



KDIGO and the Global Guideline Process

Bertram Kasiske, MD

Mandaluyong City

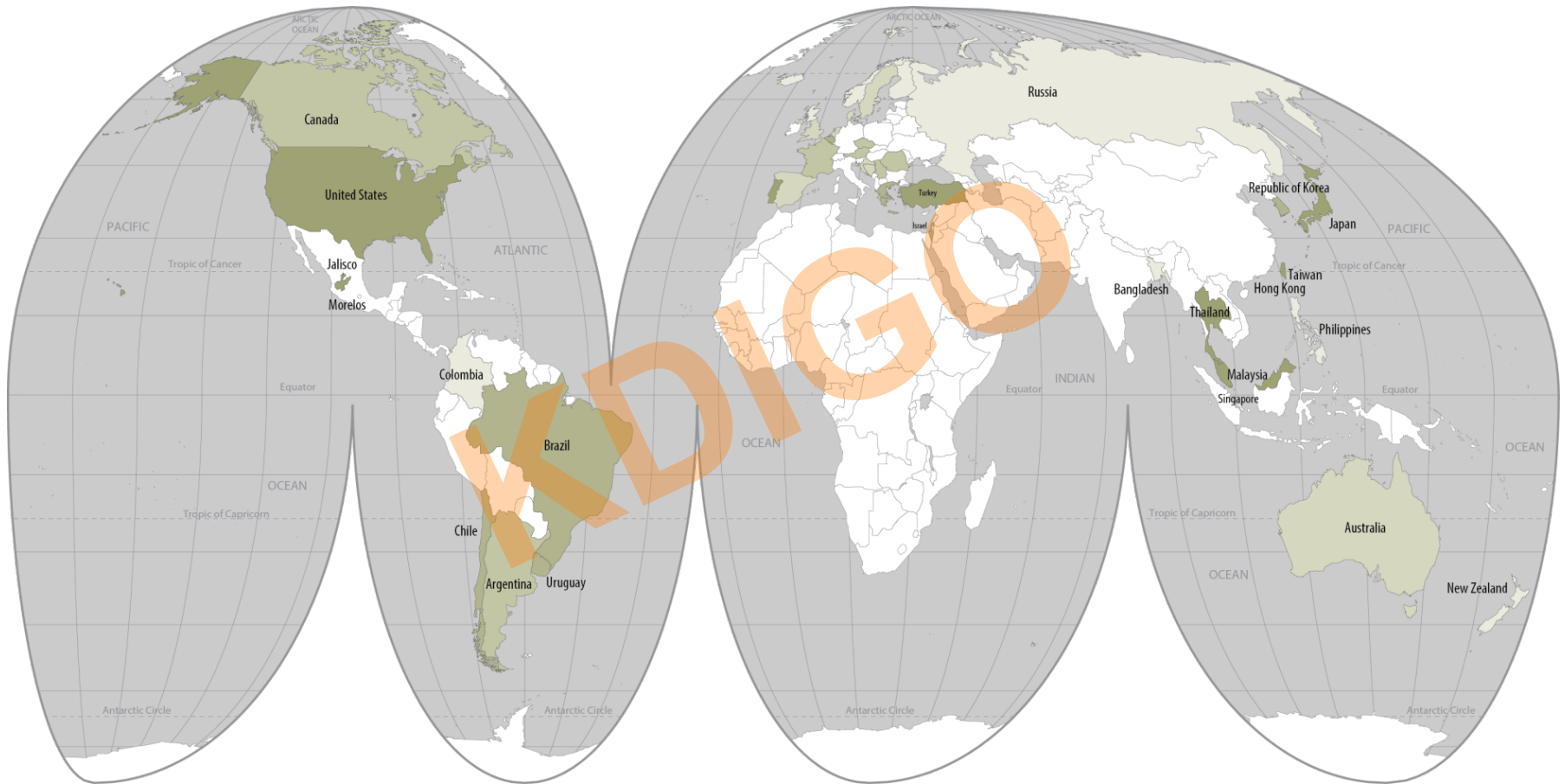
April 24, 2014

Global solutions for global problems

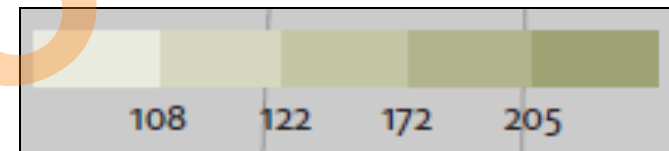
- Global incidence and prevalence of ESRD
- Clinical practice guidelines in nephrology
- The emergence of KDIGO
- Pros and cons of guideline globalization
- Where do we go from here?



Global incidence of ESRD in 2011

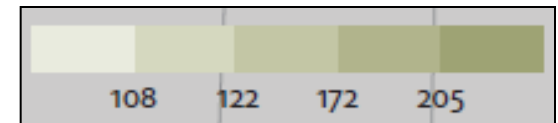


Incidence of ESRD in 2011



Quintiles (per million pop.)

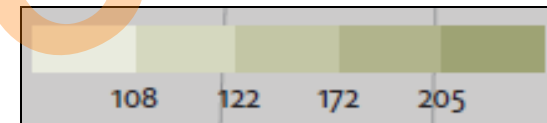
Incidence of ESRD in 2011



Quintiles (per million pop.)

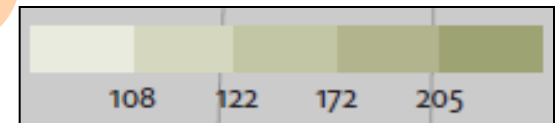
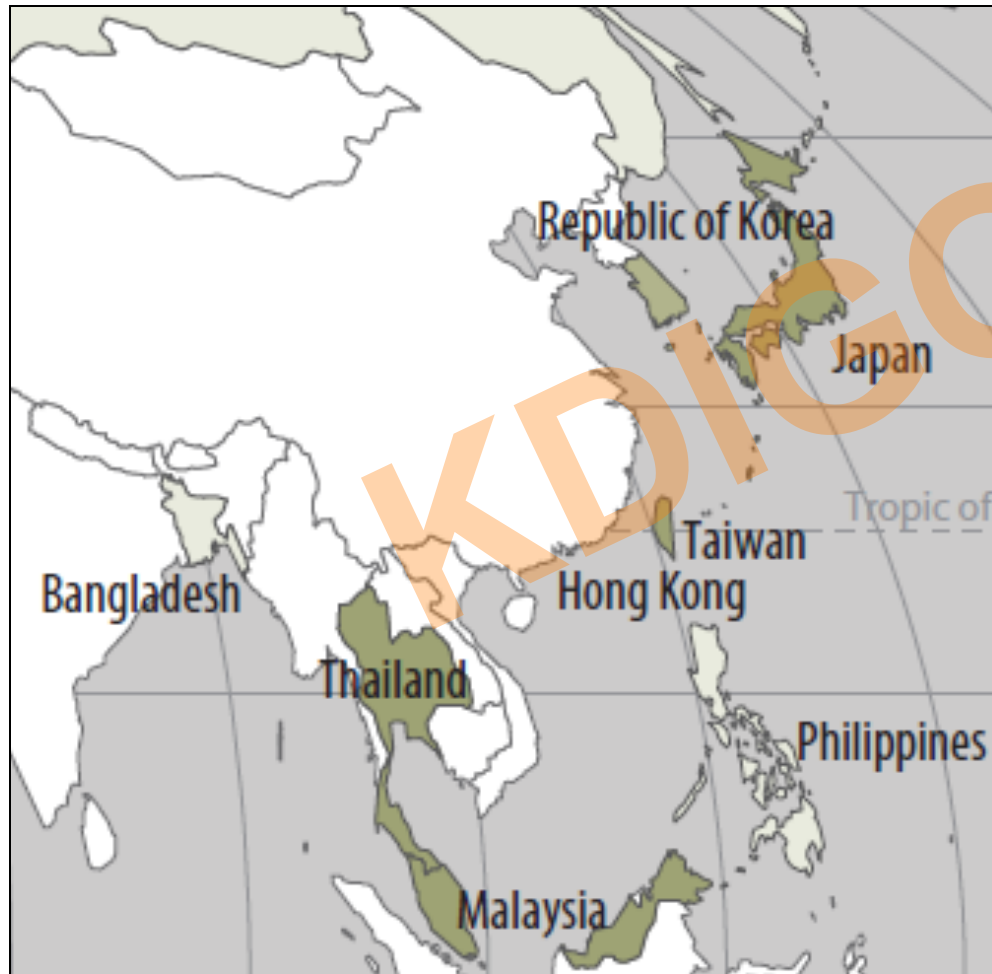


