

News Article downloaded from - <http://www.bioportfolio.com> on Thursday, November 26, 2009
Read [Chronic hepatitis B and C: a chronic lack of effective treatment](http://www.bioportfolio.com/news/Chronic_hepatitis_B_and_C.html) on BioPortfolio.com
(http://www.bioportfolio.com/news/Chronic_hepatitis_B_and.html)

Chronic hepatitis B and C: a chronic lack of effective treatment

Thursday 1st of January 1970 1:00

Chronic hepatitis B / C: a chronic lack of effective treatment

The World Health Organization estimates that one-third of the entire world's population has been exposed to hepatitis B (HBV) resulting in an estimated 350-400 million chronically infected patients globally. However, it is thought that less than one third of patients with either chronic hepatitis B or C are actually receiving treatment. Datamonitor's Brigitte de Lima investigates...

Most hepatitis patients reside in Southeast Asia and Sub-Saharan Africa and in most cases are infected at birth. However, the seven major pharmaceutical markets (including the UK) are estimated to harbor up to seven million chronic carriers, with transmission occurring primarily through sexual contact during adulthood. Additionally, while Hepatitis C (HCV) infection is less common, the WHO estimates the numbers of chronically infected individuals at a further 200 million.

Viral hepatitis - a significant public health problem

Globally, HCV infection is less common than HBV infection. However in the west, HCV (7.5 million chronic carriers in the seven major markets) is more common than HBV. Historically this has been due to transmission through contaminated blood or blood products and is often a result of shared utensils used for intravenous drug use.

Recently completed research has revealed that, despite increasing HBV and HCV disease awareness and diagnosis, treatment rates of patients with chronic viral hepatitis remain low and despite the large pool of CHB and CHC patients, less than one-third of these are currently receiving medical treatment. One underlying reason is the low rate of disease diagnosis, on average 54% for HBV and 40% for HCV. Chronic liver disease (CLD) is a long-term consequence of HBV and HCV and commonly leads to liver cirrhosis or hepatic decompensation within 10-40 years following primary infection.

Furthermore, long-term CHB and CHC cause a type of liver cancer known as hepatocellular carcinoma (HCC). Both diseases combined account for over 80% of HCC cases and almost half a million lives annually. Once diagnosed, prognosis for HCC can be as low as six to eight months.

Diagnosis and treatment still suboptimal in major markets

Although HCV diagnosis rates are lower than those for HBV, they have increased considerably in the

past two years, while those for HBV have remained flat. Key to the enhanced identification of new patients among both high-risk groups and the general population has been education and awareness campaigns organized by both the private and the public sector.

In addition to the low rates of diagnosis, inadequate therapies also account for the sub-optimal treatment levels. Although up to 80% of CHC patients with the easy-to-treat viral genotypes 2 and 3 can currently be cured, the larger prevalence of the less responsive genotype 1 translates into only half of the total patient pool achieving virus eradication.

In the case of CHB, the scenario is even worse, with viral eradication occurring in less than 5% of all patients. Current CHB therapy therefore focuses on long-term suppression of virus replication rather than virus clearance. Similar to CHC, the proportion of patients less responsive to treatment, namely those infected with the HBeAg-negative variant of HBV, is increasing globally.

Suboptimal current first-line therapies for CHB and CHC are unable to benefit the already predominant, and increasing, pools of difficult-to-treat patients, leaving ample scope for opportunistic manufacturers willing to invest in potent, tolerable drugs in a market largely driven by therapy cost.

Prescription choice largely driven by cost considerations

The pharmaceutical HBV market is currently dominated by two antivirals, GlaxoSmithKline's (GSK) Zeffix (lamivudine, LAM) and Gilead's Hepsera (adefovir dipivoxil, ADV). The preference of the former for first-line therapy is predominantly cost-driven, as the price of Zeffix is substantially lower than that of Hepsera. ADV is commonly reserved for second-line therapy following the development of resistance to LAM, which can occur in up to 67% of patients after four years of therapy. For CHC, the standard of care is now pegylated interferon (pegIFN) and ribavirin (RBV) combination therapy.

Similarly, the HCV market consists of two major players; Schering-Plough, which markets PegIntron and Rebetol, and Roche, with its drugs Pegasys and Copegus. The lack of clinical differentiation between the two rival pegIFNs and the absence of any alternative anti-HCV drugs has led to physician prescription choice being driven almost exclusively by cost and special deals provided by the manufacturers.

Current therapies - compromise is necessary

Current therapies for either disease are far from being perfect solutions. None of the HBV drugs cure the disease and long-term therapy with LAM is associated with development of resistance, while ADV entails a high financial expenditure. Pegylated IFN combination therapy might be effective in some forms of CHC disease, but it is also a therapy dreaded by most patients due to the injectable mode of delivery and the high incidence of severe side effects elicited over the entire course of the treatment.

Given the clear limitations of the current HBV and HCV therapies, major players in both pharmaceutical markets have developed different strategies aimed at increasing treatment rates. In the case of CHC, these focus on treating patients with normal alanine aminotransferase (ALT) levels, prolonging treatment for slow responders and maintaining non-responders on pegIFN monotherapy. The main strategy for CHB patients is the extension of therapy, especially for HBeAg-negative patients, as most patients relapse following cessation of therapy.

The current stalemate in the CHB and CHC treatment markets is only likely to be broken with the launch of new developmental drugs, which will have to combine high potency and good tolerability at a reasonable cost. Crucially, new drugs are more likely to gain market share if, in addition to winning the battles against the more responsive variants of the diseases, they are also effective in the

difficult-to-treat CHB and CHC patients. Drugs with high potency in the latter patients are the key to meeting the growing therapeutic needs and consequently boosting treatment rates.

The future viral hepatitis treatment landscape is predicted to follow the HIV precedent, in that drug monotherapy is likely to become obsolete and novel, potent drugs will be administered simultaneously as part of a combination. Furthermore, the focus needs to shift from patients with easily treatable variants of the disease to those that obtain little benefit from current therapies, as these are steadily accumulating in the total patient pools. New strategies are awaited to take the lead in this long-standing battle against the hepatitis viruses.

Related research:

- [Stakeholder Insight: Hepatitis B & C - Winning Battles But Not The War priced \\$15,200](#)
- [Commercial Insight: Hepatitis B and C - Awaiting New Developments priced \\$15,200](#)
- [Commercial Perspectives: Hepatitis B and C - The Chinese Way? priced \\$3,800](#)

To order these reports contact peter.barfoot@bioportfolio.com or telephone +44 1300 321501 or +1 415 680 2472 and a representative will get back to you.

You can also order on line at: <http://www.bioportfolio.com/cgi-bin/acatalog/search.html>

Via PR Newswire - PRNewswire.co.uk

Nothing in this document should be used in place of personal medical advice from your own qualified medical practitioner. See BioPortfolio.com [User Agreement](#)

Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

All rights reserved. All other trademarks recognized.

BioPortfolio Limited is registered in England & Wales at Stafford House, 10 Prince of Wales Road, Dorchester, Dorset, DT1 1PW, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2009 - BioPortfolio Limited.

