



It costs millions and takes years to build a successful pharmaceutical brand — only to have it undermined by unauthorized online channels and targeted attacks.

MarkMonitor Pharmaceutical Industry Solution

Executive Summary

As a largely unregulated and anonymous channel, the Internet has created ideal conditions for illicit prescription drug distribution and widespread pharmaceutical brand abuse that cost the industry more than \$400 billion each year.¹ Unauthorized drug distribution not only saps pharmaceutical company revenues and profits, but also has a dangerous impact on patient safety. Adverse events linked to diverted, counterfeit, adulterated or mislabeled products put consumers at risk, engendering potential legal liability and damaged reputation. With these unique risk factors in mind, MarkMonitor® offers pharmaceutical companies an industry-leading solution to protect their brands, recapture revenues and maintain brand equity.

The Growing Threat to the Pharmaceutical Industry

\$400B

Brand abuse and misuse costs the industry more than \$400B each year.¹

50%

Nearly 50 percent of drugs sold online on illegal sites are counterfeit.⁴

60%

Over 60 percent of medicines purchased online are fake or substandard.²

Unauthorized Drug Distribution Puts Pharmaceutical Brands at Risk

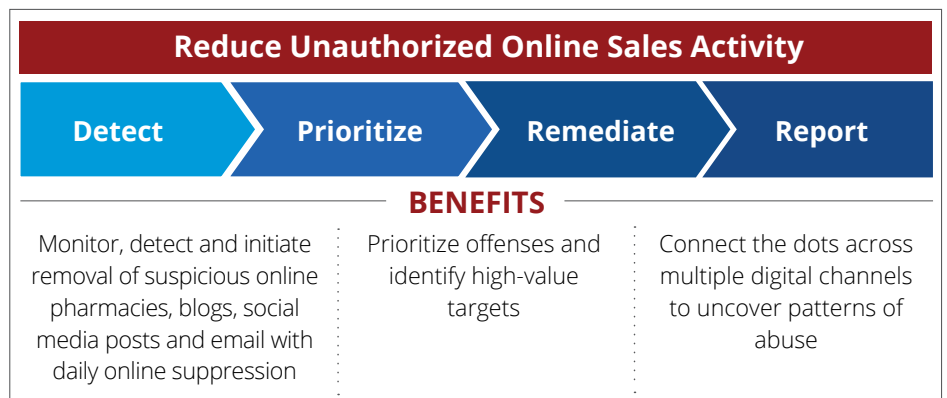
It can take years and cost billions to build and sustain a successful pharmaceutical brand.² Vast resources are required to develop copyrights, trademarks and domains, not to mention negotiating the approvals process, securing and enforcing patents, and maintaining a distribution network. However, rogue online pharmacies and unauthorized distributors with listings for prescription drugs in marketplaces, blogs and social media sites are able to undermine carefully crafted brands with small amounts of investment.

The damage to businesses is very real and extends far beyond the issues of intellectual property. Rogue sites divert legitimate product distribution, siphon off revenues, compromise supply network integrity and significantly impact profits. Copyrights and trademarks are often misused, leaving consumers unsure whether products are genuine. Legitimate pharma brands are compelled to pursue costly investigative and litigation efforts to combat illicit channels, while malicious attacks such as phishing and malware continue to mount.

Yet the most troubling danger is the risk to patient safety and potential liability of adverse events caused by counterfeit, adulterated or mislabeled products that make their way into the hands of consumers. While it can be difficult to gauge the true scope of the problem, over 60 percent of medicines purchased online are fake or substandard², and 36 million Americans have purchased a drug online without a prescription.³ Pharmacovigilance must continue to be a top priority to mitigate these risks.

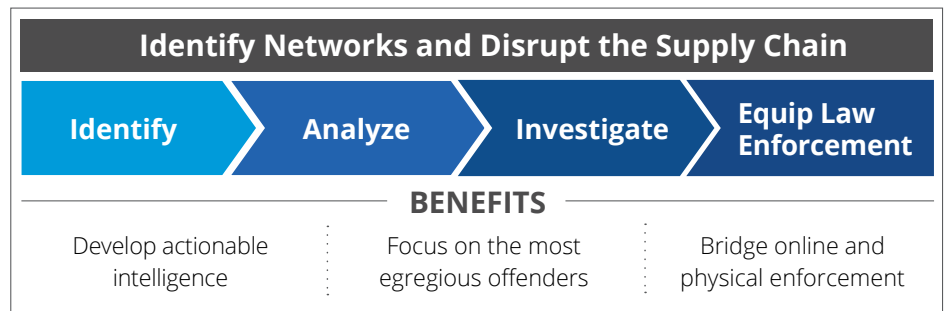
A Holistic Approach to Brand Protection

The rise of Internet commerce has made it easy for consumers to purchase any item imaginable with just a few clicks. But it has also spawned a largely unregulated and highly profitable channel for unauthorized goods across industries such as luxury goods, branded apparel, consumer electronics, automotive parts and prescription drugs.



