Access to Novel, Highly-Priced Cancer Medicines in Low-Resource Settings

Ethical challenges on the path to universal health coverage
Welcome

- **Background**
  - Enormous scientific advances leading to novel treatments
  - Enormous (health) system advances promoting more demand for and better access to care through UHC
  - Continued unmet health needs
  - Challenges include: Priority setting given limited resources and multiple needs

- **Objective**
  - To start a dialogue on ethical questions regarding access to cancer medicines
    - to inform a long-term policy research and implementation agenda on this topic.
Housekeeping

- All attendees are joining in **listen-only mode** and are **muted** during the session.
- Please submit questions/comments throughout the session via the chat box at the bottom of the GoToWebinar control panel.
- All questions/comments/suggestions will be reviewed for inclusion in the symposium.
- In case of technical problems, please write to **Natia Rukhadze** at: n.rukhadze@curatio.com
- Please complete the post-webinar survey.
### WEBINAR OVERVIEW

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<td>Introduction of speakers and panelists</td>
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<td>8:06 - 8:16</td>
<td><strong>Setting the scene</strong></td>
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<td>Challenges of funding highly-priced medicines in light of</td>
<td>Dr. Dennis Ross-Degnan</td>
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<td>other health care funding needs (WHO/EML)</td>
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<td>WHO framework on priority setting</td>
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<td>8:17 - 8:41</td>
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<td>Experience from Rwanda:</td>
<td>Experience from Rwanda: Dr. Agnes Binagwaho</td>
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<td>Experience from Latin America:</td>
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<td>Perez Cuevas</td>
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<td>8:42 - 8:55</td>
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<td>8:56 - 10:00</td>
<td>Closing of the webinar and outlook to symposium</td>
<td>Dr. Christine Leopold</td>
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Dr. Wagner is Associate Professor in the Department of Population Medicine at Harvard Medical School and the Harvard Pilgrim Health Care Institute. Anita conducts applied research to inform policies and programs for improving medicines access, affordability, and use, particularly for populations in LMIC. She founded and leads the global Medicines and Insurance Coverage (MedIC) Initiative, a unique partnership between academics, health care delivery systems, health financing institutions, and international organizations, which aims to support LMIC system leaders and operational staff.

Dr. Leopold is a Post-Doctoral Research Fellow in the Department of Population Medicine at Harvard Medical School and the Harvard Pilgrim Health Care Institute. Her main research interest lays in assessing coverage decisions for high-priced medicines in different systems. In recent years she particularly focused on identifying the value of new cancer medicines from different stakeholders' perspectives as part of priority setting processes in coverage decisions.

Dr. Ross-Degnan is Associate Professor at the Department of Population Medicine at Harvard Medical School and Director of Research at Harvard Pilgrim Health Care Institute. For over 30 years, his work has focused on improving health systems in the US and low income countries. In 1990, Dennis co-founded the International Network for Rational Use of Drugs (INRUD), a global network of academics, health managers, and policymakers.

Dr. Ho is Assistant Professor at the Centre for Biomedical Ethics at the Yong Loo Lin School of Medicine, National University of Singapore (NUS). Calvin has practiced law in London and Singapore, and serves as an Assistant Director with the Legal Aid Bureau (Ministry of Law), and a member of the Singapore Nursing Board. Prior to his current appointment, he was Senior Research Associate (from October 2001 to May 2011) with the Bioethics Advisory Committee, an expert body appointed by the government of Singapore to provide advice and recommendations on human biomedical research.
Dr. Binagwaho is a Rwandan pediatrician. From 2002-2016, she served the Rwandan Health Sector in high-level government positions, first as the Executive Secretary of Rwanda's National AIDS Control Commission, then as Permanent Secretary of the Ministry of Health, and then for 5 years as the Minister of Health. She is currently a Senior Lecturer in the Department of Global Health and Social Medicine at Harvard Medical School, a Professor of the Practice of Global Health Delivery at the University of Global Health Equity in Rwanda, and an Adjunct Clinical Professor of Pediatrics at the Geisel School of Medicine at Dartmouth.

