GCMSC recommends the administration of mRNA-based COVID-19 vaccines in children under 12 years of age and confirms their safety in this age group

The analysis shows the benefits of this type of vaccines in preventing acute and persistent disease, as well as the most serious consequences of paediatric COVID-19

Barcelona, 20 January 2022-. Vaccinating the paediatric population with mRNA-based COVID-19 vaccines is safe and recommended. This is one of the main conclusions of the analysis document “Risk of myocarditis and pericarditis in childhood and adolescence in the context of COVID-19 vaccination with mRNA vaccines” published by the Multidisciplinary Collaborative Group for the Scientific Monitoring of COVID-19 (GCMSC by its acronym in Spanish), an initiative of the Barcelona Institute for Global Health (ISGlobal) and the Official College of Physicians of Barcelona (CoMB).

After an exhaustive analysis of the scientific evidence published to date, the group of experts has valued the low incidence of myocarditis and/or pericarditis associated with vaccinations in children under 12 years of age (the cumulative incidence has been estimated at a maximum of 5 cases/1,000,000 vaccinated children), the apparent low severity of the cases when they occur, the proportionally lower mRNA dose for this age group (one third of that administered to adolescents or adults), and the benefit of the vaccines in preventing acute disease, persistent disease and the more serious consequences of paediatric COVID-19, such as Multi-system Inflammatory Syndrome in Children (MIS-C).

Myocarditis is an inflammation of the heart muscle often associated with an apparently benign viral infection and that can lead to severe symptoms. This complication, typical in adolescents and young adults (especially in males), can occur as a result of a COVID-19 episode in this age group. Cardiac problems may also occur in the context of MIS-C, one of the most feared paediatric-specific complications following SARS-CoV-2 infection.

The recommendation of the GCMSC —in line with that of the American Centers for Disease Control and Prevention (CDC), the Spanish Agency for Medicines and Health Products (AEMPS) and other professional groups— is of particular relevance in the current context in which children under 12 years of age have been, for many weeks, the group with the highest cumulative incidence. The risk/benefit balance is in favor of benefit, as also demonstrated in the adolescent group.

"We need to maintain good pharmacovigilance for this age group, and to educate civil society and raise awareness so that they can identify the symptoms associated with myocarditis and promptly consult family physicians and paediatricians if necessary,” explained Quique Bassat, paediatrician, secretary of the GCMSC, and ICREA researcher.
at ISGlobal, a centre supported by the "la Caixa" Foundation. "However, the most relevant message is that, **in this age group, the risk of post-vaccination myocarditis is minimal**, and in any case **lower than that associated with natural SARS-CoV-2 infection**.

**About the ‘Grupo Colaborativo Multidisciplinar para el Seguimiento Científico de la COVID-19’ (GCMSC)**

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**Reference:**

[Full GCMSC document](in Spanish) (in Spanish)

**Graphic material:**

[Visual abstract](in Spanish) (in Spanish)