No Prescription Required: Bing.com Prescription Drug ads

A look at how rogue Internet pharmacies are compromising the integrity of Microsoft’s online advertising program

a joint report by legitScript and knuJon

August 4, 2009

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EXECUTIVE SUMMARY

This report examines how Microsoft’s online advertising program enables “rogue” Internet pharmacies that violate US federal and state laws as well as Microsoft’s stated policies. Microsoft states that it uses an Internet pharmacy verification service to ensure that its prescription drug advertisements are legitimate. However, most Internet pharmacies (89.7%) advertising on bing.com were found to be fraudulent or illegal.

Among the highlights of this report:

• Of the prescription drug and online pharmacy advertisements sponsored by Microsoft that we reviewed, 89.7% led to “rogue” Internet pharmacies that do not require a prescription for prescription drugs, or are otherwise acting unlawfully or fraudulently.

• Despite Microsoft’s stated policy of only sponsoring Internet pharmacies that supply drugs from the United States or Canada, beginning by clicking on one of Microsoft’s advertisers, the authors received prescription drugs, without a prescription, from India. The drugs tested counterfeit.

• Most of the prescription drug advertisements sponsored by Microsoft that were reviewed for this report did not require a prescription for the sale of prescription drugs, including addictive medicines and controlled substances.

• Some ads were displayed for a legitimate US-based Internet pharmacy, but directed Internet users to a completely different, illegal Internet pharmacy website.

• Some rogue Internet pharmacies sponsored by Microsoft are members of “affiliate pharmacy networks” linked to Russian organized crime \(^1\) that operate thousands of fake Internet pharmacies.

About the Authors:

LegitScript is the only Internet pharmacy verification organization identified by the National Association of Boards of Pharmacy (NABP) as adhering to its standards for the review and verification of websites that sell prescription drugs. LegitScript operates the largest Internet pharmacy verification and monitoring program in the United States, has approved over 200 legitimate Internet pharmacies, and has designated over 37,500 Internet pharmacies as “rogue Internet pharmacies.” LegitScript’s staff includes licensed health care providers and former law enforcement and drug policy officials.

KnujOn is the premier Internet compliance company. Through spam reduction, illicit site termination, Registrar contract monitoring, ICANN consultations and law enforcement training, KnujOn has made the Internet policy structure more accountable and the end-user experience safer. KnujOn has exposed complex networks used to promote and distribute narcotics, pirated media, and knockoff merchandise as well as domain fraud perpetrated by industry insiders.

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\(^1\) Appendix A contains an in-depth discussion of the Internet pharmacy networks analyzed in this document, and explains why some of them are accurately described as Russian organized crime.
Overview

This report is the first in a series about US-based corporations that facilitate, and/or profit from, “rogue” Internet pharmacies — websites that sell counterfeit, adulterated or unapproved prescription drugs, provide addictive medications without requiring a prescription, and put Internet users, especially youth, at risk.

Our first report focuses on Microsoft’s sponsorship, through its decision engine, bing.com, of paid advertisements (or “sponsored” search results) for rogue Internet pharmacies. Microsoft’s decision engine focuses on four major categories of search: local, travel, shopping and health. Within that last category, our report analyzes a range of prescription drug advertisements sponsored by Microsoft, focusing on ten sample advertisements.

Of all prescription drug and Internet pharmacy sponsored search results on bing.com reviewed by LegitScript and KnujOn, we found that 89.7% were operating illegally. Only 10.3% were either legitimate, or potentially legitimate. In this report, LegitScript and KnujOn focus on ten of the advertisements sponsored by Microsoft that are representative of the problems we observed. None required a valid prescription; we actually placed orders with two of the ten advertisers, and received drugs without a prescription in both cases. We submitted one of the drug packages for testing; the drugs were counterfeit.

The rogue Internet pharmacies sponsored by Microsoft thus fell into primarily four categories:

1. Those that facilitate the sale of prescription drugs, including controlled substances, without requiring a valid prescription.
2. Those that sell drugs from sources that are not licensed as a pharmacy in any US jurisdiction.
3. Those that illegally source unregulated, unapproved prescription drugs from outside of the United States.
4. Those that are otherwise deceptive or misleading.

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1 In early June 2009, Microsoft announced that it would replace its search engine, Live Search (live.com) with a “decision engine” at bing.com.

2 http://www.time.com/time/business/article/0,8599,1913841,00.html
It is important to emphasize that the ten advertisers analyzed in this report are not engaged in minor violations of pharmacy law. Rather, they are wholly fraudulent websites run, in most cases, by criminal networks. They sell unapproved or counterfeit drugs, including addictive medications, without any requirement of a prescription. The drugs come from places like Calcutta, India, which is a violation of US drug safety regulations. In several cases, the websites are operated by individuals in Russia or Eastern Europe, not US-based pharmacists. In short, these “Internet pharmacies” are neither pharmacies at all, nor run by pharmacists: they are simply online street corners run by drug dealers.

Additionally, we discovered apparent disclosure gaps in Microsoft’s online advertising program. Ads that falsely appear to have been placed by a licensed Internet pharmacy actually redirect users to an unlicensed, illegal Internet pharmacy operating overseas.

The authors emphasize that these problems are neither occasional nor recent. All of the screen shots and video captures are from June or July 2009, but LegitScript first began monitoring Microsoft’s sponsored search results for Internet pharmacies in early 2008. While the specific advertisers have periodically changed, the illicit nature of online pharmacy advertisements sponsored by Microsoft have not.

Moreover, we note that Microsoft has been informed, in writing, that it is sponsoring rogue Internet pharmacies, by three well-respected national organizations. On January 2, 2008, the National Association of Boards of Pharmacy (NABP) wrote to Microsoft to inform them that “a search for prescription drugs returns some sponsored results for Internet drug outlets that do not require a valid prescription...(and)...Internet drug outlets (illegally) dispensing drugs from outside of the United States.” On July 7, 2008, the National Center for Addiction and Substance Abuse (CASA) wrote a similar letter, noting that CASA “was able to find prominent displays of ads for rogue Internet pharmacies in a search or controlled drugs...this suggests that Microsoft is profiting from advertisements for illegal sales of controlled prescription drugs online.” On February 2, 2009, the American Pharmacists Association wrote a letter to Microsoft to “to express (the APHA’s) concern with sponsored search results (online advertisements) for Internet drug sellers that appear to be operating in violation of law and/or accepted standards of pharmacy practice in the United States.”

LegitScript and KnujOn release this report in the hope that a public discussion of the problem will compel Microsoft to improve the safety and integrity of its online pharmacy advertisements.
I. Scope of Report and Methodology

This report focuses only on “sponsored search results” (paid advertisements), which typically appear on the top or right side of search results on Bing.com (formerly live.com). In the graphic below, the sponsored search results are outlined in pink. This report does not focus on “organic,” or unpaid, search results — in the graphic below, those that are not in color.

Microsoft exercises no control, or at most limited control, over organic search results, the display of which is controlled by a relevancy algorithm that determines “what’s out there” on the Internet. Microsoft does not directly profit from organic search results, and a top-ranking organic search result cannot be purchased from Microsoft. Therefore, this report does not focus on organic search results.

By contrast, Microsoft can control the display of sponsored search results and has the ability to require that they meet certain criteria. Moreover, each time an Internet user clicks on a sponsored search result, Microsoft receives revenue. Consequently, Microsoft has a much greater deal of control over, and financial stake in, the type of websites that appear in its sponsored search results.
There are literally thousands upon thousands of search term combinations for prescription drugs. To limit the scope of this report, the authors focused on about ten prescription drugs in two general categories. Both categories involve drugs that are among those more commonly promoted by Internet pharmacies.

- **Lifestyle drugs.** Rogue online pharmacies sometimes capitalize on some individuals’ reluctance to approach their physician in person with certain problems. Four drugs that fit into this category are Viagra, Cialis, Levitra (erectile dysfunction drugs), and Valtrex (a herpes medication). All four drugs are prescription-only.

- **Prescription drugs of abuse.** There are numerous prescription drugs with abuse potential. Three that are heavily promoted by rogue Internet pharmacies are Soma (carisoprodol, a muscle relaxant), Ultram (tramadol, a pain reliever) and Ambien (a sleep aid). Ambien is a controlled substance federally, the other two are controlled substances in at least one state, and all three drugs’ prescribing inserts indicate that they have the potential for abuse and addiction. “No prescription required” Internet pharmacies actively market these drugs to those who would use them to foster an addiction, rather than for legitimate medical reasons.

II. Rogue Internet Pharmacy Advertisements: Why the Issue is Important

The fact that rogue Internet pharmacies exist, and can be found by using search engines like bing.com, is not news. However, recent trends, as well as an understanding of how rogue Internet pharmacies operate, explain why the legitimacy of Internet pharmacy sponsored search results is an important issue.

First, rogue Internet pharmacies are a major driver of two dangerous trends: the growth in prescription drug abuse, and trafficking in counterfeit or unapproved drugs. Government officials and experts point to unregulated Internet pharmacies as having a primary influence on both dynamics:

- **Prescription drug abuse** is a problem especially among youth and young adults, and is growing: a recent government report noted that prescription drug abuse has become the second largest drug abuse problem in the United States, with nearly 7 million abusers — more than cocaine, heroin and methamphetamine combined, and an 80% increase in six years. US government officials have described rogue Internet

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4 Soma, or carisoprodol, is not scheduled as a controlled substance internationally or by the US federal government. However, a number of states have classified carisoprodol as a controlled substance. At least one state, Arkansas, has scheduled Ultram (tramadol) as a controlled substance.

pharmacies as the “largest form of drug trafficking” in the US, and as one of the fastest growing methods of drug abuse.

**Counterfeit drugs** are not merely an inconvenience: they can have harmful and even fatal results. The World Health Organization (WHO) considers rogue Internet pharmacies a major source of counterfeit drugs. Over the last two years, the authors have received complaints from, and have referred to the appropriate authorities, individuals who faced health consequences, including hospitalization in some cases, following their ingestion of prescription drugs received from Internet pharmacies operating from outside of the United States.

