Accomplice or Innocent?  
A Search Engine in Medical Scams

Teaching Case

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Abstract

This teaching case illustrates the complexities in online marketing, especially in health care online marketing. It presents the challenges patients face when seeking information for treatments, and how patients may be flooded with information of poor quality, even scams. We examines the role of the search engine giant Baidu. The case discusses Baidu’s revenue generation models, the keywords bidding systems, recent disputes between Baidu and a private healthcare association, and regulations on advertisements.

This case illustrates how the search engine is involved in medical scams. We discuss the following aspects: 1) The business model of an IT search engine company 2) The trade-offs involved when an IT company heavily relies on marketing incomes for revenue growths 3) The needs to regulate online marketing.

Keywords

Search engine, online marketing, keywords bidding, medical scams, health care, regulations.

Prologue

Starting from a Search

Sarah is a researcher in IT, she investigates impacts of technology on consumers. She is from China and since 2014 she works in Finland. On an early spring morning in 2015, she received a message from her mom in mainland China. Mom told her that Dad suddenly had herpes zoster. Mom mentioned that doctors recommended ozone therapy with self blood transfusion.

“Ozone therapy with self blood transfusion? It sounds bizarre.” Sarah thought. “Maybe this is a new treatment?” Sarah started searching for “ozone therapy with self blood transfusion” (Xiu Yang Zi Ti Xue Liao Fa) in her native language mandarin Chinese on Baidu.com, the search engine which occupies the highest market share in China. Immediately, more than 27,300 results were returned. In addition to third party web pages such as links to hospitals and links to companies selling ozone therapy equipment, there were also the results include Baidu encyclopedia entry, Q&A platforms on Baidu Zhidao.

It might be good to start with the Baidu encyclopedia page to have some generous idea about this therapy. The information on the corresponding Baidu encyclopedia page seems to be quite rich and professional. It discusses scope of treatments and pharmacological effects. The article uses many medical related terms, such as glucose, uric acid, bilirubin, lactic, pyruvic, etc. It mentioned according to Dr. Wolff, different therapeutic doses shall be applied to different diseases, for example, Arthritis 6.6 mg ozone, Arteriosclerosis 0.9 mg ozone, Parkinson’s disease 1.8 mg ozone, Acute hepatitis 9.8 mg ozone, Chronic hepatitis 1.9 mg ozone … On Baidu Q & A platform (Baidu Zhidao), for questions such as “who knows about Ozone therapy? Is that effective?” Most of the answers are positive; people seem to confirm that Ozone therapy is helpful.

But Sarah noted, the Baidu encyclopedia article about ozone therapy does not include any reference. Some positive answers were provided by anonymous contributors, i.e. they did not even provide their Baidu id. The instinct of a researcher tells Sarah, this is quite suspicious.

An idea suddenly came to her mind. Why not search for the term in English? Sarah started with the Wikipedia page on Ozone therapy. Just after finish reading the first paragraph, she was worried. “Various
methods have been suggested on the method of introducing the ozone into the body, and the purported benefits of this therapy include the treatment of various diseases including cancer, AIDS, multiple sclerosis, among others. The American Cancer Society has concluded there is not enough evidence to support the use of this treatment in any disease.”

She checked the American Cancer Society’s link, and the page says “Available scientific evidence does not support claims that putting oxygen-releasing chemicals into a person’s body is effective in treating cancer. Some types of oxygen treatment may even be dangerous; there have been reports of serious illness and death from hydrogen peroxide. Ozone is a strong oxidant that can damage cells, and has also caused deaths.”

Sarah then googled herpes zoster, and noted that it is a disease caused by varicella zoster virus, and the patient has painful skin rash. The rash usually heals in two or four weeks. The Wikipedia page about herpes zoster did not mention anything about ozone or self blood transfusion.

After the search, Sarah’s heart felt heavy. She immediately called mom, and warned them about the ozone therapy. “It is very lucky that I understand the importance of valid references and I can search for English references through Google. But how about patients in China? How about those solely rely on Baidu?”

**A Multimillion Medical Scam in China**

Sarah thought about her good friend Han Zhao, a journalist in a leading news media in China. Sarah remembered Han recently did an investigation about a multimillion medical scam about treatment of various psychiatric diseases such as depression. The news media is famous for deep investigative reporting, and Han’s investigation was published as a cover report on the magazine on Sep 23, 2014.

Previously Sarah read it and had some impression that search engine Baidu was involved in the medical scam. Now, after her own searching experience, Sarah was eager to read the report again.

