IN USE PRODUCT SAFETY ASSESSMENT REPORT FOR LIQUID AMISULPRIDE

SUMMARY OF ASSESSMENT AND ITS FINDINGS

BACKGROUND
The National Reporting and Learning System (NRLS) have identified a number of incidents concerning amisulpride, in particular with the liquid form. Look-a-like and sound-a-like errors have also occurred with confusion between amisulpride and sulpiride, as well as confusion with other similar sounding medicines. The situation is further confused by the availability of amisulpride as a specials liquid product which is presented in a different strength from the licensed liquid product. Incidents have been reported of confusion with the two strengths of liquid resulting in overdose, in particular the incidences have involved change from the specials liquid 25mg/mL product to the licensed 100mg/mL product.

Using the validated product safety assessment tool, UKMi have analysed whether the presentation of a range of amisulpride liquid products are appropriate. We have also sought to compare licensed and “specials” amisulpride liquid preparations between each other and with those liquid medicines that have been noted of particular confusion with amisulpride e.g. sulpiride solution. This report gives a brief summary of the findings of the analysis.

DETAILS OF PRODUCT (S) ASSESSED

Amisulpride liquid is available as:

- Licensed product, 100mg/mL strength, manufactured by Sanofi Aventis (trade name Solian®) and as a generic by Focus Pharmaceuticals.
- Specials products, 25mg/5mL strength, manufactured by a number of specials manufacturing units including Rosemont, Martindale Pharma and UL medicines. Images and product information were only available for the Rosemont product.

Liquid sulpiride is available as 200mg/5mL strength, marketed by Rosemont under the trade name Sulpor®.

See Appendix 1 for images of products

CONCLUSION FOLLOWING APPLICATION OF VALIDATED ASSESSMENT TOOL

Images and product literature for the products described above were obtained and products were assessed using the full version of the UKMi tool. The risk assessment focused on whether product factors may have contributed to the incidences reported. At this stage, the process sought mainly to identify potential contributory factors and make some limited recommendations only as to potential mitigation measures.

The following points were raised after independent consideration of amisulpride liquid products by two pharmacists:

A comparison of product packaging of the licensed products (100mg/mL) to the low strength specials product (25mg/5mL, Rosemount) revealed low potential for confusion between the two strengths or with the Sulpor® (sulpiride 200mg/5mL) product. It should be noted that images were not available for other specials products and therefore we are unable to comment on these. Although no major issues were identified with product packaging and presentation of the two licensed amisulpride liquid product, there is the issue of look-a-like and sound-a-like names with amisulpride and sulpiride. Overall it was felt the trade names on the product packaging, Sulpor® and Solian®, were more prominent than the generic names which could potentially affect correct product selection. It was felt that the corporate livery of the Rosemont products, Sulpor® and the amisulpride (25mg/5mL) specials product, could have an adverse effect on differentiation between these products and with other Rosemont products. In particular, due to the visual similarities of the Rosemont product packaging and look-a-like names there is a risk of confusing Sulpor® (sulpiride 200mg/5mL) with amisulpride 25mg/5mL specials liquid, which is concerning.
Licensed status: Amisulpride liquid, 100mg/mL, has a UK marketing authorisation; however a lower concentration of 25mg/5mL is available as a specials product. The BNF only lists the licensed (higher) strength and therefore prescribers may be unaware of the availability of other strengths. The use of the wording “special” on the Rosemont amisulpride (25mg/5mL) specials product could also be ambiguous to many healthcare professionals. A lack of information on the availability of different strengths and potential ambiguity surrounding the licensed status of amisulpride liquid products could potentially lead to confusion and result in prescribing and administration errors, particularly if healthcare professionals are unfamiliar with the products.

Inconsistencies in expression of the medicine name, in *prescribing and patient information*, could have an impact on recognition of the product by both healthcare professionals and patients as the correct medicine. Both patient information leaflets for Solian® and Sulpor® state the medicine the product contains, but then refer to the product by trade name throughout. This could be potentially confusing for patients if they are familiar with the product under the medicine name. The prescribing information for Solian® switches between using the trade and generic name (amisulpride) which is of particular concern when there is another drug with a similar name; sulpiride.