Incidence of ESRD in 2011



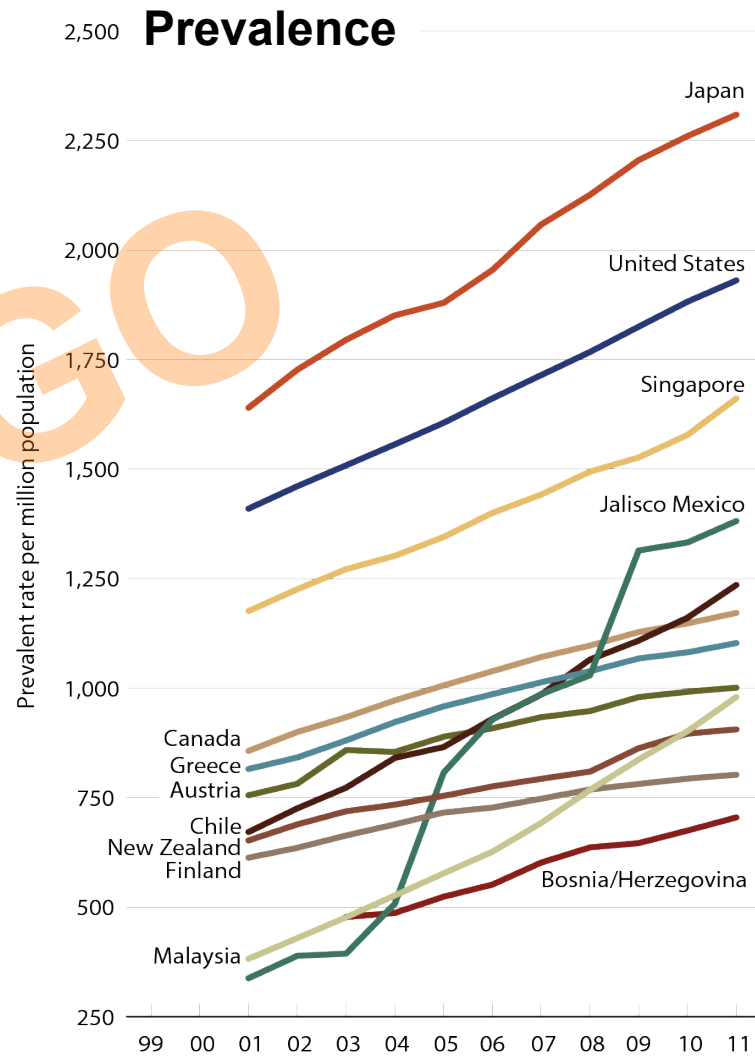
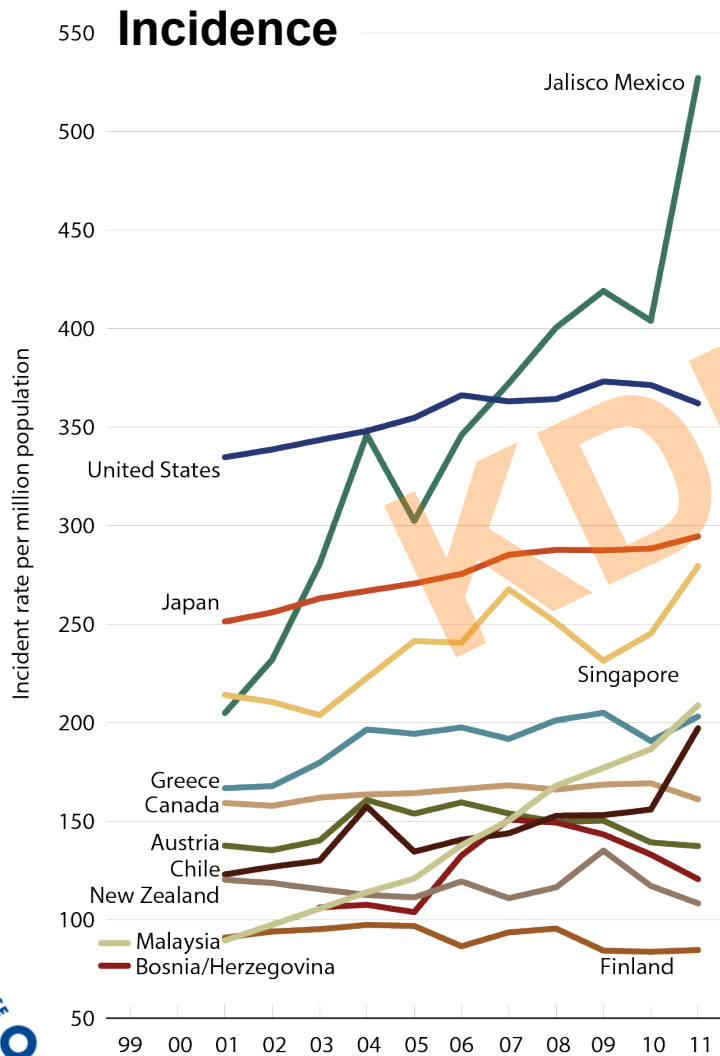
Quintiles (per million pop.)