As the world leader in brand protection, MarkMonitor brings a comprehensive approach to combating unauthorized drug availability. Our years of experience with pharmaceutical clients, proprietary technology and strategic services help protect patients, brand assets and revenue from the proliferation of illegitimate online pharmacies. MarkMonitor offers a multi-faceted solution to protect pharma brands:

1. Our broad-based operational brand protection platform continually monitors brand activity and abuse across multiple touch points such as websites, marketplaces, social media, blogs and email with built-in online enforcement mechanisms.
2. Our advanced proprietary technology is purpose-built to detect unauthorized pharma brand distribution. Network Intelligence uncovers the most egregious abuses and helps focus resources where risk is greatest.
3. Strategic services including test purchases and detailed investigative reports synthesize data and evidence to bridge enforcement efforts across digital and physical channels.



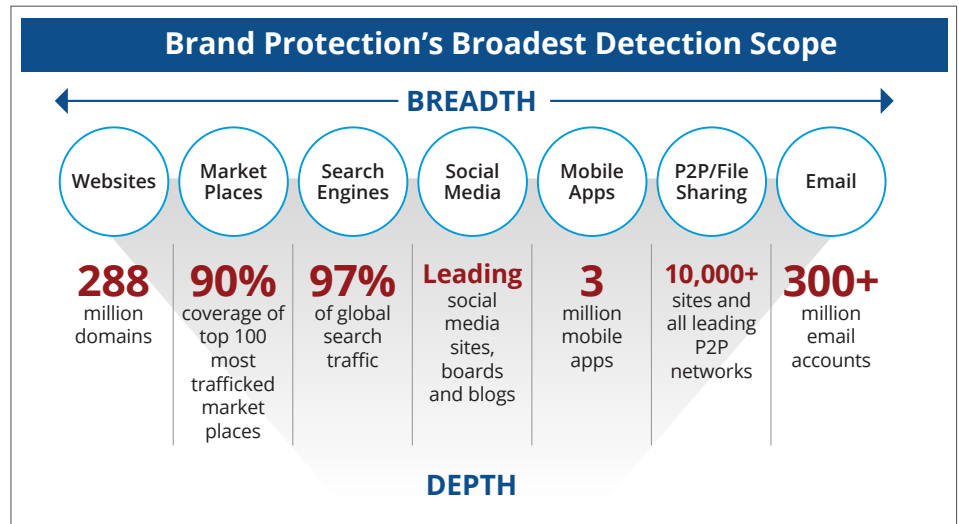
1. Start with an Operational Brand Protection Framework

A framework to reduce unauthorized online sales and promotional activity is the cornerstone of successful pharmaceutical brand protection. MarkMonitor continually monitors brand activity across multiple online channels with daily automated detection scans that locate exactly where brand abuses are taking place. Detailed analysis prioritizes offenses and highlights which products are most sold on online pharmacies and blogs, marketplaces or via social media across geographical regions. Information associated with suspected perpetrators, such as geolocation and email addresses is then verified against a Reverse Whois database to uncover other online assets that belong to the same entity.

Reporting and trend analysis connect the dots across multiple digital channels, uncovering patterns of abuse such as regional or seasonal trends, and provide insight into registrars, ISPs, payment methods, languages and currencies used by rogue pharmacies, as well as their rate and history of detection. The solution also includes embedded enforcement mechanisms such as bulk marketplace de-listings, payment processing deactivation, brandcasting, cease and desist letters and site takedown advisories to ISPs.

90%

MarkMonitor covers 90 percent of the world's most-visited marketplaces.



MarkMonitor offers the broadest online detection in the industry, searching billions of online pharmacy Web pages and blogs, analyzing content and defending against sites that are engaged in potentially unauthorized trademark usage, domain name abuse and sales activity. Online marketplaces have become one of the most common Internet locations to sell unauthorized or counterfeit prescription drugs. MarkMonitor covers 90 percent of the world's most-visited marketplaces, detecting and enforcing pharmaceutical brands, including markets like Asia where brand compliance is low and regulation is easier to evade.

Social media is another area that pharmaceutical companies must incorporate into any brand protection strategy. The industry has an obligation to report adverse events, and a growing number of individuals are now reporting unintended medical occurrences on social media outlets. MarkMonitor identifies such reports and provides detailed analysis so that companies can determine the best course of action.

The Importance of Domain Protection for Pharmaceutical Companies

Like trademarks and copyrights, pharmaceutical domain names are also under constant attack from fraudulent entities and cybersquatters. The first line of defense is domain registration, and to ensure the broadest coverage, MarkMonitor provides advisory services to help register pharmaceutical domains in more top-level domains (TLDs). It's not cost-effective to register every brand in every TLD, so pharma companies must select strategic defensive registrations, then actively police for abuse for unregistered TLDs.

