

**Question for written answer E-001984/2017  
to the Commission**  
Rule 130  
**Mireille D'Ornano (ENF)**

Subject: Use of calcium phosphate as a vaccine adjuvant

There is consensus among scientists on the harmful effects of aluminium ingestion in humans. In particular, a 1982 US study by Professor H. Wisniewski demonstrated that aluminium has neurotoxic properties and is associated with an increased risk of developing neurodegenerative diseases.

In the case of vaccines, adjuvants containing aluminium are reported to provoke a serious Th2 immune response. Since 1998, French scientific research has linked adjuvants containing aluminium to macrophagic myofasciitis, a disease caused by the persistence of the adjuvant at the injection site. Macrophagic myofasciitis is reported to lead to neurological problems.

Adjuvants containing calcium phosphate were developed in the 1970s. The immune response caused by these adjuvants is of the Th1 type, and the antibody levels and absorption capacity are – according to some studies – higher than those caused by vaccines using adjuvants containing aluminium, despite the fact that the scientific literature has reached contradictory conclusions on all of these points (*Haut conseil de la santé publique*, France, 2013).

Does the Commission intend – e.g. through the European Centre for Disease Prevention and Control – to carry out additional studies on the use of calcium phosphate as a vaccine adjuvant?