Second, rogue Internet pharmacies are financially motivated. This requires reaching potential customers, which in turn, requires the ability to participate in online advertising programs like Microsoft’s. Accordingly, online advertisements have specific importance for Internet criminals: if they can display advertisements on prime virtual “real estate” like bing.com, they can reach millions of potential customers. If they are denied the ability to advertise, it can be a crippling — even fatal — blow to their online business.

Third, it is imperative to understand that this is not merely a public health problem: it is also an issue of national security. Some illicit pharmaceutical sales fund other illegal activities, including terror and warfare. To be sure, of the nearly 40,000 illicit Internet pharmacies that LegitScript monitors, by no means do all finance these activities. But some are suspected of doing so, particularly Internet pharmacies linked to the Russian mafia and Chinese triads (gangs). That illicit prescription drug sales would fund terror and warfare should come as no surprise: after all, the US government has long noted that the illicit sale of “street drugs” (e.g., heroin from Afghanistan) has funded terror and warfare. There is no reason to think that these terrorist organizations are unwilling to do the same with the illicit sale of (either real or counterfeit) prescription drugs. As seen herein, of the rogue Internet pharmacies sponsored by Microsoft that we reviewed, most are part of Russian criminal networks of the type suspected to sponsor and

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10 Please see our discussion in Appendix A regarding this topic.

fund other illegal activities. Because the link between these Russian criminal organizations and terrorism is not the subject of this report, but does require additional explanation and to be placed properly in context, an expanded discussion of this topic is provided at Appendix A.

Fourth, Internet users may understandably assume that a search result “sponsored” by a company as reputable as Microsoft is safe and legitimate. However, well over 90% of all Internet pharmacies operate unlawfully,\(^12\) making it particularly useful to promote their business under the perceived legitimacy of a Microsoft endorsement. The fact that a majority of the Internet pharmacies sponsored by Microsoft are, in fact, unsafe and illegal is a legitimate consumer concern.

Fifth, as we establish in this report, there is evidence that the security gaps in Microsoft’s online advertising program may pose financial and reputational risks to Microsoft’s online advertisers. In short, some rogue Internet pharmacies are displaying advertisements by misappropriating legitimate websites’ domain names in Microsoft’s advertising system. At best, this potentially does harm to the legitimate advertiser’s reputation and goodwill. At worst, in addition to deceiving Internet users, the authors are concerned as to whether legitimate advertisers are being charged for advertisements that direct Internet users to unrelated, illegal websites.

Sixth, it is generally well-accepted that corporations like Microsoft have a responsibility — certainly a moral one, and probably a legal one — not to knowingly facilitate, much less profit from, activities that are dangerous, deceptive or unlawful. For all of the reasons above, search engine sponsorship of rogue Internet pharmacies is an issue highly relevant to Internet safety and to the ability of Internet criminals to perpetuate and fund international illegal activity.

### III. Sponsored Sites: How Microsoft’s Online Advertising Program Works

As explained above, website owners can purchase first-page search visibility on bing.com through advertising.microsoft.com by paying for a “sponsored” search result.

This document is not intended to provide an in-depth explanation of how Microsoft’s online advertising program works.\(^13\) However, as a general matter, search engines do not charge a fixed price for the display of an online advertisement. Rather, the sale of sponsored search results is akin to a running auction that sets prices largely according to two factors: demand for the keyword, and profitability of the keyword. For example, “used CDs” may be a popular search term, but is probably less profitable than “buy concert tickets.” Consequently, purchasing a sponsored search result for the former will typically cost less than the latter. Similarly, “buy Viagra” or “cheap Propecia”, as they pertain to popular, well-known drugs, will normally command a higher fee than keywords such as “buy band-aids.” Auction rates can be driven

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\(^12\) LegitScript, which monitors nearly 40,000 Internet pharmacies, and the National Association of Boards of Pharmacy, which also monitors several thousand Internet drug outlets, have independently made the same estimate.

\(^13\) More information about how Microsoft’s search advertising program works is available at advertising.microsoft.com.
artificially higher if rogue Internet pharmacies selling counterfeit or unapproved prescription drugs are allowed to participate in search engine ad programs. This is because making a fake or knock-off pharmaceutical product (possibly containing nothing more than flour or cleaning fluid) involves far lower costs than making an FDA-approved drug. This gives the seller of fake or unapproved products a higher profit margin, and consequently, more money to spend on advertising, which drives up the auction price. This adds to search engine revenue, but is to the detriment of legitimate Internet pharmacies that play by the rules and have to pay more to place their advertisements.

Each time an Internet user “clicks” on a sponsored search result, he or she is simply directed to the website in question and pays no direct fee. However, the search engine’s advertising program tracks the “click-through”, and charges the advertiser a fee. As noted above, the fee will vary significantly from just a few pennies to a few dollars, depending upon the demand and profitability of the keyword. With millions upon millions of clicks on advertisements, this is ultimately a significant source of revenue for the search engines. That is how Microsoft makes money from online pharmacy advertisements that appear on bing.com.

Additionally, we note that Microsoft’s advertising program appears to be set up to allow a user to input a separate “Display URL” and a different website as a “Destination URL”. In the example above, it was not difficult for KnujOn, one of the co-authors of this report, to begin the process for setting up an ad for No Prescription Needed Soma, Cialis and Valium under the name “pillzRUS.com” but redirect traffic to knujon.com. Although Microsoft’s policy states that the Display URL and Destination URL should at least be similar, this report suggests that enforcement is either lax or non-existent.

IV. Internet Pharmacies: What’s Legal, What’s Not

Before reviewing Internet pharmacy advertisements sponsored by Microsoft, it may be helpful to explain, in general terms, what is legitimate and what is not with respect to Internet pharmacies.
For the most part, the laws that apply to Internet pharmacies in the United States are fairly clear, and are governed primarily by state laws, with some federal oversight. Additionally, the National Association of Boards of Pharmacy (NABP), the organization that represents all of the pharmacy regulatory boards in the United States and several abroad, has issued clear industry standards that reflect the laws, regulations and safety standards related to pharmacy practice generally, and on the Internet specifically.

The authors focused on three types of violation of federal and state laws (as well as of NABP standards) that are particularly relevant to this report, and are among the requirements most frequently violated by rogue Internet pharmacies. Among other requirements, in the United States, in order to be considered legitimate:

1. An Internet pharmacy must supply drugs from a pharmacy that has a valid license in any state where the pharmacy dispenses or sends prescription drugs.14

2. An Internet pharmacy must not knowingly fill prescriptions for a patient who has never seen the prescribing doctor in person, but has instead only filled out an online form.

3. An Internet pharmacy must only sell drugs that are “FDA-approved,” which means — among other things — that the prescription drugs must come directly from a licensed pharmacy in the United States, not one that is located outside of the United States, even if it has a foreign pharmacy license.

While the first point above is probably self-explanatory, the second and third points require brief explanation. Prescription drugs are designated as such because, unlike over-the-counter drugs, they require some degree of medical supervision. The requisite degree of medical supervision cannot exist without a *bona fide* doctor-patient relationship. With very rare exceptions, simply filling out a form online, without ever having seen the doctor or otherwise licensed provider (including a covering physician) in person, is not sufficient to form this relationship. As such, a physician or other individual who prescribes or sells a patient a drug over the Internet, without ever having examined the patient in person, is acting neither legally nor safely, and is basically treating prescription drugs as if they were merely over-the-counter drugs.

The third point — the requirement that prescription drugs be “FDA-approved” and not imported directly to US residents from outside of the country — is based on the closed system of prescription drug distribution mandated by the Food and Drug Administration (FDA) and by federal law.15 With rare exceptions, prescription drugs may not lawfully be imported directly from outside of the United States to the patient. This has been the subject of a great deal of

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14 Of the 51 jurisdictions in the United States, all but three require an in-state license by out-of-state pharmacy. The three jurisdictions that recognize an out-of-state US pharmacy license are Massachusetts, Pennsylvania and Georgia.

misrepresentation, particularly by Internet pharmacies that claim it is lawful to import a “personal use quantity” (up to 90 days) of prescription drugs. There has never been any such exception.\textsuperscript{16} In some cases, prescription drugs imported from outside of the U.S. may end up being safe; but in many cases, they have been counterfeit or adulterated. Ordering prescription drugs directly from an Internet pharmacy outside of the U.S. is not legal, and is reasonably understood as a gamble.

In short, Internet pharmacies must be licensed in one or more US states; must be physically domiciled and source FDA-approved drugs from within in the United States; and must require patients to have been examined by a physician, not merely fill out an online form, prior to receiving prescription drugs. Internet pharmacies that fail to meet these criteria are acting unlawfully and are reasonably classified as “rogue” Internet pharmacies.

V. Search Engines’ Responsibility and Liability

What about the search engines’ responsibility — legal or moral — for these advertisements? After all, Microsoft does not control the content of other websites, even those whose advertisements its displays. So why should Microsoft be accountable for sponsored search results for rogue Internet pharmacies?

The answer to that question is best explained in three parts. First, it is important to draw a distinction between organic and sponsored search results. As noted previously, search engine algorithms for organic (unpaid) search results have been developed to simply find and return “what’s out there” on the Internet. As a general matter, the authors do not believe that search engines bear significant responsibility for the display of organic search results.

By contrast, search engines have a clear financial interest in its sponsored (paid) search results, because each click on a sponsored search result is a source of revenue for Microsoft. Additionally, Microsoft can control the placement of advertisements, and can either prohibit or permit certain content.

Second, the principle of search engines being accountable for the content of paid advertisements was at the core of the United States Department of Justice’s multi-million dollar penalties, in late 2007, against the three big search engines for sponsoring paid search results for illegal online gambling. In that case, Microsoft paid a fine or other penalties of about $30 million, for profiting from, and facilitating, illegal online gambling activity. A clear parallel can be drawn with Microsoft’s sponsorship of illegal Internet pharmacies.