*Administration* errors can occur due to the lack of suitable licensed strengths to meet the needs of the wide range of prescribed doses (50-1200mg per day, in two divided doses).

There is the potential for over- or under-dosing if (inadvertently) switching between the licensed product and the specials. For example:

- 25mg dose using 100mg/mL = 0.25mL  25mg dose using 25mg/5mL = 5mL.
- 600mg dose using 100mg/mL = 6mL  600mg dose using 25mg/5mL = 120mLs [although it may not be a practical amount to expect a patient to take].

With regards to ancillaries required, it may be difficult to measure some doses using the 100mg/mL product with an oral syringe; there have been incidences of inaccurate dosing by attempting to give small doses in the range of 12.5mg, which equates to 0.125mL. It is recommended in the prescribing information that doses of amisulpride greater than 300mg should be taken in divided doses but a 5mL syringe (graduated in mL’s) is supplied with the Focus Pharmaceutical product and therefore 500mg could potentially be administered. The Solian® product is provided with a 5ml oral syringe graduated in mg and not mL’s, and therefore, there is potential for confusion if patients are switched between the products.

As indicated before, prescribers may be unaware that different concentrations of amisulpride liquids are available which could potentially lead to *prescribing risks*. Treatment is likely to be initiated in a specialist setting with continuation in primary care by prescribers but this may not be within their normal scope of practice and they may not be familiar with the range of available products.

POTENTIAL NEXT STEPS AND MITIGATION ACTIONS

The patient safety incidents involving amisulpride liquid that have been reported through the NRLS data will, in our view, have involved an element of human error. However, our analysis suggested that improvements could be made to the products to promote their use in the safest possible way.

i. We believe our analysis has identified some issues with amisulpride liquid products that could be addressed by the manufacturers of these products:

- More emphasis on the generic name on product packaging and consider the use of Tallman lettering e.g. AMIsulpride.
- More consistency with reference to the medicine name in product information. For example if the trade name was immediately followed by the medicine name in both the patient and prescribing information this could minimise the potential risk of confusion by both patients and healthcare professionals.
- Specials manufacturers of amisulpride 25mg/5mL could use additional mechanisms to highlight the strength and the unlicensed nature of their product with a view to minimise the risk of confusion with the higher licensed strength e.g. labelling with ‘low strength’ and/or clear unambiguous labelling highlighting that the product is ‘unlicensed’.
- Ideally any disposables provided with the product to aid administration, such as oral syringes, should be tailored to the range of licensed doses, indicating a maximum volume that can be administered in one go.
Manufacturers of both specials and licensed products should consider whether the strengths manufactured meet the needs of amisulpride prescribed in practice. The licensed dosing is 50-1200mg per day, in two divided doses.

The appropriateness of the corporate livery should be considered to enable the best possible differentiation between Sulpor® (sulpride 200mg/5mL) and amisulpride 25mg/5mL, Rosemont products.

To enable safe use of amisulpride liquid products, we also believe that healthcare providers should consider the following:

- Improved communication between boundaries of care with regards to prescribing of liquid amisulpride. For example, if patients are initiated on the lower strength (25mg/5mL) specials product in a specialist setting, this should be communicated appropriately to primary care to avoid confusion and inappropriate prescribing of the higher strength licensed product.
- Consider how prescribing/dispensing systems can be adapted to highlight the availability of different strengths of products with a view to improve correct product selection.
- Good patient counselling to mitigate any risks of switching between amisulpride preparations.
- Rationalisation of the current range of amisulpride and sulpiride products should be considered, both in relation to the strengths available and products held in clinical settings. For example taking into account the corporate livery of products and its effect on differentiation of products. As well as ensuring specials products are only used in circumstances in which licensed products are unsuitable to meet needs. The use of standardised drug storage, layout and selection protocols could be considered.
- To help address any "wrong drug" problems identified, education of staff will be important in relation to the nature of the problem.

This report was produced in March 2014 using photographic images (not physical products) of amisulpride liquid products available at the time of assessment. Images were obtained primarily from pharmaceutical companies, but also from the Commercial Medicines’ Unit PharmaQC database (http://cmu.dh.gov.uk/medicine/phaqmQC-database/) and from various sources within the NHS.

This report summarises product assessments undertaken by:
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Appendix 1 – Images of products