



Greater Collaboration is

Driving Cloud Adoption in Life Sciences

TRENDING NOW: One of the primary drivers of the adoption of cloud-based solutions by life-sciences companies is the increasing reliance on outsourcing and CROs in the drug development process.

Life-sciences companies and clinical research organizations (CROs) are adopting cloud-based solutions at an increasingly rapid pace, particularly in the area of clinical and regulated content management solutions, according to data and analysis released by NextDocs.

Over the last five years, deployment of applications via the cloud has rapidly accelerated across most industries. Analysts estimate that companies will spend one-third of their IT budgets on cloud applications and solutions by 2014. But adoption of strategic solutions delivered via the cloud has, comparatively and historically, lagged in the life-sciences industry. That is beginning to change according to NextDocs.

“We’re beginning to see a rapid change in the business and IT strategies of life-sciences companies, a notable shift toward adoption of cloud-based clinical solutions,” says Matt Walz, chief strategy officer at NextDocs. “Cloud-based clinical document management solutions free life sciences companies from managing paperwork and processes, and enable them to focus on managing trials. When CROs and life-sciences companies operate on the same platform, it greatly enhances collaboration and eases the management and compliance burden.”

One of the primary drivers of the adoption of cloud-based solutions by life-sciences companies is the increasing reliance on outsourcing and CROs in the drug development process. The escalating cost of drug development combined with increasing regulation and patent expirations is slowing the growth of the industry and driving increased outsourcing to CROs. According to a report by NextDocs, up to 50% of discovery and development is now occurring “outside the firewall.”

▼ For more information, visit nextdocs.com.



Matt Walz

brain and at other sites in the body will prove to be a significant future growth driver for this market.

North America dominated the market in 2012 and is expected to maintain its market position till 2019. But the Asia-Pacific market is estimated to grow at a faster pace (CAGR of 14.6% from 2013 to 2019). Europe is expected to grow at a relatively higher rate compared to North America because of a constantly improving regulatory framework and the presence of an extensive product pipeline portfolio.

▼ For more information, visit transparency-marketresearch.com.

Drug Developers Are Implementing NEW STRATEGIES FOR USE OF COMPARATOR DRUGS

Drug developers are aggressively implementing new strategies to improve their access to and use of comparator drugs, according to leaders from the research-based drug industry who recently participated in a roundtable discussion convened by the Tufts Center for the Study of Drug Development.

“The challenges obtaining the right drugs for clinical trials — in the right quantity at the right time, and at the right price — are formidable,” says Tufts CSDD Director Kenneth Kaitin. “The lack of fully robust supply chain management practices, growing emphasis on expensive biologics, changing regulatory requirements, and growth of counterfeit medicines are forcing drug sponsors to rethink and redesign their comparator drug supply chains to support drug development that, increasingly, crosses international borders.”

Mr. Kaitin says the industry has embraced proactive approaches, including improvements in communication between internal R&D and commercial operations, and a willingness to sell commercially available products to other developers, which are bearing fruit.

▼ For more information, visit csdd.tufts.edu. **PV**

Nanomedicine Market Expected TO GROW

The market for nanomedicine was valued at \$78.54 billion in 2012 and is expected to reach a value of \$177.60 billion in 2019, growing at a CAGR of 12.3% from 2013 to 2019, according to Transparency Market Research.

The advent of new applications and technology in the field of nanomedicine will be one of the major growth factors for the global nanomedicine market. In addition, increase of funding aimed at

boosting the research activities pertaining to nanomedicine by the government as well as private institutions will expedite the process of commercialization of new products and hence will drive the market.

The global nanomedicine market by applications was dominated by the oncology market with a market share of about 38% in 2012 because of the presence of a high number of commercialized products in this segment. Development of nanomedicine products enabling drugs crossing blood brain barrier and targeting tumors in the

THERAPEUTIC TRAX... ➡

CANCER

Due to favorable market conditions in terms of U.S. pricing structures and the anticipated approval of a number of late-stage pipeline drugs, the market value for monoclonal antibodies (mAbs) in gastric and esophageal cancer treatment is expected to double by 2019. The market for mAbs in gastric cancer will grow from \$256 million in 2012 to \$501 million by 2019, at a CAGR of 10%, while the mAbs market for esophageal cancer is expected to climb from \$137 million in 2012 to \$265 million by 2019, at a CAGR of 9.9%.

Source: GBI Research, Monoclonal Antibodies Market for Gastric and Esophageal Cancers to Double by 2019

▼ For more information, visit gbiresearch.com.

CARDIOVASCULAR

The acute ischemic stroke (AIS) therapeutics market in the six major countries — the U.S., France, Germany, Italy, Spain, and UK — is forecast to jump from \$531 million in 2012 to \$1.2 billion by 2017, at a CAGR of 17.3%. The U.S. market will continue to generate the majority of sales, more than doubling its revenue from \$376.4 million in 2012 to \$945.4 million by 2017, at a CAGR of 20.2%. This is due to the U.S. having the highest prevalence and incidence of AIS and comparatively high AIS therapy prices.

