

# MIMS matters

## Jack Andraka, a Teen Prodigy in the Detection of Pancreatic Cancer?



The annual meeting of the Health Informatics Society of Australia can always be counted on to present inspiring local and international speakers that focus on e-health innovation, research and new ideas. This year's meeting HIC2014 (HIC – Health Information Conference) didn't disappoint.

It's not unusual for HIC to provide a forum for novel ideas, but rarely does a keynote speaker garner as much attention as Jack Andraka, who has become known as the teen prodigy of pancreatic cancer after winning the 2012 Gordon E. Moore Award, the grand prize of the Intel International Science and Engineering Fair.

To some, Jack's story highlights a weakness in the lengthy peer-review process leading to eventual scientific publication; while others feel that Jack's celebrity is the result of "Glamour-Mag Science" and a misunderstanding by the popular press of how new discoveries really occur and the susceptibility of self-published evidence, non-referenced work and the reliance on non-independent sources.

Andraka is well known for his work in developing what may be a new, rapid and inexpensive method to detect an increase in a protein that indicates the presence of pancreatic, ovarian and lung cancer. Jack presented that a key reason for the poor survival rate from pancreatic cancer is the lack of early detection and a rapid, sensitive, inexpensive screening method, and that his process overcame these limitations. The idea for his pancreatic cancer test came to him while he was in a high school biology class, drawing on the class lesson about antibodies and the article on analytical methods using carbon nanotubes that he was surreptitiously reading in class at the time.

Jack's teenage optimism and lack of access to research resources directed him to consult "a teenager's two best friends; Google and Wikipedia". He began to think of various ways of detecting and preventing cancer growth, and terminating the growth before the cancer cells became invasive. Afterwards he followed

up with more research on nanotubes and cancer biochemistry using Google Search, aided by free online scientific journals.

Hoping to receive laboratory help to develop his idea, Jack contacted 200 professors at Johns Hopkins University and the National Institutes of Health with a plan, a budget, and a timeline for his project. He received 199 rejection emails before he got a positive reply from Anirban Maitra, Professor of Pathology, Oncology, and Chemical and Biomolecular Engineering at Johns Hopkins School of Medicine.

The result of his project was a new dipstick-type diagnostic test for pancreatic cancer, using a novel paper sensor similar to that of the diabetic test strip. The sensor tests for the level of mesothelin, a soluble cancer biomarker first described by Scholler and colleagues in PNAS in 1999, to determine whether or not a patient has early-stage pancreatic cancer.

According to Andraka, the test is over 90 percent accurate in detecting the presence of mesothelin, is 168 times faster (taking only five minutes to run), 26,667 times less expensive (costing around three cents), and over 400 times more sensitive than the current diagnostic tests.

However, to many scientists the practical usefulness of the test remains to be proven, with a frequent view being that Jack's sensor is probably a publishable piece of science that could eventually appear in a journal, and was a remarkable achievement for a high school student. But it falls far short of changing science and is only a small step toward developing a workable cancer diagnostic.

In one of the first media stories about Andraka, Forbes Managing Editor Bruce Upbin asked: "Wait, Did This 15-Year-Old From Maryland Just Change Cancer Treatment?" Nineteen months later the same publication felt safe in answering: "No, he didn't. And I think it's unfair to him, and to the work he did do, that we expected him to. Because what he did – creating a cool biosensor while still in high school – was pretty neat on its own".

### This Issue

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# Don't take your medicine with fruit juice!

Dr Geraldine Moses  
BPharm, DClinPharm, AACPA



Geraldine Moses is a doctor of clinical pharmacy, specialising in drug information. She works part-time at the Mater Hospital in Brisbane within the Academic Practice Unit and provides a national drug info service for the ADA, called Pharm-Advice. She is also an accredited pharmacist, providing HMRs in her local community and training those who wish to become accredited.

**Together with Debbie Rigby, Geraldine runs seminars on managing drug interactions. For more information or to register please contact them through their website <http://www.pharmeducation.com.au>**

You've probably heard about grapefruit juice (GFJ) interacting with prescription drugs. The risk is real, can occur with as little as 200ml of juice and is quite significant... drug levels can increase up to 2-3 fold.<sup>(1)</sup> In the past few years however, new research has shown that other juices, particularly apple and orange juice, can also significantly alter drug absorption but in the opposite way to GFJ.<sup>(2)</sup> Serum drug levels go down.