Incidence of ESRD in 2011

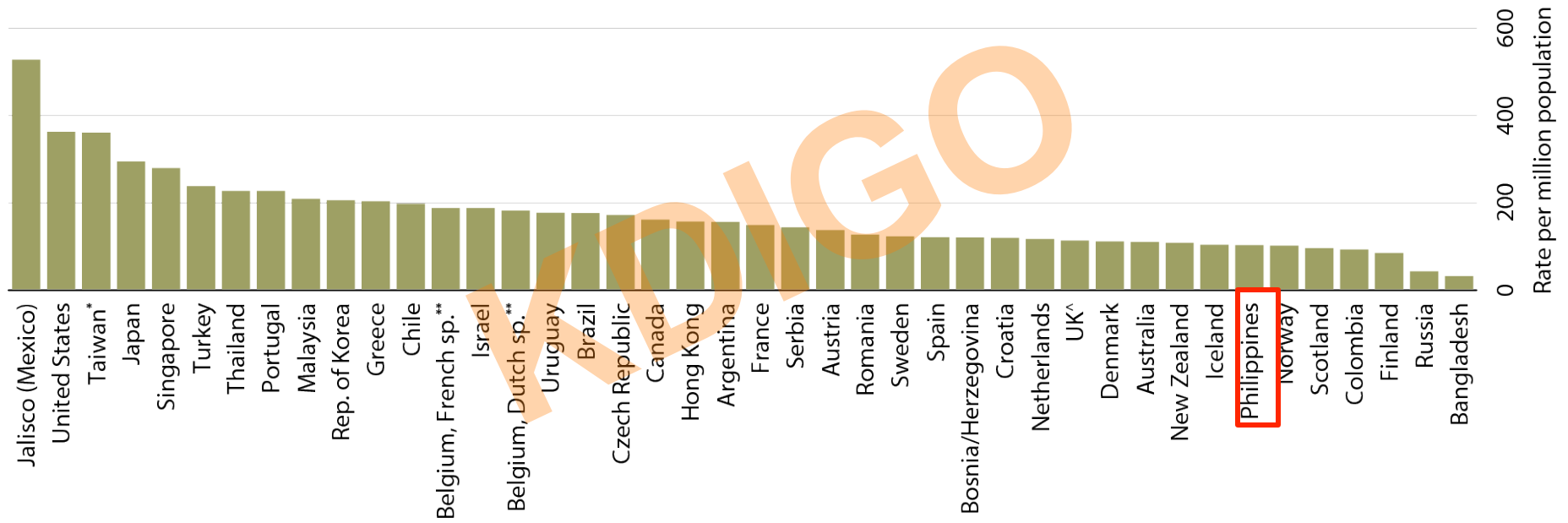


Quintiles (per million pop.)

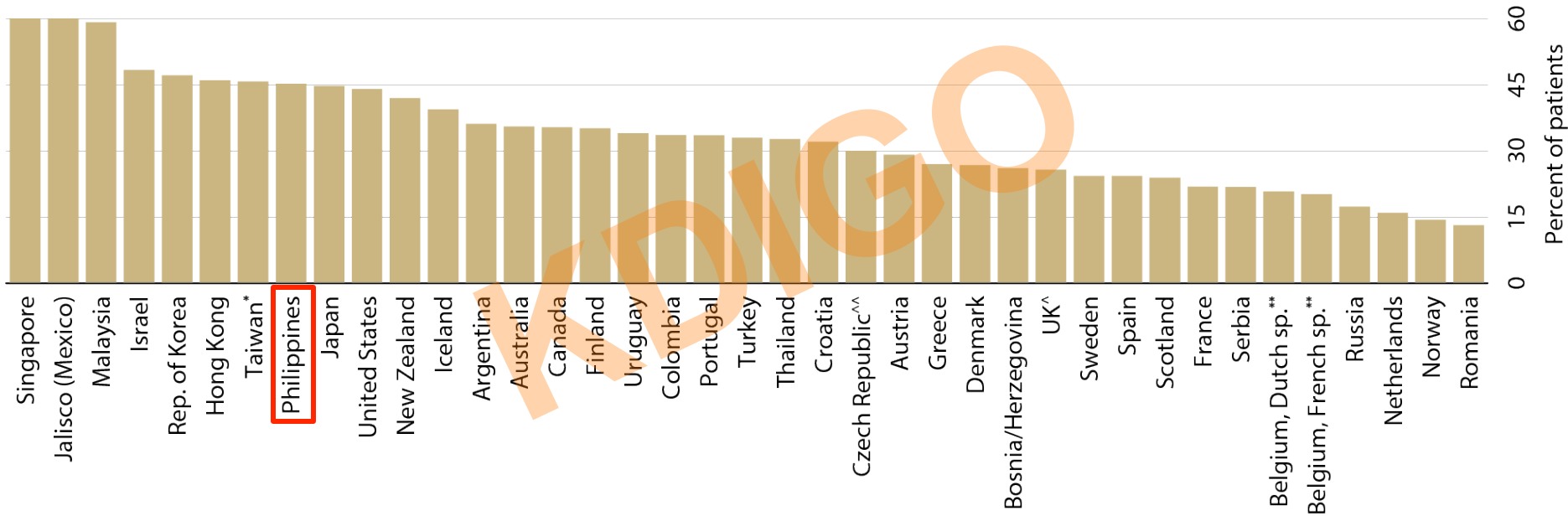
Increasing global incidence & prevalence of ESRD (per million pop.)



