The Australian
Friday 17/03/2017
Page: 23
Section: Business News
Region: Australia, AU
Circulation: 97419
Type: National
Size: 251.00 sq.cms.

press clip

Biotech tackles hospital infection

EXCLUSIVE

SARAH-JANE TASKER
HEALTH CARE

A deadly infection that is spreading rapidly because of the increasing use of antibiotics is in the sights of Australian drug developer Immuron.

Clostridium difficile, also known as C Diff, killed 30,000 people in the US last year. It is one of the most common hospital-based infections and the deadliest antibiotic-resistant infection.

"When you have a growing older population that is increasing susceptible to infections and you use more antibiotics, you create an epidemic," Immuron chief executive Thomas Liquard said.

The Australia-listed company took on the challenge to develop a treatment when contacted by Dena Lyras at Melbourne's Monash University, who is a global expert on C Diff.

US-based Mr Liquard said while you could kill C Diff easily by taking an antibiotic, C Diff left spores behind that were indestructible.

"When you use an antibiotic to kill the bacteria you open up the gut wall and the spores get in there and wait, and when the environment is right again they germinate into new C Diff bacteria, which take over and secrete toxins," he said.

"You then take antibiotics again, kill all your microbiota, the spores stay behind and they reoccur. People die because they cannot get that infection under control."

The company, which is working towards a Nasdaq listing, has a team in Melbourne and another in Israel. It develops drugs for gut-mediated diseases. One of its most successful commercial products is Travelan — for travellers' diarrhoea.

While the treatment for C Diff is not the most advanced drug in the Immuron portfolio it is the one Mr Liquard is excited about because of strong early clinical results and the potential for a non-antibiotic oral treatment that is cheap to manufacture.

The Immuron chief explained that once a patient had C Diff, they had a 50 per cent chance of having a recurrence, and once they had a recurrence, they had another 50 per cent chance of getting it again, and so on.

Mr Liquard said a patient either escaped it or had to take "poop" pills of healthy microbiomes from donors who were specially selected.

That treatment is 98 per cent effective if the infection is brought under control but it is a treatment that is reserved for the most severe cases.

"That's the last therapy — a fecal matter implantation through the anus or orally through a pill," he said.

Mr Liquard said Dr Lyras at Monash University was intrigued by the fact that Immuron's technology, which was a colostrum-based technology, was not an antibiotic.

"We don't kill C Diff; we don't kill bacteria. We neutralise them and then let the natural process of elimination take its course," he said.

The company will start a one-year clinical trial on 40 to 60 patients in Israel in the second quarter of this year.

"I want human efficacy data," Mr Liquard said.

He is looking for a partner for a fatty liver drug the company is also developing but he said he might hold on to the C Diff treatment.

"It is an orphan disease. The commercial model is more tenable and it would be a very valuable asset," he said.

"We'd get 12 years of market exclusivity in the US, so being able to market an orphan drug in the US would be something we could use as an anchor to develop other things.

"This is what we're in this business for — to be able to develop something tailored to a targeted disease that can make a difference."