Fruit juice drug interactions are clinically relevant for two reasons. Firstly, because the increase or decrease in drug levels can be dramatic, and secondly because the greatest impact of the interaction occurs when fruit juice is given simultaneously, and many people take their medications with a swig of fruit juice! In fact, I recently received an enquiry from a man whose wife was undergoing cancer chemotherapy and had also embarked upon a "detox" program drinking about 3 litres of freshly-squeezed fruit and vegetable juice throughout the day. He wanted to know whether this juice could interfere with her chemotherapy. As it turns out, the answer is a resounding YES.

## Mechanisms

Drug interactions with GFJ are caused by furanocoumarin bioflavonoids in the fruit blocking CYP3A4 enzymes in the gut wall, thus preventing them from being metabolised as they pass through the gut wall (via enterocytes) and the liver (in hepatocytes). As a result, systemic levels of drugs subject to this metabolism can increase. HINT: Only drugs **exclusively** metabolised via CYP3A4 are likely to interact with GFJ significantly.

Orange and apple juice have a different effect. They contain bioflavonoids called hesperidin and phlorizin (and others) which can block organic anion transport protein (OAT-P), a membrane-bound transport protein in the gut wall that pumps both endogenous and exogenous compounds into enterocytes and

hepatocytes on their way to the systemic circulation.<sup>(3)</sup> When these bioflavonoids block OAT-P, serum levels of drugs reliant on this pathway will decline.

A good example of a fruit juice-drug interaction is that which occurs between apple juice and atenolol, a commonly used antihypertensive. Atenolol is totally dependent on OAT-P 1A2 for transport across the gut wall. A recently published study found that 600 ml apple juice consumed over 1.5 hours after atenolol administration caused a 58% reduction in atenolol levels and 1200 ml apple juice consumed over 3 hours lead to an average 82% reduction in levels.<sup>(4)</sup> A study involving another beta blocker called celiprolol found 200 ml orange juice administered within 2 hours reduced plasma celiprolol concentrations by an average of >80% compared with administration with water.<sup>(5)</sup> The result would be that both these drugs would be rendered ineffective by the effect of these fruit juices.

Luckily OAT-P blockade only lasts for a matter of hours, so the key issue is timing. The most significant interactions occur when the juice is given within 2 hours of drug administration, and it appears the interaction can be avoided completely if they are separated by four hours or more.<sup>(3)</sup>

The OATP family of proteins has been identified as transporters of many important drugs including fexofenadine, digoxin, pravastatin, rosuvastatin, methotrexate, 5-fluorouracil, thyroxine, penicillin, zidovudine, acyclovir and many more. Note the penicillin! And these transporters have been identified not just in the intestine and liver but kidney and brain as well. So no doubt, the physical effects of fruit juice-drug interactions are very complex. In the meantime, it would be wise to advise your patients to take their medicines with water rather than fruit juice.

Drugs with significant interactions with grapefruit juice	Drugs with significant interactions with apple and orange juice
Felodipine	Fexofenadine
Estrogen	Atenolol
Simvastatin	Erythromycin
Caffeine	Digoxin
Quetiapine	Rosuvastatin
Oxycodone	Thyroxine
Zolpidem	Aliskiren

### References:

- Bailey D, Dresser G, Arnold MO. Grapefruit-medication interactions: Forbidden fruit or avoidable consequences? *CMAJ*, March 5, 2013, 185(4) 309-15
- Bailey DG. Fruit juice inhibition of uptake transport: a new type of food-drug interaction. *Br J Clin Pharmacol* 2010; 70(5): 645-55
- MJ Dolton MJ, Roufogalis BD and McLachlan AJ. Fruit Juices as Perpetrators of Drug Interactions: The Role of Organic Anion-Transporting Polypeptides. *Clin Pharmacol Ther* 2012; 92(5): 624-30
- Jeon, H.et al. Apple juice greatly reduces systemic exposure to atenolol. *Br. J.Clin. Pharmacol* 2013; 75 (1): 172-9
- Lilja, J.J., Juntti-Patinen, L. & Neuvonen, P.J. Orange juice substantially reduces the bioavailability of the beta-adrenergic-blocking agent celiprolol. *Clin.Pharmacol. Ther.* 75, 184-190 (2004).