In this medical scam, hospitals claimed that they can use Encephalo Fluctuo Graph (EFG) test to detect lack of specific types of neurotransmitters, and can cater treatment for various psychiatric diseases such as depression.

In fact, lack of neurotransmitters is only one possible reason for psychiatric diseases, and there is not enough scientific evidence supporting the results of the so called EFG test. In the news report, it says “Search for the keywords “Beijing Depression”, and among the search results, those listed in the beginning, are all hospitals with the EFG technique. Journalist went to the Winning Gate Hospital, and the patients interviewed, without exception, heard about this hospital through searching on Baidu.”

Sarah was really shocked! She contacted Han, and they had a talk. Sarah asked Han, “As I read in your news report, do you mean that the patients went to the Winning Gate Hospital were misled by the Baidu search results?”

“I think so.” Han said. “Patients or their relatives searched about their diseases on Baidu, and this hospital was ranked in the beginning. They thus went here. For example, Lei, he is a boy who could have studied in university. His father noted Lei had some psychic problems in late 2012. He searched online and was led to the Winning Gate Hospital. They spent around RMB 200,000 (around US$ 32,240) at the hospital during January to July 2013. Lei’s problem became more and more serious, he tried to commit suicide, and violently hurt his parents. A 19 year old girl, Wei, the only daughter of a family, was also a patient at the Winning Gate Hospital. The family was also directed to that hospital through Baidu Search. Her situation also got worsened. She completely lost control of her mind, became manic depressive, and even beat up on her parents.”

Why did such things happen? Sarah felt necessary to understand how search engines work.

**How does Search Engine Work**

Searching through search engines is nowadays very common. It involves the following information flows: 1) indexing, information gathering by the search engine; 2) queries, a user inputs a query at the search engine to ask for information; 3) results, the search engine returns results to the user, 4) content, the user accesses the content from the content provider (Grimmelmann 2007; Croft et al. 2009)
Indexing: Search engines are actively collecting information from the web. Software programs, such as crawler, spiders, automatically request web pages and store the information.

Queries: A search query indicates a user's purpose. It typically contains of words and phrases. Search engines process the query and decide the criteria to retrieve information.

Results: Search engines delivers results according the query. Yet it is challenging to deliver results which best met the user's question. There are various indexes to rank the results. For example, PageRank, is a query independent index to rank the results. PageRank is used by Google Search (Langville and Meyer 2012), and is one way of calculating the importance of a website, based on how many times the specific website is cited by other websites.

Content: After processing the results provided the search engine, the user then accesses content from the content provider.

The above process can be iterative, as a user can refine her queries to getter better results. The process is illustrated in Figure 1 (adapted from Grimmelmann 2007) below.

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**Figure 1. How does Search Engine Work, adapted from Grimmelmann (2007)**

Content providers can try to influence the ranking through various methods. Some sites which are only looking for a quick financial return may adopt black hat search engine optimization (SEO). The site may create many pages pointing to each other, to trick search engines to consider the site is referred to by other authoritative sources, and is a popular source of information (Grimmelmann 2007). Such practice is an unethical SEO.

Search engines can also make searching a profitable business, through advertising programs. For a content provider, being placed in the top of search results may attract more clicks, and clicks may convert into sales (Ghose and Yang 2009, Yang and Ghose 2010). Once a content provider joins such advertising programs, a search engine may manipulate the ranking of search results and put the specific content provider at the top of the results. This method is adopted by Baidu, the search engine in the previous scenarios.

**Baidu – the Leading Search Engine in China**

Baidu Inc. (NASDAQ: BIDU) was founded by Ronbin Li in 2000. Baidu offers many information services, including search engine (Baidu.com), collaboratively-built encyclopedia (Baidu Baike, i.e. Baidu Encyclopedia), Q & A platform (Baidu Zhidao, i.e. Baidu Knows). According to alexa.com, the traffic rank to Baidu.com is ranked the first in China, and the fourth globally, as of April 2015.

Baidu went public on NASDAQ on August 5, 2005. Baidu debuted at US$ 27, as of Jan 2 2015 its stock is US$ 223.08. In December 2007, it became the first Chinese company included in the NASDAQ-100 index. In fiscal year 2014, it has a total revenue of US$ 7.9 billion (RMB49 billion).