\textsuperscript{16} The US Food and Drug Administration has, as a matter of policy (not law or regulation), given its agents enforcement discretion in a very limited set of cases. However, the criteria require specific elements, such as the unavailability of the drug in the United States. A fuller discussion of the grant of enforcement discretion is at http://www.fda.gov/ForIndustry/ImportProgram/ImportPolicyandInformationbyProduct/default.htm. The claim that it is legal to import prescription drugs for personal use into the country from a foreign Internet pharmacy is false.
Third, consider the analogy of a landlord who becomes aware that his tenants are using his property as a “crack house,” or to cook methamphetamine. If the landlord, once becoming aware of the problem, continues to permit such activity, and to receive monthly rents knowing that the payments are funded in part by illegal drug-related proceeds, he or she may be legally liable, for knowingly receiving illegal drug proceeds, and for knowingly permitting drug-related activity on property they control, even if he or she does not participate directly in the drug-related activity. Additionally, the rent money paid to the landlord may be subject to seizure as the proceeds of an illegal drug transaction. Similarly, online advertising space should not be used to house illegal drug activity, much less serve as a source of revenue and profits for the company that owns the online advertising space.

Regardless of technicalities regarding Microsoft’s legal responsibility for sponsoring search results for illegal activity, there is an inherent moral and ethical question that goes deeper than federal and state laws. Microsoft, as one of the world’s leading companies, and one of the three largest search engines, arguably has a moral obligation to — once it becomes aware of the problem — stop facilitating rogue Internet pharmacies’ business activities, and to stop profiting from such illegal activity. We are hopeful that this report will encourage that result.

VI. Microsoft’s Online Pharmacy Advertising Policy

Before conducting an analysis of Internet pharmacy ads sponsored by Microsoft, it is important to acknowledge that Microsoft has a policy in place to limit ads for pharmacies, or prescription drugs, to those pharmacies approved by a third-party verification service, PharmacyChecker. However, this report is focused on Microsoft, not the nature of online pharmacies approved by PharmacyChecker. The policy requires that Microsoft-sponsored prescription drug ads will only lead to Internet pharmacies that are duly licensed in the US or Canada (and that presumably only supply drugs that are approved in those countries), that require a valid prescription based on an in-person medical examination, and that supply genuine prescription drugs in accordance with the law. For the purposes of this report, we simply acknowledge Microsoft’s policy, without assumptions as to the extent to which it has been implemented or enforced.
VI. Rogue Internet Pharmacies Sponsored by Microsoft: Ten Examples

LegitScript and KnujOn reviewed ten sample Microsoft advertisements for, or automatic redirects from advertisements to, Internet pharmacies that violate US law. Here is a summary of those ten sponsored search results, and how they contrast with Microsoft’s stated policy of restricting sponsored Internet pharmacies to US- or Canadian-based pharmacies that require a prescription and ship drugs only from US or Canadian locations. (Note: The hyperlinks lead to video clips that show each bing.com advertisement, the website that the ad linked to, and in some cases a live chat showing that the Internet pharmacy requires no prescription. We expect that within 24 hours after releasing this report, some of the websites below will have altered their content. Our screenshots and video clips document their content prior to our report’s release.)

1. choice-rx.com. This Microsoft-sponsored Internet pharmacy does not require a prescription and sells drugs purportedly from India or the Seychelles. The order is processed by a website in Panama sponsored by Russian company.

2. k2med.com. This fake Internet pharmacy linked to a Russian organized crime group called “33 Drugs” fraudulently advertises under the name “dailymedrx.com,” a licensed Internet pharmacy in Indiana.

3. canadian-healthcare-shop.com. Microsoft advertisements for canadadrugs.com or prescriptionpoint.com fraudulently redirect to this no-prescription-required website controlled by a Russian spam network.

4. expressdelivery.biz. This rogue websites advertises under affordabledrugs.com, but redirects to expressdelivery.biz. The website claims to sell drugs from Canada, but the authors submitted an order, and received counterfeit Cialis, without a prescription from India.

5. bestrxcanada.com. This Microsoft advertiser sells potentially counterfeit drugs, does not require a prescription, and has a connection to Russian organized crime.

6. jutcom.com. This advertiser appears to be a mini search engine, but primarily displays Internet pharmacies selling controlled substances without a prescription.

7. rx-medical-center.com. LegitScript successfully ordered and received a prescription-only prescription muscle relaxant without a prescription from this Microsoft advertiser.

8. toppharmacymulti.com. Controlled by a Russian/Eastern European network, this fake Internet pharmacy has hijacked an advertisement placed by a licensed US pharmacy.

9. genericshotsale.com. This no-prescription-required website is controlled by Russian organized crime, does not require a prescription, and pretends to be “Canadian.”

10. rx-line.com. This Microsoft advertiser is actually based in Calcutta, India, sends potentially counterfeit drugs, and does not require a prescription.
1. **Rogue Internet Pharmacy Advertisement #1: Choice-Rx.com (video clip)**

**Choice-Rx.com** is a Internet pharmacy search result sponsored by Microsoft. Choice-Rx is not a licensed pharmacy in any US state, does not require a prescription, and is located outside of the U.S., which means that there are no assurances that the drugs are genuine or safe. In fact, the website claims to send its drugs from India, but also claims to be based in the Seychelles. The order page for the Internet pharmacy is sponsored by a Russian company linked to numerous fake Internet pharmacies, and the order page’s website is hosted in Panama. The “meta description” of the website, found within the website’s source code, announces: “CHOICE-RX ships generic and brand name drugs internationally (sic) to you, no prescription needed, buy viagra here at choice-rx.com.”

A Microsoft-sponsored ad for choice-rx.com, an illegal Internet pharmacy with ties to Russia and the Seychelles that does not require a prescription to order prescription drugs. The website’s owner uses a Minnesota address and is not a registered pharmacist.

The authors conducted a search for “generic meds” on bing.com, Microsoft’s search engine. As shown below, choice-rx.com was returned as the top sponsored result. We clicked on the search result, as shown above. We were directed to the website’s home page, choice-rx.com. Once arriving there, we engaged the website’s “live chat” feature in an online conversation. As shown below, the website is transparent and open in that it does not require a prescription for the sale of prescription drugs.

LegitScript/KnujOn Report on of Bing.com Internet Pharmacy Advertisements

Although choice-rx.com claims to have its own doctor that will “decide whether” an individual needs a prescription, this is wholly unlawful: a bone fide doctor-patient relationship is required in order to dispense a prescription, not an anonymous, virtual interaction. In fact, in the vast majority of cases, Internet pharmacies that claim to employ a doctor to determine whether or not a prescription is needed have no doctor on staff.

To add to the illegal nature of this website, it is clear that the drugs do not come from the United States. In another chat with choice-rx.com, the company claimed that they send drugs from India, although even this cannot be verified: the drugs could be from anywhere.

Could Microsoft have known, ahead of time, that choice-rx.com is a rogue Internet pharmacy? The answer is Yes — in a matter of seconds. The website offers drugs that do not exist, such as “Cialis soft,” which purports to be a “gel tab” version of Cialis, a popular prescription-only erectile dysfunction drug. Although made in large quantities by counterfeit drug operations, “Cialis soft” is neither manufactured by Lilly & Co., the manufacturer that makes legitimate Cialis, nor any other organization. Cialis soft, like many other products offered by choice-rx.com, are unapproved drugs at best; counterfeit drugs at worst.
So who is behind this rogue Internet pharmacy? The official registration for this website indicates that an individual in Chanhassen, Minnesota has registered this website, as well as several other Internet drug outlets (medreveiw.com [misspelling in the original] and anytimerx.com). The individual to whom the website is registered, however, is not listed as a licensed pharmacist in Minnesota.18

Identifying the website registrant is only part of the ultimate answer to the question of who, or what, controls this website. In fact, choice-rx.com does not operate alone: it is part of a larger criminal network that goes by the name “medstore.biz” and claims to be located in the Seychelles. (LegitScript and KnujOn established this by attempting to place an order with choice-rx.com. All prescription drug orders are routed to medstore.biz.) In the parlance of the Internet pharmacy world, this means that choice-rx.com is the “affiliate” website and medstore.biz is the “anchor website.” In other words, medstore.biz is the “Internet Headquarters” that processes the prescription drug orders and actually mails the drugs to the Internet user on behalf of choice-rx.com.

So who operates medstore.biz, the main business behind choice-rx.com? Similarly, the official WhoIs information indicates an address in the Seychelles:

The illicit nature of choice-rx.com should have been apparent in a matter of seconds: it redirects prescription drug orders to medstore.biz, which is located in the Seychelles and sponsored by a Russian organization, REGTIME.

The registration information above suggests that the core business may be located in, or have ties to, Russia. The website registration information for medstore.biz (see above) indicates that medstore.biz is sponsored by REGTIME LTD, a key sponsor of rogue

18 https://www.hlb.state.mn.us/mnbop/glsuiteweb/homeframe.aspx.
Internet pharmacies. The registration page for Regtime can only be accessed in Russian, suggesting that whomever controls medstore.biz may be Russian and/or operating from Russia. And of the visitors to medstore.biz, the content of which is in English, more (30%) come from Russia than any other country, while only 20% come from the United States, and 4% from the United Kingdom. The IP address, 190.34.148.20, is in Panama City, Panama — noted as a hub for international money laundering. Both LegitScript and KnujOn maintain databases with thousands of rogue Internet pharmacies; Regtime is one of the top sponsors of illegal Internet pharmacy activity, and Panama is a primary locus of payment transactions.