# Health As A Service, Telstra's Roadmap for Health

At the recent Health Informatics Conference (HIC) held in Melbourne in August 2014, Telstra discussed its strategy and commitment around health. Common knowledge is that Telstra has made a number of acquisitions of health related companies over the past 18 months, as well as recruiting a number of senior executives from the health industry, including Shane Solomon, ex-Chief Executive at the Hong Kong Health Authority, and ex-National Health Lead at KPMG. Acquisitions have included Fred IT, DCA Healthcare, HealthEngine and IP Health. The common feature between these companies is their innovative use of technology in the health arena. Taking just one example, Fred IT has a strong, consistent history of launching innovations using IT, initially to community pharmacy, but in recent times this has broadened to include e- prescription services and developing and managing the National Prescription and Dispense Repository for NEHTA.

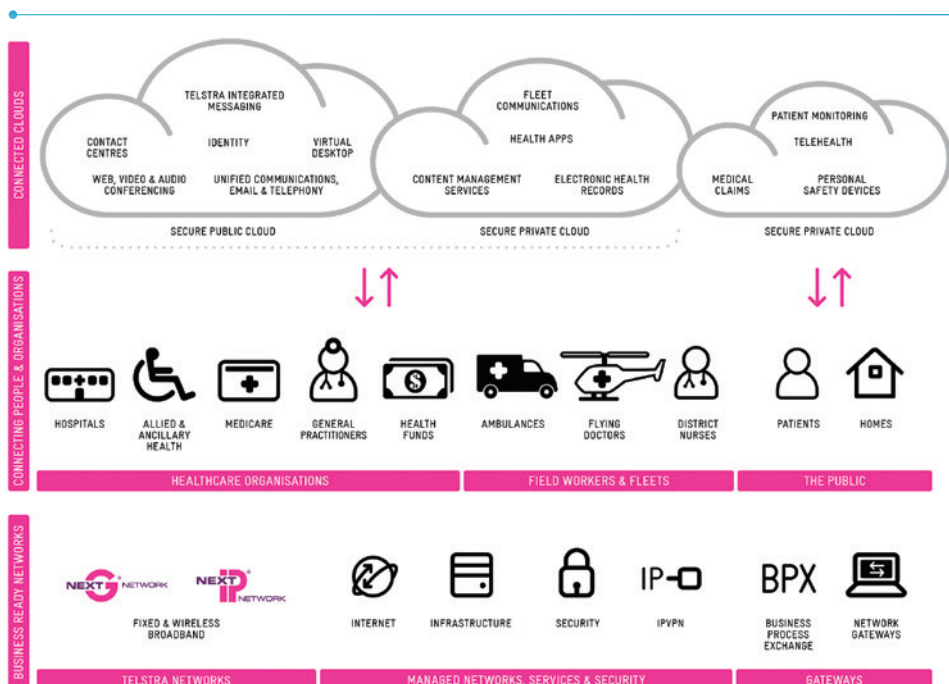
To date, it could be viewed that the common element driving these various acquisitions was their reliance on underlying services that are provided by the telecommunications industry and, as such, Telstra. Undoubtedly, the consumption of internet and mobile enabled services by the health sector will grow over time; however what makes the Telstra strategy so interesting is that it seems to be based not just on selling more internet and mobile plans, but on being a player in driving the uptake and innovation around these platforms that can lead to a better and more efficient healthcare system.

Shane Solomon summed up the strategy as being Health As A Service – clearly defining and envisioning a future where health lives within the cloud, greater enabling connectivity and communication to drive better health outcomes.

**Telstra's advantage is that it does not sit on any side of the health divide, but transcends it, and can look to provide services across acute and primary care through health professionals, but also by enabling consumers to monitor and manage their own health.**

Indications are that Australia is poised at potentially the next phase in development of our eHealth system. NEHTA is continuing to drive forward the PCeHR, there appears to be a renewed interest in the use of EMRs in acute care, we are seeing more growth in the development of cloud based clinical software systems, and home health monitoring devices are becoming more main stream. Technology is the enabler that can, if applied well, join the pieces together to make information more useful and help to drive innovation that actually improves the efficiency and effectiveness of healthcare delivery.

This is the opportunity that Telstra has noted and acted on by putting into play a strategy that sees it set to be positioned as a long term participant in this space. Whilst in the Telstra ecosystem, health is still relatively small, it will be one to watch with interest, as Telstra is one of the few providers with both the economic resources and espoused strategy to potentially influence the rollout of eHealth services across Australia.