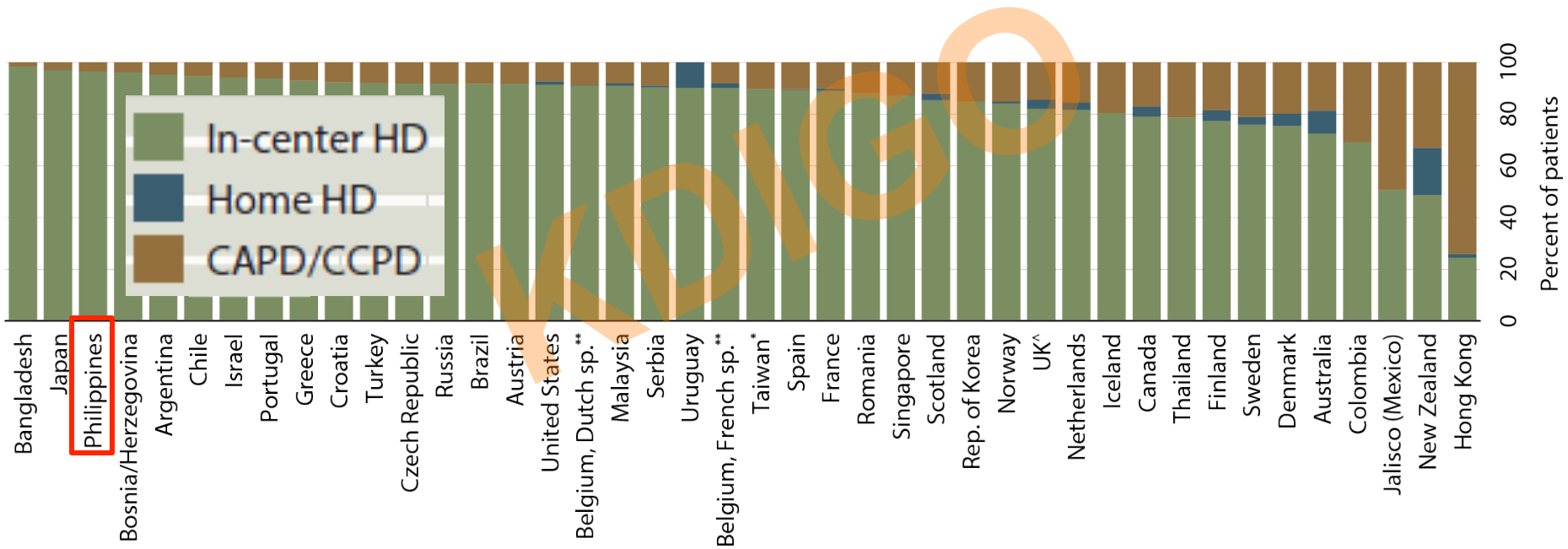
Incidence of ESRD in 2011



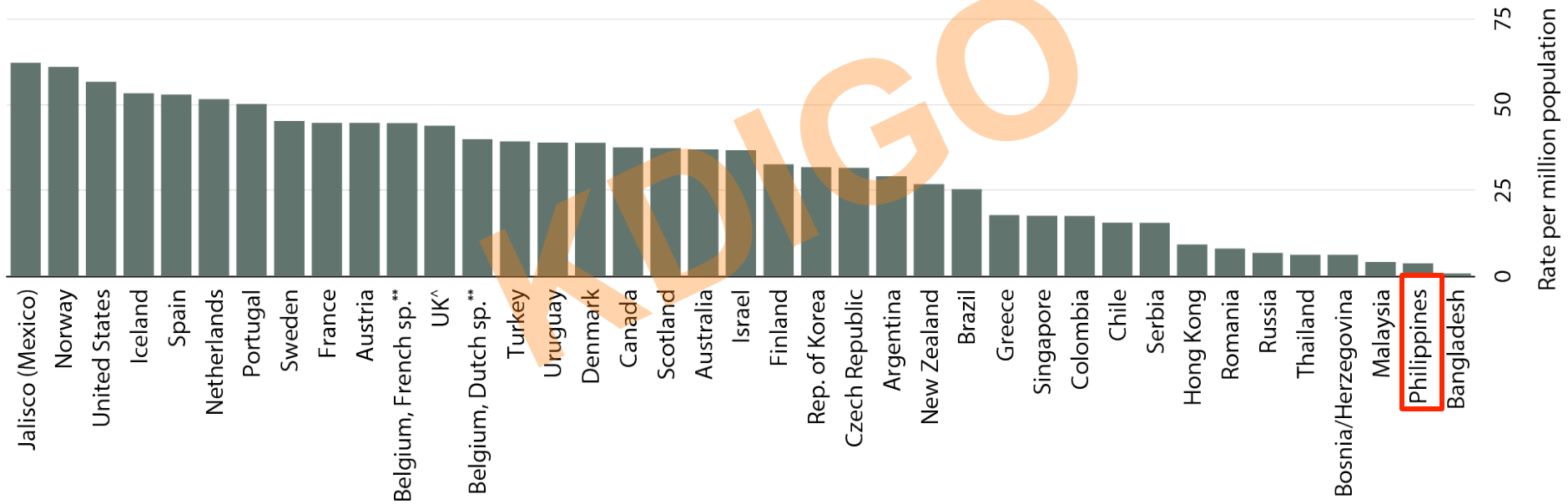
Percentage of incident patients with ESRD due to diabetes in 2011



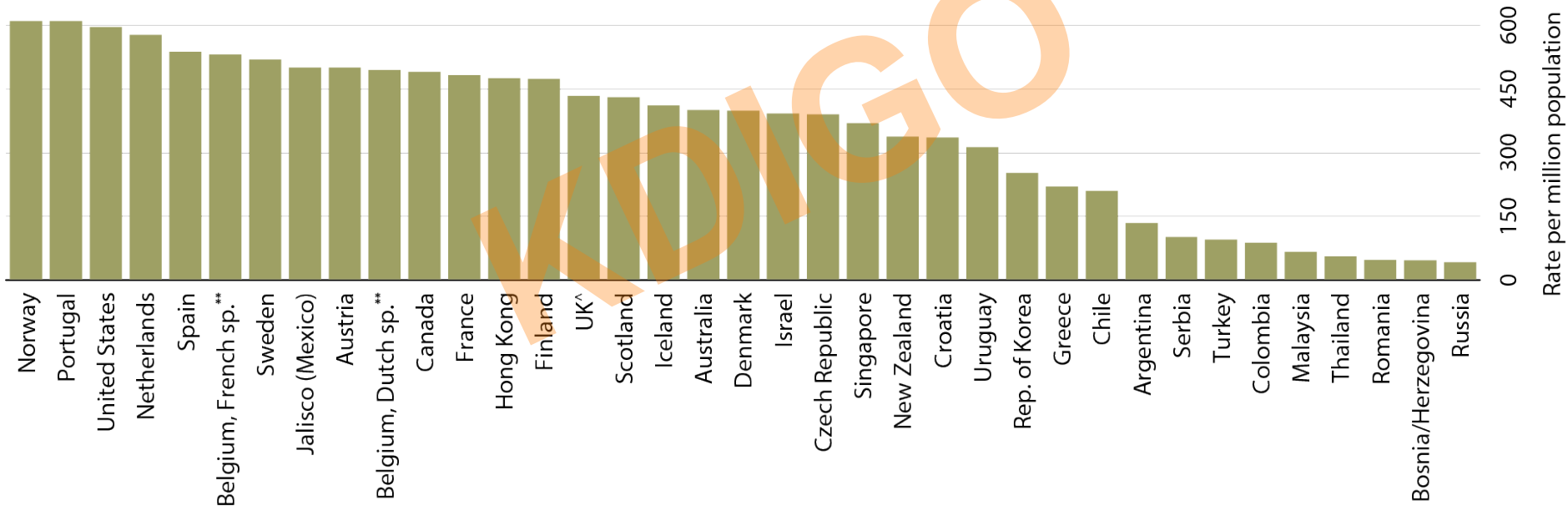
Percentage of prevalent patients by dialysis modality in 2011



Transplant rates in 2011



Prevalent rates of functioning transplants in 2011



Global solutions for global problems

- Global incidence and prevalence of ESRD
- Clinical practice guidelines in nephrology

