

Part VI: Summary of the risk management plan

Summary of risk management plan for GalliaPharm

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

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

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

I. The medicine and what it is used for

GalliaPharm is authorised for *in vitro* radiolabelling of specific carrier molecules which have been specifically developed and authorised for radiolabelling with this radionuclide to be used for diagnostic imaging with positron emission tomography (PET). Please refer to the information of the medicinal product that is to be radiolabelled with gallium (^{68}Ga) chloride.

The radionuclide generator contains germanium (^{68}Ge) as the mother nuclide which decays to the daughter nuclide gallium (^{68}Ga), which is eluted with sterile ultrapure 0.1 mol/l hydrochloric acid. This medicinal product is not intended for direct use in patients.

Summary of treatment benefits

GalliaPharm is used to radiolabel certain medicinal products that have been specially developed for radiolabelling with the active substance gallium (^{68}Ga) chloride. These medicinal products act as carriers to take the radioactive ^{68}Ga to where it is needed. These may be substances that have been designed to recognise a particular type of cell in the body, including tumour cells. Oncology is the major application domain, however, potential has been demonstrated for imaging of pulmonary perfusion and ventilation as well as inflammation and infection. The low amount of radioactivity administered can be detected outside of the body by special cameras. It allows high quality images and short scanning time while minimizing the radiation dose to the patient and personnel, and allows fast dischargement of the patient. It also allows repetitive examinations within the same day.

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

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

Measures to minimise the risks identified for the medicinal product are:

- 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 —GalliaPharm is for prescription only and its use and administration by authorised persons takes place only in designated clinical settings.

Together, these measures constitute *routine risk minimisation* measures.

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

II.A List of important risks and missing information

Important risks of GalliaPharm are risks that need special risk management activities to further investigate or minimise the risk, so that the medicinal product can be safely administered. 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 GalliaPharm. 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	Not applicable.
Important potential risks	<ul style="list-style-type: none"> • Accidental direct use in patients • ⁶⁸Ge breakthrough • Sterility of the eluate
Missing information	Not applicable.

II.B Summary of important risks

Important potential risk: Accidental direct use in patients	
Evidence for linking the risk to the medicine	The direct use of the eluate may lead to venous irritation and tissue necrosis and also to a lack of toxicity of free ⁶⁸ Ga.
Risk factors and risk groups	The risk is very low, as the MAH already took several preventive measures. It is not connected to a special risk group and no promoting risk factors exist.
Risk minimisation measures	Routine risk minimisation measures: <ul style="list-style-type: none"> • SmPC sections 2, 4.1, 4.2, 4.4, 5.2: where advice is given that GalliaPharm is “not intended for direct use in patients” • SmPC section 4.3. on Contraindications • SmPC sections 4.9. and 11 on Instructions in case of accidental use

	<ul style="list-style-type: none"> Additional risk minimisation measures: Not applicable, there are no additional risk minimisation measures.
Important potential risk: ⁶⁸Ge breakthrough	
Evidence for linking the risk to the medicine	The breakthrough for this generator typically begins as low as 0.0001 % at the point of release and may rise slightly with the number of elutions. To keep the breakthrough low, the generator should be eluted at least once per working day. When used according to these instructions, the breakthrough should stay below 0.001 % for 12 months.
Risk factors and risk groups	Breakthrough of ⁶⁸ Ge can increase above 0.001 % if the generator is not eluted for more than 2 days. Nevertheless the risk is very low, as the MAH already took several preventive measures. It is not linked to a special risk group and no promoting risk factors exist.
Risk minimisation measures	Routine risk minimisation measures: <ul style="list-style-type: none"> Inclusion of extensive instructions in SmPC section 12. Information / warning in SmPC section 12: Additional risk minimisation measures: Not applicable, there are no additional risk minimisation measures.
Important potential risk: Sterility of the eluate	
Evidence for linking the risk to the medicine	Possible ways if introducing microbial contamination are the exchange of the container with sterile ultrapure 0.1 mol/l hydrochloric acid or a lack of aseptic working-techniques.
Risk factors and risk groups	The risk is very low, as the MAH already took several preventive measures. It is not connected to a special risk group and no promoting risk factors exist.
Risk minimisation measures	Routine risk minimisation measures: <ul style="list-style-type: none"> Instruction / information / warning in sections 6.6, 12 Additional risk minimisation measures: Not applicable, there are no additional risk minimisation measures.

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 GalliaPharm.

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

There are no studies required for GalliaPharm.