

net-progress

Survey of Life Sciences Websites

June 2005

turning information
into intelligence.

Foreword



Over recent years, the internet has become a powerful tool in the marketing of any business, and this is just as true of the Life Sciences sector as any other. A website can be highly effective in generating sales leads, investor interest, servicing existing clients, and raising awareness of current areas of research.

But simply having a website should not be seen as an end in itself. Whilst the majority of websites in this sector do not generate revenue directly, they nevertheless have an impact on the business. A slow website with missing pages and broken links can, for instance, restrict the number of enquiries or limit the number of catalogue downloads. A website that can't be found in the search engines for appropriate search phrases won't generate as many visitors as it should, nor the right type of visitor. And a website that can't be used by everyone who wants to, regardless of physical condition, can damage an organisation's reputation and in the worst cases, lead to prosecution.

A survey of the sector should help to raise awareness of these issues and highlight good practice that should lead to an improved standard across the industry.

Ron Long

Ron Long has been Chairman and CEO of Procognia since the company was formed in April 2002. Prior to joining Procognia Ron was served as a Main Board Director on the Board of Amersham Plc from 1990 until 2001. During his time with Amersham he was Commercial Director, CEO of Amersham Pharmacia Biotech and was also appointed Vice Chairman of the Board in 2000.

In January 2001 Ron was appointed Chairman of KuDOS Pharmaceuticals, in February 2001 Non-Executive Director of Pharmagene plc (now Senior Non-Executive Director), and Deputy Chairman of The Automation Partnership in November 2001. He is also Non-Executive Director of Gyros AB.

Introduction

Performance in the following key areas has been assessed as it will be of primary interest to both website stakeholders and the wider audience.

Quality

The extent to which a website has been constructed and maintained so as to avoid compromising the quality of visitor experience.

Presence

The internet presence of the website, in terms of search engine performance, incoming link popularity and search saturation.

Accessibility

The extent to which a website complies with the Priority 1 checkpoints of the W3C Content and Accessibility Guidelines.

Summation

Overall

19% of the websites assessed achieved an overall ranking of 'Above Average' or 'Excellent'.

Quality

74% of websites assessed achieved a website quality ranking of 'Above Average' or 'Excellent'.

Presence

19% of websites assessed achieved a presence ranking of 'Above Average' or 'Excellent'.

Accessibility

All but one of the home pages assessed failed one or more of the Website Content Accessibility Guidelines (WCAG) Priority 1 accessibility checkpoints as outlined by the World Wide Web Consortium (W3C).

Analysis: Website Quality

Why is Website Quality Important?

The quality of a user's visit to a website is not simply determined by the strength of content on that website. The way a website is constructed and maintained can have a positive or negative impact on that experience.

Most website visitors have a specific task in mind when they arrive at a website. Placing obstacles in the way of completing those tasks can lead to frustration, and consequently to website abandonment and undermine brand reputation.

Website quality impacts directly upon the following:

- **Website abandonment.** If users are frustrated in finding what they want from one website, they will quickly leave to find it on another. This may result in lost business, either directly or indirectly.
- **Brand reputation.** A good or bad experience will effect a users perception of the brand as a whole. Research has shown that 80% of business professionals use the internet for product information and evaluation, and 55% access company information to learn more about the organisation.
- **Customer retention.** The cost of retaining a customer is far less than the cost of acquiring a new one. Having gone to the expense of attracting a customer to the website, a poor experience could reduce the chances of that visitor returning.

How did this sector score for website quality?

