



arana
therapeutics



cancer program

Antibody cancer
treatments under
development



Background

Arana has a number of anti-cancer compounds in its pipeline that warrant further development, based on the results from discovery stage and pre-clinical studies.

The market for all anti-cancer drugs is worth more than US\$20 billion annually. The market for a drug against any one solid tumour is estimated to be approximately US\$500 million in per annum sales.

Lead Compounds

ART010

A novel biologic to treat bone cancer, ART010 is a modified version of osteoprotegerin, a naturally occurring protein in the body that regulates bone density.

Osteoprotegerin has been shown to protect against loss of bone mass in diseases such as osteoporosis and bone cancer. However, there is evidence that osteoprotegerin may interfere with a surveillance system in the body that kills cancer cells.

ART010 is an engineered version of osteoprotegerin, produced by the application of Arana's technology platform EvoGene™. In preclinical studies, ART010 was shown not only to protect against bone loss as effectively as the osteoprotegerin, but also to reduce the ability of a tumour to grow in bone.

Seventy percent of patients with advanced breast and prostate cancer develop secondary cancers in the bone, which amounts to about 300,000 new cases annually in the US alone. The cost of adjunct treatment to counter the effects of bone erosion, fragility and pain is estimated at US\$1 billion.

ART104

ART104 is an antibody against a novel cancer target. Currently in the advanced discovery stage of development and the late stages of 'humanisation', ART104 has been shown to improve the effects of standard chemotherapy in a mouse model of colorectal cancer.

Although ART104 is under development for colorectal cancer, Arana anticipates that it may also be effective for the treatment of other solid tumours.

Arana is likely to take a decision on the form of ART104 it will develop clinically within 18 months, following the completion of preclinical studies.

ART150

ART150 is an antibody under development for the treatment of lung cancer and melanoma.

ART150 targets gangliosides (which are complex molecules made of carbohydrate and lipid present in the membranes of cells) and is currently in pre-clinical trials.

In a mouse model of human lung cancer, ART150 was able to completely inhibit tumour development, even after the completion of treatment.

The market for lung cancer therapies is about US\$3 billion annually and that for melanoma therapies is about US\$1 billion. Arana expects to complete preclinical development of ART150 in 2009.

Three discovery stage projects

Arana has three anti-cancer compounds in the discovery stage of its product pipeline:

- ART140 – for leukaemia
- ART101 – for colorectal cancer
- ART160 – for solid tumours

Contact

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