

## CYTOPIA REPORTS FINAL DATA FROM PHASE I CANCER TRIAL

Cytopia recently presented an update on the final data from its Phase I clinical trial for CYT997. Importantly, the trial not only achieved its primary objectives of determining the safety of the compound in cancer patients but final data also revealed that CYT997 may be targeting and disrupting the blood vessels of tumours.

Patients enrolled in the study had advanced cancer which had failed to respond to other therapies. Each patient was eligible to receive a maximum of six cycles of CYT997 therapy, subject to ongoing clinical stabilisation. A diverse range of cancer diagnoses were included in the trial, with the most common tumour types being metastatic melanoma and mesothelioma.

### 77% OF PATIENTS ACHIEVED DISEASE STABILISATION

Seven of the trial's 31 patients (23%) completed six cycles of drug therapy, suggesting stabilisation of their cancers for approximately four months. These findings are promising given that most of the patients in this study had failed therapy with approved anticancer agents and that CYT997 was given as a single agent in these chemo-resistant trial participants. Two patients continued to receive the drug following the trial under the Commonwealth Government's compassionate use scheme.

Of the 22 patients evaluable for tumour response measurements, 17 patients (77%) achieved a best response of disease stabilisation. The remaining five patients (23%) continued to progress through their CYT997 therapy.

Dr Jason Lickliter, Medical Oncologist and lead clinical investigator for this study commented, "Stabilisation of disease in patients who have failed standard anticancer treatments is an encouraging finding, particularly as CYT997 was given alone. The data obtained in this study indicate that further investigation of CYT997 is warranted in a range of clinical settings".

Further data collected during the study indicates that CYT997 may be disrupting the tumour blood vessels in some patients, leading to changes in tumour blood flow and signs of blood vessel damage.

CYT997 was also comparatively well tolerated in this study, with the range of severity of side-effects observed being typical of those seen with other Vascular Disrupting Agents.

Given the favourable findings of the Phase I study, the company is well advanced in planning for its multi-trial Phase II programme, including single-arm and randomised studies in a range of tumour indications.

The company also intends to commence dosing in a single-arm Phase II study in relapsed or refractory multiple myeloma patients within weeks (see accompanying story in this edition of cyTopics).

## NEW PREMISES FOR CYTOPIA

Cytopia has recently relocated its Australian operations to new premises in Richmond, Melbourne.

Thanks to careful planning and management of the process, downtime on our research projects was kept to a minimum. The new site offers numerous advantages for our business and our people, but was primarily chosen for the already established laboratory infrastructure, including chemistry and biology laboratories.

This has been a welcome move for the company, providing additional growth capacity that was not previously available at the Prahran premises, and an excellent working environment for our staff.

In conjunction with the relocation, we have also introduced a fresh new logo and branding for Cytopia. This version of cyTopics features the new logo and all external communications from the company will now carry the new branding.



## CHAIRMAN AND CEO'S MESSAGE

### Dear shareholders

As the 2007 year draws to a close, the 2008 year is shaping up as a very exciting one for the company. At our Annual General Meeting, we announced to shareholders a series of milestones which we anticipate will deliver a solid stream of news and progress during 2008. Cytopia will be in the strong position of having a pipeline of drug candidates spanning preclinical, Phase I safety trials and Phase II efficacy trials.

We are moving quickly towards the commencement of Phase II trials in various cancer indications with our vascular disrupting agent, CYT997. The first of our two Phase I safety trials is complete, and the data from this trial was recently released to the market.

The trial participants were all end-stage cancer patients who had failed all available front line cancer therapies. Of those patients where the change in tumour size could be accurately measured, we were encouraged to see disease stabilisation in nearly 80% of that group. In addition, two patients elected to continue treatment with the drug beyond the trial, through the Commonwealth Government Special Access Scheme.

Our Phase II trials will focus on highly vascularised tumours where one would expect a vascular disrupting agent such as CYT997 to be most efficacious. However, our recent announcement of the first Phase II trial for CYT997 in refractory or relapsed multiple myeloma illustrates the broader potential we also see for this compound in other cancer indications. Conducted at the Alfred Hospital in Melbourne, this single arm trial will run for approximately twelve months, with interim data anticipated in the third quarter of 2008.

We expect to also commence both single arm and randomised Phase II trials in CYT997 during the first half of 2008. Likely indications for these trials are melanoma (skin cancer) and glioblastoma (brain cancer). Further updates will be provided in future editions of cyTopics.



