

CERVICAL CANCER A GLOBAL PERSPECTIVE

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GCIG Chair



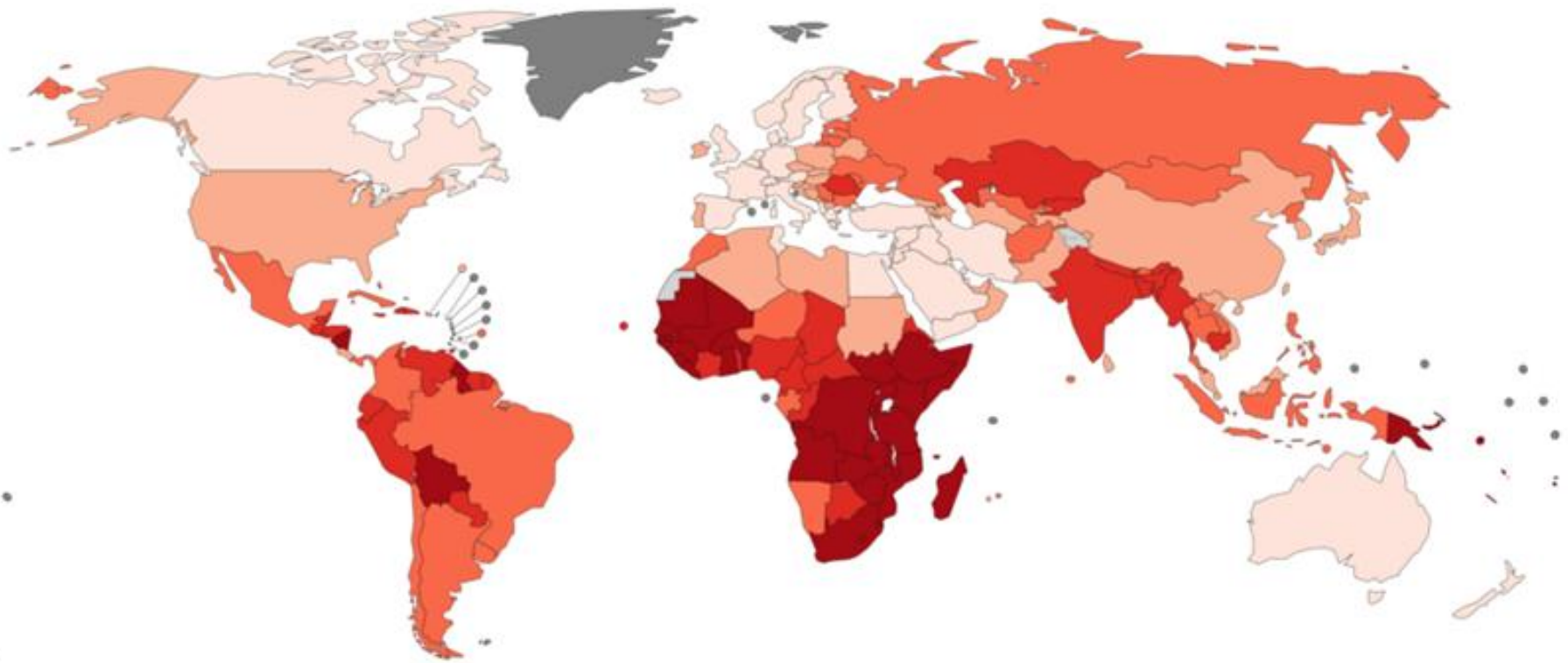
Cervical Cancer Education Symposium.
Mexico, Jan 2017

Gynecological Cancer

- Gynecological Cancers represent around 15% of all cancers
- Trends in incidence:
 - Endometrial Cancer 6% (slightly increase)
 - Ovarian Cancer 4% (stable)
 - Cervical cancer 3% (stable in Western world, increasing in Developing countries)
 - Vulva, vagina and others: 1,2% (increasing)

- “... 65% of cancer deaths occurred in lower income countries.”
- A prototype of this distinct distribution:
Cervical Cancer :
In Developing Countries it is the leading cause of cancer death