Choice-Rx.com never should have been granted entry into Microsoft’s online advertising program. All of the information above can be easily verified through open-source information in a matter of minutes. The contrast between Microsoft’s stated policy, which purports to limit online pharmacy ads to bona fide US and Canadian Internet pharmacies that require prescriptions and adhere to US laws, and choice-rx.com, a rogue Internet pharmacy that does not require a prescription, sells potentially counterfeit drugs and has criminal ties to Russia and money-laundering ties to Panama, could not be more vivid.

The authors track which Internet pharmacies are sponsored by which domain name registrars. Regtime sponsors significantly more rogue Internet pharmacies than one would expect as compared to Regtime’s overall market share.

See whois.domaintools.com/medstore.biz.

Ibid.

2. **Rogue Internet Pharmacy Advertisement #2: k2med.com (video clip)**

A search for “buy viagra” on bing.com illustrates how Microsoft’s online advertisements may display an advertisement for a legal website, but actually direct the Internet user to a fraudulent, illegal website. In addition to misleading Internet users, this may victimize legitimate businesses who choose to participate in Microsoft’s online advertising program. In this case, the advertisement initially appears to have been placed by a legitimate Internet pharmacy in Indiana, [dailymedrx.com](http://dailymedrx.com). In fact, clicking on the advertisement leads to a rogue, no-prescription-required website.

![A Microsoft-sponsored ad for DailyMedRx.com. Clicking on the advertisement does not lead to DailyMedRx.com, but instead to a rogue Internet pharmacy, store.k2med.com, controlled by a Russian-based organization called “33 Drugs” that illegally sells potentially counterfeit “no prescription required” drugs from overseas.](image)

The website circled in red above, **DailyMedRx.com**, appears to be a legitimate Internet pharmacy website. It is owned by Arcadia Associates, headquartered in Indianapolis, Indiana. The company’s pharmacy is licensed in several states, and **DailyMedRx.com** specializes in home health care, temporary health staffing, mail order pharmacy, and home medical equipment. Patients can manage their online prescription orders, if they have a lawful prescription, through **dailymedrx.com**. The authors emphasize that although **dailymedrx.com** is not presently a LegitScript-approved Internet pharmacy, we have no reason to question the integrity, legality or safety of **dailymedrx.com** or of Arcadia Associates.

For several months, **dailymedrx.com** has been a victim of a Russian-based organized criminal organization called “33 Drugs.” That organization has been appropriating **dailymedrx.com**’s domain name to advertise with Microsoft, and manages over 100 websites that sell potentially counterfeit drugs without requiring a prescription.

Upon searching for “buy viagra,” the advertisement for **dailymedrx.com** appears. As shown in [this video clip](#), clicking on the advertisement actually leads to **store.k2med.com**. LegitScript first observed this sort of illicit redirect in late 2008 and attempted to notify Microsoft about this and other cases of illicit redirection in both late
2008 and early 2009. Our notifications went unheeded, and we continued to observe the redirection every time we conducted this search, through mid-2009.

**K2Med.com**, the rogue Internet pharmacy that dailymedrx.com advertisements lead to, does not require a prescription for the sale of prescription drugs. As with the earlier example, LegitScript engaged in a live chat with a representative from the website to inquire as to whether a prescription is required for the sale of prescription drugs, as illustrated in the graphic below.

Similarly, the online pharmacy violates Microsoft’s stated policy of limiting prescription drug sales to legitimate, licensed Internet pharmacies authorized that do business in the United States. In fact, k2med.com admits that the drugs it sells do not come from the United States or even Canada — but rather India, a violation of both US law and Microsoft’s own stated policy.
LegitScript and KnujOn have determined that 33 Drugs, the organization that k2med.com is part of, is closely linked to one of the world’s largest major spamming and Internet criminal operations, also run out of Russia and other former Soviet bloc countries.23

So who is behind k2med.com? The website is registered anonymously. However, there are six other websites located at the same IP address (94.76.206.3); all are rogue Internet pharmacies. All but one are registered anonymously, and LegitScript has observed five of the seven websites as sponsored advertisements by one or more search engines over the last year. During this time period, some of the websites were registered to individuals providing an address in St. Petersburg, Russia. The authors encourage Microsoft to investigate how and why Internet pharmacies on this IP address were granted access to Microsoft’s advertising program, both with live.com as well as bing.com.

This situation raises other concerns: did any Internet users place an order with rogue Internet pharmacy k2med.com, mistakenly believing it to be a pharmacy they trusted, dailymedrx.com? And who paid for these advertisements — dailymedrx.com, or k2med.com? If dailymedrx.com was charged for these advertisements, it raises the larger question of whether Microsoft is overcharging legitimate advertisers for advertisements that actually lead to unrelated, illegal websites, deceiving the Internet user and Microsoft’s advertisers alike. If, on the other hand, the advertising account was actually under the domain name of k2med.com, three other questions emerge. First, who allowed k2med.com to set up an advertising account with Microsoft? Second, who actually paid for the k2med.com advertisement? Third, why would Microsoft allow one website to display an advertisement in the name of another website?

23 For a more detailed discussion of why 33 Drugs is appropriately described as Russian organized crime, refer to Appendix A.
Rogue Internet Pharmacy Advertisement #3: canadian-healthcare-shop.com
(video clip 1, video clip 2)

If you have ever received a spam email advertising Viagra, Tamiflu, or other drugs, an organization called GlavMed was probably behind it. GlavMed, primarily operated out of Russia and China, is one of the world’s most prolific spammers, is known to engage in wide-spread fraud, and is linked to an organized crime network commonly known in the Internet security community as the Russian Business Network.

Like the other thousands of rogue Internet pharmacies that comprise the GlavMed network, canadian-healthcare-shop.com does not require a prescription for prescription drugs, and the products it offers — if they arrive at all — are widely understood to carry a serious risk of being counterfeit. No matter how often one calls the “pharmacy’s” phone number, 210 888 9089, nobody will ever answer: there is no pharmacy, no pharmacist, and no physician.

(210) 888-9089 is a phone number used in countless Russian-led spam campaigns for fake Internet pharmacies. No matter how often one calls the number for this Microsoft-sponsored online pharmacy, nobody will answer. The fake internet pharmacy is below.
GlavMed websites, which typically announce themselves as “Canadian,” have no connection to Canada at all. LegitScript has frequently received complaints that orders to websites in the GlavMed network result in nothing but a fraudulent credit-card charge.

**Canadian-healthcare-shop.com** has been advertising for several months as a Microsoft-sponsored Internet pharmacy search result. However, like the previous example, canadian-healthcare-shop.com has been hijacking two other Internet pharmacies’ advertisements, **canadadrugs.com** and **prescriptionpoint.com**.

As shown by these video clips (1, 2) for a Microsoft-sponsored canadadrugs.com advertisement and a Microsoft-sponsored prescriptionpoint.com advertisement, neither ad directs to either website that is displayed. Rather, both redirect to canadian-healthcare-shop.com. That website, like the others we have discussed, does not require a prescription, sells potentially counterfeit drugs, and is in no way connected to a licensed pharmacy — either in the United States or Canada.

It is important to briefly digress and note neither canadadrugs.com nor prescriptionpoint.com, both of which are affiliated with licensed Canadian pharmacies, are legitimate Internet pharmacies. The reasons for that are not the subject of this report. Briefly, however, the FDA has clearly indicated that importing drugs that are not subject
to the safety protections mandated by the FDA is illegal. In some cases, these websites have sent drugs to the United States not from Canada, but rather from Turkey and other locations to the US through Barbados or other locations. This is illegal and may mislead Internet users who believe that they will receive drugs from Canada. Despite this, both are approved to advertise with Microsoft, simply by virtue of being affiliated with a licensed Canadian pharmacy.

Notwithstanding the fact that neither canadadrugs.com nor prescriptionpoint.com are operating within the bounds of US federal and state laws in their own right, it is important not to miss the larger point: a rogue Internet pharmacy that is part of the Russian spam and organized crime network GlavMed is displaying advertisements by hijacking the URLs of two approved advertisers. In this case, the mechanism that they have chosen to utilize is to hijack the URLs of two “Canadian” Internet pharmacies, and redirect traffic to the Russian one.

As with an earlier example, it is important to ask whether canadadrugs.com and prescriptionpoint.com were being charged for advertisements that redirect to a rogue Internet pharmacy associated with Russian organized crime. The larger question of why canadian-healthcare-shop.com is being allowed to advertise as canadadrugs.com or prescriptionpoint.com should also be answered, as well as why two websites that operate outside of the bounds of U.S. federal and state laws are allowed to advertise in the first place.
This example describes how the authors were able to successfully receive counterfeit prescription drugs, without a prescription, from India, beginning by clicking on an Internet pharmacy advertisement sponsored by Microsoft.

First, we conducted a search for “generic cialis” on bing.com. Among the top four sponsored results was “affordabledrugs.com.”

The ad for affordabledrugs.com actually links to expressdelivery.biz, a rogue Internet pharmacy.

The authors subsequently clicked on affordabledrugs.com. As shown in the video clip, it redirected us to expressdelivery.biz. The authors make no assumptions as to whether or not this was done with the knowledge or participation of affordabledrugs.com.
Upon arriving at expressdelivery.biz, we simply followed the process for submitting an order for Cialis. At no point was a prescription required. Our order was accepted in a matter of seconds. A few days later, we received the drugs in the mail from India, in a plain, white envelope. The return address was Mumbai, India. There were no instructions, or use precautions, included with the pills.

A few days later, LegitScript contacted Lilly & Co., the manufacturer of Cialis. Lilly agreed to test the drugs we purchased from expressdelivery.biz. Within a week, we had an answer: the so-called “authentic Cialis” that we purchased via a Microsoft-sponsored advertisement was, in fact, counterfeit.

Counterfeit drugs: the “Cialis” sold by expressdelivery.biz, via an advertisement for affordabledrugs.com, was confirmed be counterfeit by Eli Lilly, the manufacturer of authentic Cialis.

