Part VI: Summary of the risk management plan

Summary of risk management plan for lanthanum

This is a summary of the risk management plan (RMP) for lanthanum. The RMP details important risks of lanthanum, how these risks can be minimised, and how more information will be obtained about lanthanum's risks and uncertainties (missing information).

Lanthanum's summary of product characteristics (SmPC) and its package leaflet give essential information to healthcare professionals and patients on how lanthanum should be used.

Important new concerns or changes to the current ones will be included in updates of lanthanum's RMP.

I. The medicine and what it is used for

Lanthanum is authorised as a phosphate binding agent for use in the control of hyperphosphataemia in chronic renal failure patients on haemodialysis or continuous ambulatory peritoneal dialysis (CAPD). Lanthanum carbonate is also indicated in adult patients with chronic kidney disease not on dialysis with serum phosphate levels ≥1.78 mmol/L in whom a low phosphate diet alone is insufficient to control serum phosphate levels.

Lanthanum is given orally as chewable tablet (250 mg, 500 mg, 750 mg or 1,000 mg) or oral powder (750 mg and 1,000 mg).

II. Risks associated with the medicine and activities to minimise or further characterise the risks

Important risks of lanthanum, together with measures to minimise such risks and the proposed studies for learning more about lanthanum's risks, are outlined below.

Measures to minimise the risks identified for medicinal products can be:

- Specific information, such as warnings, precautions, and advice on correct use, in the package leaflet and SmPC addressed to patients and healthcare professionals;
- Important advice on the medicine's packaging;
- The authorised pack size — the amount of medicine in a pack is chosen so to ensure that the medicine is used correctly;
- The medicine's legal status — the way a medicine is supplied to the patient (e.g. with or without prescription) can help to minimise its risks.

Together, these measures constitute routine risk minimisation measures.

In addition to these measures, information about adverse reactions is collected continuously and regularly analysed including PSUR assessment so that immediate action can be taken as necessary. These measures constitute routine pharmacovigilance activities.

If important information that may affect the safe use of lanthanum is not yet available, it is listed under 'missing information' below.

II.A List of important risks and missing information

Important risks of lanthanum are risks that need special risk management activities to further investigate or minimise the risk, so that the medicinal product can be safely taken. Important risks can be regarded as identified or potential. Identified risks are concerns for which there is sufficient proof of a link with the use of lanthanum. Potential risks are concerns for which an association with the use of this medicine is possible based on available data, but this association has not been established yet and needs further evaluation. Missing information refers to information on the safety of the medicinal product that is currently missing and needs to be collected (e.g., on the long-term use of the medicine);

List of important risks and missing information	
Important identified risks	• Gastrointestinal obstruction, Ileus, Subileus, Gastrointestinal perforation • Lanthanum deposition in the gastrointestinal tract
Important potential risks	• Lanthanum deposition (bone, liver) • Systemic allergic reactions • Medication error associated with incompletely chewed/unchewed tablet
Missing information	• Gastrointestinal events with the oral powder formulation • Effects of lanthanum deposition on long term use.

II.B Summary of important risks

Important Identified risk: Gastrointestinal obstruction, Ileus, Subileus, Gastrointestinal perforation	
Evidence for linking the risk to the medicine	Clinical trials and Post-marketing reports
Risk factors and risk groups	Lanthanum-induced constipation may contribute to the development of acute intestinal obstruction and perforation and its role cannot be excluded in patients at high risk (e.g., with history of GI surgery, peritonitis, diverticular disease, intestinal adhesions, GI ulcers, GI neoplasms, GI motility disorders) for gastrointestinal obstruction and perforation.
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.4 and 4.8 PL section 2 and 4 Additional risk minimisation measures: No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

Important Identified risk: Lanthanum deposition in the gastrointestinal tract	
Evidence for linking the risk to the medicine	Animal studies: SPD0099 and SPD0100. Human studies LAM-IV-301, LAM-IV-303, LAM-IV-307, LAM-IV-308 and SPD405-309.
Risk factors and risk groups	Chronic kidney disease patients who are on long-term treatment with lanthanum; those with impaired hepatic function, considering the potential for increased accumulation (biliary excretion is the

Important Identified risk: Lanthanum deposition in the gastrointestinal tract	
	predominant route of lanthanum elimination).
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.4, 4.8 and 5.3 PL section 2 and 4 Additional risk minimisation measures: No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

Important Potential risk: Lanthanum deposition (bone, liver)	
Evidence for linking the risk to the medicine	Animal studies: SPD0099 and SPD0100. Human studies LAM-IV-301, LAM-IV-303, LAM-IV-307, LAM-IV-308 and SPD405-309.
Risk factors and risk groups	Chronic kidney disease patients who are on long-term treatment with lanthanum; those with impaired hepatic function, considering the potential for increased accumulation (biliary excretion is the predominant route of lanthanum elimination).
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.4, 4.8 and 5.3 PL section 2 and 4 Additional risk minimisation measures: No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

Important Potential risk: Systemic allergic reactions	
Evidence for linking the risk to the medicine	Clinical trials and post-marketing surveillance
Risk factors and risk groups	Patients with history of allergic reactions.
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.3 and 4.8 PL section 2

Important Potential risk: Systemic allergic reactions	
	Additional risk minimisation measures: No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

Important Potential risk: Medication error associated with incompletely chewed/unchewed tablet	
Evidence for linking the risk to the medicine	Post-marketing reports
Risk factors and risk groups	Patients who have difficulty chewing or limited dental function (e.g., the elderly).
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.2 and 4.4 (RSI for chewable tablets only) PL section 2 (RSI for chewable tablets only) Additional risk minimisation measures: No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

Missing Information: Gastrointestinal events with the oral powder formulation	
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.8 PL section 2 and 4 Additional risk minimisation measures: No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

Missing Information: Effects of lanthanum deposition on long term use	
Risk minimisation measures	Routine risk minimisation measures: SmPC section 4.4 Additional risk minimisation measures:

Missing Information: Effects of lanthanum deposition on long term use	
	No risk minimisation measures
Additional pharmacovigilance activities	Additional pharmacovigilance activities: None

II.C. Post-authorisation development plan

II.C.1. Studies which are conditions of the marketing authorisation

There are no studies which are conditions of the marketing authorisation or specific obligation of lanthanum.

II.C.2. Other studies in post-authorisation development plan

There are no studies required for lanthanum.