

# Biotech Daily

May 3, 2007

## DR MICHAEL WOOLDRIDGE AND DIA-B TECH

### [MARC SINATRA'S BIOGUIDE: DIA-B TECH](#)

**Overview:** Former Federal Health Minister Dr Michael Wooldridge has taken seats on the boards of Dia-B Tech, Cogstate, Resonance Health and Australian Pharmaceutical Industries since retiring from Parliament in 2001. An investment of \$10,000 in each of these four companies on the day Dr Wooldridge joined the board (or the company floated), would have turned \$40,000 into about \$21,000. This represents an average annual loss of 24 percent.

To see if this trend was likely to continue, I looked at the company with which Dr Wooldridge appears to be most closely associated - the diabetes-focused Dia-B Tech. Dr Wooldridge is the chairman and his former departmental chief of staff, Ken Smith, is the chief executive officer.

**Financials:** market cap: \$16 million; cash: \$2.4 million; last quarter cash burn: \$1.1 million.

**Directors & Management:** chairman, Dr Michael Wooldridge; chief executive officer, Ken Smith; non-executive director, Harold Neil Hewitt; non-executive director, Sir George Alberti.

Although the directors and management are clearly well-credentialed, there appears to be a lack of biotechnology-focused people on the board. This may be rectified with the replacement of Patrick Volpe, who recently left the board.

**Technology:** Dia-B Tech has patents, provisional patents and/or other intellectual property covering the following three areas:

1. Insulin sensitizing factor, ISF402, a small, naturally occurring protein shown to enhance the effects of insulin.
2. A bark that traditional South Pacific healers use to treat type II diabetes.
3. The CDA1 protein, which is thought to cause scarring and other complications in the kidneys and vascular systems of diabetes patients and may be a suitable target for a therapeutic.

**Products in Development:** The following are Dia-B Tech's main products in development, the indication for which they are being developed and their current development stage.

- 1) ISF402 - type II diabetes - phase I trials;
- 2) IMO14-Fusion - type II diabetes - animal studies;
- 3) The target protein CDA1 - diabetic complications - discovery.

ISF402 has been shown to be safe and to lower glucose levels in animal studies. It appears to work by breaking up insulin-zinc complexes that form in the blood stream and prevent insulin stimulating glucose uptake. The first part of a phase I clinical trial of 32 healthy patients, found no adverse events and results that were “suggestive of a biological effect of ISF402”. The second part of the trial, due to report mid-year, is currently underway and involves the use of ISF402 in type II diabetics. IMO14-Fusion is the active component of the South Pacific traditional medicine. This component appears to have insulin-like properties.

CDA1 has been shown to activate signaling pathways linked to fibrosis and to act as an anti-proliferative agent. Current work is focused on generating a mouse in which the CDA1 gene has been knocked out. This will give the company more information on the role of CDA1 and an idea of what an anti-CDA1 therapy might do.

**Product markets:** Diabetes is a huge health issue, with the World Health Organisation putting the number of sufferers at 171 million worldwide. In the US, the prevalence of diabetes increased by 50 percent from 1997 to 2004. Morgan and Stanley put the worldwide market for diabetes drugs at \$US17 billion in 2005. The worldwide market for insulin sensitizers relevant to ISF402 has been put at \$US4 billion, while IMO14 will be seeking a share of the \$US4-5 billion dollar worldwide insulin market. Any treatment based on CDA1 will be looking for a slice of the \$US22.9 billion spent each year in the US on diabetic complications.

The product markets for insulin sensitizers and different forms of insulin appear crowded. Differences in product performance characteristics and the synergistic effects of dual and triple therapies, however, tend to create product niches. In terms of ISF402, it should be noted that non-aggregating forms of insulin are already on the market.

**Verdict:** It is difficult to see where Dia-B Tech’s “traditional” medicine, IMO14, will fit into the market since it seems highly unlikely it could outperform insulin itself. The CDA1 project is interesting, but it is at such an early stage that ascribing any significant value to it is impossible. ISF402 is clearly their most promising project and a product developed from it could generate sales in excess of \$US250 million a year. Still significant risks remain. A lack of available literature on ISF402 makes it difficult to ascertain the strength of the science, but the company does inform me that peer-reviewed publications are forthcoming. There is also the fact that non-aggregating forms of insulin are already on the market and that the general overall market is crowded.

Overall, Dia-B Tech’s market capitalization of \$16 million seems about right given the nature of their projects and the risks associated with the company. A similar Canadian-based company, Diamedica, has a market capitalization of \$28 million, but has more advanced, lower risk projects.

Dia-B Tech’s projects aren’t advanced enough to generate the interest required to support their share price post-listing -18 cents - as the market has confirmed. Why this is so from a company chaired by a former Federal Health Minister is a very good question.

Marc Sinatra’s Bioguide  
Bioguide Consultants  
Email: [m.sinatra@alumni.mbs.edu](mailto:m.sinatra@alumni.mbs.edu)