**Baidu's Revenue Generation – “Almost All from Online Marketing”**

The major income of Baidu is from online marketing. Since Baidu is listed on NASDAQ, we can find its Form 20-F to the United States Securities and Exchange Commission. Foreign private issuers need to file the Form 20-F to provide information. In Baidu’s Form 20-F for the fiscal year ended December 31, 2014, under the Revenue Generation section, it says:
We (Baidu) derive almost all of our revenues from online marketing services, which accounted for approximately 99.7%, 99.6% and 98.9% of our total revenues in 2012, 2013 and 2014, respectively. A majority of our revenues from online marketing services were derived from our P4P services (P4P stands for pay for placement). Our P4P platform is an online marketplace that introduces internet search users to customers who pay us a fee based on click-throughs for priority placement of their links in the search results. We recognize P4P revenues when a user clicks on a customer’s link in the search results, based on the amount that the customer has agreed to pay for each click-through.

In 2015, Baidu’s online marketing revenue continues to grow. According to Baidu’s first quarter 2015 results announced on April 29, 2015:

Table 1. Revenue of Baidu 2010 – 2014, from Form 20-F

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>Total</td>
<td>7,915,074</td>
<td>14,500,786</td>
<td>22,306,026</td>
<td>31,943,924</td>
<td>7,905,799</td>
</tr>
</tbody>
</table>

“Online marketing revenues for the first quarter of 2015 were RMB12.519 billion ($2.019 billion), representing a 33.5% increase from the corresponding period in 2014. Baidu had about 524,000 active online marketing customers in the first quarter of 2015, representing a 17.5% increase from the corresponding period in 2014 and flat from the fourth quarter of 2014. Revenue per online marketing customer for the first quarter of 2015 was approximately RMB23,800 ($3,839), a 13.9% increase from the corresponding period in 2014 and a 9.8% decrease compared to the fourth quarter of 2014.”

Table 2. Revenue of Baidu for the first quarter of 2015, compared with the corresponding period in 2014, and the fourth quarter of 2014

<table>
<thead>
<tr>
<th>Quarter</th>
<th>March 31, 2015</th>
<th>March 31, 2014</th>
<th>December 31, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online marketing services</td>
<td>12,518,757</td>
<td>9,378,318</td>
<td>13,844,607</td>
</tr>
<tr>
<td>Other services</td>
<td>205,859</td>
<td>118,234</td>
<td>205,622</td>
</tr>
<tr>
<td>Total revenues</td>
<td>12,724,616</td>
<td>9,496,552</td>
<td>14,050,229</td>
</tr>
</tbody>
</table>

Without doubt Baidu is the market leader in China’s online marketing area. According to iResearch analyst Zhi Xi, Baidu occupies 81.6% of China’s keyword search market share, increased from 80.9% in 2013. The other Chinese search engine such as Qihoo 360 (NYSE:QIHU) and Sougou were lagged far behind.

Baidu Union – A Business Alliance for Advertising

Baidu not only provides marketing services through its organic websites, but also through affiliated websites. In the announcements in the Earnings Conference Call for the first quarter of 2015, it says, “We offer performance-based online marketing services and display advertisements through both Baidu organic websites and our affiliated websites (our Union business). Our affiliated websites lead traffic to us through integrating a Baidu search box into their sites and/or by displaying relevant contextual promotional links for our customers.”

The term Baidu Union is a business alliance which has been planned a long time ago and is still growing in size. The term “Baidu Union” appeared in Baidu’s Form 20-F filed in April 9, 2009, May 30, 2007, and June 21, 2006. According to the 2009 Form 20-F, Baidu Union is composed of many third-party websites and software applications. Usually, Baidu Union members embed a Baidu search box or toolbar and match Baidu sponsored links with contents they provided. Baidu shares revenue with the Baidu Union
members through directed traffic and content, for example, based on the number of click-throughs from the Union member's users.

Some examples of members in Baidu Union:

Health care related:

39.net - “120 Asking the doctors”, the leading health related content provider, Alexa rank in China 46, Alexa Global rank 324

120 ask.com – “120 Asking the doctors”, a leading health care Q&A platform, Alexa rank in China 348, Alexa Global rank 3225

Other:

58.com- NYSE:WUBA, the leading online marketplace serving local merchants and consumers, Alexa rank in China 74, Alexa Global rank 492

Qunar.com - NASDAQ:QUNR, the leading travel information provider, Alexa rank in China 161, Alexa Global rank 1389

ChinaUnicom - China United Network Communications Group Co., Ltd. A Chinese state-owned telecommunications operator and the world’s third-biggest mobile provider.