# Medicines Management 2014 - a Thought Provoking Meeting that Broadened Professional Horizons



Cullen Bay Marina, Darwin Harbour  
Photo by Shaun Crawford



Stokes Hill Wharf, Darwin  
Photo by yeowatzup

An important event in the annual MIMS calendar is participating with the Society of Hospital Pharmacists (of Australia) at their annual National Medicines Management Conference. This year the conference has been held in Australia's Top End (Darwin); a location where for thousands of years people have gathered under the deep blue skies and lush tropical surroundings. As well as the expected pharmacy scientific papers being presented, this year the program fittingly featured a diverse stream of presentations on indigenous and tropical themes.

## The Role of Pharmacists in Disaster Management

Natural disasters are now more frequently impacting people. Our planet might seem like a more active and dangerous place than ever, given the constant media reports of multiple natural disasters recently. The Earth's climate may be changing, but in recent decades, with the search for undeveloped land and fertile soil, people are flocking to areas that have a history of being disaster-prone regions. This creates a situation in which ordinary events like earthquakes and hurricanes become increasingly elevated to the level of natural disasters that reap heavy losses of human life and property.

Commodore **Elizabeth Rushbook**, Director General of the Royal Australian Navy, began her naval career as a third year undergraduate medical student at Queensland University in 1991. After completing her internship and residency at Logan Hospital in Queensland, Elizabeth has worked as a clinical doctor in the Australian Defence Force in a variety of roles afloat and ashore. From her unique experience of clinical practice and policy and health service management, Commodore Rushbook explained the critical role pharmacists play as a part of the primary health care response in disasters and humanitarian aid.

Australia's National Critical Care and Trauma Response Centre was conceived following the 2002 Bali bombings. Funded by the Australian Government, the NCCTRC is focused on enhancing Australia's capacity to provide clinical and academic leadership in disaster and trauma care. **Petra Straight** a clinical pharmacist based at the Darwin NCCTRC

discussed the challenges of "Pharmacy on The Frontline". Her daily role involves maintaining the deployment medication cache, ensuring the safe and legal deployment of medicines, and making sure volunteers are fully vaccinated for medical deployments. Petra was recently deployed to Tacloban in the Philippines as the Australian Government's Medical Assistance Team Pharmacist in response to Typhoon Haiyan.

## Angangkere – Traditional Aboriginal Healing and Indigenous Medicinal Plants

Angangkere traditional healing is a sacred form of healing practiced by Arrernte people for over 50,000 years. They believe in the power of healing that comes from the land. The indigenous peoples of Central Australia often prefer to visit a traditional healer before they see a western doctor, or in combination with western treatment. **Amelia Turner, Patricia Webb** and **Kat Hope** explained the importance of pharmacists and other health professionals to be aware of traditional healing and respectful of their patients' right to access this form of healing.

Indigenous medicinal plant knowledge has provided leads to discovering many medicinal products used in Western healthcare and complementary medicine. With a significant potential to develop new medicines from plants used by Australian Aboriginal people, the Chuulangun Aboriginal Corporation and the School of Pharmacy and Medical Sciences at the University of South Australia are conducting research examining the safety, efficacy and sustainable harvesting of medicinal plants with the potential for product development through herbal medicine and pharmaceutical routes. **David Claudie** and **Susan Semple** presented their work from both the Aboriginal Traditional Owner and western scientist perspectives and displayed the value of a collaborative approach to the investigation of Australian Aboriginal medicinal plants.

*Medicines Management 2014, the annual scientific conference of The Society of Hospital Pharmacists (Australia) was held in September over four days. MIMS is a proud sponsor and supporter of the conference.*

BROADEN  
YOUR HORIZONS



# New Product Announcement – Android App



# MIMS for Android

This is a product we have been eager to develop for some time now. The entire team at MIMS has worked hard on this project and we are now in the final stages of development and testing. We are so excited that we could not resist giving our customers a preview.

Android users will now be able to enjoy the same comprehensive features as our iPhone users, including drug search, multiple browse functions, drug to drug interactions checking, and pill identifier searching. We have also taken on board our iMIMS user feedback and improved areas such as the styling of the Abbreviated and Full Product Information.

