



Medicines & Healthcare products
Regulatory Agency

10 South Colonnade
Canary Wharf
London
E14 4PU
United Kingdom
[gov.uk/mhra](https://www.gov.uk/mhra)

request-1121583-31b55af0@whatdotheyknow.com

8 May 2024

MHRA reference: FOI2024/00055

Dear [REDACTED]

Thank you for your information request of 24 April. Your request is:

“Are all covid vaccines containing Genetically Modified Organisms? (GMO)”

We have considered your request under the Freedom of Information Act 2000 (FOIA). We confirm that we hold the information you have asked for; however, this information is available to you as it is published. Section 21 of the FOIA applies when the information is already reasonably accessible to the requester and we do not need to provide a copy of the information. You can access the information here:

[MHRA Products | Home](#) – note for COVID-19 vaccines of interest to you, these can be searched on the above given link. Similarly, Google can also be used to locate the regulatory landing pages for the first authorised COVID-19 vaccines.

All COVID-19 vaccines do not contain Genetically Modified Organisms (GMO). This information is exempt under Section 21 of the FOIA, because the definition of genetically modified organism (GMO) is available in the public domain, see below. In addition, the content of the vaccines is detailed in the public assessment reports.



Medicines & Healthcare products Regulatory Agency

According to the [directive](#) which is cross-referenced in the Human Medicines Regulations 2012.

“genetically modified organism (GMO)’

means an **organism**, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination;”

The Pfizer and Moderna vaccines include mRNA, but this is not an organism.

<https://www.gov.uk/government/publications/regulatory-approval-of-covid-19-vaccine-moderna>

<https://www.gov.uk/government/publications/regulatory-approval-of-pfizer-biontech-vaccine-for-covid-19>

The AstraZeneca COVID-19 vaccine (Vaxevria) includes genetically modified organisms. Please see below excerpt from the public assessment report on the AstraZeneca COVID-19 vaccine.

III.5 Ecotoxicity/Environmental Risk Assessment

It is agreed that, in accordance with CHMP guidance EMEA/CHMP/SWP/4447100 entitled, "Guideline on the Environmental Risk Assessment of Medicinal Products for Human Use" published 01 June 2006, due to their nature, vaccines are unlikely to result in a significant risk to the environment. Therefore, an environmental risk assessment is not provided in this application. This is acceptable. This vaccine contains a genetically modified organism (GMO). However, consequences of release and persistence of the GMO in the environment are regarded as negligible.

Source: [MHRA Products | Search results](#)

We trust that this response suitably addresses your question.

Yours sincerely,

Healthcare, Quality and Access Group

Medicines and Healthcare products Regulatory Agency

Appeal rights

If you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date you receive this response and addressed to foi.request@mhra.gov.uk

If you remain dissatisfied with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. Please bear in mind that the Information Commissioner will not normally review our handling of a request unless the requester has first asked us to conduct an internal review.



Medicines & Healthcare products Regulatory Agency

The Information Commissioner can be contacted through their online webform at:

<https://ico.org.uk/make-a-complaint/foi-and-eir-complaints/foi-and-eir-complaints/>

Or in writing to: Information Commissioner's Office, Wycliffe House, Water Lane,
Wilmslow, Cheshire, SK9 5AF