As shown above, the so-called Cialis we received was certified by Lilly to be counterfeit. As is sometimes the case, it did contain some amount of tadalfil, the active ingredient in Cialis. However, the purported batch number and expiration date combination were not valid, and near infrared spectroscopy and liquid chromatography both failed, resulting in a forensic finding that the drugs were not authentic Cialis, but were instead counterfeit.

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24 As noted earlier in this report, LegitScript does not have any financial relationship with Eli Lilly. Internet users who have purchased suspected counterfeit drugs online are able to request that the manufacturer test the drugs for authenticity. LegitScript approached Eli Lilly in this capacity.
5. **Rogue Internet Pharmacy Advertisement #5: BestRxCanada.com (video clip)**

In the example below, LegitScript searched for “online pharmacy.” Although all of the search results were for illegally operating Internet pharmacies, we selected one to analyze further: bestrxcanada.com, which advertises “no prior prescription needed.”

![Image of Bing search results](image1)

The Microsoft advertisement for bestrxcanada.com, a no-prescription-required Internet pharmacy linked to GlavMed, a criminal spam organization operating out of Russia.

Clicking on bestrxcanada.com leads directly to that website, which suggests that bestrxcanada.com is an approved advertiser. As with some of the other examples, the website does not require any prescription at all for the sale of prescription drugs: LegitScript was able to submit a test order for several prescription drugs without a prescription. The website further indicates that the drugs come from India — a violation of US law and unsafe generally. It is impossible to tell whether the drugs are real or counterfeit, or if they even come from India.

![Image of BestRxCanada website](image2)

Like the other websites we analyzed, several pieces of evidence strongly indicate that bestrxcanada.com, despite the inclusion of “Canada” in its domain name, has nothing whatsoever to do with Canada, but rather is firmly in the grip of Russian organized crime.

The first indication that this website is linked to Russian organized crime is that the website’s IP address is identical to another website mentioned earlier in this report, k2med.com, which is an affiliate of Russian organization “33 Drugs.” Only eight websites exist on this IP address, and all are Internet pharmacies. It is therefore not

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25 Insert IP address definition.
unreasonable to assume that these eight Internet pharmacies are under the common control of one organization or individual.

Second, the contacts page within bestrxcanada.com directs Internet users to contact the “pharmacy” through support@medspharmacysupport.com. It stands to reason that whomever controls medspharmacysupport.com also controls, or is involved with, bestrxcanada.com. Both websites are currently registered anonymously, but both were registered at the time that bestrxcanada.com began advertising online (late 2008) to an individual in St. Petersburg, Russia (bestrxcanada.com) and a known Russian spammer (medspharmacysupport.com).

As shown below, medspharmacysupport.com was registered to Andrew Smirnov, one of the world’s most notorious spammers, who has registered multiple fake or spam-driven Internet pharmacies. (Multiple variations of this name — Alexy Smirnoff, Adamm Smirnov, Alex Smirnov, et cetera — are used to register spam websites.) The “pharmacies” registered by Mr. Smirnov lack any license or registration, are utilized in spam, and are typically associated with the Russian-based GlavMed affiliate network. The email used to register the website, extorminus@gmail.com, is commonly used for Mr. Smirnov and the variations on his name.

Yet the website’s FAQ section, shown below, claims that the Internet pharmacy uses only “US-licensed pharmacies and US-licensed physicians”. Could this possibly be true?

The claim that bestrxcanada.com uses US-licensed physicians and pharmacies is wholly false. First, as we have seen, bestrxcanada.com says that the drugs come from India, which makes the claim that US-licensed pharmacies are used nonsensical. Second, the website sells products banned or unapproved in the United States, such as Acomplia or...
Cialis “soft tabs”. It is exceedingly improbable that any US-licensed physician would write a prescription for these products, since they are neither FDA-approved and cannot be acquired at a licensed pharmacy. The third and most compelling reason is based on common sense: it strains reason to think that a website registered by spammers based in St. Petersburg, Russia, would actually have any interest in retaining US physicians to write online prescriptions for their website. Rather, the website operators would simply dispense the prescription drugs. After all, if bestrxcanada.com is already breaking the law by importing drugs from India, by engaging in spam-related activities, and by not requiring an in-person physical exam, there is no reason to think that the claim that they utilize US-based physicians is anything but an attempt to appear legitimate and lull Internet users into a false sense of comfort with the website.

Could Microsoft have ascertained ahead of time that bestrxcanada.com is a rogue Internet pharmacy? Yes — in a matter of seconds. Mr. Smirnov’s association with this website can be found quite easily, and LegitScript and KnujOn track his websites regularly. The authors encourage Microsoft to examine how and why bestrxcanada.com, which is not a pharmacy at all, but is a fake, fraudulent Internet pharmacy associated with Russian organized crime and spammers, was granted entry to Microsoft’s online advertising program in the first place.
VI. Rogue Internet Pharmacy Advertisement #6: jutcom.com (video clip)

Microsoft advertiser jutcom.com initially appears to be a mini-search engine, not a vehicle for rogue Internet pharmacies to reach bing.com users.

Our sixth example illustrates a variation on the themes above. A Microsoft-sponsored advertisement that at first glance appears to be a minor search engine is actually nothing more than a facade for rogue Internet pharmacies, and “funnels” Internet users who click on its Microsoft advertisement to foreign, no-prescription-required online pharmacies selling controlled substances.

The home page for jutcom.com, below, initially appears to be a minor search engine, and announces “great deals.”
Yet jutcom.com appears to participate in Microsoft’s advertising program for one primary reason: to redirect Internet users who click on a jutcom.com advertisement to illegally operating Internet pharmacies, several of which sell controlled substances (drugs with the potential for abuse and addiction) without requiring a prescription. Clicking on a jutcom.com ad does not lead to the website’s home page, but rather to a page that lists rogue Internet pharmacies.

From bing.com, the authors conducted a test search for Ambien, a controlled substance sleep medication with the potential for abuse and addiction. Microsoft returned jutcom.com as a sponsored result for Ambien, with the phrase: “Unbeatable prices. You want ambien. Find it here!”

Upon clicking on the Microsoft-sponsored jutcom.com advertisement, we were directed to a page within jutcom.com that listed several no-prescription-required Internet pharmacies (only the first two are visible in the graphic below).
We clicked on the first result, globalrxpharmacy.net, a website that sells numerous controlled substances such as Xanax, Ambien, Meridia and Valium.

GlobalRxPharmacy.net’s FAQs make it apparent that the drugs come from outside of the country — in this case, not merely a violation of the Food, Drug and Cosmetic Act, but also of the Controlled Substances Import and Export Act (CSIEA). The website’s FAQs indicate that “for USA orders, the package has to pass through the local Customs office,” which would not be the case were the orders lawfully shipped from within the United States.

jutcom.com directed us to globalrxpharmacy.net, which sends controlled substance into the US from outside of the country, without a prescription, two violations of US law.

To make matters worse, this website fraudulently claims that it is “…entirely legal...to buy medication from an overseas online pharmacy without a prescription,” as noted in the website’s FAQs, below.

Globalrxpharmacy.net incorrectly informs visitors that it is perfectly legal to order controlled substances from overseas without a prescription.

In short, although GlobalRxPharmacy.net, a rogue Internet pharmacy, is not itself a Microsoft-sponsored advertisement, it piggybacks on jutcom.com in order to participate in the Microsoft advertising process.

Should Microsoft have been able to determine, ahead of time, that advertiser jutcom.com is little more than a front for illegal online pharmacies? Yes — in a matter of seconds.
A simple check of the IP address used by jutcom.com, 216.237.8.41, indicates that there are only two websites on that IP address: jutcom.com and cheappharmacys.com. Both are registered to “Kirk Shafonsky” in Newport Beach, California.

It could have easily been determined that Microsoft-sponsored search result jutcom.com was highly likely to be a front for rogue Internet pharmacies. There is only one other website sharing the same IP address, “cheappharmacys.com”. It is registered to the same individual in California, and overtly promotes Internet pharmacies selling controlled substances without requiring a prescription.

Like jutcom.com, CheapPharmacys.com announces “great deals” on “online pharmacies” and a short review of the Internet pharmacies it lists clearly indicate that no prescription is required. It does not require any great leap of logic to conclude that jutcom.com may be a tool for rogue Internet pharmacies to reach Microsoft users.

What about the argument that jutcom.com is not actually an “Internet pharmacy” (as its home page initially appears to be a mini-search engine) and, as such, should not be subject to any restrictions? This argument ignores reality: jutcom.com has chosen to have its advertisements displayed when a bing.com user searches for restricted prescription drugs. When the Internet user clicks on the jutcom.com ad, it is not redirected to the mini-search engine’s home page, but rather to a list of illegal Internet pharmacies. Whatever else jutcom.com may also be, there is no reasonable way to view it except as a front for a rogue Internet pharmacy network.
VII. **Rogue Internet Pharmacy Advertisement #7: rx-medical-center.com (video clip)**

On February 9, 2009, LegitScript emailed Microsoft to warn the company that **rx-medical-center.com**, a Microsoft-sponsored search result, was a rogue Internet pharmacy that was selling potentially counterfeit drugs without requiring a prescription. In late June 2009, nearly five months later, **rx-medical-center.com** was still a Microsoft-sponsored advertisement. No action had been taken, despite our warning.

To prove our point, in early July 2009, LegitScript ordered Lioresal, a prescription-only muscle relaxant also known as Baclofen, **without a prescription** through **rx-medical-center.com** after clicking on the Microsoft advertisement. The drug arrived from India, and without a prescription, in violation of both US law and Microsoft advertising policy. The following graphics illustrate how easy it was to do this — and how easy it would have been for Microsoft, or an online pharmacy verification service, to know that **rx-medical-center.com** is a rogue Internet pharmacy.

We initially conducted a search for Soma, another prescription muscle relaxant. The website **rx-medical-center.com** was returned as a sponsored search result.

![Image of Bing search results for Soma](image)

**rx-medical-center.com** advertises for Soma, a prescription-only muscle relaxant that is a controlled substance in several states.

