

**DEPUTY SECRETARY** 

30

March 2017

Ms Genevieve James Coroners Register Coroners Court of Victoria 65 Kavanagh Street Southbank Victoria 3006

Dear Ms James

## Investigation into the death of Sydney Kennedy

I refer to your letter, dated 10<sup>th</sup> February 2017, advising the Therapeutic Goods Administration (TGA) of Coroner Michelle Hodgson's finding without inquest in relation to the death of Sydney Hugh Kennedy.

The Coroner's finding was that Sydney Kennedy, a 66 year old male with bipolar affective disorder and mild-moderate intellectual disability, died on the 24<sup>th</sup> June 2013 from complications of chronic lithium therapy. The Coroner's finding states the following:

'...there appears to have been no recognition of Mr Kennedy's presentation in the months leading up to his admission to hospital being related to lithium when he had therapeutic target serum concentrations of lithium. Furthermore, in the six weeks after the target serum concentrations of lithium were above 1.0mmol/L, there were no links made between the lithium level and Mr Kennedy's presentation.

There appears to be limited understanding of the presentation and signs and symptoms of lithium toxicity, both with a target serum concentrations of lithium above recommended ranges and at therapeutic range. In addition there appears to have been no account of the impact on Mr Kennedy's ability to excrete lithium of the renal impairment, use of ACE inhibitor, age and sixteen-kilogram weight loss and anorexia as contributors to the accumulation of lithium and possible toxicity.'

The Coroner's recommendation is as follows:

'I recommend that the TGA issue an alert to prescribers to exercise caution when prescribing lithium over the long term for ageing patients and patients with medical co-morbidities. In particular the alert should draw prescribers attention to the increased risk of toxicity in patients who take the drug long-term, and the possibility that even when target serum concentrations of lithium is within the recommended parameters, clinical presentation changes (including but not limited to the recognised signs and symptoms of lithium toxicity) may indicate lithium toxicity.'

## TGA Response

Lithium is indicated in the treatment of acute episodes of mania and hypomania and for the prophylaxis of recurrent manic-depressive illness.

In Australia, Product Information (PI) documents provide information to healthcare professionals to guide their prescribing, dispensing and administering decisions and to assist them to provide patient education. The PI can be accessed on the TGA website at <a href="http://www.tga.gov.au">http://www.tga.gov.au</a>.

The TGA considers that the following issues raised in the Coroner's recommendation are currently addressed in the Australian PI for lithium (Lithicarb and Quilonum);

- Lithium should be used with care in the elderly population.
- Elderly patients may exhibit signs of toxicity at serum concentrations ordinarily tolerated by younger patients.
- Renal function should be monitored.
- Concurrent angiotensin converting enzyme (ACE) inhibitors should only be instituted with caution and with subsequent monitoring of lithium levels.

The TGA additionally notes that several Australian clinical practice guidelines such as the Australian Medicines Handbook (AMH), Therapeutic Guidelines, and articles published in 2013 in the Australian Prescriber<sup>1</sup> and Australian Family Physician<sup>2</sup> caution that toxicity could occur at lower serum lithium levels in elderly patients. Furthermore, some of these guidelines recommend using a reduced dose and monitoring more frequently in elderly patients and those with reduced renal function.

It appears that Mr Kennedy's case has not previously been reported to the TGA. The TGA has entered the details of his case into our Adverse Drug Reaction System database, and is investigating whether this constitutes a new safety signal that requires further action. Our investigation will include consideration of the Coroner's recommendation. A decision will be made by September 2017.

Yours sincerely

Adj. Professor John Skerritt Health Products Regulation Group

<sup>&</sup>lt;sup>1</sup> Malhi G, Tanious M, Bargh D, Das P, Berk M. Safe and effective use of lithium. Australian Prescriber [online]. 2013;36:18-21. Available from: <a href="https://www.nps.org.au/australian-prescriber/articles/safe-and-effective-use-of-lithium">https://www.nps.org.au/australian-prescriber/articles/safe-and-effective-use-of-lithium</a>

<sup>&</sup>lt;sup>2</sup> Lucas C, Donovan P. 'Just a repeat' When drug monitoring is indicated. Australian Family Physician. 2013;42(1):18-22. Available from: <a href="http://www.racgp.org.au/afp/2013/januaryfebruary/just-a-repeat/">http://www.racgp.org.au/afp/2013/januaryfebruary/just-a-repeat/</a>