Headline figures

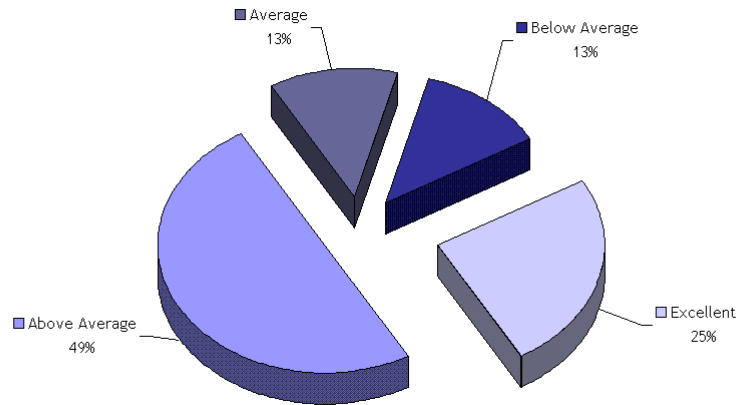
- 25% of websites achieved an 'Excellent' rating
- No websites were rated as 'Poor'
- 77% of websites exceed the average quality score across the internet (60)
- 23% of websites were equal to or below the average quality score across the internet (60)

Key findings

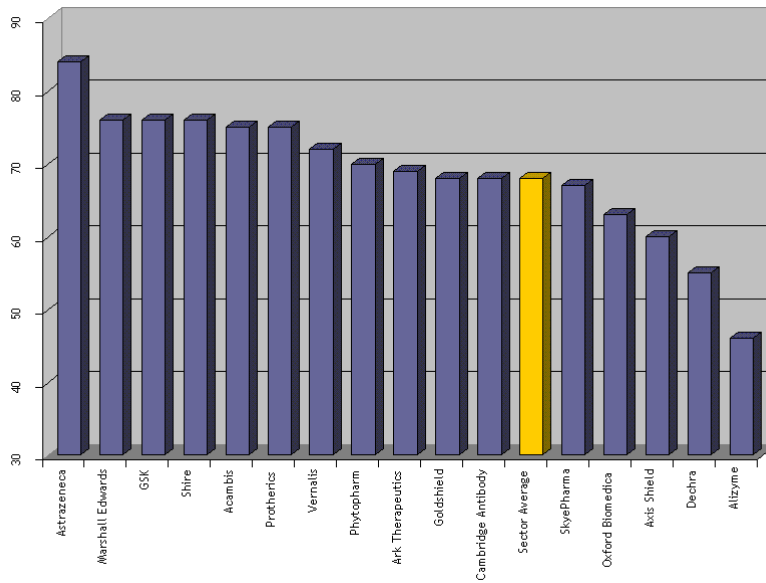
- Average of 1% broken links (primary & secondary) per website across sector, ranging from 0% to 5%
 - Average of 3% slow pages per website across sector, ranging from 0% to 17%
 - Average of 7% deep pages per website across sector, ranging from 0% to 41%
 - Average of 4% missing page titles per website across sector, ranging from 0% to 60%
 - 24% of websites contained poorly implemented frames
 - 72% of websites failed to provide a link, or had a poorly identified link to a privacy policy from the home page.
-

Analysis: Website Quality

Overview of Sector Website Quality



Website Quality League Table



Analysis: Website Presence

Why is Website Presence Important?

Search engines are responsible for generating approximately 80% of new visitors to the majority of websites. Appearing in the top results for the most appropriate phrases is key to maximising the benefits derived from the search engines.

Incoming links to websites are responsible for driving visitors directly to websites from other websites. Additionally, the number of incoming links to a website can have a positive effect on search engine ranking and improve visibility.

Presence is important for the following reasons:

- **Generating traffic.** Whether a website is an information only website, or a full e-commerce website, generating new visitors to a website is a vital part of any online strategy.
-
- **Brand awareness.** Occupying top positions in search results increases brand awareness, and denies that opportunity from competitors.
-
- **Brand endorsement.** Incoming links to a website act as a tacit endorsement of a website and its branding, which can have a positive effect on the way a company is perceived.

How did this sector perform for website presence?