Dr. Perez Cuevas is a senior social protection and health specialist at the Interamerican Development Bank in 2012. Currently, he collaborates on research studies and in the design and evaluation of health programs and policies focusing on improving health services in the areas of non-infectious diseases and obesity and overweight prevention. Prior to joining the Bank, he worked as a health systems researcher at the Mexican Social Security Institute and the Federico Gómez Children’s Hospital in Mexico.
CANCER AS CAUSE OF DALYS* BY COUNTRY INCOME GROUP

- NCDs majority of DALYs
- Cancer rising %

- NCDs low but rising
- Cancer % still low

* Sum of Years of Life Lost (YLL) and Years of Life Lived with Disability (YLD)

Data from Global Burden of Disease Study 2015 (See also Lancet 2016;388)
CHANGES IN GLOBAL CANCER INCIDENCE 1990-2013

Global Burden of Disease Collaboration. JAMA Oncol. 2015; 1(4)
NEED FOR EVIDENCE ABOUT COST-EFFECTIVENESS OF DIFFERENT POSSIBLE INTERVENTION PACKAGES

Countries in Sub-Saharan Africa

Countries in Southeast Asia

- Cost per DALY saved (bars) varies widely by condition, package, and region
- Cumulative cost per capita (lines) varies four-fold between Asia and Africa

CVC=cervical cancer packages; CRC=colorectal cancer packages, BRE=breast cancer packages

Cost-effectiveness of strategies to combat breast, cervical, and colorectal cancer in sub-Saharan Africa and South East Asia. BMJ 2012; 344
COUNTRIES VARY WIDELY IN INCLUSION OF CANCER MEDICINES ON EMLS

Notes: Drug combinations having targeted agents are considered under newly approved targeted therapy. Calculation includes both core and complementary medicines.
AFTER EXTENSIVE REVIEW, 16 OF 22 PROPOSED NEW CANCER MEDICINES ADDED TO 2015 WHO EML

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<tr>
<th>Cancer Medicines on the 2013 EML</th>
<th>Cancer Medicines Added in 2015</th>
<th>Cancer Medicines Rejected by WHO</th>
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<td>Allopurinol</td>
<td>Hydrocortisone, Hydroxyurea</td>
<td>Arsenic trioxide, Dasatinib, Diethylstilbestrol, Erlotinib, Gefitinib, Nilotinib</td>
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<tr>
<td>Asparaginase</td>
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<td>Bleomycin</td>
<td>Ifosfamide, Mercaptopurine, Mesna</td>
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<td>Calcium folinate</td>
<td>Methotrexate, Methylprednisolone, Paclitaxel</td>
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<td>Carboplatin</td>
<td>Prednisone, Procarbazine, Tamoxifen</td>
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<td>Chlorambucil</td>
<td>Thioguanine, Vinblastine, Vincristine</td>
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<td>Cyclophosphamide</td>
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<td>Cytarabine</td>
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<td>Daclcarbazine</td>
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<td>Dactinomycin</td>
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<td>Daunorubicin</td>
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<td>Dexamethasone</td>
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<td>Docetaxel</td>
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<td>Doxorubicin</td>
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<td>Etoposide</td>
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<td>Fluorouracil</td>
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Abbreviations: EML, Model List of Essential Medicines; WHO, World Health Organization; ATRA, all-trans retinoic acid; G-CSF, granulocyte-colony stimulating factor.

https://am.asco.org/who-expands-cancer-essential-medicines-list
Universal Health Coverage

An Approach –
Fair Progressive Realisation of UHC

- Categorise services (including medicines) into priority classes. Considerations include:
  - Cost-effectiveness
  - Priority to the worse-off
  - Financial risk protection

- First expand coverage for high-priority services to everyone
  - Eliminate OOP payments
  - Increase mandatory progressive prepayment with pooling of funds

- Ensure that disadvantaged groups are not left behind

Five Unacceptable Trade-offs

1. Expand coverage for low- or medium-priority services before there is near universal coverage (UC) for high-priority services. This includes reducing OOP payments.

