

SECRET

**SOUZA CRUZ GROUP  
TRANSDERMAL NICOTINE**

MAY 29th, 1992

Despite technology for transdermal administration of ethical pharmaceuticals having been in use for over ten years in USA, it has never been marketed in Brazil. Available information about this subject comes from scientific literature and also from articles in magazines and newspapers.

In December 1991 an article about the subject was published in "Veja", the most important magazine in Brazil. This article resumed these products and techniques used in USA as a way to help smokers to quit the habit. It was also mentioned in this article that Ciba Geigy asked federal health authorities for authorization to launch a transdermal nicotine patch in Brazil. Until now they were not successful in obtaining this authorization.

Three other articles were published in April 1992, in other magazines and newspapers, mentioning the three major companies and products such as Ciba Geigy (Harbitrol), Marriew Merren Dow (Nicoderm) and American Cyanamid (Prostep). All these articles mentioned the size of the U.S.A. market and that US analysts believe in 1995 this market will be around US\$ 1.0 billion. With the information we have, it seems that from the technical point of view, mass production of these products is possible to support this volume growth in USA.

**IS THE STOWIC PATCH A SIGNIFICANT TECHNICAL ADVANCE AND IS IT LIKELY TO BE DEVELOPED INTO A SALABLE PRODUCT FOR MASS MARKETS**

Scientific publications indicate that in terms of technology, the product developed by "Stowic Resources Ltd." shows a considerable advance against its competitors, as nicotine delivery is gradual, avoiding the negative effects of dermal irritation, which is very common in other similar products.

In fact, these products are being clearly positioned in the market as "medicines", which are able to reduce the symptoms of nicotine dependence such as anxiety, concentration difficulty and irritability, very common amongst people who are trying to break the smoking habit.

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**DOES THE PATCH REPRESENT A SIGNIFICANT THREAT TO THE TOBACCO INDUSTRY ?**

As known, smoking and health controversies are growing considerably and the number of smokers trying to give up smoking is increasing worldwide. Therefore, this kind of product will tend to be tried and depending on its effectiveness, should become a considerable sized market.

The tobacco industry should consider these products as a threat, as they could help smokers to quit the habit, but not as a definitive substitute for cigarettes as they will never offer smokers attributes such as organoleptical sensations and image support, which are very important in the individual decision on smoking.

Even if this market were to grow considerably, we believe these type of products are not aviable option to be exploited by B.A.T., due to this type of product being diametrically opposed to the Company's main business focus - exploiting the world tobacco market.

**WHAT SHOULD BE THE REACTION, IF ANY, BY B.A.T. INDUSTRIES ?**

In view of the above consideration, the best route for B.A.T. to prepare itself to face this type of product and also new ones, which will probably be introduced in the future, is by directing priorities and incentive towards the development of safer cigarettes, e.g. cigarettes which maintain flavour, taste, mechanical and visual characteristics of existing products, but with benefits to consumers such as lower sidestream, less strong smoke aroma and lower quantities of controversial substances in the smoke.

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