Headline figures

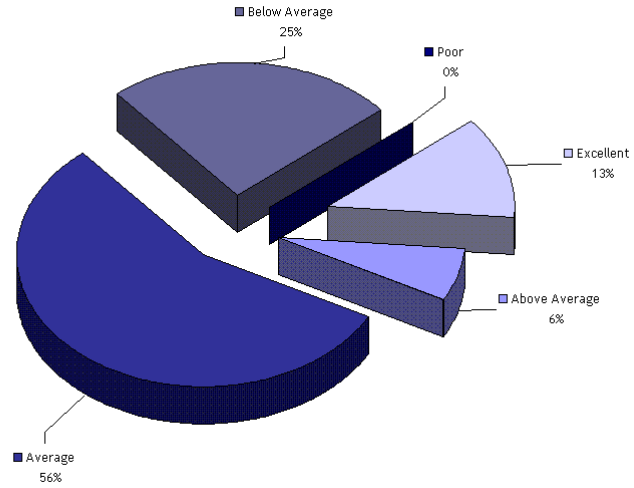
- 13% of websites achieved an 'Excellent' rating
- No websites were rated as 'Poor'
- 41% of websites exceeded the average presence score across the internet (48)
- The average sector score (49) exceeded the average across the internet.

Key findings

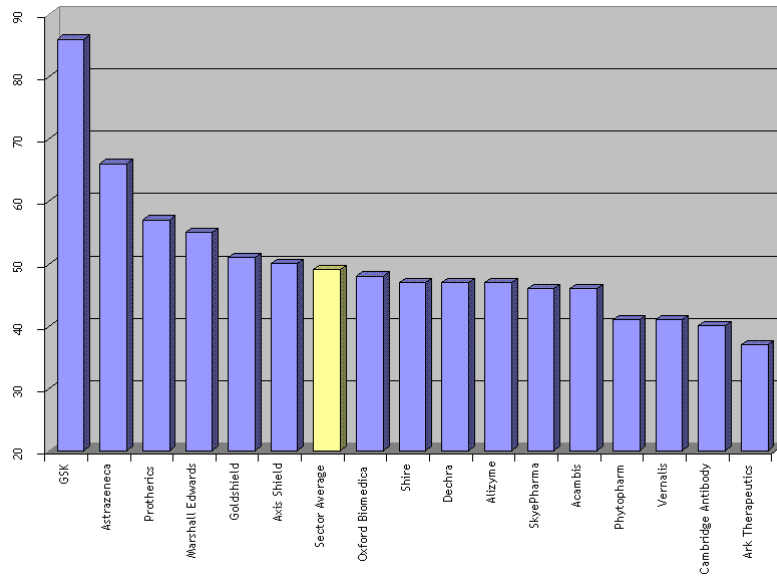
- All companies achieved excellent ranking for company name on all search engines tested.
 - 50% of companies achieved an excellent ranking for product name on all search engines tested.
 - 30% of companies achieved an excellent rating for one generic search term
 - 18% of companies fail to appear for any generic search term
 - 66% have excellent search engine saturation
 - 12% have excellent levels of incoming links
 - 36% of websites had properly implemented keyword or description meta tags.
-

Analysis: Website Presence

Overview of Sector Website Presence



Website Presence League Table



Analysis: Website Accessibility

Why is Website Accessibility Important?

An estimated 10% of the worldwide online population suffer from visual disabilities, and yet this area is often neglected by business. By catering for this large section of the public, it is possible to ensure that everyone has access to a website.

Moreover, even doing simple things like making the size of the text changeable can transform the quality of visitor experience for those with less than 20/20 vision.

Accessibility is important for the following reasons:

- **Inclusivity.** According to the U.K.'s Department for Work and Pensions, there are approximately 10 million disabled adults in the U.K. with a spending power of 80 billion pounds.
- **Brand reputation.** As part of any social responsibility program, making your website accessible to all visitors improves your brand reputation with all user groups.
- **Legislative compliance.** Legislation exists across the world to ensure efforts are made to provide accessibility to all user groups. Failure to comply with minimum accessibility standards could lead to prosecution.

How did this sector perform for website accessibility?