Next, we **clicked** on **rx-medical-center.com**. It took us to that website, which lists a variety of prescription drugs by category. We chose Lioresal, a muscle relaxant that acts upon the spinal column and that may cause drowsiness, and carries drug withdrawal symptoms including hallucinations and seizures, as well as a warning against driving while on the drug — solid reasons that the drug should only be used with medical supervision and not without a prescription.
Clicking on “Buy Lioresal” took us to another website, rx4us.com. Upon arriving at that website, we first reviewed the FAQs to see if we would need a prescription, and where the drugs come from. The website was open about not requiring a prescription for prescription drugs, and that the drugs come from outside of the United States.

From within rx-medical-center.com, we selected a cheaper muscle relaxant, Lioresal, and selected “Buy.”

Clicking on “Buy Lioresal” took us to another website, rx4us.com. Upon arriving at that website, we first reviewed the FAQs to see if we would need a prescription, and where the drugs come from. The website was open about not requiring a prescription for prescription drugs, and that the drugs come from outside of the United States.

After clicking “Buy” within rx-medical-center.com, we were redirected to rx4us.com, which says it does not require a prescription for prescription-only Lioresal. The website additionally claims, incorrectly, that this is perfectly legal.

To confirm that this website was selling prescription drugs without requiring a prescription, we engaged the “live chat” feature to inquire as to whether we need a prescription. We were told that we did not need a prescription to place an order for prescription drugs from the website.
Finally, LegitScript was successfully able to place an order for the prescription drug without ever having a prescription. We soon received shipment confirmation, below.
Should Microsoft have been able to determine ahead of time that rx-medical-center.com is an illegal Internet pharmacy website? Yes — in a matter of seconds.

First, it would have taken ten seconds to click on “Buy” for any particular drug, and be redirected to rx4us.com, which is clear, on its FAQs, that it does not require a prescription and mails drugs from overseas.

Second, there are 20 websites, including rx-medical-center.com, that share the same IP address (216.69.164.191). Of these, ten are Internet pharmacy websites, at least some of which similarly do not comply with the law. It stands to reason that with half of the 20 websites on a single IP address acting as Internet pharmacies, they may share some degree of common control.

Third, the website is registered anonymously. Private registration may be a valuable service for individuals (not businesses) that own a private website — say, with a family-oriented or other personal photo album or blog. But a legitimate pharmacy has no conceivable reason to hide its identity or actual location. After all, pharmacy and pharmacist licenses are a matter of public record, without exception. The NABP’s standards require pharmacy websites to maintain a similar degree of transparency.
VIII. Rogue Internet Pharmacy Advertisement #8: toppharmacymulti.com (video clip)

ApexOnlinePharmacy.com, a licensed pharmacy in Washington, D.C., displays sponsored advertisements for several drugs, including tramadol, a prescription pain reliever. Clicking on an advertisement for apexonlinepharmacy.com instead redirects Internet users to toppharmacymulti.com, a rogue Internet pharmacy that is part of the Russian GlavMed affiliate pharmacy network, is registered to a Russian address, does not require a prescription, sells counterfeit or unapproved drugs, and is operated from an IP address in Turkey. It is important to emphasize that the only way to arrive at this particular rogue Internet pharmacy via apexonlinepharmacy.com is to click on a Microsoft advertisement for apexonlinepharmacy.com. Simply visiting apexonlinepharmacy.com does not, as far as the authors can tell, redirect to toppharmacymulti.com.

The authors emphasize that we have no reason to believe that apexonlinepharmacy.com is complicit in the redirection of its website to this rogue Internet pharmacy. However, it is indisputably true, as shown by this video, that clicking an ad that appears to be placed by this pharmacy first directs the Internet user to apexonlinepharmacy.com, and then away from that website to an illegal one. In fact, the authors do not know whether apexonlinepharmacy.com placed this ad, or whether it was actually placed by toppharmacymulti.com. In short, it is entirely possible that apexonlinepharmacy.com is a victim in this case, and not at all responsible for the illicit redirection from its website. However, this advertisement has illicitly redirected to toppharmacymulti.com for at least a couple of months.

In this case, the danger is that an unwitting
Internet user clicks on apexonlinepharmacy.com, and inadvertently ends up ordering a prescription drug from an Internet pharmacy that does not require a prescription, operates from overseas, and sells potentially counterfeit drugs, believing the entire time that they are ordering from a licensed US-based pharmacy. In this case, the damage is not merely to the Internet user, but also to apexonlinepharmacy.com’s reputation — a security gap in Microsoft’s advertising system due to a lack of ongoing monitoring of Internet pharmacy websites.

toppmatharmacymulti.com, a Russian-controlled no-prescription-required fake Internet pharmacy. This rogue Internet pharmacy participates in Microsoft’s advertising program by hijacking a page within apexonlinepharmacy.com, a licensed US pharmacy based in Washington, D.C.

As noted previously in this report, GlavMed websites such as (and identical in design to) toppmatharmacymulti.com are responsible for millions upon millions of spam emails. Toppharmacymulti.com does not require a prescription, sells potentially counterfeit drugs, and is an illegal, fraudulent Internet pharmacy.
IX. **Rogue Internet Pharmacy Advertisement #9: GenericsHotSale.com** *(video clip)*

In this rogue Internet pharmacy advertisement example, the authors conducted a search for “generic meds”. One of the bing-sponsored search results returned was for generichotsale.com, another website controlled by a Russian criminal network.

![Image of Bing search results for generichotsale.com](image.png)

GenericsHotSale.com advertises on bing.com for “generic meds.”

After clicking on generichotsale.com, we were taken directly to that website. No redirection to another website occurred, suggesting that generichotsale.com has an advertising account with Microsoft.

Generichotsale.com is an “affiliate” of the organization that goes by the name “33 Drugs,” which operates over 100 websites that do not comply with the law, do not require a prescription for prescription drugs, and sell potentially counterfeit drugs from unapproved locations. In the graphic below, the website clearly lists 33 Drugs’ phone number, 1-866-33-DRUGS, and at the bottom of the website, announces its affiliation with the 33 Drugs network. (This is the same network as the one cited in Example #2.)

![Image of GenericsHotSale.com website](image2.png)

There is an additional significant fact: the URL bar, after clicking on Microsoft’s ad for generichotsale.com, includes “/c?ms” (without the quotes) after the URL. This is most likely in order for generichotsale.com to track how often visitors are arriving after having clicked on a Microsoft advertisement.

Could it have been ascertained ahead of time that generichotsale.com is a rogue, fake Internet pharmacy? Yes — in a matter of seconds. First, the website says is sends drugs from outside of the US, which violates US law and Microsoft’s stated policy.
GenericsHotSale.com, which openly advertises on bing.com for “generic meds,” is an affiliate of Russian criminal Internet pharmacy network 33 Drugs, and openly uses its phone number on its home page.

Second, it is critically important to investigate an Internet pharmacy’s affiliations. The 33 Drugs rogue Internet pharmacy network is well-known to organizations that track Internet pharmacies. Any affiliation with 33 Drugs should be a sure-fire, instant disqualifier.

Third, as with websites previously mentioned, the website sells prescription drugs that are either banned or that are not even approved as prescription drugs, such as Acomplia or “Female Viagra.”

Fourth, if the above factors were not sufficient, a simple check of which websites share this IP address should have been sufficient to determine that generichotsale.com is a rogue Internet pharmacy. There are only four other websites on the same IP address, and all are rogue Internet pharmacies that do not require a prescription, and are affiliated with Russian organized crime networks.
X. Rogue Internet Pharmacy advertisement #10: rx-line.com (video clip)

Our tenth rogue Internet pharmacy advertisement is rx-line.com, a rogue Internet pharmacy that does not require a prescription, sends drugs from overseas, is located in both India and Bucharest, and inexplicably is allowed to advertise an illegal prescription drug: “generic viagra.”

Our search for “generic meds” on bing.com returned several results, including rx-line.com. Clicking on this website led directly to that website without any redirection, suggesting that rx-line.com has an advertising account with Microsoft.

There is no legal generic version of Viagra in the United States, Canada or most other countries because of patent protection. Whether one agrees with those patent protections is not the point; rather, the point is that the drugs are therefore outside of the regulatory structure imposed by the FDA to ensure the safety of prescription drugs.

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How do we know that rx-line.com violates both US law and Microsoft’s stated policy? First, it is open about the fact that it is located in Calcutta, India, and its FAQs indicate that it ships drugs into the US from outside of the country.

The FAQs additionally make clear that no prescription is required. Although the website claims that a “licensed physician” will determine whether a prescription is needed, this is probably a fraudulent claim, and besides, would be unlawful even if true: the law, not individual physicians, determines whether a drug requires a prescription or not.

Additional information about rx-line.com indicates

Rogue Internet pharmacies often fraudulently claim that an “overseas licensed physician” will review an online questionnaire and write an Internet prescription. These organizations rarely employ a physician at all.
that the website is registered to an individual in Bangalore, India. The IP address itself, at the time that this report was written, was located in Bucharest, Romania.
Online advertising programs are at the heart of search engines’ long-term business strategies. For any business that seeks to interact with potential customers online, the ability to purchase “visibility” — the display of the company’s website on the “instant” (usually first) page of search results — from a search engine is an integral part of reaching customers. In a sense, online advertising programs are the revenue engine that drives much of the Internet forward.

In the long term, trust is similarly at the core of successful sponsored search result programs. If Internet users can be confident that sponsored search results are legitimate, it benefits the Internet user (in being able to quickly and confidently select a relevant search result that is trustworthy), the advertiser (because Internet users are more likely to click on a sponsored search result if they perceive it to be trustworthy) and the search engine (which relies upon advertising revenue). If this trust breaks down, so inevitably will the search engine’s online advertising program. Permitting participation by deceptive or illegal advertisers may increase revenue in the short-to-medium term. In the long term, it destroys Internet users’ trust and is not a sustainable business strategy.