ChinaTelecom - China Telecom Corporation Limited. A Chinese state-owned telecommunication company, the third largest mobile telecommunication provider and the largest fixed-line service provider in Mainland China.

Skype - A telecommunications application software, now owned by Microsoft.

Figure 2. Some Members in Baidu Union

Baidu’s Pay for Placement (P4P) Service

Baidu’s P4P service is basically an advertising auction ranking system. In the beginning, the auction system was more transparent. It used to be more similar to Google’s AdWords. A bidder will know others’ biddings, and can estimate how much he needs to pay for being ranked in a certain position.

Since April 20, 2009, Baidu promoted the “Phoenix Nest” advertising system, and it started to work on Dec 1, 2009. The original auction ranking system was closed. Baidu claimed that advertisers who provide good service or product can be ranked at good positions with less pay in “Phoenix Nest”. Yet the entire auction process becomes less transparent. Bidders will not know other’s bids. Since the advertising effects are significantly better for the best position, many bidders bid more ambitiously to become the highest bid. As a result, they pay more comparing to an open auction.
The hidden process indeed allows Baidu to freely change the price rate. Baidu admitted this in the Form 20-F. “Furthermore, we adjust prices for some of our online marketing services from time to time. We may lose customers who decide not to pay for our increased prices.”

In addition, though Baidu claimed that advertisers who provide good service or product can be ranked at good positions with less pay, it is difficult for third parties to uncover how Baidu evaluates the quality of the service or product. Baidu claimed that “Our intelligent ranking system takes into consideration the “quality factor” of a sponsored link for a search query in addition to the price bid on the keyword. The quality factor of a sponsored link for a search query is determined based on the relevance and certain other factors. The relevance is determined based on our analysis of past search and click-through results. Links to customers' websites are ranked according to a comprehensive ranking index, calculated based on both the quality factor of a sponsored link for a search query and the price bid on that keyword.” It seems the quality factor is composed of relevance and other factors, but Baidu did not specify what the other factors are.

On one hand, Baidu provided favorable comments regarding the Phoenix Nest system. On the other hand, the businesses complained about the rising advertising costs. In 2010, an SME business owner in Zhejiang commented “previously I spent RMB 5000 to 6000 each month on keywords search. Now I need to spend more than RMB 7000 to reach a similar effect.” An SME owner in Changsha said, “previously when paying RMB 2 per click for a specific keyword we could get ranked among the first 3, now paying even RMB 10 per click for that keyword, we could not even get into the first 18!” According to the search engine marketing firm adSage, the price of popular keywords in the game industry has risen more than 8 times.

Though there are many negative comments, Baidu is still very confident. It emphasizes the better reach of targeted audience. “Our P4P online marketing customers may choose to set a daily limit on the amount spent and may also choose to target only users accessing our website from specified regions in China and/or during specific time period of the day. ... Leveraging on our big data capabilities, Phoenix Nest helps merchants locate potential customers more precisely and improve the marketing effectiveness towards the potential customers.” (In the teaching note, the search results from different Chinese cities are a foreign city of the same term is included.)

“In recent years, we have generated an increasing amount of online marketing revenues from online advertising. We believe our large user base and traffic provide advertisers with a broad reach and optimal monetization results.”

**Industries Advertising on Baidu**

Regarding the clients of the advertising services, Baidu made very general claims. “We deliver online marketing services to a diverse customer base operating in a variety of industries.” This sentence appeared in Baidu’s Form 20 of the fiscal year 2014, 2013, 2012.

Baidu’s online marketing customers include SMEs in China, large domestic companies and Chinese divisions and subsidiaries of large, multinational companies. In 2014, Baidu had approximately 813,000 active online marketing customers. This number is 753,000 in 2013, and 596,000 in 2012.

Though Baidu did not disclose specific detail about how much income were generated from which areas, we may still get some clue through the order of the industries listed in this document.

In the 2014 report, it says, “Our defined industries in which our customers operate include medical and healthcare, tourism and ticketing, education, software and online games, machinery and equipment, network service, transportation, construction and decoration, financial services, business services and franchising. Customers in our top five industries contributed approximately 49% of our total online marketing revenues in 2014.’’

