



TECHNICAL REPORT

ANTIRETROVIRAL MEDICINES IN LOW- AND MIDDLE-INCOME COUNTRIES: FORECASTS OF GLOBAL AND REGIONAL DEMAND FOR 2020–2024

DECEMBER 2021

ANTIRETROVIRAL MEDICINES IN LOW- AND MIDDLE-INCOME COUNTRIES: FORECASTS OF GLOBAL AND REGIONAL DEMAND FOR 2020–2024

DECEMBER 2021

Antiretroviral medicines in low- and middle-income countries: forecasts of global and regional demand for 2020-2024

ISBN 978-92-4-004126-4 (electronic version)

ISBN 978-92-4-004127-1 (print version)

© World Health Organization 2022

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<http://www.wipo.int/amc/en/mediation/rules/>).

Suggested citation. Antiretroviral medicines in low- and middle-income countries: forecasts of global and regional demand for 2020-2024. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <https://www.who.int/copyright>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Design and layout by Brainagent

CONTENTS

LIST OF FIGURES	iv
LIST OF TABLES	v
ACKNOWLEDGEMENTS	vi
ABBREVIATIONS AND ACRONYMS	vii
EXECUTIVE SUMMARY	viii
1. INTRODUCTION	1
2. METHODS FOR DETERMINING KEY FORECAST VARIABLES	3
2.1 TOTAL NUMBER OF PEOPLE RECEIVING TREATMENT	3
2.2 NUMBER OF PEOPLE RECEIVING FIRST- AND SECOND-LINE THERAPY	7
2.3 PROPORTION OF ADULTS ON FIRST-LINE RECEIVING TREATMENT BY ARV DRUG	9
3. ESTIMATED TOP FIRST-LINE ADULT ART REGIMENS IN GENERIC-ACCESSIBLE LOW- AND MIDDLE-INCOME COUNTRIES	12
4. DISCUSSION	13
REFERENCES	14
ANNEX	15

LIST OF FIGURES

Fig. 1. Model used for forecasting ARV drug demand	2
Fig. 2. Comparison of projections of the number of people receiving ART, 2001–2024	6
Fig. 3. Number of adults and children living with HIV receiving first- and second-line ART, 2020–2024, based on the average of three projections	8
Fig. 4. Projected market share of primary NRTIs for adults, 2012–2024	9
Fig. 5. Projected market share of secondary NRTIs for adults, 2012–2024	10
Fig. 6. Projected market share of NNRTIs and DTG for adults, 2015–2024	10
Fig. 7. Estimated top first-line adult regimens in generic accessible low- and middle-income countries, 2019 – 2022	12

LIST OF TABLES

Table 1. Summary of assumptions made in the forecast scenarios	3
Table 2. Number of adults and children living with HIV receiving treatment by scenario and average, 2020–2024	5
Table 3. Proportion of adults receiving second-line ART, 2020–2024	7
Table 4. Proportion of children receiving second-line ART, 2020–2024	8
Table 5. Average market share for ARV drugs for adults, 2020–2024	11

ACKNOWLEDGEMENTS

WHO is grateful for the valuable input from the Technical Working Group members who met virtually in October 2020 to harmonize the assumptions and forecasts for global demand for antiretroviral drugs: Avenir Health (represented by **Adebiyi Adesina** and **John Stover**), the Clinton Health Access Initiative (represented by **Jessica Fox** and **Zack Panos**), the Medicines Patent Pool (represented by **Hannah Barron Moak** and **Sandra Nobre**), the Office of the United States Global AIDS Coordinator (represented by **Christine Malati**), the United States Agency for International Development Global Health Supply Chain (represented by **Wesley Kreft**), UNDP (represented by **Yulia Kurbatova** and **Zafar Yuldashev**), UNICEF (represented by **Joyce Bakka**), UNAIDS (represented by **Deepak Mattur**) and WHO (represented by **Boniface Dongmo Nguimfack**).

WHO extends its gratitude to staff members **Daniel Low-Beer**, **Martina Penazzato**, **Marco Vitoria** and **Lara Vojnov** (WHO) and UNAIDS staff members (**Peter Ghys** and **José Antonio Izazola-Licea**) for their technical contributions in finalizing the forecasts.

WHO thanks everyone who contributed to this product, especially **Meg Doherty**, **Ren Minghui** and WHO staff members and partners who participated in the joint WHO/UNAIDS consultation with pharmaceutical companies.

WHO expresses its special thanks to the technical review and editing committee: **Adebiyi Adesina** (Avenir Health), **Jessica Fox** (Clinton Health Access Initiative), **Peter Ghys** (UNAIDS), **Deepak Mattur** (UNAIDS), **Zack Panos** (Clinton Health Access Initiative) and **John Stover** (Avenir Health).

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_23354

