار و در خط لوله
- فرمولاسیون مبتنی بر نانوکریستال‌ها دارای تاییدیه‌های بالینی موجود در بازار و در حال توسعه
- جایگزین‌های مبتنی بر فناوری نانو بر ای نانوحامل‌ها در دارو رسانی
- کاربردهای حال و آینده

روش شناسی

اطلاعات موجود در این گزارش از منابع مختلف تهیه شده است؛ که عبارت از تحقیقات اختصاصی انجام شده توسط موسسه Cientifica، منابع اولیه، از جمله مصاحبه با صنعت و دانشگاهیان، و منابع دست دوم از جمله نشریات آنلاین و بانک داده‌ها است و برای تعیین موارد زیر بکار رفته است:

- اندازه حال حاضر صنعت دارویی، بازار دارو رسنی و نانودارو رسانی شامل نرخ رشد سالانه ترکیبی
- اندازه جمعیت/رشد تا ۲۰۲۱
- آمارهای بهداشت جهانی و منطقه‌ای
- داده‌های ثبت اختراع از جمله تاریخ انقضا
- ادغام‌های شرکت دارویی و تملک
- مخارج بخش‌های تحقیق و توسعه شرکت و دانشگاه

- روندها در نمودارهای مخارج حوزه سلامت دولت شامل نرخ رشد سالانه ترکیبی
- بازار فعلی دارورسانی بصورت درصد از کل بازار دارویی شامل نرخ رشد سالانه ترکیبی
- پرفروش‌ترین محصولات دارورسانی موجود در بازار
- آمارهای تحقیقات و انتشارات در حوزه دارورسانی

این داده به منظور فراهم کردن بازار فعلی نانودارو رسانی (۲۰۱۰) و بازار جهانی قابل شناسایی برای محصولات دهه آینده تجزیه و تحلیل شده است.

قیمت این گزراش ۵۰۰۰ دلار آمریکا است و در سایت موسسه Cientifica در آدرس http://cientifica.eu/blog/research/market-reports/nanotechnology-in-drug-delivery-2011 قابل خریداری است. فهرست مطالب این گزارش در ادامه قابل روئیت است.

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Chapter Four: Nanotechnology in Drug Delivery

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Typical Image of Colloidal Gold Nanoparticles [1].

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3-D stacked vertical bar graph representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, European Union countries studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.61
3-D stacked area chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, European Union countries studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.62
3-D pie chart representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, Asian countries studied, source: Cientifica (all figures in percentage).

Exhibit 4.63
Horizontal bar graph representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, Asian countries studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.64
Line chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, Asian countries studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.65
3-D stacked vertical bar graph representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, Asian countries studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.66
3-D stacked area chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, Asian countries studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.67
Table representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, all most relevant key technologies, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.68
3-D pie chart representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, all key technologies studied, source: Cientifica (all figures in percentage).

Exhibit 4.69
Horizontal bar graph representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, all key technologies studied, source: Cientifica (all figures in percentage).

Exhibit 4.70
Line chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, all key technologies studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.71
3-D stacked vertical bar graph representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, all key technologies studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.72
3-D stacked area chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, all key technologies studied, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.73
3-D pie chart representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, nanocarriers as a whole, source: Cientifica (all figures in percentage).

Exhibit 4.74
Horizontal bar graph representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, nanocarriers as a whole, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.75
Line chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, nanocarriers as a whole, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.76
3-D stacked vertical bar graph representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, nanocarriers as a whole, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.77
3-D stacked area chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, nanocarriers as a whole, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.78
3-D pie chart representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, nanocarriers *versus* drug nanocrystals, source: Cientifica (all figures in percentage).

Exhibit 4.79
Horizontal bar graph representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, nanocarriers *versus* drug nanocrystals, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.80
Line chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, nanocarriers *versus* drug nanocrystals, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.81
3-D stacked vertical bar graph representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, nanocarriers *versus* drug nanocrystals, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.82
3-D stacked area chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, nanocarriers *versus* drug nanocrystals, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.83
3-D pie chart representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, impact of drug solubility and drug bioavailability, source: Cientifica (all figures in percentage).

Exhibit 4.84
Horizontal bar graph representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, impact of drug solubility and drug bioavailability, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.85
Line chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, impact of drug solubility and drug bioavailability, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.86
3-D pie chart representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, impact of targeted delivery, source: Cientifica (all figures in percentage).

Exhibit 4.87
Horizontal bar graph representing the Total Addressable Market, TAM forecast in 2021, for nanotechnology in drug delivery, impact of targeted delivery, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.88
Line chart representing the Total Addressable Market, TAM forecast by 2021 (for the 2011-2021 period), for nanotechnology in drug delivery, impact of targeted delivery, source: Cientifica (all figures US$ Million Dollars).

Exhibit 4.89
SWOT analysis to evaluate the strengths, weaknesses, opportunities and threats involved in nanotechnology in drug delivery In the scope of the technology adoption roadmap (during the 2011-2021 period).

Appendix

Exhibit A.1
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: North America; country: USA.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.2
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: European Union; country: Germany.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.3
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: European Union; country: France.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.4
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: European Union; country: UK.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.5
Table of the organizations with publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. Country: Russian Federation.
Organizations are ordered alphabetically (increasing order).

Exhibit A.6
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: Asia; country: India.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.7
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: Asia; country: India.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.8
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: Asia; country: Japan.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.9
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: Asia; country: P R China.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.10
Table of the top 20 organizations showing the highest publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. World Region: Asia; country: South Korea (Republic of Korea).
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.

Exhibit A.11
Table of the organizations with publishing activity in PubMed periodicals (2000-2010), based on PubMed, for Nanotechnology in Drug Delivery. Asia; country: Taiwan.
Organizations are ordered first by descending order of total articles published and then ordered alphabetically (increasing order), if applicable.