Headline figures

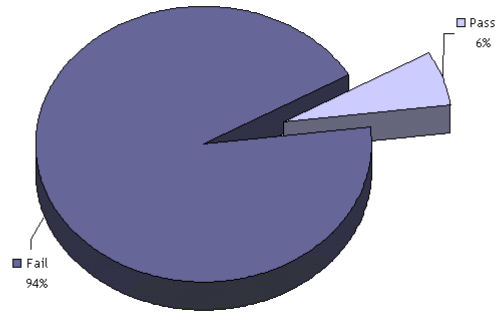
- 6% of home pages passed WCAG priority 1 checkpoints
- 94% of home pages failed WCAG priority 1 checkpoints

Key findings

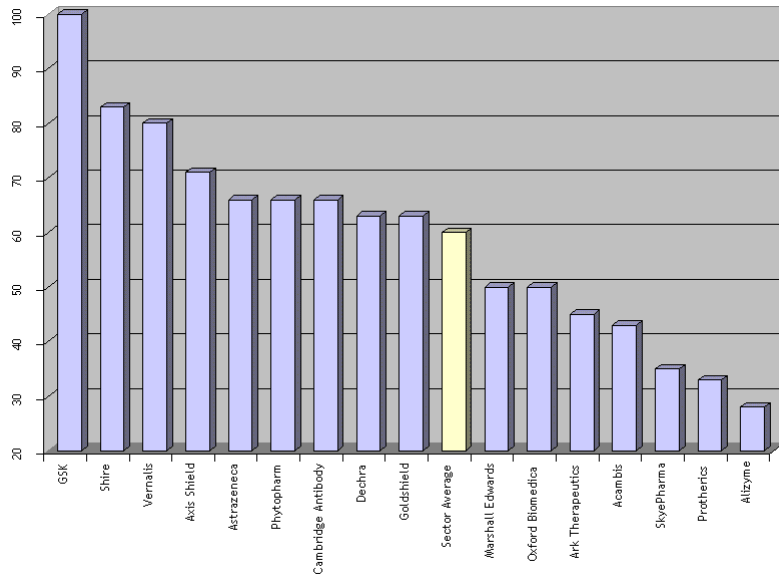
- 24% of home pages fail 2 WCAG priority 1 checkpoints
 - 18% of home pages fail 3 WCAG priority 1 checkpoints
 - 18% of home pages fail 4 or more WCAG priority 1 checkpoints
 - 41% of home pages fail to have alt tags for more than 10 images on the home page
 - 59% use fixed font sizes
-

Analysis: Website Accessibility

Overview of Sector Website Accessibility



Website Accessibility League Table



Detail: Website Quality

Aspects of Website Quality Checked

Factor	Description	Importance
Primary broken links	These are significant and noticeable errors that negatively affect a user's experience. These errors consist of missing or incorrectly specified links to pages, images, documents, email addresses, other websites and broken anchors.	High
Secondary broken links	Whilst a "no tolerance" attitude to errors is recommended, some broken links impact less than others on the quality of visit. Consequently, missing image files that merely help to align the page correctly, and are generally not noticeable to a visitor are not penalised to the same level as primary broken links.	Low
Missing page titles	Page titles help users to orientate themselves within a website and can be particularly important to users employing screen reader software.	Medium
Website speed	A slow website can cause great frustration for a website visitor, and can cause website abandonment. Whilst factors like the speed of the internet and quality of connection are important, so is page size. As some slow pages are necessary if not desirable on any website to show product images, presentations and so on, it is the ratio of slow to fast pages that is measured to provide an overall website speed figure. For the purpose of this survey, there is a 100KB ceiling.	High
Slow home page	For the majority of websites, the home page is the biggest single entry point. Failure to load quickly can lead to website abandonment at the first hurdle. A penalty is applied to those websites that have a slow home page.	High
Deep pages	A website with pages more than four clicks away from the home page is considered to have "deep" pages. This can disorientate visitors so that they feel lost on the website.	Medium
Poorly Implemented Frames	Poorly implemented frames can result in pages being displayed incorrectly, printing issues and becoming disconnected in search engine results. Failure to implement frames correctly receives a penalty.	Medium
Generic page titles	Page titles help users to orientate themselves within a website. Use of generic titles largely fails to help with this, and so a penalty is applied.	Medium
JavaScript/Java/Flash Required	Websites that require JavaScript, Java or Flash to be active in order to navigate a website or view content receive a penalty, as they exclude user groups that do not support these technologies.	High
Privacy policy	Users generally want to know if data about them is recorded, and if so, what is done with that data. Failure to have or clearly label a link to a privacy policy statement from the home page receives a penalty.	High

Methodology

Due to the size of some of some of the websites, only the first 5,000 URLs were checked where applicable. Where organisations have more than one domain, only one has been tested.

