Biotech Daily Marc Sinatra's Bioguide

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CYTOPIA - FLYING UNDER THE RADAR

Overview: Cytopia is a Melbourne-based drug discovery and development company with core competencies in kinase biology and rational drug design.

With results from a phase II trial for its lead cancer drug due by the end of the year, a drug for several myeloproliferative disorders close to clinical trials and a \$274 million deal with Novartis under its belt on an undisclosed project (see below) the fact that Cytopia is trading at a market capitalization of just \$7 million above its cash in the bank is ridiculous.

Why does Cytopia continue to fly underneath investors' radar?

Financials: Market cap: \$17 million; cash: \$11 million; last half year cash burn: \$3.8 million.

Directors: Non-executive chairman, Bob Watson; chief executive officer and managing director, Andrew Macdonald; non-executive directors, Dr Kevin Healey, Roderick Lyle, Mark Rowsthorn, Dr Geoffrey Vaughan.

Cytopia's board has done well, but it needs reshaping with more significant industry expertise and international pharmaceutical development experience being a priority.

Products in Development:

- 1) CYT997: Currently in a phase II trial for multiple myeloma with data analysis to commence in September. A phase II trial in glioblastoma was scheduled to commence last quarter. CYT997 is a vascular disrupting agent and is thought to break down tumor vasculature. It is also thought to have a direct cytotoxic effect. A phase I study of an oral version of CYT997 is underway.
- 2) CYT387: With animal studies proving positive, Cytopia expects to lodge an investigational new drug application with the US Food and Drug Administration by the end of the 2008. CYT387 is an inhibitor of Janus Kinase 2 (JAK2), which has been shown to be continually active in several myeloproliferative diseases.

- 3) JAK3 inhibitors: Subject of the 2006 licencing deal with Novartis. As part of the deal, little information can be released by Cytopia, although it is currently being developed for prevention of transplant rejection, with opportunities for rheumatoid arthritis (RA) and other autoimmune diseases. JAK3 is mainly expressed by haematopoietic cells. This is important for targeting inflammatory diseases and lessening side effects.
- 4) An early JAK2 project for pulmonary hypertension is ready for out-licencing, as is a project targeting the macrophage colony stimulating factor receptor.

Significant Product Markets:

Vascular disrupting agents are new drugs, and markets and their sizes are purely theoretical. Sales of Avastin, a drug which inhibits the growth of new tumor vasculature, had worldwide sales of US\$2.45 billion in 2007.

Three VDAs are in phase II/III or phase III trials, all combined with other drugs. Oxigene has Zybrestat in a trial for thyroid cancer and Sanofi-Aventis has AVE8062 in a study for soft tissue cancer. Novartis has ASA404, which it licenced from Antisoma in an \$890 million deal, in a trial for non-small cell lung cancer.

Initial indications for CYT387 are likely to be polycythemia vera (PV, over production of red cells) and essential thrombocytopenia (ET, over production of platelets). The US prevalence of these diseases in 2003 was 65,243 and 71,078, respectively.

At least two other companies have JAK2 inhibitors in development. Exelixis hopes to start a phase I trial of XL019 later this year, while Incyte's INCB018424 is in a phase I/II trial for PV and ET. Given the nature of PV and ET, JAK2 inhibitors are unlikely to command the price of a \$30,000 a year drug like Gleevec, which is also in a phase II PV study.

In regards to JAK3 inhibitors, one percent of the world's population has rheumatoid arthritis (RA), with global organ transplants expected to reach 700,000 a year by 2010. The global market for RA drugs in 2007 was \$13 billion and Cytopia says the transplant drug market is \$3 billion.

There are at least two other JAK3 inhibitors in development. Notably, Pfizer has CP-690 550 in phase II and III trials for RA, and in phase II trials for the prevention of transplant rejection. Rigel Pharmaceuticals has R348 in phase I trials for RA.

Opinion:

Few, if any, ASX listed companies have a pipeline equal to Cytopia's. While Cytopia's compounds are behind those of many of their competitors, the company is operating solely in promising new areas and is close enough to find itself in the box seat should a competitor's older compound fail or prove not as efficacious.

Moreover, ample room exists in each area for multiple drugs, lessening risk.

CYT997 and the Novartis collaboration could bear very substantial fruit. However, the biggest potential is in the JAK2 program, where Cytopia has patent protection on its compound and the target. A deep-pocketed partner could use this to rein-in competitors and dictate terms as it sees fit. This is an exceedingly good place to be.

The major reason Cytopia has flown under the radar is that, despite a recent raising through Lodge Partners, it has engaged infrequently in capital raising through Australian brokers. These raisings generate an invariably positive analyst report, broker support and, thus, interest in the company. But they can be of limited use for small companies because they often only provide part of what they need.

While Cytopia's pipeline and management are first rate, to become a major player on the Australian scene it needs to find a considerable amount of cash, additional directors highly experienced in key areas and a network of associations capable of supporting the company as it develops. This would be best achieved if they brought a specialist fund or funds onto the register, which could provide all of these things at once.

Using a mix of comparables and discounted cash flow analysis, I believe Cytopia should be trading at a price of 84 cents a share.

Cytopia was untraded at 21 cents.

Marc Sinatra's Bioguides marc@biotechdaily.com.au