These statements are true for all advertising, but have particular import in the area of prescription drugs. A fraudulent advertisement for bicycles or books may be irritating or even criminal, but usually does not carry the potential for the addiction or loss of life that can result from counterfeit medicines or no-prescription-required websites selling addictive drugs. Unlike books or bicycles, medicines are key to our health. They can be expensive, and some Internet users -- particularly those with a genuine and possibly urgent need for safe and effective prescription drugs, but without the money to pay for them -- may be particularly susceptible to fraud or the sale of substandard drugs. Websites selling fake or unapproved pharmaceuticals may fund other illicit, or even dangerous, activities.

Microsoft’s “sponsorship” of an Internet pharmacy as a search result may be seen as a stamp of approval; some Internet users will consequently assume the Internet pharmacy to be safe and legitimate. Yet the reality is far different. Just 10.3% of the sponsored search results for websites selling prescription drugs that we reviewed were either legitimate, or even potentially legitimate. Nearly nine of ten websites were operating unlawfully. These were not mere technical violations. Rather, many were tied to Russian organizations that sell counterfeit drugs, expired drugs, drugs with no requirement of a prescription, or simply engage in fraudulent credit card charges.

Equally troubling are the implications for Microsoft’s paying advertisers. As shown in this report, in at least four cases that we observed, an advertisement that appeared to have been placed by a licensed pharmacy redirected to a unrelated website for a rogue Internet pharmacy. This implies gaps in the security, or at least transparency, of Microsoft’s online advertising program. Similarly, allowing rogue Internet pharmacies, some of which have higher profit margins due to the sale of counterfeit drugs and can consequently spend more money on advertising, to participate in Microsoft’s online advertising program may artificially boost the
It is incumbent upon Microsoft to ensure that its stated policies, and the implementation of those policies, are brought fully into compliance with the laws, regulations, and standards of safety that govern the practice of medicine and pharmacy. It is neither responsible nor effective for Microsoft to pick and choose which laws and regulations it wants its prescription drug advertisers to adhere to: after all, if an Internet pharmacy is willing to circumvent one type of law (e.g., the restriction on importing unapproved prescription drugs), it is perfectly reasonable to be concerned that they may be willing to circumvent other laws as well (e.g., requiring a valid prescription for the sale of prescription drugs). Until and unless Microsoft fully implements policies requiring its prescription drug advertisers to adhere to existing federal and state laws and regulations, clicking on Microsoft’s sponsored search results for prescription drugs and Internet pharmacies will continue to put bing.com’s users and its advertisers at risk.

The good news is, restoring the integrity of Microsoft’s prescription drug and health care advertising space is an achievable goal. In every case referenced above, it was immediately apparent that the Internet pharmacy was acting in clear and unambiguous violation of US federal and state laws and threatening the security and integrity of Microsoft’s online advertising program. These problems can easily be fixed through competent verification and continued monitoring. However, as a systemic problem, it requires a systemic, not piecemeal, solution.

As an increasing number of Internet users turn to the Internet for information about personal health care, Microsoft’s decision engine, bing.com, may still have the potential to capture additional market share, and become a widely trusted resource for Internet users. However, that is unlikely to happen unless the problems described in this report are addressed.
Appendix A: Establishing the Link to Russian Organized Crime and Terrorism

This report ties some rogue Internet pharmacies sponsored by Microsoft to foreign (mainly Russian, Eastern European and Chinese) organized criminal networks that are thought to fund other illicit activities, including, in some cases, terrorism. Sometimes, when the links between drugs and terrorism have been alleged in other contexts, such as arguing that networks selling “street drugs” like heroin and marijuana fund (directly or indirectly) terrorist organizations, the response has been to accuse the speakers of engaging in hyperbole and fear mongering. The purpose of this Appendix is to be as precise as possible, to limit the scope of these statements within the proper context, and to back our statements up -- insofar as they go -- with footnotes and independent sources.

First, as a preliminary matter, the authors emphasize that the primary purpose of this report is not to analyze the relationship between rogue Internet pharmacies and the funding of terror and warfare. That is an important topic, but one that deserves its own analysis. For the purposes of this report, it is important to note that the authors do not argue, and readers should not assume, that websites that we designate as “rogue Internet pharmacies” are, by reason of that definition alone, automatically engaged in supporting terrorism. Many rogue Internet pharmacies are nothing more than petty drug dealers with a website, and the prescription drugs they sell are, in some cases, from legitimate sources (but sold without a prescription), or from illicit sources that are not necessarily connected to terrorist organizations in any way.

However, it is also true that a variety of experts, and even the US government, have already established the link between some rogue Internet pharmacies and the funding of terror and warfare. For example, one industry expert and former federal drug agent recently noted that “...organized crime...and terrorist organizations such as Al Qaeda and Hezbollah counterfeit prescription drugs, because the profits far outweigh risks.”27 Recent federal investigations, indictments and convictions have firmly linked the counterfeiting of prescription drugs to Middle Eastern terrorist organizations.28 And other reports have noted that much of this activity is facilitated by “Russian mafia” groups — more accurately described as organized crime networks mostly based in Russia and Eastern Europe — and Chinese triads, both of which often provide the Internet architecture and financial assistance or money laundering for illicit pharmaceutical operations.29 Where the authors have shown that some criminal Internet pharmacies sponsored by Microsoft linked to Russian and Chinese organizations, it is most certainly reasonable to be concerned that these networks may use the proceeds of their illicit prescription drug sales —

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27 Aaron Graham, former Drug Enforcement Administration and Food and Drug Administration investigator, at the time of the quote working for Purdue Pharma, quoted in Hospitals & Health Networks, “Pressure Points: What’s Stressing Your Pharma”, Eric Apalategui, accessible at: http://www.hhnmag.com/hhnmag_app/jsp/articledisplay.jsp?dcrpath=HHNMAG/Article/data/05MAY2007/0705HHN_FEA_Pharma&domain=HHNMAG.


some of which we have proven originate with clicks via Microsoft advertisements — to fund other sorts of activity.

To approach the question from another angle, this report provides evidence that so-called US or Canadian Internet pharmacies sponsored by Microsoft violate the law, and in many cases, are registered to individuals that provided addresses in Russia. But are they “Russian (or Eastern European, or Chinese) organized crime?” Yes. To explain our use of that description, we first turn to a definition of organized crime.

The US Federal Bureau of Investigation defines “organized crime” as “any group having some manner of formalized structure and whose primary objective is to obtain money through illegal activities.” This definition fits the structure of the organizations that control most of the Microsoft-sponsored advertisements we reviewed. Below, we deconstruct that definition as it applies to those specific advertisers.

GlavMed network

Of the ten examples we reviewed, canadian-healthcare-shop.com, bestrxcanada.com, and topppharmacymulti.com are affiliates of the GlavMed criminal network, an affiliate pharmacy network with tens of thousands of illegal Internet pharmacies. We are confident in classifying the websites as GlavMed affiliates because the websites share the phone number, design, drug list, address and other unique information utilized only by websites within this network. LegitScript and KnujOn have received complaints about thousands upon thousands of Glavmed websites engaged in illegal pharmaceutical sales and/or spam, and are familiar with websites in the network, and actively track and classify those websites on a daily basis.

How do we know GlavMed is Russian? The website GlavForum.ru (the “.ru” indicates Russia), which is entirely in Russian, is a treasure trove of information about the GlavMed network. Translated pages, mainly from Russian, provide rich and certain information that some of the primary individuals who control GlavMed are in or are from Russia or other areas in Eastern Europe.

To provide one concrete example, glavmed.com, which is the membership-only website that provides entry into and controls websites within the GlavMed affiliate world, was initially registered by “Andrey Smirnov” — the very same person who initially registered bestrxcanada.com, one of the rogue Internet pharmacy examples analyzed in this report. It does not matter whether Mr. Smirnov is a real individual or simply an alias: the point is that GlavMed registers fake Internet pharmacies under this name and variations of it. Current or past Whols registration under this name should be either an automatic disqualifier, or at least a red flag, for approval as a Microsoft-sponsored advertisers. The address and phone number are also identical. Keeping in mind that only individuals who operate GlavMed’s Internet pharmacies are allowed

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30 http://www.fbi.gov/hq/cid/orgcrime/glossary.htm
to enter the GlavMed website, according to Alexa, 55% of visitors to Glavmed.com are from Russia. Another 15% are from Kazakhstan, with another 11% from Belarus and 10% from the Ukraine. Again, glavmed.com is not merely an Internet pharmacy or a public forum: it is the “control dashboard” for thousands upon thousands of rogue Internet pharmacies in the GlavMed network.

Turning to the definition of organized crime, GlavMed is properly understood as having a “formalized structure.” If an individual wishes to “own their own Internet pharmacy,” they must sign up to become a GlavMed affiliate. This gives the Internet pharmacy owner certain rights and responsibilities within the GlavMed network.

The other requirement for the definition of “organized crime” is that the intent of the formalized structure is financial. This undoubtedly exists: operating a GlavMed Internet pharmacy gives the owner the right to receive a percentage of the profits from sales originating from his or her website, and the affiliate structure results in a proliferation of thousands of GlavMed Internet pharmacies that direct revenue to the central organization. GlavMed, and its affiliates, therefore meet the definition of organized crime. Being that this formal structure is largely based in Russia and that Russian and Eastern Europeans appear to control it, we are comfortable referring to GlavMed as Russian or Eastern European organized crime. Therefore, the Microsoft advertisers that are part of the GlavMed network are also part of a Russian organized crime network. Consequently, it is accurate to say that Microsoft is sponsoring advertisements that have been placed by website owners affiliated with foreign organized crime networks.

33 Drugs network

The same is true for k2med.com and genericshotsale.com, two other rogue Internet pharmacies sponsored by Microsoft. Both are indisputably part of the 33 Drugs network. We know this not only because of website design, content, drug lists and registrations, but because any orders placed with these websites redirect order and payment information to secure.33drugs.com.