A combination of manual checking and automated software was used to identify the number of issues present on a website. Weighting was applied to reflect the relative importance (low, medium or high) of the various issues. The score takes into account the relative size of the website.

Explanation of Results

The quality of a website is measured on a scale of 0-100. The higher the score, the better the website quality.

Score	Rating
> 75	Excellent
> 65	Above Average
> 55	Average
> 45	Below Average
45 or less	Poor

Detail: Website Presence

Aspects of Website Presence Checked

Factor	Description	Importance
Search engine presence	The major search engines were tested for five keywords and phrases (for example the organisation name) and performance of the websites for those phrases recorded.	High
Search engine saturation	The percentage of pages on a website indexed by Google search engine.	Low
Incoming links	The number of links to a website, as reported on a number of major search engines were totalled.	Medium

Methodology

Where organisations have more than one domain, all were tested for search engine performance. Incoming links to multiple domains were added together. Ten search engines (US versions) were selected on the basis of user popularity for testing. A combination of manual inspection and automated software was used to determine the performance of the websites for five relevant search phrases. A similar approach was used to determine the number of incoming links to each domain. The scores were then weighted to reflect their relative importance (high, medium or low) to determine the presence score.

Explanation of Results

The presence of a website is measured on a scale of 0-100. The higher the score, the better the website presence.

Score	Rating
> 65	Excellent
> 55	Above Average
> 45	Average
> 35	Below Average
35 or less	Poor

Detail: Website Accessibility

Aspects of Website Accessibility Checked

Standards of accessibility are measured against the checkpoints outlined by the World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines 1.0 (WCAG).

There are three levels of accessibility standards as outlined in WCAG. Priority 1, containing 16 checkpoints, is the minimum recommended level of accessibility. For the purposes of this survey, the home page of each website was tested against Priority 1 checkpoints. A full list of Priority 1 Checkpoints can be found on the W3 website.

Methodology

Where an organisation has an accessible version of the website, this has been tested. Home pages were manually checked against WCAG Priority 1 checkpoints. A score of 100% means that the home page (and only the home page) has passed all the Priority 1 checkpoints. Passing the Priority 1 checkpoints should not be interpreted as meaning the website is fully accessible which would require the website to pass Priority 2 and 3 checkpoints.

Explanation of results:

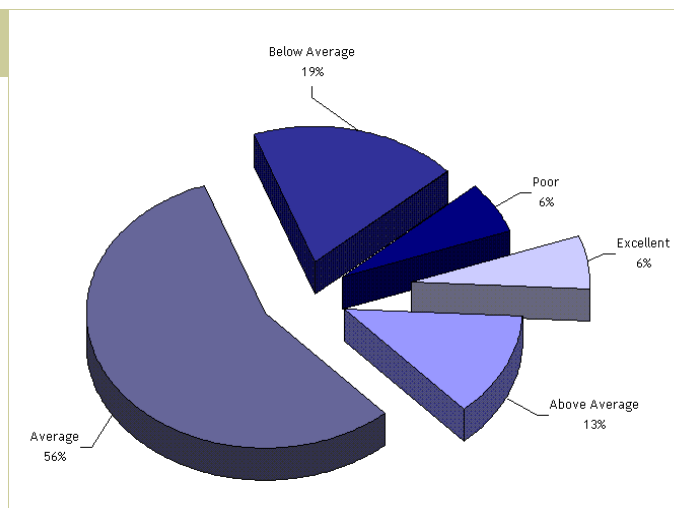
An accessibility score of less than 100 indicates that the website's homepage does not conform to WCAG Priority 1 accessibility standards, and as such represents a failure to meet the minimum generally accepted benchmark of accessibility.

Final Observations

In the round, the sector performs well, and exceeds the performance of other sectors as well as the general standards of websites found on the internet.