KDIGO



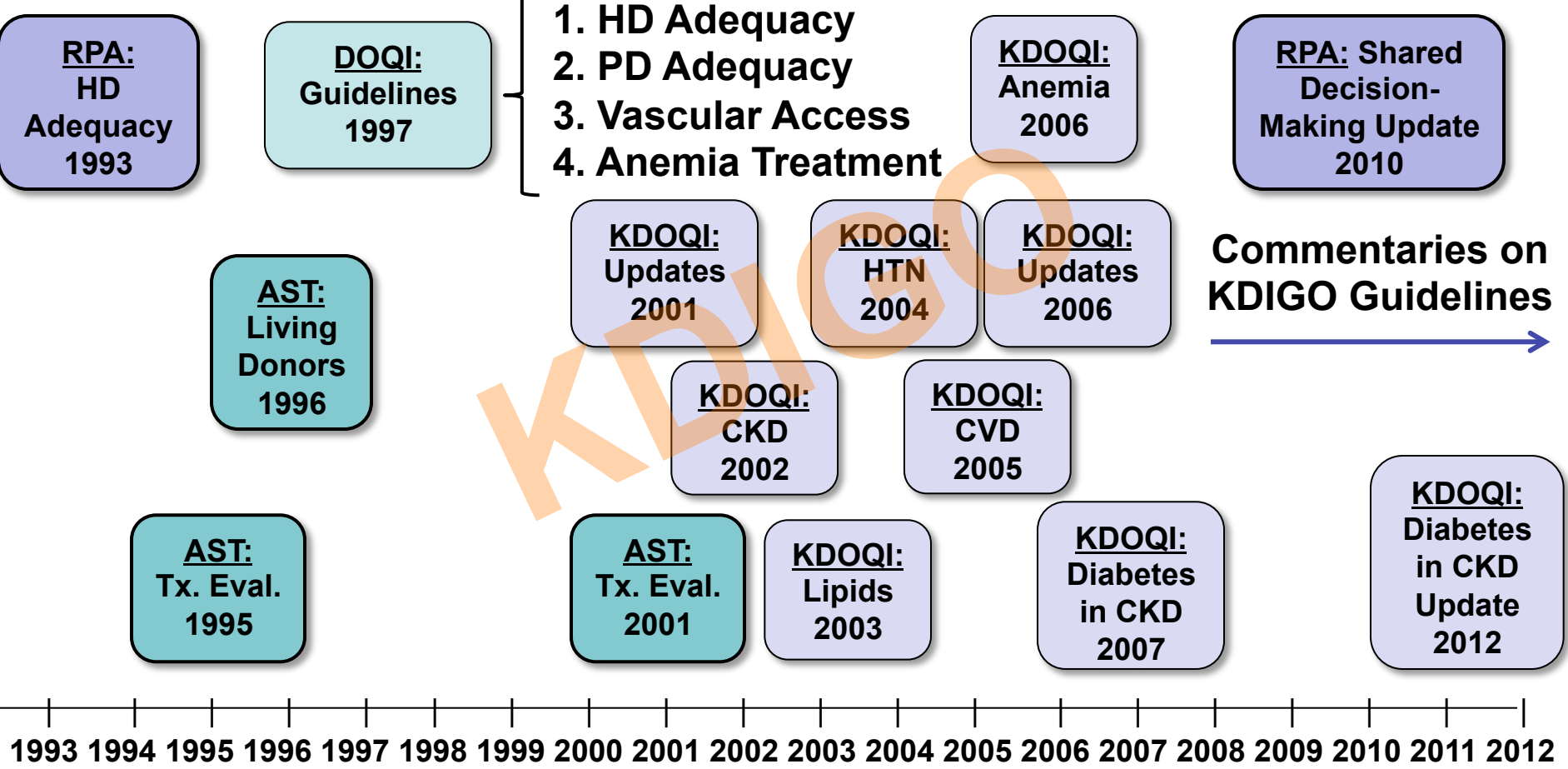
First guideline – Banff?

The Banff Conferences on Allograft Pathology:

- 1991 Centre For Conferences - Banff, AB Canada
- 1993 Centre For Conferences - Banff, AB Canada
- 1995 Centre For Conferences - Banff, AB Canada
- 1997 Banff Springs Hotel - Banff, AB Canada
- 1999 Banff Springs Hotel - Banff, AB Canada
- 2001 Rimrock Resort Hotel - Banff, AB Canada
- 2003 University of Aberdeen – Aberdeen, Scotland
- 2005 Fairmont Hotel - Edmonton, AB Canada
- 2007 La Coruña, Spain
- 2009 Rimrock Resort Hotel - Banff, AB Canada
- 2011 Enghien-les-Bains, France



United States



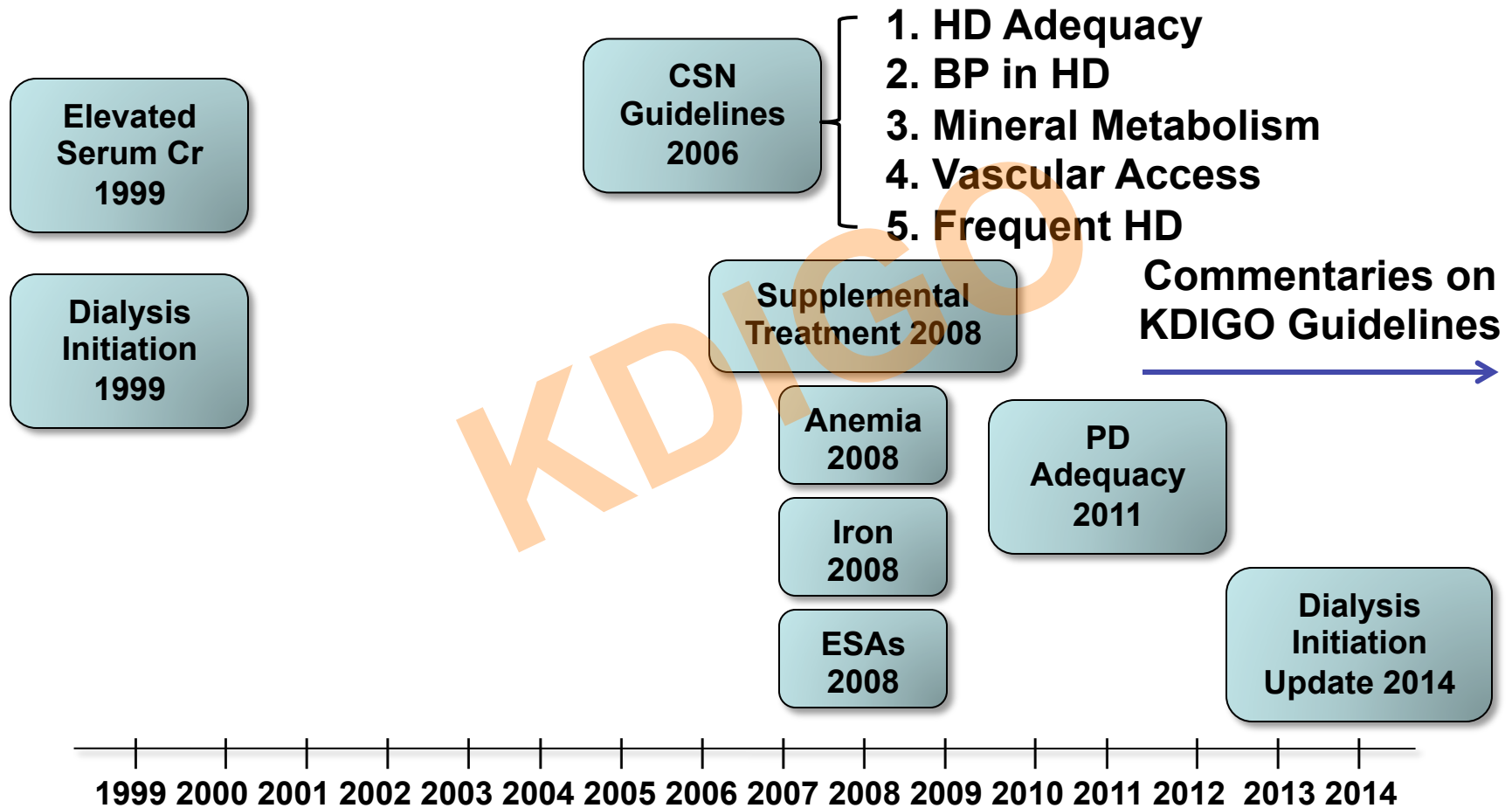
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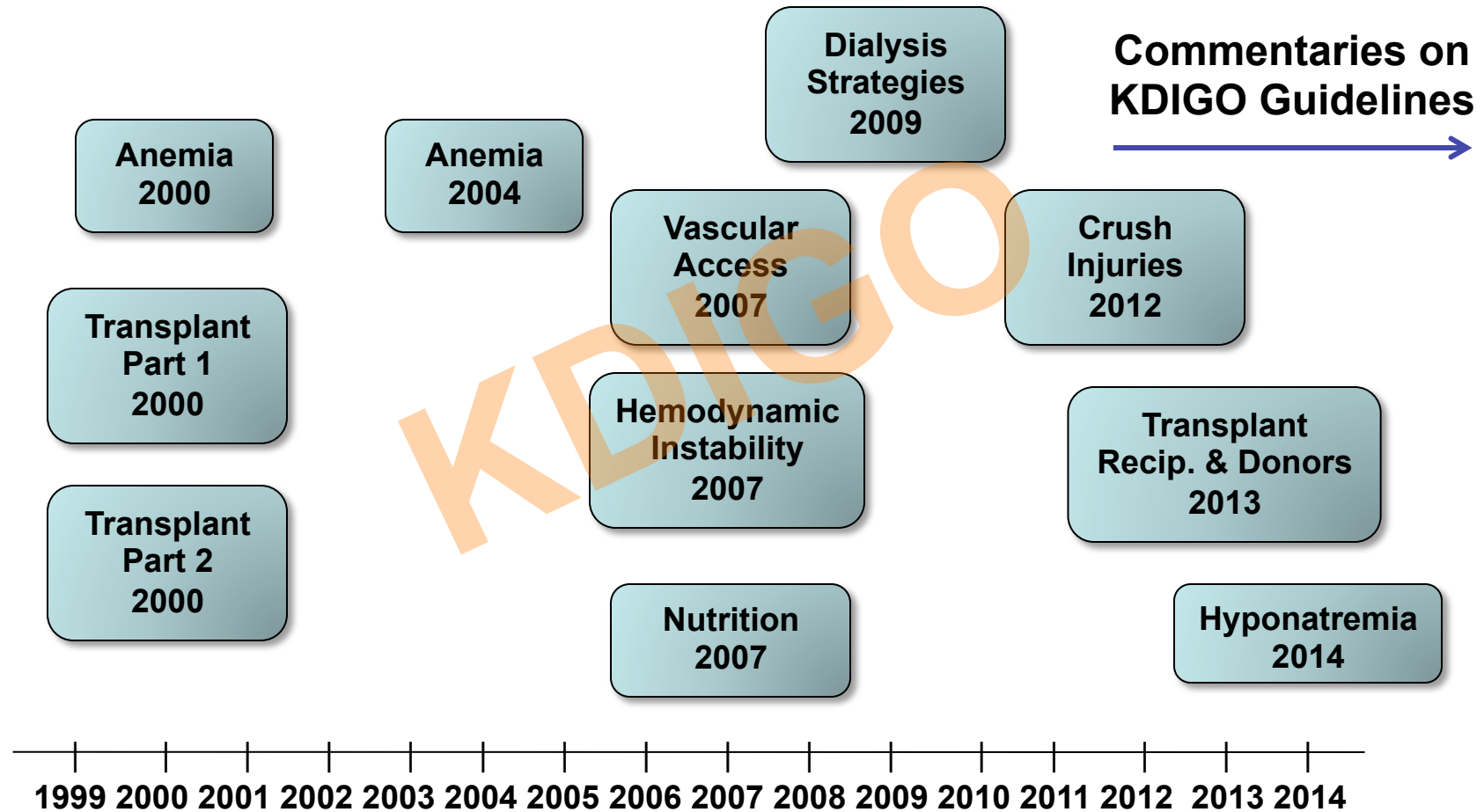
Kidney Disease: Improving Global Outcomes