The corresponding section in the 2013 report says, “Our defined industries in which our customers operate include medical and healthcare, education, software and online games, tourism and ticketing, machinery, construction and decoration, franchising, electronic commerce, electronic products, business services, transportation, financial services, information technology services, electronic components and household appliances. Customers in our top five industries contributed approximately 54% of our total online marketing revenues in 2013.’’
The corresponding section in the 2012 report says, “Our defined industries in which our customers operate include medical, machinery, education, software and online games, electronic commerce, tourism and ticketing, transportation, franchising, business services, electronic products, information technology services, financial services, construction and decoration, and household appliances. Customers in our top five industries contributed approximately 53% of our total online marketing revenues in 2012.”

Consistently, medical industry is the first industry being mentioned. Consider the Form 20 is an official report thoughtfully prepared, and after the list of industries, it talks about “customers in our top five industries”, it suggests that medical industry is a major contributor for Baidu’s advertising revenue.

**Which Healthcare Institutions are Advertising on Baidu?**

After we identify medical and healthcare industry as a major client, another question is, in this industry, which healthcare institutions are actually advertising on Baidu?

Such information is quite challenging to obtain. But the recent conflicts between Baidu and Putian Private Healthcare Association provides us with more information. Putian Private Healthcare association is the largest private health care association in China. Till the end of November 2014, there are 112,166 private hospitals in China (data from National Health and Family Planning Commission of the People’s Republic of China), more than 8,600 are members of the Putian Private Healthcare association.

From March 24, 2015, Putian Healthcare Association launched a boycott against Baidu. They complained about the rising advertising prices. In the dispute, the Putian Healthcare Association claimed that “the boycott is designed not only to drive down ad prices but to lay a foundation for better cooperation in the future.”

According to a report by Southern Weekend, a leading investigative media, Hospitals in Putian Private Healthcare mainly operates in the specialty area of gynecology, infertility, plastic surgery, and dentistry. These specialties have the following features in common: relatively low risk and high-profit. However, the quality of the health care services offered by these private hospitals is doubtful.

Putian Healthcare Association complained that in 2015 Baidu “doubled its mandatory spending floor for a single advertiser to 10 million yuan annually”. In addition, Baidu requires the clients to increase spending every year, from 10 to 20 percent, or even 40 percent annually.

In fact, as early as 2011, several Putian hospitals specializing in male reproductive system diseases already complained that Baidu’s fees of up to 600 yuan per click were too steep. But later the sources said the price then jumped to 999 yuan per click.

A research report by the U.S. investment firm JPMorgan Chase estimates that Putian hospitals may have contributed 5 to 12 percent of Baidu’s US$7.9 billion (RMB49 billion) revenue. Columnist Cao Jian at Caixin.com commented, “These private hospitals have total revenue of about 260 billion yuan every year, and they spend around 12 billion yuan on ads. Some have even spent up to four-fifths of their profits on cooperation with Baidu. This is why a few private hospitals say they work for Baidu.”

**Regulations on Advertisements in China**

In China, currently there is no national law or regulation specifically for the online advertising business. Online advertising is regulated together with advertising through other channels, through the State Administration for Industry and Commerce. According to China’s advertising laws and regulations, advertising agencies are obligated to monitor the advertising content posted. The agencies need to ensure the content is accurate.

According to the Advertising Law of People’s Republic of China, amended on April 24, 2015 and will be implemented from September 1, 2015. Item 44 “All advertising activities done through the Internet, are subject to the regulations in this law.” And the law contains items regarding advertising in the health care industry.

However, whether P4P services are considered as a form of online advertising seems to be arguable.

According to Baidu, “Our P4P services are not subject to PRC advertising laws and regulations, because PRC laws and regulations and administrative authorities currently do not classify P4P services as a form of online advertising.”
Baidu also admitted that P4P can be classified as online advertising and this may bring risks for the business and investors. “However, if P4P services are classified as a form of online advertising in the future, we would be obligated to examine the content of our P4P customers’ listings on our websites as required by PRC advertising laws and regulations, which could be very burdensome, and we may have to stop posting certain categories of listings on our websites or otherwise cease our P4P services for certain categories of customers. We have been and in the future may again be subject to claims or negative publicity based on the results in our paid search listings. … There has been negative publicity about fraudulent information in our paid search listings. Although we have been continually enhancing our technology, control and oversight to prevent fraudulent websites, web pages and information from our paid search listings, there is no guarantee that the measures we have taken are effective at all times.”

Comments by Medical Professionals and the Public

“Getting first-hand medical information through the Internet search is unwise.” CPPCC National Committee, Chinese Academy Wang Jing Wen Jianmin, director of Orthopaedic Hospital commented.