A key strength of the MIMS for Android app is its ability to download the MIMS full database onto the device and apply the MIMS updates each month. After downloading, no internet connection is required. You will have full access to Australia's leading drug information wherever you are.

The world of Android has seen a number of significant changes in a relatively short period of time. It has certainly come a long way. Even die hard Apple fans are showing signs of envy.

Those of you who have visited your local phone store to purchase an Android device will already be aware of the broad range of Android devices and manufacturers. It certainly is an experience trying to find the right one for you. There are many cheap devices out there, so it is advisable to get some recommendations from your friends before you purchase a device.

The Android platform currently has a much larger market share than other operating systems. With Android being an open platform, this has enabled many manufacturers to enter the market, producing a myriad of different device screen sizes, resolutions, and even

customisation of the user interface. This has led to what is known as market fragmentation. Whilst this may sound great and offer a lot of choice, it does present a huge challenge for software developers. The MIMS Development Team has done an exceptional job in creating an app that is capable of running on many different devices.

The minimum device requirements for the app are:

- **Android Version: 4.0.3 or higher** (for those who like jargon, the app can run on Jelly Bean or Kit Kat)
- **RAM: 512MB Minimum**
- **CPU: 1GHz Single core**
- **Display: 480px x 800px** (Higher resolution is recommended for a better experience and readability)
- **Wi-Fi connection for initial download and monthly data updates**

The app will be available around mid to end of September. Installation is via direct download onto your device through the Google Play Store. Simply search for MIMS Australia and install.

Anyone can download the app for free and register for a 7-day free trial. Once downloaded, simply launch the app and tap the register link below the Sign in button. Trialling the app will give you some time to check if your device is suitable.

For employees of larger organisations, your employer may already provide access to MIMS products. Please check with your administrator for instructions on how to register for your copy of MIMS.

We hope you enjoy using the new MIMS for Android app as much as we do.





## Ngaanyatjarra Health Service



“There’s not much solid internet in this part of the world” said Robbo (Andrew Roberts), a pharmacist living and working in one of the most remote parts of Australia and working full time in Aboriginal Health.

“Could you help us mate and give us some of your MIMS Annuals – we don’t have much money either”.

*So we do - every July we post 16 MIMS Annuals to Alice Springs, and the rest is up to Robbo!*

His home is in a small community of 100 people or so, about 150 km from the NT/SA/WA border, and he works with the Ngaanyatjarra Health Service (NHS).

Formed in 1985 after the Pitjantjatjara/ Ngaanyatjarra Homelands Health Service was recreated as two distinct health services, the community-controlled health service provides professional and culturally appropriate health care to the Ngaanyatjarra people in Western Australia. It covers a vast area and the communities, made up of approximately 2,300 Ngaanyatjarra people, are widely scattered across the Great Victorian and Gibson Deserts of Western Australia – the majority are at least 1,000 kilometres from a regional centre.

There is no hospital or other health providers servicing or based in the Ngaanyatjarra Lands. Most people live in the communities, and the Ngaanyatjarra Health Service employs around 65 staff members.

NHS works closely with the Ngaanyatjarra people to provide health care and education, encourage sustainable lifestyles through diet and physical wellbeing, and deliver health related training and training facilities for people on the lands. Robbo travels those lands in his long wheel base 4x4, with his dog and his camera. He does home medicine reviews in the middle of the Western desert and turns up at conferences to get his CPD points, fight for the rights of his profession and the people he serves. And to convince MIMS to keep providing the Annuals for each and every one of the clinics that make up the **Ngaanyatjarra Health Service**.

*It’s a pleasure working with you Robbo*

## MIMS Research and Student Program



Researchers, teachers and students require more than just basic drug information to support them in their studies and research. MIMS delivers the most comprehensive, up to date, trusted medicines information and the associated clinical knowledge that leads to improved clinical knowledge skills and development.

The MIMS Research and Student Program is a complimentary nation-wide program for Universities and Accredited Education Institutions. The service is available for institutions that offer education in Medicine, Nursing or Pharmacy, and provides selected MIMS products free to students in any year of their studies.

The resources provided by the program are delivered electronically, and are an invaluable, comprehensive, trusted, user friendly and rich application for sourcing not only medicines information, but a great deal of other valuable reference material for students studying in the health sector.