A Prototype: Estimated Cervical Cancer Mortality Worldwide



Estimated Age-Standardised rates per 100,000




✓ Globocan 2012 - WHO

Cervical Cancer in the United States

Incidence Rate is 12,000 and Mortality Rate 4,000 per year



 = 1000

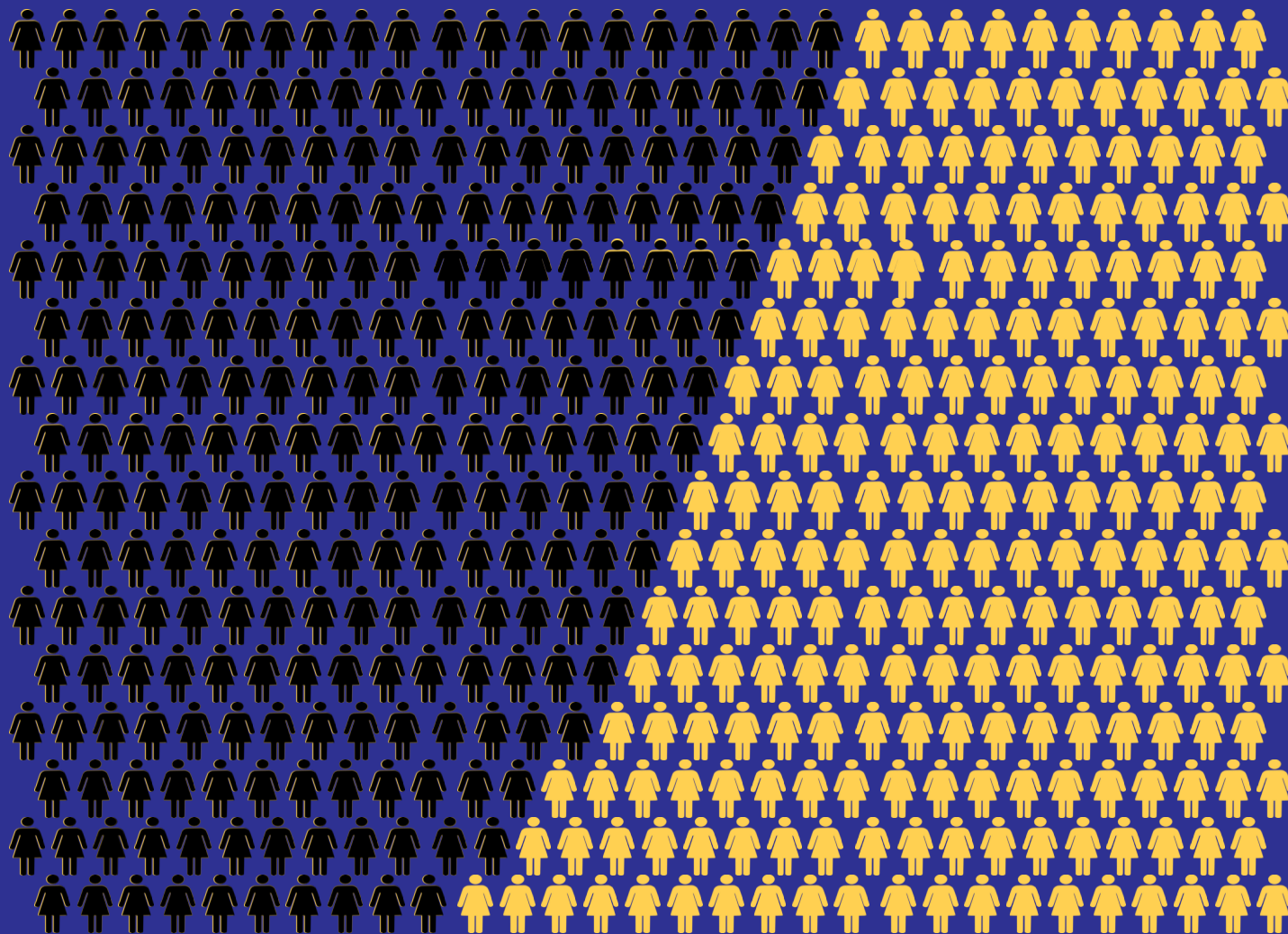
Siegel CA *CANCER J CLIN* 2013;63:11–30

Presented by: Gottfried E. Konecny, M.D.

PRESENTED AT:  | Annual '13 Meeting

Cervical Cancer in the World

Incidence rate is 530,000 and Mortality Rate 275,000 per year



♀ = 1000

Cervical Cancer in Latin America

Cervical cancer in Latin America. Potential years of life lost in 2012.

Countries	Number of deaths	Life expectancy (LE)	Potential years of life lost (PYLL)
Argentina	2127	80	53175
Bolivia	845	69	11830
Brazil	8414	77	185, 108
Chile	734	82	19818
Colombia	1986	78	45678
Costa Rica	116	82	3132
Cuba	569	81	14794
Ecuador	1026	79	24624
El Salvador	388	77	8536
Guatemala	672	75	13440
Haiti	575	65	5750
Honduras	417	76	8757
Mexico	4769	80	119, 225
Nicaragua	424	78	9752
Panama	134	80	3350
Paraguay	439	74	8341
Peru	1715	77	37730
Puerto Rico	84	82	2268
Dominican Republic	600	76	12600
Uruguay	175	80	4375
Venezuela	1798	78	41117
Total	27998		633, 430

- ✓ Life expectancy - Average age at death = Number of years of life lost by each death
- ✓ Number of years of life lost by each death X total number of deaths per period= Number of years of life potentially lost.

✓ **A loss of 633,000 potential years of life in Latin America**

Source: Deaths, according to GLOBOCAN 2012.

LE: www.bancomundial.org/datos/indicador/SP.DYN.LE00.FE.IN

PYLL: Estimates according to a mathematical model

Gynaecological Tumors

Cervical Cancer

- ♦ Second most common cancer among women worldwide.
- ♦ Second most common cause of cancer-related mortality in women globally.
- ♦ Human papillomavirus (HPV) infections are the cause of nearly all cervical cancers.
- ♦ Preventable through screening and vaccination
- ♦ If not prevented → surgery for early stage disease
- ♦ If not diagnosed at early stage → radiation therapy (RT) and concomitant chemotherapy.