Wang Xiaosha, deputy director of the Department of Neurology, Xiyuan Hospital, said, “medical advertising may appear in newspapers, magazines, radio, television, and possibly also on vehicles. But advertising through search engines may not be recognized as advertising, and users can easily be fooled. … One must be vigilant, the more advertising you find about a hospital, the more suspicious the hospital is, do not go there.”

An anonymous source from the Putian Healthcare Association said, “Try to do some search on Baidu, check for some diseases, which hospitals are ranked among the top? Are the hospitals famous for their service quality?”

Sarah felt deeply troubled. Baidu, the leading search engine, seems to play a quite disgraceful role ...

**Accomplice or Innocent? A Search Engine in Medical Scams**

*Teaching Note*

This teaching case illustrates the complexities in online marketing, especially in health care online marketing. It presents the challenges patients face when seeking information for treatments, and how patients may be flooded with information of poor quality, even scams. We examines the role of the search engine giant Baidu. The case discusses Baidu’s revenue generation models, the keywords bidding systems, recent disputes between Baidu and a private healthcare association, and regulations on advertisements.

**Target Audience**

This teaching cases and note may be used for courses related to societal impacts of ICT, online marketing, business model of ICT firms, and regulation of online marketing. It is suitable for group discussion. Students can take different perspective: users of the search engine, institutions providing decent medical services, institutions providing doubtful medical services, search engine, and regulators. Students can also compare the situation in their region with what documented in the case, check the local regulation and practices of the local firm.

**Teaching Objectives and Recommended Questions for Discussion:**

**Teaching Objectives**

This case illustrates how a search engine is involved in medical scams. As illustrated in Figure 3, the scenario described involves search engine, content provider (hospitals), patients. It presents the complexity in the real world, and discusses the following aspects:

1. The business model of an IT search engine company
2. The trade-offs involved when an IT company heavily relies on marketing incomes for revenue growths
3. The needs to regulate the online marketing area

**Recommended Questions for Discussion**

1. Identify the business model of a search engine.
2. How does search engine change the procedure of patient’s health care suggestion seeking?
3. Shall P4P services be considered as a form of online advertising?
4. If the search engine put the content provider among the top results not based on PageRank but due to the content provider’s payment to the search engine, shall search engine be obliged to share the responsibility when the claims in the content provider’s website are inaccurate?
5. How may competition between search engines influence search results? (May refer to search the same keywords on Google and Baidu.)
6. Investigate the situation of online marketing in your region and do a comparison with the situation described in the case. (May refer to search examples from different locations included.)

![Diagram](image)

**Figure 3. Parties Involved in the Medical Scam**

**Search the same keywords on Google and Baidu**

Search the same keywords “depression treatment hospital” on Google and Baidu (search in both English and Chinese), compare the results. When search in English, neither Google or Baidu list specific hospitals among the top results. When search in Chinese, Google and Baidu provided complete different results.

Google listed Beijing Anding Hospital in the first [http://www.bjad.com.cn/article/?sid=43](http://www.bjad.com.cn/article/?sid=43). This public hospital was found in 1914, it is a Three A class hospital, i.e. the highest class. The second result was Sohu health page on depression, [http://dise.health.sohu.com/disease-2526.shtml](http://dise.health.sohu.com/disease-2526.shtml), on this page, it provides basic information about depression, and the experts recommended are from good public hospitals. The third result was from Hong Kong Hospital Authority. The webpage provides basic information about depression, the institutions and NGO's recommended are decent non-profit organization. [http://www21.ha.org.hk/smartpatient/tc/chronicdiseases_zone/details.html?id=175](http://www21.ha.org.hk/smartpatient/tc/chronicdiseases_zone/details.html?id=175).

Instead, Baidu listed specific hospitals among the top results. [http://www.jsbyy.com/](http://www.jsbyy.com/) Qian Chinese medicine hospital, this is private hospital in Hebei, claim to cure depression through acupuncture.

**Search the same term from various locations**

Search the same term ozone therapy on Baidu, different results are generated. Check the webpages and discuss if you think the websites are credible. You may not understand Chinese, but try to estimate based on your impression of the websites. PowerPoint slides can be provided on request.

Search from Qingdao, Shandong, China
The first answer on the pages promotes Spain Sai Deke ozone treatment equipment, the same equipment as promoted earlier by http://www.sslmed.com/. The answer is provided by an anonymous contributor, i.e. even Baidu id was not provided.

A post on ozone therapy, the content is claimed to be reposted by a physician.

References