Since the last edition, Mr Gavan Flower has joined us as Chief Financial Officer and Company Secretary and is profiled on page 4. Gavan brings broad commercial skills and experience to the company and we welcome him to Cytopia. We are also very pleased to retain the input and expertise of Dr Andrew Wilks in an advisory capacity from January 2008. Andrew will shortly conclude his responsibilities as Chief Scientific Officer and transition to membership of our Scientific Advisory Panel.

We trust that you find this issue of interest. Communication to all stakeholders is very important to us and if you are a shareholder, we would again encourage you to register for electronic communications via the company's share register, Link Market Services. This will enable us to quickly and efficiently deliver to our stakeholders all relevant communications including issues of cyTopics, the Annual Report and general announcements to the market.

**Andrew Macdonald** *CEO*

**Bob Watson** *Chairman*

## CYT997 SHOWS EARLY PROMISE IN MULTIPLE MYELOMA

During October, Cytopia announced very promising data from studies investigating the activity of CYT997 in cell samples from patients with multiple myeloma. The studies were conducted by Dr Andrew Spencer's Myeloma Research Group at the Australian Centre for Blood Diseases.

Multiple myeloma is an incurable cancer of specialised bone marrow cells known as plasma cells. In patients with multiple myeloma, these plasma cells divide in an uncontrolled manner invading the bone marrow and the solid bone tissue, potentially leading to fractures. Kidney failure and anaemia can also occur.

While significant progress has been made in new therapies for multiple myeloma, patients almost always relapse, leading to uncontrollable and fatal disease. It is estimated that some 4,000 Australians die each year of multiple myeloma and approximately 50,000 people are living with a diagnosis of myeloma in the United States alone.

CYT997 was shown to have a number of favourable effects in myeloma cells including the ability to stop cells dividing; the ability to overcome a specific mechanism of myeloma cell resistance and to kill cells from multiple myeloma patients which has recurred following treatment with other drugs.

Importantly, CYT997 was also shown to improve the anti-myeloma properties of drugs currently approved for myeloma treatment, opening the possibility of synergistic activity in the clinical setting.

Cytopia has filed regulatory applications for a Phase II study in patients with multiple myeloma which is resistant or has recurred following previous treatment. Dr Andrew Spencer will act as the study's Principal Investigator. Enrolment has already commenced for this study and dosing should occur within weeks.

*For further information on Multiple Myeloma, please see Myeloma Foundation of Australia [www.myeloma.org.au](http://www.myeloma.org.au)*

# JAK2 INHIBITORS FOR PULMONARY ARTERIAL HYPERTENSION



Pulmonary arterial hypertension (PAH) is a highly debilitating disease of the lungs, where build up of cells in the pulmonary arteriole leads to very high pulmonary arterial pressures. Patients with PAH suffer from extreme shortness of breath as the heart struggles to pump against these high pressures causing such patients to ultimately die of right heart failure.

The average survival after diagnosis for untreated patients is about three years. PAH has been called the "cancer of cardiovascular diseases" and even on the latest therapies, about 60% of patients suffer a major life-threatening event (heart failure, hospitalization or lung transplant) over a two-year period. With an existing global market for PAH drugs of over US\$2 billion, there is still a great need for better drugs to treat this disease.

Cytopia's recent studies with specific and potent JAK2 inhibitors in an animal model of PAH have shown excellent efficacy in treating and even reversing the disease, indicating strong clinical potential.

The chemistry team at Cytopia has developed a suite of novel JAK2 inhibitors that could be delivered to the lungs in an inhaled form. These specifically designed chemical compounds would then be cleared from the body in an inactive form, significantly reducing any potential for unwanted side effects in other tissues or organs. These inhibitors are backed by world wide patents, covering the Cytopia intellectual property in the new compounds.

Strategic initiatives are underway to locate the best partners to develop an inhaled form of Cytopia's compounds and to support this work with on-going funding through grants or commercial partnerships.

WITH AN EXISTING GLOBAL MARKET FOR PAH DRUGS OVER US\$2 BILLION, THERE IS STILL A GREAT NEED FOR BETTER DRUGS...

## PATENT UPDATE

Since the last edition of cyTopics, there has been considerable activity in the Cytopia patent portfolio.

- Two new provisional applications relating to new chemical series as potential drug candidates for the JAK programs have been filed in the US.
- An International (PCT) application has been filed in relation to the potential drug candidates for the FMS project.
- US patent number 7259179 entitled "Kinase inhibitors" has been issued in the name of Cytopia Research Pty Ltd. This patent relates to the early research developing Cytopia's potential drugs for the JAK2 and JAK3 programs.
- British patent number 2423083 entitled "Azole-based Kinase inhibitors" was granted in the name of Cytopia Research Pty Ltd. This patent relates to potential drugs developed for the JAK programs, among others.
- Australian patent application number 2002226196 and New Zealand application no 540035 have been accepted for grant. The first application is entitled "Protein Kinase signaling" covers Cytopia's early research identifying the mode of action for JAK2 activity. The second application is entitled "Pyrazine based tubulin inhibitors" and relates to research which lead to the development of CYT997.

