

5th Invitation to manufacturers and suppliers of medicinal products for treatment of hepatitis B and C, to submit an Expression of Interest (EOI) for product evaluation to the WHO Prequalification Unit: medicines

To support national and global efforts to increase access to and the affordability of care and treatment for Hepatitis B and C, in both mono-infected and HIV co-infected patients. WHO together with UNICEF, UNAIDS and UNITAID, invite applicants for selected pharmaceutical products to submit Expressions of Interest (EOI) for product evaluation.

1. Procedure for this Invitation to EOI

The current Invitation is published in accordance with the *Procedure for prequalification of pharmaceutical products*, adopted in 2001 by the 37th WHO Expert Committee on Specifications for Pharmaceutical Preparations, and amended subsequently as part of the 45th report of the Committee, published as [No. 961 of the WHO Technical Report Series](#) in 2011.

Assessment of product(s) submitted under this Invitation will include evaluation of:

- product dossiers, which must include product data and information as specified in the guidelines for submission (see Procedures & Fees)
- manufacturing sites, which must adhere to [good manufacturing practices](#) (GMP)
- clinical sites (if applicable), which must adhere to [good clinical practices](#) (GCP).

If evaluation demonstrates that a product and its corresponding manufacturing (and clinical) site(s) meet WHO recommended standards, it will be included in the list of prequalified medicinal products that are considered to be acceptable for procurement by UN organizations and others.

2. Medicinal products included on the 5th Invitation

The ultimate aim of this 5th Invitation is to increase the range of selected products and sources available in relation to treatment of hepatitis B and C in mono-infected or HIV co-infected patients. The medicines listed in this invitation have been identified as vital to treatment of patients with chronic hepatitis B and C infection. These products are included either in the [WHO Model List of Essential Medicines](#), the WHO 2016 update of the WHO Guidelines for the screening, care and treatment of persons with hepatitis C infection; or the 2015 Guidelines on prevention, care and treatment of chronic hepatitis B infection.

Products included in the WHO Model List of Essential Medicines are those which satisfy the priority health care needs of a population. They are selected on the basis of disease prevalence, evidence on efficacy and safety, and comparative cost-effectiveness. Products included in WHO treatment guidelines are selected on the basis of an assessment of the quality of evidence of benefits, harms, costs, and appropriateness for use in a variety of situations, taking into account needs of special populations, and the values and preferences of the groups (professional and patient) using them.

For medicines for children, solid oral dosage forms such as dispersible or chewable tablets are preferred.

Interested applicants are encouraged to submit documentation for recommended dosage forms and strengths of the medicinal products listed below which have been identified as priority products. Appropriate solid dosage formulations should be scored for paediatric use purposes and relevant evidence should be provided to support equal distribution of active ingredients in the scored products, especially in case of fixed-dose combination products.

In all instances below, tenofovir refers to tenofovir disoproxil fumarate.

1. Medicines to treat hepatitis B or C in adults and adolescents

1.1. Antivirals as single-ingredient formulations for use in adults and adolescents:

1.1.1 Hepatitis C

Daclatasvir tablet, 30mg, 60mg (preferably scored)

Ledipasvir tablet, 90mg

Ribavirin capsule, 200mg, 400mg, 600mg

Sofosbuvir tablet, 400mg

Velpatasvir tablet, 100mg

1.1.2 Hepatitis B

Entecavir tablet, 0.5mg, 1mg preferably scored

Tenofovir, tablet 300mg *Tenofovir, tablet 150mg, 200mg, preferably dispersible

** For patients 12 years or older.*

1.2. Antivirals as fixed-dose combinations (FDC) for adults and adolescents:

1.2.1 Hepatitis C

Sofosbuvir/ Ledipasvir, tablet 400mg/90mg

Sofosbuvir/ Daclatasvir, tablet 400mg/60mg

Sofosbuvir/ Daclatasvir, tablet 400mg/30mg

Sofosbuvir/Velpatasvir tablet 400mg/100mg

Glecaprevir/Pibrentasvir, tablet 100mg/40mg

1.3. Antivirals as single-ingredient formulations for use in children: Paediatric formulations

1.3.1 Hepatitis C:

Daclatasvir, tablet 30mg (preferably dispersible)

Ribavirin, syrup, 40mg/ml (oral)

Sofosbuvir, tablet 100mg (preferably dispersible)

1.23.2 Hepatitis B

Entecavir, oral solution, 0.05mg/ml

3. How to submit an Expression of Interest

In order to submit an expression of interest for product evaluation, the applicant must send the requested documentation, arranged according to the information provided on the WHO Prequalification Unit (PQT) website at <https://extranet.who.int/pqweb>

4. Quality assessment procedure following submission of an expression of interest by an applicant

The quality assessment is undertaken to evaluate whether the pharmaceutical product being evaluated meets the requirements recommended by WHO, and is manufactured in compliance with good manufacturing practices (GMP).

The procedure established by WHO for quality assessment incorporates:

- general understanding of the production and quality control activities of the manufacturer;
- assessment of product data and information on safety, efficacy and quality submitted by the manufacturer, including product formulation, manufacture and test data and results;
- assessment of the manufacturing site's adherence to GMP, and its consistency in production and quality control of starting materials, with specific emphasis on active pharmaceutical ingredients, and finished product;
- assessment of clinical testing units or organizations (i.e. parties performing one or more clinical trials with the product) for compliance with good clinical practices and good laboratory practices, as appropriate;
- random sampling and testing of medicines supplied.

Previous evaluation conducted by the relevant National Drug Regulatory Authority (NDRA) may be taken into account during the evaluation conducted by WHO, provided that NDRA has expertise in the product area.

Once WHO is satisfied that quality assessment has been completed for the manufacturer of the relevant starting materials, the finished pharmaceutical product, and the clinical testing units, and that the product meets WHO recommended standards, the product (as produced at the specified manufacturing site) is added to the [WHO List of Prequalified Products](#).

5. References and further information

For further information on the WHO Prequalification Unit- Medicines (PQT/MED), please visit PQT website at: <https://extranet.who.int/pqweb>

WHO list of Essential Medicines

<https://www.who.int/groups/expert-committee-on-selection-and-use-of-essential-medicines/essential-medicines-lists>

For further information on WHO treatment guidelines, please consult:

2018 Guidelines for the care and treatment of persons diagnosed with chronic hepatitis C virus infection

<https://www.who.int/publications/i/item/9789241550345>

2022 Updated recommendations on treatment of adolescents and children with chronic HCV infection, and HCV simplified service delivery and diagnostics

<https://www.who.int/publications/i/item/9789240052734>

2015 Guidelines for the prevention, care and treatment of persons with chronic hepatitis B infection

https://apps.who.int/iris/bitstream/handle/10665/154590/9789241549059_eng.pdf

2017 Guidelines on hepatitis B and C testing

<https://apps.who.int/iris/bitstream/handle/10665/254621/9789241549981-eng.pdf>