## MARC SINATRA'S BIOGUIDE: SOLAGRAN - PHARMA OR COMPLIMENTARY?

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**Overview:** Solagran has been one of the top performers over the last year, with its share price climbing from 17 cents to a high of \$1.55 (currently \$1.12). The company is commercializing a range of extracts from green conifer needles. These extracts, known as Bioeffectives, are reputed to be useful for treating chronic liver diseases, infections, neurodegenerative diseases and cancer, to name just a few applications.

Solagran's stellar share price rise is indicative of a company that has found blue-sky, that elusive combination of traits that makes investors believe massive, relatively near-term cash flows will occur. When you look at some of Solagran's traits, you do see parallels with other blue-sky companies. These include a non-traditional, expedited route to market, such as that tried by Chemeq, and a product touted to have an almost unlimited number of uses, such as Psivida's Biosilicon.

So, is Solagran a company of substance or is it going to be found seriously wanting as Chemeq and Psivida were?

**Financials:** Market cap: \$132 million; cash: \$2.2 million; last half cash burn: \$700,000; 2006-'07 sales revenue: \$125,000.

**Directors & Management:** executive chairman, Dr Vagif Soultanov; executive director strategic development, Denis Kilroy; executive director operations, Charles Pellegrino; executive director finance, Peter Stedwell. Solagran's board lacks pharmaceutical expertise and any independent directors. The latter does not appear to have caused any issues to date.

**Technology:** Solagran's technology is based upon extracts from green conifer needles. The initial and most complex extract is Bioeffective A. Its contents include carotenes, vitamins E and K, sterols and polyprenols. Sixteen other Bioeffectives are derived from Bioeffective A, including the company's Russian-registered pharmaceutical, Ropren (Bioeffective R). Ropren is comprised entirely of polyprenols.

**Products:** Solagran has three products that have been approved for use in various countries. They are:

- 1) Ropren Approved in Russia as a hepatoprotector, Ropren's main use is in the treatment of chronic liver disease. Other potential uses include normalisation of lipid metabolism, prevention and treatment neurodegenerative diseases and substance abuse. Sales are expected to commence in Russia later this year, with registration in Europe the next priority.
- 2) Bioeffective A Approved by the Australian Therapeutic Goods Administration in February 2006 as a complementary medicine substance. It was launched earlier this year and is available as the antioxidant Bioeffective A320. Bioeffective A is expected to find uses in areas such as oral care, gastrointestinal health and burns and wound treatment.

3) Bioeffective B - Developed for use with saunas. It is marketed to both the general public and professional sporting teams who are trialling to aid recovery. It is also being studied for the treatment of prostatic hyperplasia.

Solagran has started commercialisation of Bioeffective I (a drink for the sauna market) and N (an antiviral and haematopoietic product). Solagran has also signed a deal with ASX listed Bioprospect to develop agricultural Bioeffective products.

**Product Markets:** The global market for plant-derived drugs stood at \$US18 billion in 2005. The global market for antioxidants was put at \$US3 billion in 2005. The Russian pharmaceutical market was worth \$US5.1 billion in 2006 (compared with a global market of \$US643 billion and a US prescription market of \$US274.9 billion). Despite its small size, the Russian market has been growing rapidly primarily due to the introduction of a drug reimbursement scheme. It is highly unlikely that its level of growth will be maintained.

The most common antioxidant, vitamin E costs \$US16 for 120 capsules. The comparator used in the Ropren liver disease trials, Essentiale Forte costs \$US19 for 30 capsules, while the most commonly used product to treat liver diseases, milk thistle, costs around \$US10 for 100 capsules. Choline alphoscerate, the comparator used in the Ropren cognitive function studies costs \$US30 for 60 capsules. All prices were derived from amazon.com and based on the highest dose capsules available.

**Verdict:** Framed as a traditional small pharmaceutical company, Solagran has problems. In general, they don't provide detailed data or p-values to support their claims. In addition, poor comparator choice, reliance on secondary and subjective endpoints, heterogenous patient populations and small study sizes make it very difficult to determine what, if any, unique, clinically significant benefits their products may have.

Framed as a complementary medicine company, however, the picture is compelling. You have a range of natural, biologically-active products derived from a source with a rich history in traditional Russian medicine. Throw in executive chairman, Dr Vagif Soultanov, who used Bioeffectives to protect himself from radiation in Chernobyl, and the company and its products look quite marketable.

I think a combination of clever marketing, potential proprietary drug margins, a seemingly endless supply of new products, a fast and unique pathway to market, the positive signal of buying a manufacturing plant and the expectation that Ropren demand in Russia will outstrip supply has given investors a glimpse of blue-sky. This blue-sky, however, disappears when Solagran is, in my opinion, appropriately framed as a complementary medicines company as reflected in my undiluted discounted cash flow valuation of 53 cents per share.

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