chromatography and crystallization, and wherein monomeric impurities are removed.

Summary ~~of the invention~~

A process has been sought wherein the crude dimeric contrast agent is purified providing a high yield, wherein crystallisation of crystals is avoided, which is easy to scale up and which provides a purified agent in short time. A process has now been identified using membrane technology to remove monomeric compound impurities and salts from the crude product of dimeric X-ray contrast agents.

Accordingly, in a first aspect the disclosure~~invention~~ provides a process for the purification of a crude dimeric X-ray contrast agent product comprising the step of

i) passing a solution of the crude product across a membrane (M1) such that monomeric compound impurities and salts cross the membrane (permeate, P1) and the dimeric X-ray contrast agent passes over the membrane (retentate, R1)

providing a purified dimeric X-ray contrast agent.

In a second aspect, there is provided a composition comprising a dimeric contrast agent purified according to the process as disclosed above, together with at least one physiologically tolerable carrier or excipient.

Brief Description of the drawings

Figure 1 shows the process of the first aspect wherein a crude product is purified by separating purified product from monomeric impurities and salts.

Detailed Description of the Preferred Embodiments

Surprisingly it has been found possible to provide an industrially viable process, useful also in large scale, wherein both monomeric impurities and salts are separated from the dimeric contrast agent by using membrane separation.

The crude dimeric X-ray contrast agent product to be purified by the process of the invention is the product obtained from the syntheses, in a raw non-purified state. This crude product is preferably in the form of a solution, wherein the solvent comprises the solvent used in the

last step of the synthetic route. The solvent is e.g. water or an alcohol or mixtures thereof, and this may comprise water, 2-