This is most evident in the area of quality. The majority of websites in the Life Sciences sector have fewer broken links and fewer missing page titles than other sectors. However, on the websites where these are present, they do of course need to be addressed. Just one broken link can lead to website abandonment, and there were examples of important links being broken, such as links to key content, subsidiary or partner websites and to email addresses. For these types of errors, a “zero tolerance” approach is recommended.

Sector Overall Performance



There are other factors that need to be examined where they occur. Slow pages – though it should be said not that not every slow page is a problem page – can nonetheless frustrate visitors if they occur in large enough numbers. Deep pages, where drilling down to content can disorientate visitors unless some sort of “breadcrumb trail” is implemented. Finally, only 28% of the websites examined included a link to a privacy policy on the home page, which can influence whether visitors decide to contact a company or not.

The sector also performs creditably in the area of presence. Where in most sectors, search engine performance is often restricted to the company name and a product, most of the companies in the Life Sciences sector have some sort of presence for at least one general search term as well.

A large number of the websites have the majority of their pages indexed by the search engines. The average number of incoming links is high – although the range shows that some companies still have much work to do in this aspect of presence. A number of websites still use frames, which are no longer really considered good practice because of the problems they can cause.

Whilst poorly implemented frames are penalised under quality, it should also be noted that one of the issues they can cause, is to appear in a fragmented state in the results of the search engines. This results in content pages sometimes appearing without branding or navigation.

Accessibility is the one area where the Life Sciences sector has plenty of room for improvement. Only one company has a home page that passed World Wide Web Consortium (W3C) Website Content and Accessibility Guidelines (WCAG) Priority 1 checkpoints when inspected, which in itself is no guarantee of accessibility. Several others have clearly considered accessibility, and only one or two issues that could be easily resolved prevented passing. As things stand, the vast majority of home pages failed, for example, to include alt tags (which are alternative textual descriptions) for all images - and 41% of the home pages examined had more than ten images without them. Some of the websites also failed to provide alternative content or navigation features for website visitors unable to use Flash or JavaScript.

In this, the sector as a whole is not really any better or worse than other sectors. Nonetheless, it remains disappointing given that nearly all the companies have a strong Corporate Social Responsibility programme, and in most cases, deal with health in general. The relevance of accessibility to the industry is illustrated by Directive 2004/27/EC of the European Parliament, which states that,

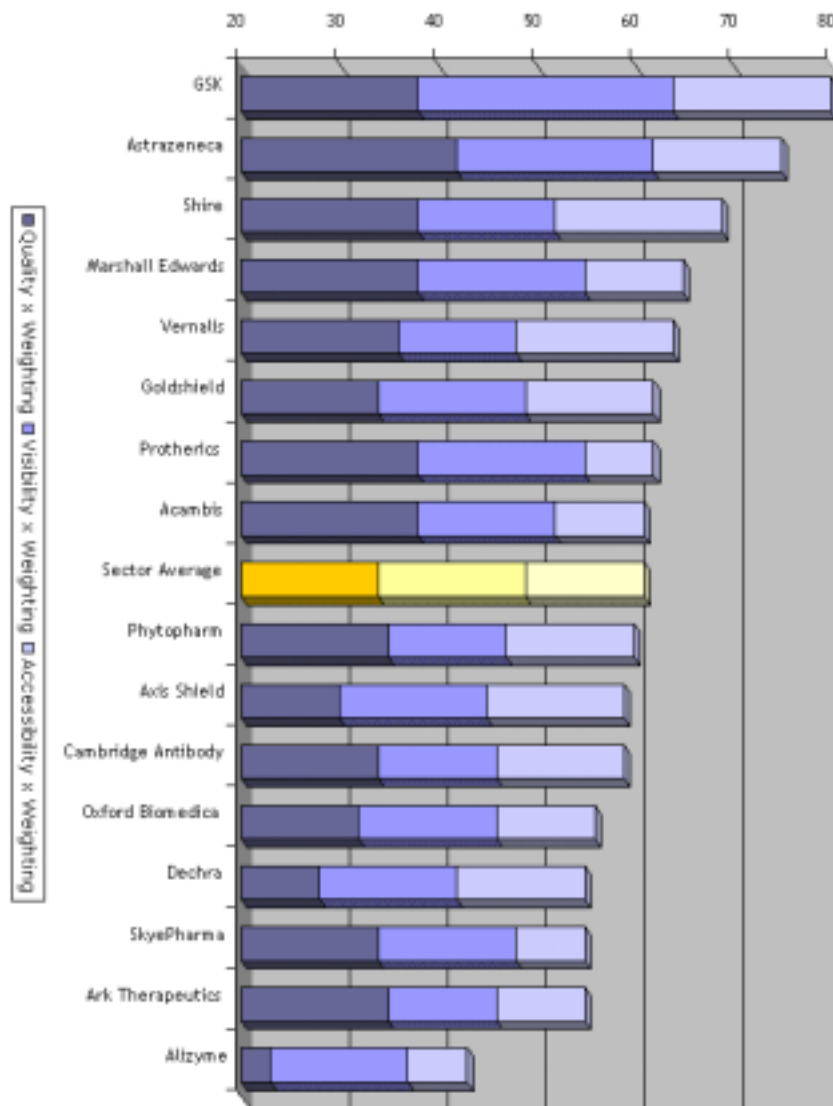
'The name of the medicinal product, as referred to in Article 54, point (a) must also be expressed in Braille format on the packaging. The marketing authorisation holder shall **ensure that the package information leaflet is made available on request from patients' organisations in formats appropriate for the blind and partially-sighted.**'