MIMS is always eager to discuss options with universities and colleges to allow for the effective delivery of our drug, medicines and health information to students and research programs. Examples of current programs include:

### eMIMS for Pharmacy Laboratories and Classrooms

eMIMS is available for use within the institution as a resource for pharmacy studies. MIMS provides complimentary access within

pharmacy labs, allowing students to research the most trusted, comprehensive and independent drug and medicines information. eMIMS comprises the following segments:

- MIMS Medicines Database – Abbreviated and Full product information
- MIMS DrugAlert - drug interactions
- MIMS Product Images
- MIMS Assist
- MIMS Companion
- MIMS Disease Index
- myDr Patient Diagrams
- MIMS Resource
- MIMS Consumer Medicine Information

### iPhone, iPad, Android and Web Apps for Mobile Devices

MIMS, in partnership with the state public health departments in New South Wales, Victoria, Queensland, Australian Capital Territory and Tasmania, can supply students doing practical studies in public hospitals with no-personal-charge apps for popular phone and tablet devices.

### Research

MIMS, in partnership with The University of New South Wales Centre for Healthy Brain Ageing (CHeBA), is supporting the study of the ageing brain by enabling access to MIMS integrated data as a relational data-table.

For more details of services to research and education please contact:  
**MIMS Australia 1800 800 629**  
**info@mims.com.au**

# eMIMSDesktop and eMIMSCloud - your feedback on using the new software

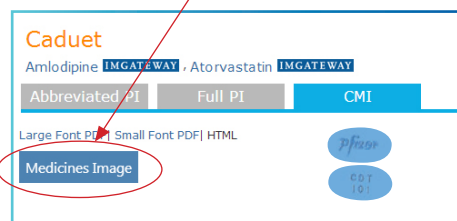
MIMS recently conducted a survey asking those of you using the new eMIMSDesktop and eMIMSCloud for your feedback on using the new software.

There was some really positive feedback and some issues raised, which we are currently addressing. We understand change is hard, and when you have been using the same software for up to 15 years, suddenly finding yourself with a new version can be trying (I can hear those people who are now saying "to say the least!")

**Overall, users tell us that they would recommend the new eMIMSDesktop to friends and colleagues, and have helped us identify things we can improve or are not immediately clear within the software.**

We had quite a few responders telling us they wish the pill images were on the PIs - you can see the images from the Abbreviated PI, Full PI and the CMI simply by clicking on the Medicines Image box

Simply by clicking on



Another thing that came up many times was that there was no PBS or Authority information. This is simple to find in the Abbreviated PI.

In the Abbreviated PI you will find all the PBS information including Authority number and approved indications for Authority, Nurse Practitioner prescribing and where applicable by clicking on this symbol:

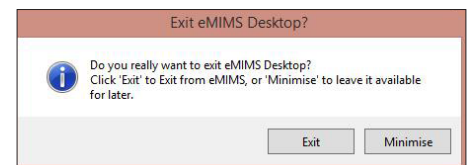


You will find more handy information about navigating eMIMS on our website [www.mims.com.au](http://www.mims.com.au) and in your DVD carrier.

From your feedback, we have identified three priority fixes: the speed of opening and return of search results, monthly updates and printing of the CMI. Clearly all of these issues are impacting on your workflow as busy healthcare professionals.

We are working hard to resolve these issues and want you to know we have heard you and are responding to your concern. Our developers are currently addressing each of these concerns. In the DVD you received in September, you will have found some of the first round of improvements.

- 1. Faster medicines search** results to ensure better response times for you and your customers.
- 2. Monthly updates** are sometimes being blocked by firewalls or proxy servers. To overcome this, we have changed the monthly update process to use HTTP instead of FTP, and have added Proxy Server settings.
- 3. Printing of the CMI and other content** has been improved by ensuring eMIMSDesktop now uses the Windows system print dialog box. This will resolve issues for most users who have specific requirements, such as their printers wanting to use specific paper trays, duplex printing, and paper sizes.
- 4. Opening speed** - as a short term fix we have added a pop up that displays a confirmation prompt on exit - minimising rather than exiting means you don't have to wait for it to open during the day.



**Screen resolution** has been an issue for some users, and so we have provided an error message that now displays more information on the current and required settings, which will help you easily apply settings that meet your needs.

