Submission for the Post Market review of the life-saving drugs program

Dr David Ketteridge MBBS, FRACP (Paediatrician and metabolic physician)

Metabolic Unit, SA Pathology at the Womens and Childrens Hospital, North Adelaide SA 5006

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Department of General Paediatrics, Womens and Childrens Hospital, North Adelaide SA 5006

Background

As paediatrician and metabolic physician I have been involved in direct clinical management, clinical research trials, and have provided advice both nationally and internationally for patients with orphan and ultra orphan diseases. I was a member of the clinical advisory panel for the mucopolysaccharidoses within the life-saving drugs program until the recent abolition of those panels.

I will not address each of the separate terms of reference but will make some brief comments which I hope the review panel will be able to take into consideration.

1) The current process for approval of drugs through the life-saving diseases program relies upon a company sponsor initially providing data on the clinical effectiveness of a medication to the TGA and having that approved. The company then applies to the PBS for the medication to be subsidised and on failing that on a cost benefit analysis process the company can then apply to the life-saving drugs program.

   This process is expensive and requires a company sponsor. It can work for orphan diseases (frequency of less than 5 per 10,00 individuals) but may not work for ultra- orphan diseases, (those with frequency of one in 500,000 or less), as even with a very high medication price it may not be economic for a company to go through this process. For a disease with a birth frequency of approximately 1 in 500,000, the expected frequency would be one affected child every 4 years, and thus it would be difficult for a company to justify the application costs on such a limited patient population. .

   An example of such a disease is ADA deficient severe combined immune deficiency. The birth frequency is approximately 1 in 500,00, or approximately one child every 4 years in Australia. This can potentially be managed with enzyme replacement therapy, gene therapy or bone marrow transplantation. So it may not be considered for application by a company on the basis of rarity of the disease and very limited possibility of covering the cost. Whilst some of these patients can be managed with a bone marrow transplantation, this option is not always available and may not provide optimal treatment. Treatment with enzyme

replacement therapy has been shown to be effective in preventing the immune deficiencies, and in gene therapy has also recently been given orphan drug status in the EU. But it is unlikely that a company sponsor will apply for either of these forms of treatment to be approved through the TGA in Australia as it would be most likely be economic for them to do so. Thus I believe it would be useful for this review to consider other options for recognition of treatments and consideration of funding options including the possibility of a simplified application protocol that can be used by medical staff or others who have patients with ultra orphan diseases.

2) I believe that the current requirement for the life-saving drugs program to mandate collection of data is essential, and should continue however I would strongly support the collection of this data in a form that can be readily exported to an appropriate International Registry. With rare diseases and treatment we can not expect to gather sufficient data within Australia to assess response and to compare treatment options, so larger registries are important. It would also be essential that the data from these registries can be easily extracted and reviewed by clinicians and other appropriate interested parties. The best example of this at present is the data from the Gaucher treatment program within the life-saving drugs program. For this to function best there should also be a clear agreement that the collection of the data is funded and where the that cannot be collected through existing Medicare funded tests the State and Territory health systems must be obligated provide the funding, for example by providing appropriate access to resources including psychologists MRI scans and other necessary investigations. This would need to be integrated into the Commonwealth, State and Territory health agreements.

3) As an essential adjunct to the collection of data on patients with rare diseases treated under the LSDP is the need to collect comparison data on patients managed with alternate regimes or with out specific therapy. As well there needs to be a national registry for patients with rare diseases with at least a minimum data set specific for each disease, and contact details for each patient and their treating physician. This is important to allow both prediction of need and future management and if appropriate and co-ordination of clinical trials for these patients. This would be best co-ordinated via the relevant diagnostic laboratories under appropriate ethical supervision. For example the mitochondrial diagnostic service in Melbourne or the Lysosomal diagnostic service in Adelaide, or the Fatty acid oxidation diagnostic service in Sydney. This data should not be publicly accessible, but held as confidential patient information, with access to approved physicians or others via an ethics committee. The definition of a rare disease would need to be agreed, but international guidelines suggest a disease with an incidence of > or = to 5 per 10,000 individuals may be appropriate.

4) I feel it would also be useful for some degree of flexibility within the program to allow for further assessment and investigation of dosage variations. For example reduction in

frequency of dosage or short-term period of increased dosage should be allowed by negotiation. This would require some expert input to the LSD P and this may be provided by similar panels to that which have previously existed. There is probably no need for review of every patient's individual data on a frequent basis but infrequent review and overall monitoring of the program clinically is important and this would be best provided by panels similar to the previous disease specific panels.

5) Whilst not specifically included in the terms of reference for the LSDP review I would also strongly support development of a "Horizon Scanning Committee or panel" similar to that which functions in the UK and whose purpose is to look to future developments in medical care and consider whether and how to integrate such developments in to the Australian Health system. Currently gene therapies are being developed for many inborn errors of metabolism, neonatal screening techniques are expanding and may include genetic screening – with implications for life insurance and other issues, and many other areas of medicine are changing rapidly. Considering how these new techniques should be used, whether they should be introduced and they should be integrated not just in to health practices, but also the wider community and regulations should provide both economic and health benefits to Australians in general.

6) I have not commented on costs of medication specifically as I am not sure that this the terms of reference are broad enough. Issues such as international copyright, limitations on extensions of copyright and use of similar drugs need to be considered, including implications of various international trade agreements. However consideration of competitive tendering and similar issues is important.