With the European Directive to be implemented in October 2005, it may be that some of the companies will have to consider accessibility offline as well as online. Additionally, it may be that the internet could be a useful tool in helping companies comply with the spirit of this legislation.

The results of testing for quality, presence and accessibility have been weighted to reflect their relative importance to provide the composite league table opposite.

Final Observations

Overall League Table



net-progress Awards for Excellence

Gold Standard Websites

To qualify for the Gold Standard Award, a website must achieve an excellent rating in both quality and presence and pass Priority 1 Accessibility standards.

Silver Standard Websites

To qualify for the Silver Standard Award, a website must achieve a good or better rating in both quality and presence and pass Priority 1 Accessibility standards.

Commendations

Commendations are awarded where a site is considered to excel in a specific area.

Award Winners

GlaxoSmithKline Gold Standard Award.



Gold Standard
net-progress

Commended

AstraZeneca is commended for website quality.



Commended
for website quality
net-progress

AstraZeneca is commended for website presence.



Commended
for website presence
net-progress

About net-progress

net-progress is an internet consultancy using a holistic approach to add value to a company's online presence. net-progress specialises in accessibility, quality, presence, behaviour analysis and reputation management in order to deliver measurable improvements to a business.

net-progress has been working in the field of web analytics since 1997, with clients ranging from FTSE100 companies to SMEs.

net-progress designed, built and maintains **net-guide**, an accessibility centric search engine and directory that has received RNIB accreditation. The value of this project was recently recognised in the House of Commons in an Early Day Motion signed by more than 50 MPs.

net-guide was short-listed for The National Library of the Blind's Visionary Design Award in 2004 and net-progress were short-listed for the RNIB's Simply the Best Award in 2005.

In addition to the core web analytics business, net-progress produces regular surveys on various aspects of online performance in a variety of sectors, as well as accepting commissions from trade and consumer publications. net-progress produce a regular Site Inspection feature for Ability Magazine, a campaigning publication for people who have difficulty using IT.

Further information:

www.net-progress.co.uk
www.net-guide.co.uk

Press Contact:

Paul Crichton
+44 20 8296 0971
paul@net-progress.co.uk

Data Collection

The data for this survey was compiled between 7th March 2005 and 16th June 2005. All the data reflects the state of the websites during that time. Only publicly accessible areas of the websites were inspected. No improper methods were used to determine this data. All reasonable steps have been taken to ensure the accuracy of the data. However, it should only be seen as representing a general overview of the websites examined.

Copyright Notices

© Copyright net-progress 2005. All rights reserved. Duplication of this material, in whole or in part, by any means whatsoever, is strictly forbidden without the permission of net-progress.