Source: GlobalData, Opportunity Analyzer: Acute Ischemic Stroke - Opportunity Analysis and Forecasts to 2017

▼ For more information, visit globaldata.com.

CNS

Due to upcoming patent expirations for four high-profile drugs, the global Parkinson's disease (PD) market is expected to decline from \$3.4 billion in 2012 to \$2.9 billion by 2019, at a negative CAGR of 2.3%. PD drugs, such as Azilect (rasagiline mesylate), Stalevo (levodopa, carbidopa, entacapone) and Comtan (entacapone), will lose their patents by the end of the forecast period. Generic alternatives for these treatments have already been approved, which will result in further market competition.

Source: GBI Research, Parkinson's Disease Therapeutics

Market to 2019 - Pipeline Shows Shift towards Long Term Disease Management

▼ For more information, visit gbiresearch.com.

DIABETES

The late-stage pipeline for microvascular complications of diabetes (MCD) is disproportionately weak compared with the extremely high levels of unmet needs in this area. Only the treatment for diabetic retinopathy, and particularly, DME, has been recently revolutionized by the introduction and rapid acceptance of drugs that inhibit the effects of VEGF, including Roche/Novartis' Lucentis, and Roche/Genentech's Avastin. The late-stage pipeline for this complication includes one drug from this class of anti-VEGF therapies, Regeneron's Eylea. The whole anti-VEGF class will experience steady growth over the forecast period (CAGR of 6%) and will likely reach sales of around \$2.5 billion by 2022, with Eylea alone accounting for \$1.2 billion in sales.

Source: GlobalData, PharmaPoint: Microvascular Complications of Diabetes - Global Drug Forecast and Market Analysis to 2022

▼ For more information, visit globaldata.com.

GASTROINTESTINAL

The gastrointestinal (GI) therapeutics market for irritable bowel syndrome (IBS), ulcerative colitis (UC), and Crohn's disease (CD) in the eight major markets — the U.S., UK, France, Germany, Italy, Spain, Canada, and Japan — is expected to decrease in value from \$6.8 billion in 2012 to \$6.6 billion by 2019, at a negative CAGR of 0.3%. GI market will register different CAGRs across the different markets during the forecast period. The U.S. and Japan will witness positive CAGRs of 0.2% and 4%, respectively, while the European markets will decline at a negative CAGR of 2.5%. This unfavorable growth is due to the upcoming patent expiry of various major drugs.

Source: GBI Research, Gastrointestinal Therapeutics in Major Developed Markets to 2019 - New Drug Approvals and Promising Pipeline to Counter Declines from Patent Expiries

▼ For more information, visit gbiresearch.com.

HIV

Newly approved in the U.S., ViiV Healthcare's

Tivicay is set to become the world's leading integrase inhibitor within the next three years, valued at 12.6% of the market by 2022. It is expected to generate annual sales of up to \$2.1 billion by 2022 in the U.S., Japan, and five major EU markets. The combined sales value of HIV drugs in the seven major markets is expected to increase by 40% in the next decade, rising from \$11.9 billion in 2013 to \$16.8 billion in 2022. It is forecast that the market will peak at \$17.3 billion in 2020.

Source: Datamonitor Healthcare

▼ For more information, visit datamonitorhealthcare.com.

OPHTHALMIC

The need for effective and patient-friendly treatment of retinal diseases to avoid visual impairment is driving the retinal therapeutics market in the United States. Vascular endothelial growth factor (VEGF) inhibitors dominate the market as they are a safe and effective option to treat age-related macular degeneration (AMD), diabetic macular edema (DME), and retinal vein occlusion (RVO). The U.S. market earned revenue of \$2.45 billion in 2012 and estimates are that this will almost double to \$4.15 billion in 2017.

Source: Frost & Sullivan, Analysis of the U.S. Retinal Therapeutics Market

▼ For more information, visit lifesciences.frost.com.

The ophthalmology therapeutics market for dry eye syndrome (DES) and glaucoma in the eight major countries — the U.S., the UK, France, Germany, Italy, Spain, Canada, and Japan — is expected to increase moderately, climbing from \$3.7 billion in 2012 to \$6.1 billion by 2019, at a CAGR of 7.6%. But the ophthalmology market will face major barriers during the forecast period, including the loss of patent for many blockbuster drugs, such as Lumigan, which will lead to subsequent pressure from cheaper off-label products.

Source: GBI Research, Ophthalmology Therapeutics in Major Developed Markets to 2019 - New Drug Approvals and Promising Pipeline to Trigger Shift in Treatment Paradigm to Combination Therapies

▼ For more information, visit gbiresearch.com.