2. First include in the UC scheme only those with the ability to pay and not include informal workers and the poor, even if such an approach is easier.

3. Giving high priority to very costly services when the health benefits are very small compared to alternative, less costly services.

4. Expanding coverage for well-off groups before doing so for worse-off groups when costs and benefits are not vastly different.

5. To shift OOP payment towards mandatory prepayment that makes the financing system less progressive.

QUESTION 1

From your perspective, what are the main issues that need to be addressed in a health system given the ethical challenges associated with providing access to novel cancer therapies that are very costly when many other health care needs must be met? And how are the issues addressed in your country?
- There are huge improvements in the understanding of the bio-physiology of cancer diseases leading to the development of new drugs.
- However these drugs are unaffordable for people where I live and even for vulnerable poor in the developed world.
- A response inspired by what the global community did for AIDS treatment is needed because too many premature death occur all over the world due to treatable cancer.
- We need to expand diagnostic capacity, treatment and what it takes for follow up using task shifting.
- In Rwanda we work on all these component of a sound cancer program with protocols guidelines and education and also advocate for access.
Bridging access to cancer care in Mexico

**Social Security**
- Population: ±60 million
- Contributory through tax in salaries
- Non-explicit package of benefits
- Cancer coverage:
  - Screening
  - Prevention
  - Treatment
- All types of cancer
  - First time, first served basis

**Seguro Popular, since 2003**
- Population: ±57 million
- Non-Contributory
- No pre-paid services
- Explicit package of health benefits through 2 funds:
  1. Universal Catalog of Health Services (Primary care)
  2. Fund for protection against catastrophic expenditures
- Cancer coverage:
  - Screening
  - Prevention
  - Treatment
- Children: All types of cancer
  - Breast, cervical and ovarian cancer
  - Non-Hodkin, Testicles, prostate, colon

There are economic, ethical and cost-effective considerations to include these types of cancer

**Expected impact of Seguro Popular**
- Improve access
- Reduce OOP
QUESTION 2

Which questions can the research community help answer to facilitate decisions that are more likely to lead to fair outcomes?
Again using HIV experience, we need to promote researches in the field of:

1. Psycho-social so that we could create good public private partnership entities such as Global Fund, etc.

2. Pharmacology aiming at discovering new drugs that are cheaper or to find good generic under the umbrella of those who initially have discovered the drugs

3. Develop the skills to convince the pharmacologic industry that the volume of selling will cover the lower cost while respecting the moral duty to save the maximum life.
Cancer epidemiology: The incidence of cancer is on the rise in Latin America and Caribbean countries, yet the actual magnitude is unknown

- The effect of risk factors (ie. Environmental) is still unidentified in the region
- There is still a pressing need to develop studies aimed at measuring with precision this problem – there are few registries (Colombia) in the region
- There is a lack of epidemiological surveillance studies

Studies to ascertain access to cancer treatment

 Evaluative studies to estimate the impact (effectiveness) of public health programs and the efficacy of clinical interventions (survival studies?)

Economic evaluations aimed at informing health policy makers where to allocate the resources.
QUESTIONS AND ANSWERS

Please submit your questions/comments through the chat box at the bottom of the GoToWebinar control panel at any point.
LET’S CONTINUE THIS IMPORTANT CONVERSATION!

- All slides and the recordings of the webinar will be published on our website: [http://www.populationmedicine.org/research/drug-policy-research-group/home](http://www.populationmedicine.org/research/drug-policy-research-group/home)

- At the Health System Global Symposium (HSG) on November 18th from 11:00-12:30 (PDT) “Access to Novel, High-Cost Cancer Medicines – Towards a More Holistic Ethical and Practical Framework for Health System Decisions”