Canada

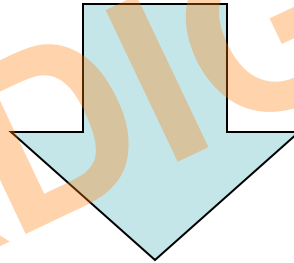


Europe



Europe

EBPG



Europe

Nephrol Dial Transplant (2008) 23: 2162–2166

doi: 10.1093/ndt/gfn238

Advance Access publication 9 May 2008



Editorial Review

European best practice quo vadis? From European best practice guidelines (EBPG) to European renal best practice (ERBP)

Carmine Zoccali¹, Daniel Abramowicz², Jorge B Cannata-Andia³, Pierre Cochat⁴, Adrian Covic⁵, Kai-Uwe Eckardt⁶, Denis Fouque⁷, Olof Heimbürger^{8,9}, Alison McLeod¹⁰, Elizabeth Lindley¹¹, Francesco Locatelli¹², Goce Spasovski¹³, James Tattersall¹⁴, Wim Van Biesen¹⁵, Christopher Wanner¹⁶ and Raymond Vanholder¹⁵



Kidney Disease: Improving Global Outcomes

United Kingdom

THE RENAL
ASSOCIATION
founded 1950

Clinical Practice Guidelines Committee



Kidney Disease: Improving Global Outcomes

United Kingdom

Clinical Practice Guidelines Committee 2013

Andy Lewington (Chair)	Shona Methven
Neil Duncan	Clara Day
Vicky Briggs	Graham Woodrow
Andrew Mooney	Ed Sharples
Simon Steddon	Marlies Ostermann
Martin Wilkie	Graham Warwick
David Goldsmith	Suren Kanagasundaram
Ashraf Mikhail	Richard Baker
Mark MacGregor	Mark Wright
Paul Harden	Mick Kumwenda
Cormac Breen	Sandip Meeta
Mike Robson	



United Kingdom

Module	Date	Review Due
Acute Kidney Injury - Andrew Lewington & Suren Kanagasundaram	08/03/11	2014
Anaemia in CKD - Dr Ashraf Mikhail, Dr Rajesh Shrivastava & Dr Donald Richardson	15/11/10	2013
Assessment of the Potential Kidney Transplant Recipient - Chris Dudley & Paul Harden	12/01/11	2014
Blood-borne viruses - Colin Geddes, Elizabeth Lindley & Neill Duncan	14/07/09	2012
Cardiovascular disease in CKD - Dr Stephen Holt & Dr David Goldsmith	06/08/10	2013
CKD-Mineral and Bone Disorders (CKD-MBD) - Dr Simon Steddon & Dr Edward Sharples	06/12/10	2013
Detection, Monitoring and Care of Patients with CKD - Dr Mark S. MacGregor & Dr Maarten W. Taal	28/02/11	2014
Haemodialysis - Robert Mactier, Nic Hoenich & Cormac Breen	01/12/09	2012
Nutrition in CKD - Dr Mark Wright & Dr Colin Jones	25/06/10	2013
Peritoneal access - Martin Wilkie, Sarah Jenkins & Badi Shrestha	22/09/09	2012
Peritoneal dialysis - Dr Graham Woodrow & Prof Simon Davies	30/07/10	2013
Planning, initiation & withdrawal of RRT - Ken Farrington & Graham Warwick	17/09/09	2012
Post-operative Care of the Kidney Transplant Recipient - Dr R Baker, Professor A Jardine & Dr Peter Andrews	05/02/11	2014