Cervical cancer issues

(GCIG Brain storming, Melbourne 2014)

- WESTERN COUNTRIES (mainly early stages)
 - Fertility sparing/preserving
 - Sentinel node mapping
 - IMRT
 - Molecular Biology/Novel targeted therapies/predictive markers

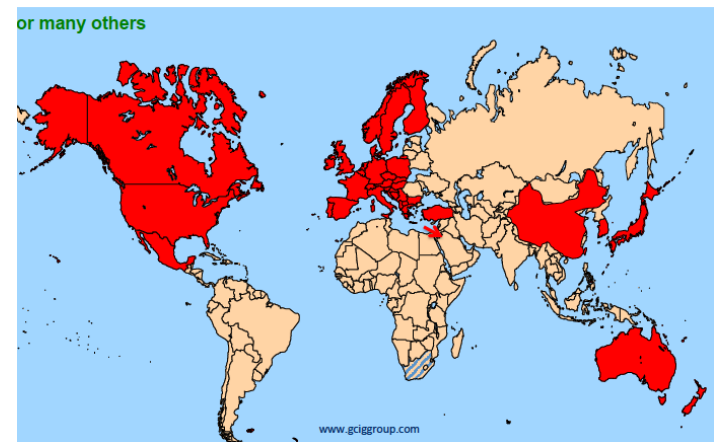
- DEVELOPING COUNTRIES (mainly locally-advanced & advanced stages)
 - Pap smear screening
 - Vaccines
 - Accesibility to radiotherapy
 - Accsesibility to medical treatment

Current situation and Challenges

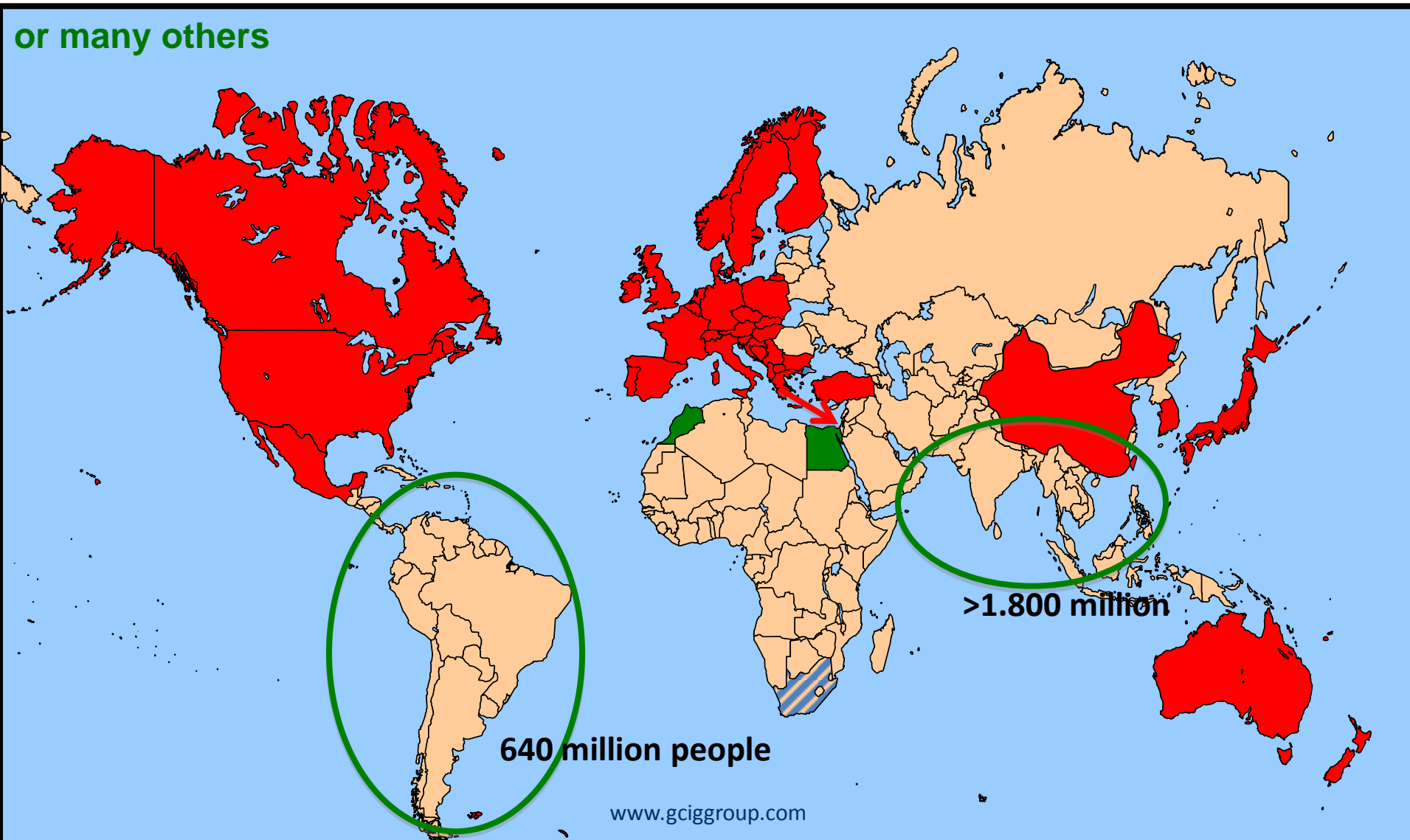
- Currently 29 groups are GCIG members.
 - 15 Europe
 - 7 US and Canada
 - 5 ASIA
 - 1 Australia/New Zealand
 - 1 Latin America
 - 0 Africa