Pharmaceutical domain and trademark assets must be managed holistically. MarkMonitor identifies and compares trademarks to domain holdings to pinpoint gaps and potential targets for abuse, protecting assets with advanced security services.

Key Solution Differentiators

■ **Automated Detection:**

Continuous detection, analysis, remediation and reporting give you a framework to identify the worst offenders and connect the dots across multiple digital channels.

■ **Comprehensive Protection:**

Identify offenders across the broadest set of channels including online pharmacy sites, marketplaces such as eBay and Alibaba, social media sites and blogs.

■ **Network Intelligence:**

Powerful proprietary technology scours the Internet, including the deep web, to identify, categorize and cluster suspicious online pharmacies into networks.

■ **Custom Enforcement**

Services: Test purchases, investigative reports and strategic consulting services help bridge digital and physical enforcement activities for a true end-to-end solution.

■ **Partner Ecosystem:** The unparalleled MarkMonitor network of partnerships — with search engines, social media sites, domain name registries, industry advocate groups and government agencies — streamlines enforcement.

2. Target the Worst Offenders with Actionable Intelligence

A defensive approach alone may not be sufficient. Today, brands are often compelled to complement defensive enforcement with proactive methods such as controlled buys and investigation that cripple offenders inflicting the most damage. MarkMonitor has developed leading-edge proprietary technology purpose-built for the pharmaceutical industry that goes beyond monitoring and online enforcement to deliver powerful, actionable intelligence to help expedite such methods.

MarkMonitor Intelligence for Pharmaceuticals provides powerful technology that crawls the Internet, including the deep web, to uncover networks of websites selling suspicious prescription drugs and identify anchor sites where transactions are centrally processed.

We accelerate the information-gathering process with actionable intelligence, obviating the need to spend countless hours of manual labor preparing cases for investigation, third party escalation, litigation and/or law enforcement.

By clustering suspicious online pharmacies into networks, MarkMonitor helps identify choke points to target the source of the most damage. We prioritize, investigate, profile and map the connections between suspected counterfeiters' activities in both digital and physical channels, enabling you to streamline enforcement costs and expedite investigations, litigation and physical enforcement.

3. Coordinate Enforcement Measures to Stop Abuse

MarkMonitor arms you with detailed analysis and intelligence, pinpointing key offenders so you can take coordinated enforcement action. Clustering technology links multiple sites to a single entity to expedite their removal by identifying choke points and neutralize their nerve center. Rather than multiple one-off enforcement efforts, MarkMonitor optimizes your chances of successfully removing your products from infringing networks and offers the potential to recover proceeds by collecting from associated accounts.

MarkMonitor provides a complete set of custom services, enabling you to take action after sites are identified and maintain momentum in all enforcement efforts. Test purchases provide support for anti-counterfeiting investigation, intelligence and enforcement efforts. We work with vetted veteran investigators to assist clients in obtaining samples of potentially diverted product, empowering you to protect consumers and brand equity. MarkMonitor Investigative Reports help you gather and aggregate evidence against the worst offenders so you can take immediate action against the biggest clusters of rogue sites. Our reports provide key evidence for physical investigation and enforcement. Coupled with targeted test purchases, evidence is ready for litigation or hand off to law enforcement.

Comprehensive Brand Protection for Pharmaceutical Companies

The MarkMonitor Pharmaceutical Industry Solution protects today's pharma companies from counterfeits and unauthorized distribution channels. We provide you with a powerful framework to monitor brand abuses across a vast array of global channels and deliver actionable intelligence to help you identify and pursue the most egregious offenders. Our custom services go even further to deliver the critical evidentiary support necessary to reclaim your lost Web traffic, revenues and brand equity.

By taking a holistic approach to brand protection that leverages powerful technology, enforcement tools and industry-focused expertise and best practices, MarkMonitor keeps global pharmaceutical brands secure and provides comprehensive tools to protect public health and safety. With so much at stake, our highly effective solution protects both consumers and pharmaceutical companies by supporting drug safety and brand protection strategy.

About MarkMonitor

MarkMonitor, the world leader in enterprise brand protection and a Thomson Reuters Intellectual Property & Science business, provides advanced technology and expertise that protects the revenues and reputations of the world's leading brands. In the digital world, brands face new risks due to the Web's anonymity, global reach and shifting consumption patterns for digital content, goods and services. Customers choose MarkMonitor for its unique combination of industry-leading expertise, advanced technology and extensive industry relationships to preserve their marketing investments, revenues and customer trust. To learn more about MarkMonitor, our solutions and services, please visit **markmonitor.com** or call us at **1-800-745-9229**.

More than half the Fortune 100 trust MarkMonitor to protect their brands online.

See what we can do for you.

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