Australia / New Zealand



Chronic Kidney Disease Guidelines

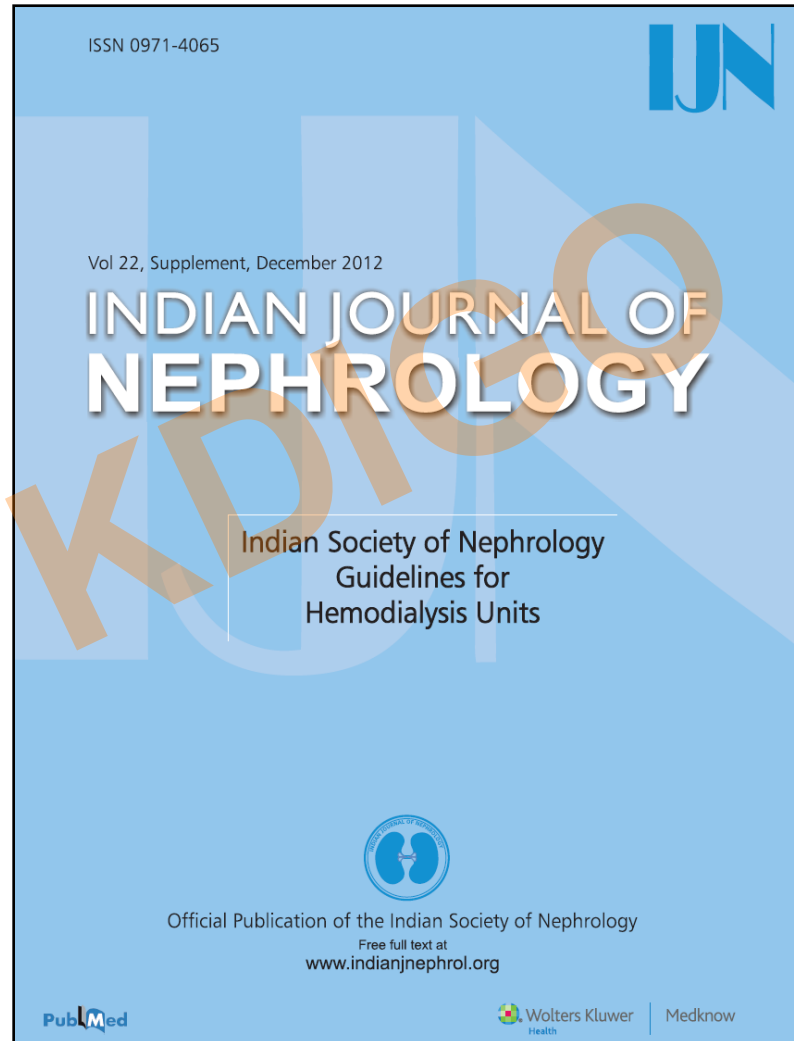
Dialysis Guidelines

Transplant Guidelines



Kidney Disease: Improving Global Outcomes

India



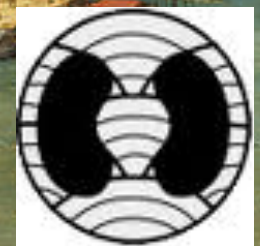
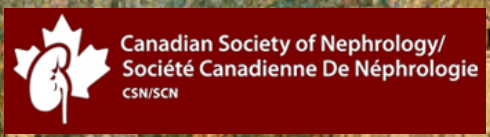
Kidney Disease: Improving Global Outcomes

India – Guidelines for HD Units

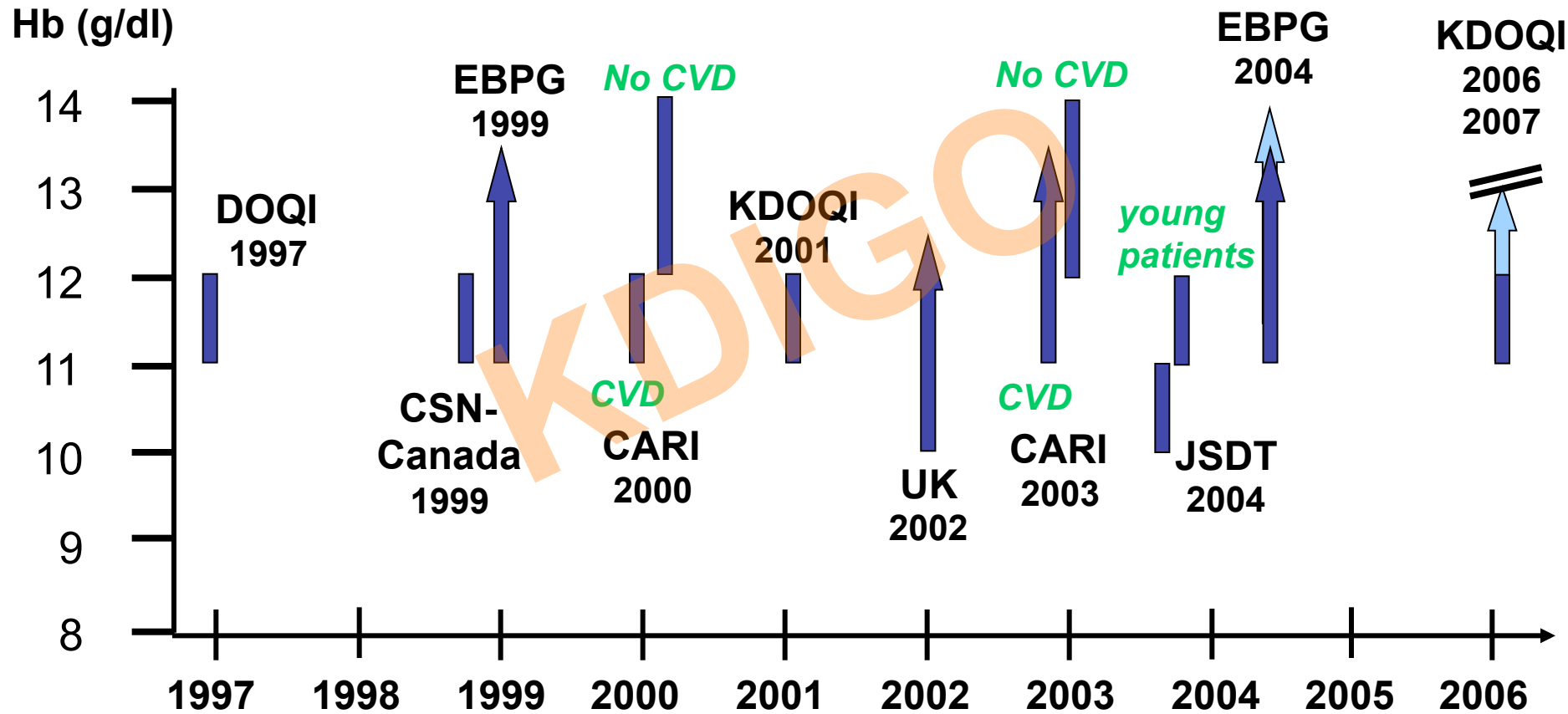
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Nephrology guidelines: Pillar of wisdom or Tower of Babel?