**Links to FRED, minfos, Lots and Amfac and Aquarius are all in the works.**

## Getting the best out of eMIMSDesktop and eMIMSCloud

Take a look at the *Training Videos and User Guides on the eMIMS pages of our website*

- ✓ Symbols and Links – What They Mean
- ✓ Finding Information about Medicines  
Using the search, filter your search to find gluten free products in a therapeutic class, using the browser and the advanced search
- ✓ Using Quick Browse
- ✓ Checking interactions
- ✓ Product Identification
- ✓ Clinical Resources
- ✓ Patient Care

### Lipitor (Tablets) <sup>Rx</sup> (S4)

Atorvastatin (Ca); lactose; white f-c

#### Dose

±. Individualise dose; 10-80 mg once daily; may adjust dose after 4 wks according to resp hypercholesterolaemia, mixed dyslipidaemia: 10 mg/day. Homozygous familial hypercholesterolemia: 40 mg/day. Concomitant cyclosporin, telaprevir, tipranavir + ritonavir: max atorvastatin 10 mg. discontinue atorvastatin, may reintroduce 7 days after last fusidic acid dose

Pack 10 mg (blister) [30]; AUSTR168338

Restricted - PBS/RPBS (NP) (Rp 5)

**[Restricted benefit indication(s)]** For use in patients that meet the criteria set out the General Statement for Lipid Lowering Drugs.

... read more

Restricted - PBS/RPBS (Rp 11)

**[Restricted benefit indication(s)]** For use in patients who meet the criteria set out the General Statement for Lipid-Lowering Drugs, and who are receiving treatment undi

## MIMS member



Salman Ali Banani

Data Architect  
– Australia & NZ

### What do I do?

As the Data Architect for Australia and New Zealand, my role is to ensure that our data production processes and delivery mechanisms meet the current and future needs of our clients and partners. To achieve this, I have to understand the emerging needs of our data architecture so that we can address those needs in our backend systems development. I also work closely with our vendors to ensure optimal integration of MIMS data with their software products to provide best end user experience. Sometimes I have to work with the end users of our reference products to get their feedback and channel that to our applications development team.

### What is your background?

I completed my Masters in Computer Science at UNSW, and have worked in the Software Development industry for about 15 years. I started with MIMS as a Software Developer, where I led the development of a number of products for various markets across Asia-Pacific, including eMIMSCloud for Australia and MIMS Gateway for New Zealand and Asia. Now, as Data Architect, my role has evolved and requires me to have a wider and more long-term view of the industry trends and needs of our partners and end users.

### What do you enjoy most about your role?

The best thing about my work is that it challenges me on a daily basis to broaden my view of the industry trends and user needs. In the past, my focus was on how

to build and improve our existing software products, but now I mainly focus on helping our business understand what is it that our users and partners need. It is absolutely essential for our business to have a clear vision of a future in which MIMS remains relevant, and the most trusted source of medicinal information across Australia and New Zealand. My job is not only to help create that vision and ensure that we set the right direction for future product development.

### What do you see as the challenges for MIMS?

I find that the medical software industry in Australia is closely connected, and we have to understand the vision behind various government initiatives. This requires various vendors to work together, as different software products are targeting different stages of the medications management cycle. The challenge for MIMS is to closely monitor the evolution of eHealth initiatives across the region and figure out where we can add value with our expertise as a provider of medicinal information. We need to stay on top of NEHTA and PBS initiatives, such as the implementation of AMT for greater interoperability across various health care software systems.

### What do you enjoy outside the office?

I used to be a movie buff, but now I spend most of my free time with my family, as my two year old keeps us busy. I also try to stay updated with the latest trends and technologies in the IT industry.

## Upcoming Conferences

### Australian Association of Consult Pharmacy Accredited Pharmacists Forum

Thursday 9th October 8:45am to 5:00pm  
National Convention Centre, Canberra

### Pharmacy Australia Congress

Friday 10th October to Sunday 12th October  
National Convention Centre Canberra  
<http://www.psa.org.au/pac>

**MIMS will be exhibition at booth #48**

### GP 2014 Conference

Thursday 9th October to Saturday  
11th October  
Adelaide Convention Centre  
<http://www.gpconference.com.au/>

**MIMS will be exhibiting at booth #66**

**MIMS**  
100% pure knowledge

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### Support

**Customer Service: 1800 800 629 E-mail: [support@mims.com.au](mailto:support@mims.com.au)**