Countries represented in the GCIG 2015



Countries represented in the GCIIG future?



GCIG

MISSION and VISION STATEMENT

- **MISSION:** to promote and facilitate high quality clinical trials in order to improve outcomes for women with gynecological cancer.
- **VISION:** Improving quality and duration of life for women with gynecologic cancers will be accomplished through a
 - focused common purpose,
 - shared expertise
 - mutual respect among members
 - with recognition and accommodation of cultural, geographic, and clinical diversities amongst and between members and patients.

Current situation and Challenges

- One of the keys to improve outcomes for women with gynecological cancer is to expand research in gynecologic cancer.
 - Increasing the ammount of cooperative group performing clinical trials in a global network as GCIG.

Locally Advanced Stages Cervical Cancer

Key Issues

- Pap smear screening
- Vaccines
- Accessibility to radiotherapy
- Accessibility to medical treatment

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Pap Smear Screening Difficulties in Developing Countries

- **Costs:**

- Logistics for implementation of Cytology:

- Infrastructure for collection; Cost of reading
 - Distribution of results (**higher cost**)

- **Social:**

- Population (level of education, social status, access to health centers)
 - Unable to adhere to the population screening programs
 - Difficulty to identify lacks of coverage

Pap Smear Screening Difficulties in Developing Countries

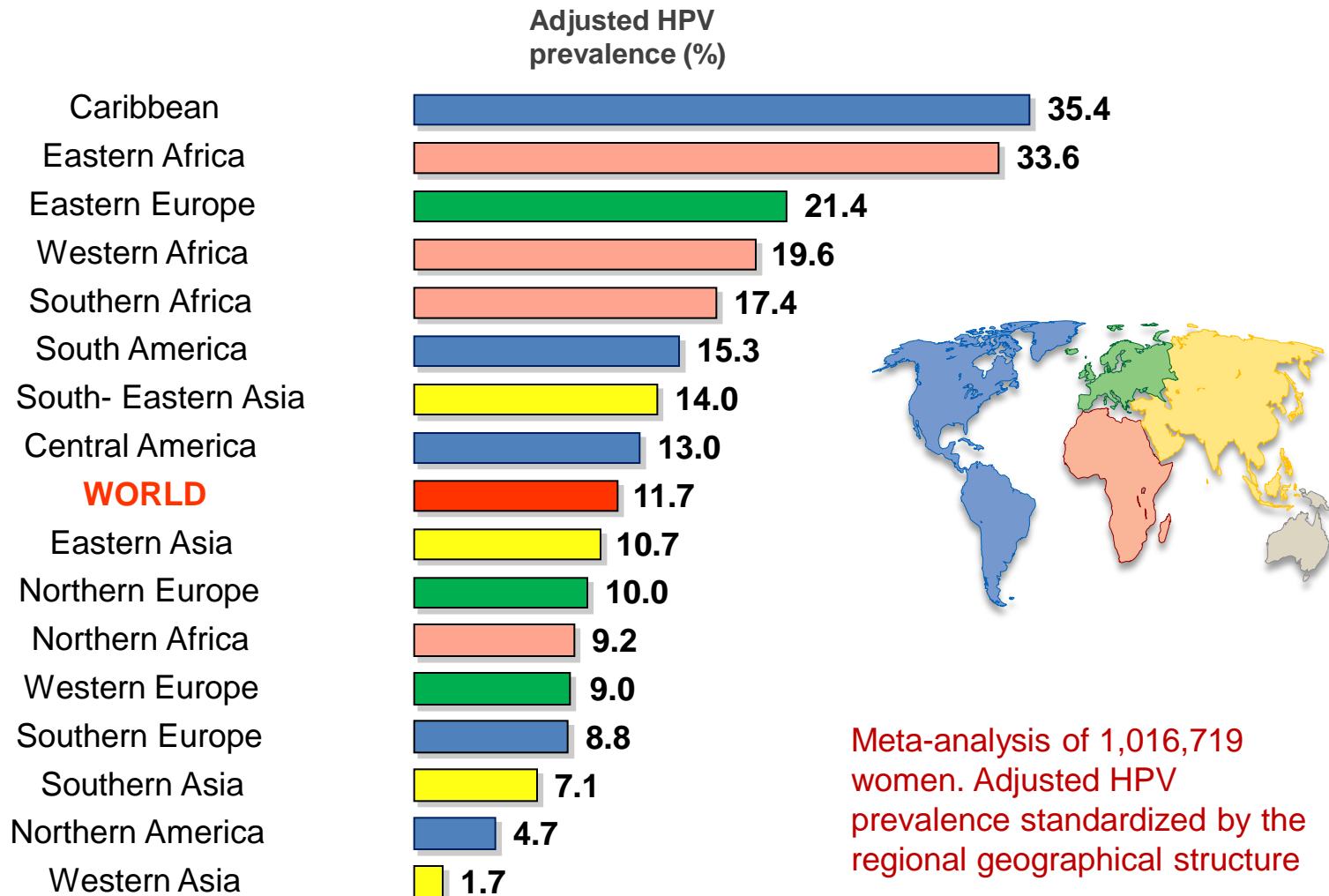
- **Executing:**
 - Quality of cytology (collecting and reading)
 - Satisfactory samples as a limiting factor
 - Lack of standardization for reading
 - False negatives: 3-30%
 - Excess of abnormal cytology generating costs and undetermined significance.