There are two primary “anchor sites” within the 33 Drugs network: 33drugs.com and drugrevenue.com. The latter is the members-only “control dashboard” that is accessed by the individuals who control websites within the 33 Drugs network. Like GlavMed, 51% of the visitors to the members-only drugrevenue.com site hail from Russia (a plurality of those from St. Petersburg), with an additional 10% from Uzbekistan, and 9% from the Ukraine. Because control of these 33 Drugs Internet pharmacies emanates from drugrevenue.com, it is difficult not to conclude that the network is therefore controlled by individuals in Russian and Eastern Europe. Similarly, forums monitored by the authors establish this as well.

This is, of course, consistent with the registration for these two websites, as discussed in the body of this report. And like GlavMed, 33 Drugs has an organized affiliate structure and exists for financial reasons. In selling prescription drugs without a prescription, as well as unapproved and potentially counterfeit drugs, there is no doubt that it is illegal in nature. The organization’s
formalized structure, Russian control, and profit motive make it accurately described as “Russian organized crime.”

**Rx-Commission, MedStore.biz, other networks**

Most of the five other websites analyzed in this report similarly meet the definition of organized crime, although the connection to a specific country, like Russia, are hazier or do not exist. choice-rx.com, as an affiliate of the illegal medstore.biz network, meets the definition of organized crime due to its place within a formalized structure; the sponsorship of medstore.biz by Russian registrar Regtime suggests a Russian component, although that is not conclusive.

rx-line.com, similarly, is part of the gold-rx.com rogue Internet pharmacy network, and as such, exists within a formalized structure. As with the earlier examples, part of that formalized structure involves affiliate payment agreements, and is thus financial in nature. Although registered in India, the IP address is actually in Bucharest, Romania, as is the location of gold-rx.com’s website. Again, rx-line.com is part of organized crime: there is an Eastern European connection, but it is unclear whether the business primarily operates from Calcutta, India or Romania.

expressdelivery.biz, the advertiser that we ordered a Cialis counterfeit drug from, is likewise part of a group of Internet pharmacies that go by the name Rx-Corp.biz. We know this because expressdelivery.biz announces itself as an affiliate of Rx-Corp.biz directly on its website, and refers orders to edmall55.com, which is used by Rx-Corp.biz for that purpose. Rx-Corp.biz, like others discussed above, is currently registered anonymously, but just a few months ago — during which time it was recruiting affiliates like expressdelivery.biz — it was registered by an individual in Russia. Again, the network of websites that process orders on behalf of Rx-Corp.biz are an affiliate network operating unlawfully that, like the others above, meet the definition of organized crime.

rx-medical-center.com, the website that we ordered and received Lioresal without a prescription from, also operates unlawfully, and is affiliated with more than one Internet pharmacy; each is part of an affiliate network that fails to adhere to US federal and state laws. jutcom.com, while initially appearing to act as mini-search engine, probably has some sort of a financial relationship with the illegal Internet pharmacies they list. The geographic locations of these rogue Internet pharmacy networks are more complex (and in some cases, more murky). However, location notwithstanding, these websites engage in illegal activity by serving as closed search engines for rogue Internet pharmacies.

In conclusion, the authors recognize that describing most the rogue Internet pharmacies identified in this report as linked to Russian and Eastern European organized crime, and noting that some of those fund terrorism, are bold claims. Yet there is no question but that the businesses that operate these websites meet the definition of organized crime. Experts other than LegitScript and KnujOn have already established that some of these criminal networks use their profits to
fund other illicit activity, including terrorism. The authors thus stand by our assessment that Microsoft-sponsored Internet pharmacy advertisers may well be, in some cases, funding illegal, transnational and dangerous activity that goes well beyond the mere illicit sale of pharmaceutical products.
Appendix B: Overall Observed Legitimacy of Microsoft-sponsored rogue Internet pharmacies

Legitimate or Potentially Legitimate: 10.3%
Operating outside of the bounds of US law: 89.7%

Introduction

There are countless possible searches for prescription drugs. The authors do not suggest that we conducted all of these searches, or that the searches we conducted provide a scientifically representative sample. Rather, we simply chose a selection of popular prescription drugs and conducted variations on search terms, such as “buy viagra,” “generic cialis” or “cheap tramadol.” Consequently, the legitimacy ratio of the sponsored search results may or may not be representative of all of the possible sponsored search results for prescription drugs.

Moreover, some prescription drug searches returned zero or very infrequent sponsored results. For example, a search for “Alimta,” a prescription drug used in cancer treatment, typically returns either no Microsoft-sponsored advertisements, or just one (an informational website). These types of searches were excluded

Methodology

Our selection of the search terms was not completely random: the authors’ experience with Internet pharmacy crime and fraud guided, in a general sense, the types of searches we performed. Erectile dysfunction drugs such as Viagra, Cialis and Levitra are all the subject of millions of spam emails, counterfeit drug operations, and intellectual property violations. Similarly, generic medicines are often legitimate and sold legally; but in cases where a drug remains under patent protection and no generic equivalent is authorized, the likelihood that a website offering an unapproved generic version of that drug is also engaged in other illicit activity increases dramatically. Similarly, prescription drugs with abuse potential are commonly sought for purchase without a prescription.

Although we performed each search multiple times, we did not wait until we received a result that had an unusually high number of illicit sponsored search results as compared to the others. Rather, we simply took what we found. Indeed, the sponsored search results were largely consistent when the same keywords were used.

Inclusions and Exclusions

If, among sponsored search results, a website appeared that did not facilitate the sale of prescription drugs, that was excluded from our analysis. For example, soma250.com is an informational website returned as an advertisement following a search for Soma, but does not offer to sell the drug. Some other websites sell so-called “herbal” medicines. These substances are not advertised as prescription drugs, and these websites were largely excluded from our
analysis. Similarly, amazon.com returned as a sponsored search result for some drugs, but amazon.com does not attempt to facilitate sales of the drug. As such, these sort of search results were not included in our analysis, which analyzed the legitimacy of sponsored search results leading to websites that directly sell, or offer to facilitate the sale of, prescription drugs.

**Results**

As shown below, just under 11%, or seven out of 69, of all sponsored search results among ten searches were for either legitimate or potentially legitimate Internet pharmacies that adhere to US federal and state laws.
Bing Search #1: Generic Cialis (potentially legitimate: 0/7; two results excluded)
In our search for “generic cialis,” none of the websites that actually facilitate sales of prescription drugs were legitimate. Several of the sponsored search results below, including click.askpanda.com, redirect to websites controlled by Russian organized criminal organizations. Two websites were excluded from our analysis: viswiss.com, which offers non-prescription (herbal) products, and impotenceguide.info, an informational site.

Bing Search #2: Buy Levitra (potentially legitimate: 0/6; three results excluded)
In conducting a search for “buy levitra,” six Microsoft advertisements were for Internet pharmacies operating outside of the bounds of US federal and state laws and pharmacy practice, as well as Microsoft’s own standards. The authors excluded three websites, viswiss.com, mensblogtalk.com, and enhancementadvice.com.
Bing Search #3: Buy Tramadol (legitimate: 1/8; one result excluded)

In our search for tramadol, only one of the eight sponsored search results that provided prescription drugs was potentially legitimate (discreetuspharma.com). (Amazon.com, which was returned as a search result, is not an online pharmacy and was excluded from our calculations and review.) We note that apexonlinepharmacy.com itself may be legitimate, but in the example below, redirected to a rogue Internet pharmacy (as shown in an earlier video clip).

Bing Search #4: Generic Meds (legitimate: 1/6, two results excluded)

In our bing search for “generic meds,” eight sponsored search results were returned. Target.com is a legitimate Internet pharmacy website. We excluded lowpriceshopper.com, which did not have relevant content. NexTag.com included illicit online pharmacies in its search results and was counted as an illegal result.
Bing Search #5: Ambien (potentially legitimate: 1/5).
In our search for Ambien on bing.com, seven online ads were returned. Four were verified as acting outside of the bounds of US federal and state laws and pharmacy practices. AmbienCR.com is a legitimate informational website; it and naturalambien.com, a herbal website, were excluded. We adopt a neutral position on phentermineny.com for reasons outside of the scope of this report (for calculation purposes only, it is included as potentially legitimate).

Bing Search #6: Online Pharmacy (legitimate: 1/9)
In our search for online pharmacy, only one result, safeway.com/pharmacy, is a legitimate Internet pharmacy that adheres to US federal and state laws and pharmacy practices as described by the National Association of Boards of Pharmacy.
Bing Search #7: Cheap Soma (legitimate: 1/8, one excluded)
Soma (carisoprodol) is an addictive prescription drug with the potential for abuse. Soma250.com, an informational website, was excluded. Only apexonlinepharmacy.com, which did not redirect to an illicit website in this case, is a potentially legitimate Internet pharmacy.

Bing Search #8: Pain Meds (potentially legitimate: 2/5; three excluded)
Of the search results below, three operate outside of the bounds of US law and pharmacy practice. Of the remainder, LegitScript has verified the legitimacy of walmart.com, and has a neutral recommendation on discreetuspharma.com. Pronto.com, smarter.com and amazon.com are not online pharmacies and were excluded from our calculations.
Bing Search #9: Valtrex (legitimate: 0/7, one excluded)
Valtrex is a prescription-only, herpes medication. Of the search results below, valtrex.com, an informational website about the drug itself, was excluded. Seven are for Internet pharmacies that operate outside of the bounds of US law.

Bing Search #10: Buy Viagra (potentially legitimate: 0/7, two excluded)
Viagra is a popular, prescription-only medication. In the sponsored search results below, the informational website viagra.com and viswiss.com were excluded. DirectPharmacyUSA.com, is an affiliate of a pharmacy that has a pharmacy license but has shipped to states where it does not maintain an active license. As such, the authors have not ranked this website as legitimate.