## INVESTOR COMMUNICATIONS

Communication with our stockholders is something that is very important to Cytopia. We will try to keep you in touch through the latest issues of cyTopics, our Annual Report and other general announcements to the market. Therefore, can you please help us by providing your details via the following methods:

### Shareholders

Please contact our share registry online, Link Market Services, at [www.linkmarketservices.com.au](http://www.linkmarketservices.com.au) to register your email address.

### Non Shareholders

Email your details to [info@cytopia.com.au](mailto:info@cytopia.com.au)

## STAFF PROFILES



**GAVAN FLOWER**  
CHIEF FINANCIAL OFFICER &  
COMPANY SECRETARY

Gavan graduated from Melbourne University with a Bachelor of Commerce degree in 1993, majoring in Accounting and Finance. He then commenced his accounting career with the local Chartered Accounting firm, Pitcher Partners, where he completed his Professional Year Program to become a member of the Institute of Chartered Accountants in 1995.

His first foray into industry was with Visy Industries in 1997, and then after a two year stint back in public practice he took up the role with the multi national ASX listed cinema screen advertiser, Media Entertainment Group as Chief Financial Officer and Company Secretary.

After two years with the company he was a senior finance executive for Olympic Games, Wimbledon and US Open contractors Cleanevent.

Two years later he decided to take on the challenge as Corporate Accounting Manager, and then Company Secretary of listed ASX200 company, Spotless Group Limited.

After four years with Spotless he is now the newest member of the Cytopia executive.



**ROSE FIDA**  
DRUG DEVELOPMENT  
MANAGER

Born & bred in Melbourne, Rose completed a Bachelor's degree in Science and in 2000, obtained a PhD in Physiology from Monash University.

Looking for a different focus & challenge, Rose undertook a 3 year post doctoral position in Pharmaceuticals at the Victorian College of Pharmacy.

In 2002, she accepted a position as the Pharmacokinetics Team Leader with the Centre for Drug Candidate Optimisation (CDCO) working on many different lead drug development programs.

With a personal interest in the development of oncology drugs, Rose joined Hospira Australia (formerly Mayne Pharma) as an accredited R&D Project Manager, and over the last 12 months as an R&D Project Leader, leading and managing a portfolio of generic injectable drug projects from formulation development and manufacturing through to registration and launch for a global market.

Rose is looking forward to the challenges of drug discovery and bringing her experience in the development of oncology drugs within the pharmaceutical industry to Cytopia.

## RECRUITMENT

Specific job openings will be posted on the Cytopia website from time to time. Please refer to the following link for details: [www.cytopia.com.au](http://www.cytopia.com.au)

## CYTOPICS

Further copies of *cyTopics* are available from the company website: [www.cytopia.com.au](http://www.cytopia.com.au)

## CONFERENCES AND PRESENTATIONS

In recent months, Cytopia has participated at a number of conferences & investor presentations.

### INTERNATIONAL CONFERENCE ON VASCULAR TARGETED THERAPIES IN ONCOLOGY

Mandelieu, France (4 – 6 October 2007)

### 15TH ANNIVERSARY BIOPARTNERING EUROPE CONFERENCE

London, UK (7 – 9 October 2007)

### AUSBIOTECH 2007

Brisbane Convention & Exhibition Centre (21 – 24 October 2007)

### AACR-NCI-EORTC INTERNATIONAL CONFERENCE ON MOLECULAR TARGETS AND CANCER THERAPEUTICS

San Francisco, USA  
(22 – 26 October 2007)

### THE AMERICAN SOCIETY OF HEMATOLOGY ANNUAL MEETING

Georgia, USA (8 – 11 December 2007)



### AUSTRALIA

576 Swan Street  
RICHMOND VIC 3121  
AUSTRALIA  
T +61 (03) 9208 4222  
F +61 (03) 9208 4299

### USA

5 University Place, Room 203  
RENSSELAER NEW YORK 12144-3474  
USA  
T +1 518 462 4511  
F +1 518 375 7029

E [cytopia@cytopia.com.au](mailto:cytopia@cytopia.com.au)  
W [www.cytopia.com.au](http://www.cytopia.com.au)

ABN 41 079 253 606