Locally Advanced Stages Cervical Cancer

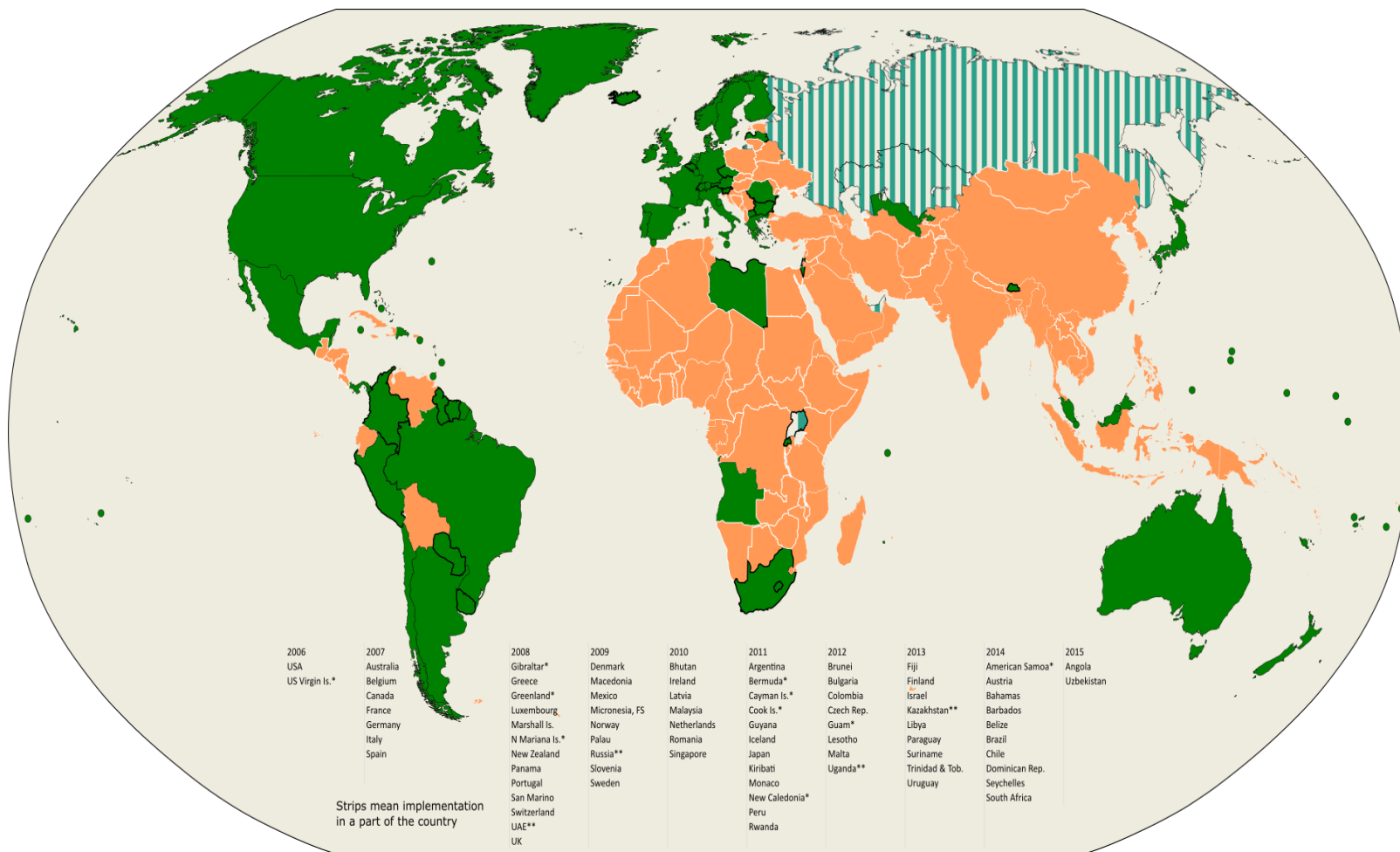
Key Issues

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HPV Prevalence Among 1 Million Women With Normal Cytology



HPV Vaccination Programs to 2014/2015



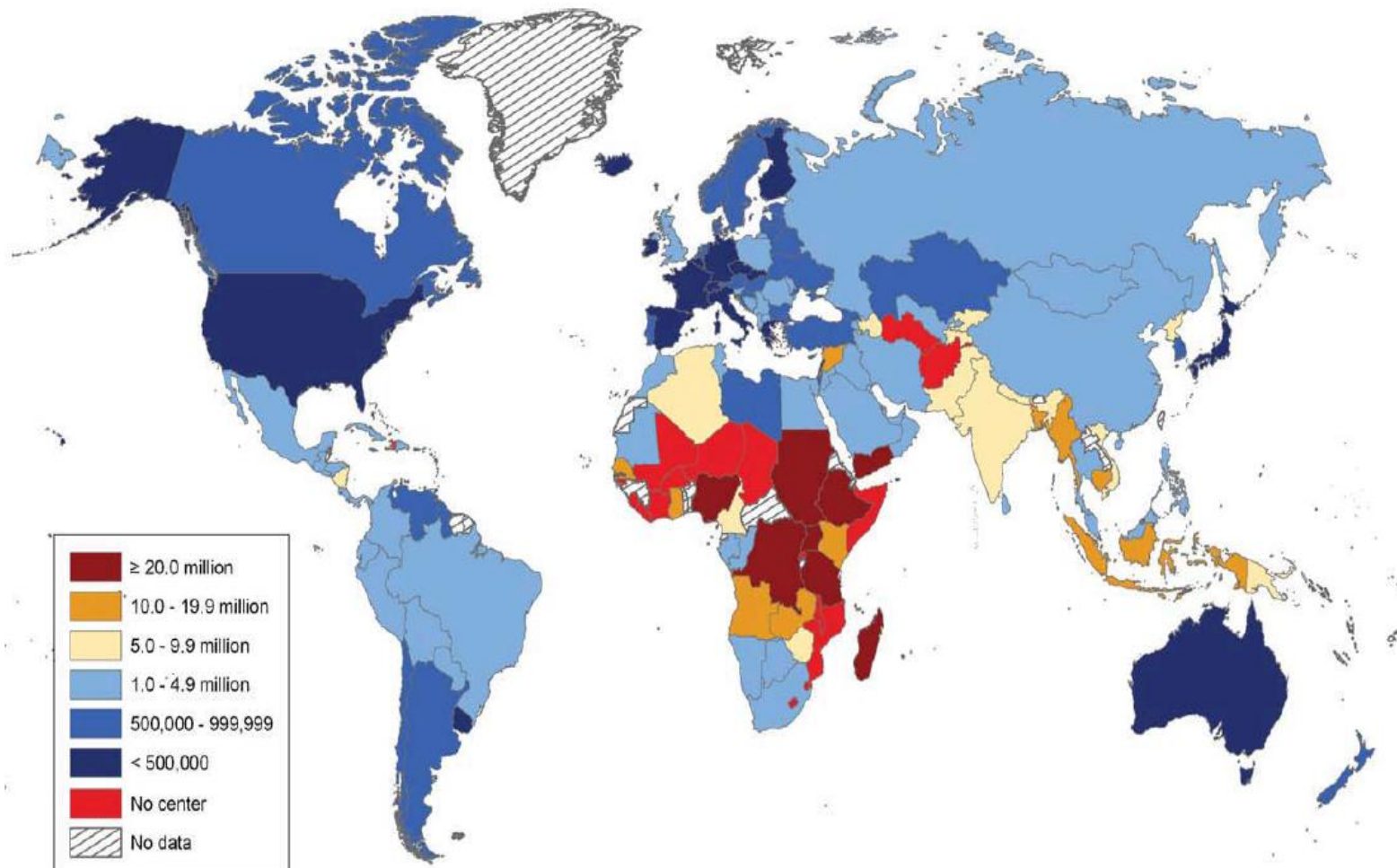
64 COUNTRIES, 4 REGIONS, & 12 TERRITORIES

Locally Advanced Stages Cervical Cancer

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Number of People Served by Each Radiotherapy Center by Country

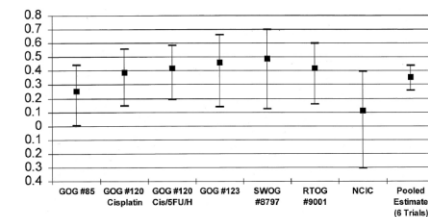


Locally Advanced Stages Cervical Cancer

Key Issues

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- Accesibility to medical treatment

Reduction in the risk (1 - relative risk) of death from six chemoradiation clinical trials in cervix cancer



Rose, P. G. et al. J Clin Oncol; 20:891-893 2002

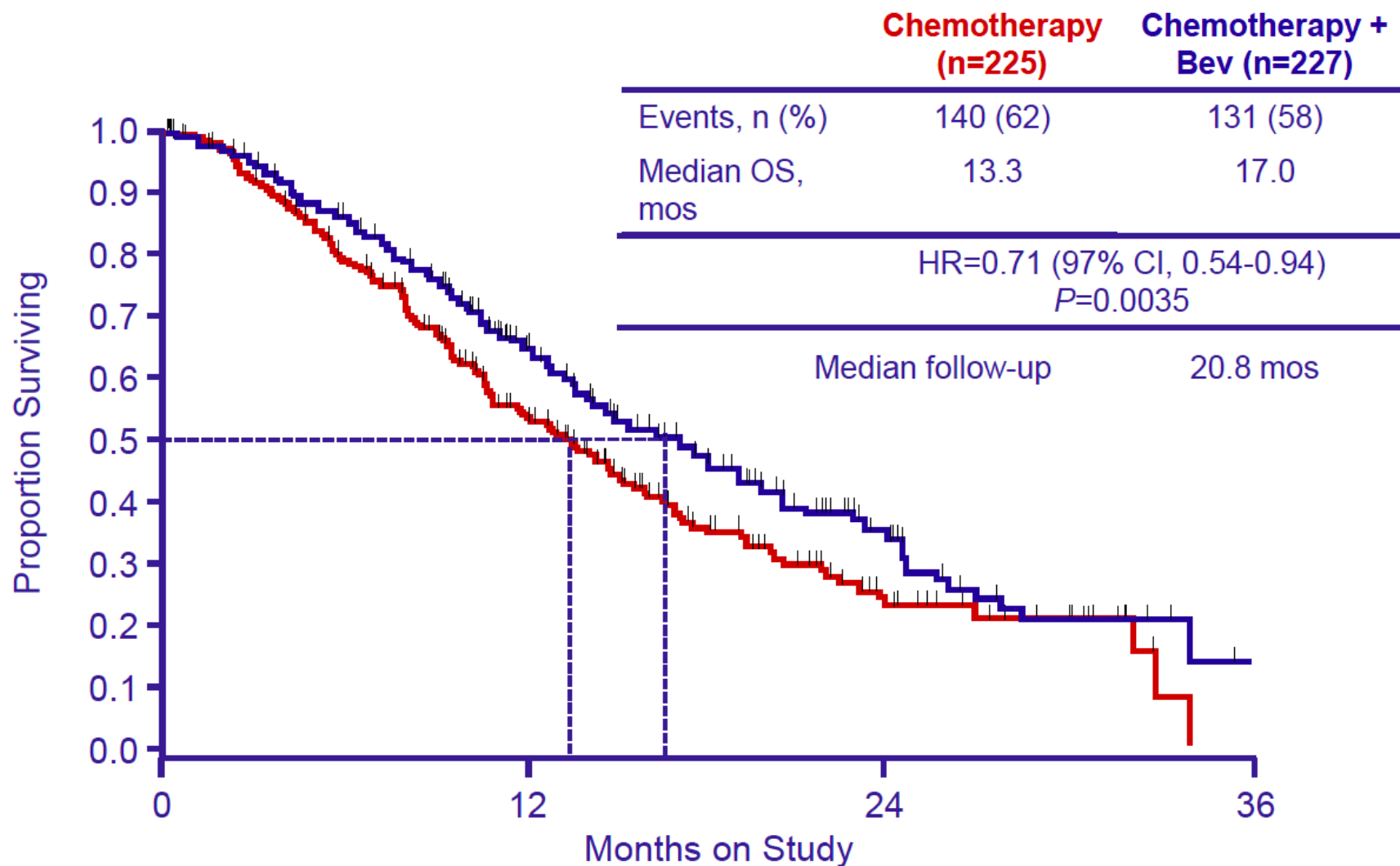
JOURNAL OF CLINICAL ONCOLOGY

Recurrent/Metastatic Cervical Cancer

Key Issues

- Accessibility to medical treatment
- Few options to cure
- Standard of care: platinum combination (≤ 2013)
Cisplatin + paclitaxel

GOG 240: OS for Chemo vs Chemo + Bev



Recurrent/Metastatic Cervical Cancer

THE NEW ENGLAND JOURNAL of MEDICINE

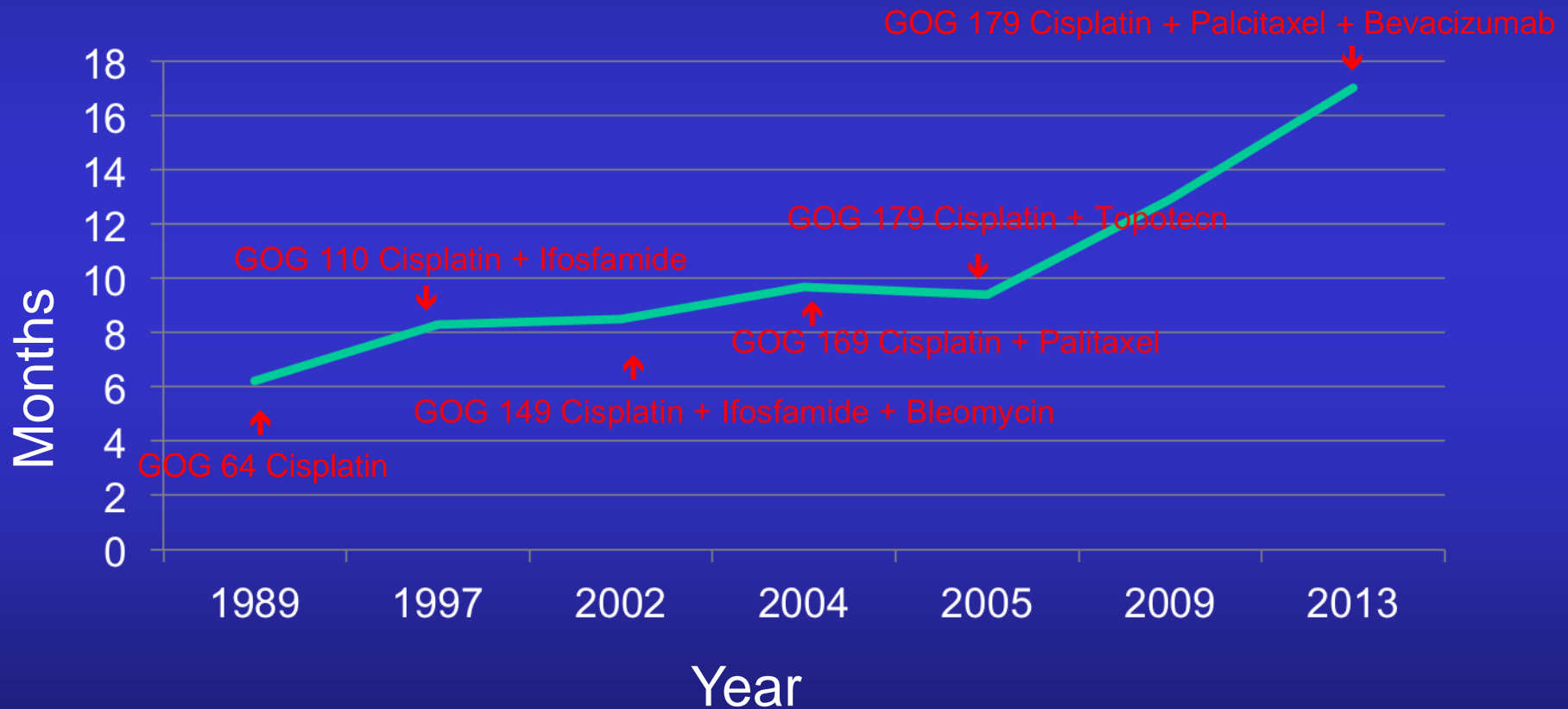
ORIGINAL ARTICLE

Improved Survival with Bevacizumab in Advanced Cervical Cancer

Krishnansu S. Tewari, M.D., Michael W. Sill, Ph.D., Harry J. Long III, M.D.,
Richard T. Penson, M.D., Helen Huang, M.S., Lois M. Ramondetta, M.D.,
Lisa M. Landrum, M.D., Ana Oaknin, M.D., Thomas J. Reid, M.D.,
Mario M. Leitao, M.D., Helen E. Michael, M.D., and Bradley J. Monk, M.D.

N ENGL J MED 370:8 NEJM.ORG FEBRUARY 20, 2014

Progress in Survival in Advanced and Recurrent Cervical Cancer



Recurrent/Metastatic Cervical Cancer

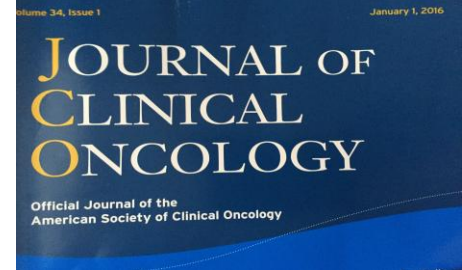
Accessibility to medical treatment

- Few options to cure
- Standard of care: platinum combination (2013)
 - Cisplatin + paclitaxel + Bevacizumab
- *Clinical Practice Changing*



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Expectations



- The institute of Medicine, Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries, the WHO:

“Stepping Stones in improving the fight against cancer in Low-, Middle-, and High-Income Countries.”

Souza et al, JCO vol34, Jan 2016

Thinking about numbers...

- In 2010:
 - Long term costs of patients with cancer and their families - US\$ 2.5 trillion annually worldwide.
- The implementation of prevention, early detection, and treatment strategies:
 - Potentially save 2.4-3.7 million lives annually
 - The majority of this lives in Low- and Middle- Income countries
 - Economic benefit in excess of US\$400 billion.

“Stepping stones against cancer in Low and Middle- Income countries”:

- ✓ Focus on prevention and risk reduction strategies
 - National Cancer Control Plan
 - Basic Health Care infrastructure and education

- ✓ Prevention and WHO list of essential medications
 - Prevention and early detection programs
 - Access to basic pathology and imaging services

Gynecological Tumors

Cervical Cancer

Remarks

- First world advances in both diagnosis and treatment should be applicable to developing countries.
- To establish networks to improve survival in cervical cancer is a priority

Please look to the future



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Symposium. Mexico, Jan 2017