Anemia guidelines



Global solutions for global problems

- Global incidence and prevalence of ESRD
- Clinical practice guidelines in nephrology
- **The emergence of KDIGO**



KDIGO Beginnings

In December 2003, 30 nephrologists, from 20 countries and six continents, met in Amsterdam to review the plans for a new organization, whose proposed mission was to develop and coordinate clinical practice guidelines for the care of kidney patients on a global basis. The organization was christened “KDIGO”.



KDIGO – A Simple Idea

- Although local practice differs, evidence is global
- Avoiding redundancy and streamlining the efforts:
 - Increased output (more guidelines)
 - Expanded scope (more topics)
 - Robust, consistent quality
 - Based on broader expertise
 - Greater impact
 - Improvement of the knowledge base



KDIGO – Guideline Process

REPORT BRIEF  MARCH 2011

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Clinical Practice Guidelines We Can Trust



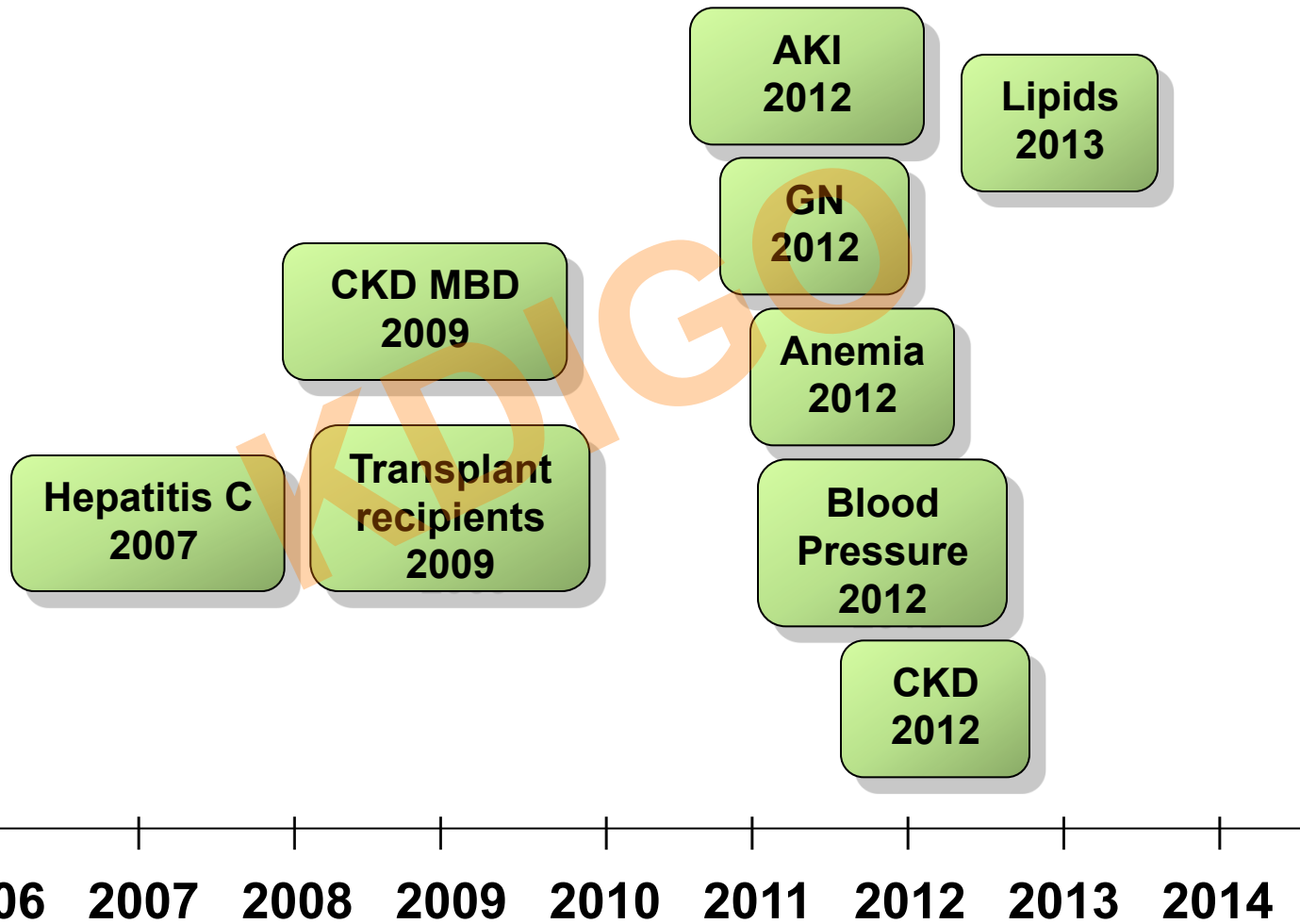
CLINICAL PRACTICE GUIDELINES WE CAN TRUST

INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES

Healthcare providers often are faced with difficult decisions and considerable uncertainty when treating patients. They rely on the scientific literature, in addition to their knowledge, skills, experience, and patient



KDIGO Guidelines



Global solutions for global problems

- Global incidence and prevalence of ESRD
- Clinical practice guidelines in nephrology
- The emergence of KDIGO
- **Pros and cons of guideline globalization**



Should guideline development be centralized? Two viewpoints.

“This committee recognizes value in a diverse community of developers and the unique relationships each has with its constituency, relevant experts, practitioners, and funding sources.”

IOM (Institute of Medicine). *Clinical Practice Guidelines We Can Trust*. Washington, DC: National Academies Press; 2011.

“The time has come for guideline development to again be centralized ...”

TM Shaneyfelt & RM Centor. Reassessment of clinical practice guidelines: go gently into that good night. *JAMA*. 2009;301:868.



The pluralistic approach creates ...

- Guidelines tailored to local practice
- Easier access to career development
- Easier access to local funding

but also

- Threats to reliability and quality
- More competition for limited funding
- Inconsistencies and confusion



The centralized approach creates ...

- Improved reliability and quality
 - Greater consistency
 - Better use of limited resources
- but also*
- Less relevance to local practice
 - Less access to career development
 - More difficult fund raising

How can we optimize the guideline development process?

Evidence is global, but
clinical practice is local.



Global solutions for global problems

- Global incidence and prevalence of ESRD
- Clinical practice guidelines in nephrology
- The emergence of KDIGO
- Pros and cons of guideline globalization
- **Where do we go from here?**



What do we need?

- Consistent state-of-the-art methods
- Up-to-date evidence reviews
- Up-to-date guideline recommendations
- Global participation and ownership
- Local dissemination and implementation



The need for ongoing surveillance

- New topics
 - A new treatment (also implies new evidence)
 - A new disease or condition
- New evidence
 - A new treatment
 - New evidence for old topics
- Changes in interventions
 - Interventions become safer and more effective
 - Interventions become more affordable
- Changes in health care priorities
 - Changes in importance of outcomes, e.g. QOL



Methods to update guidelines

1. Planned periodic updates

- Resource intense but robust

2. “Living Guideline” model

- Constantly update everything
- Popular Up-to-date[®] model

3. Selective *ad hoc* updates

- Ongoing surveillance
- Targeted PICO* evidence reviews
- Selective updates as needed

*Population/patient; Intervention; Comparator/control; Outcome



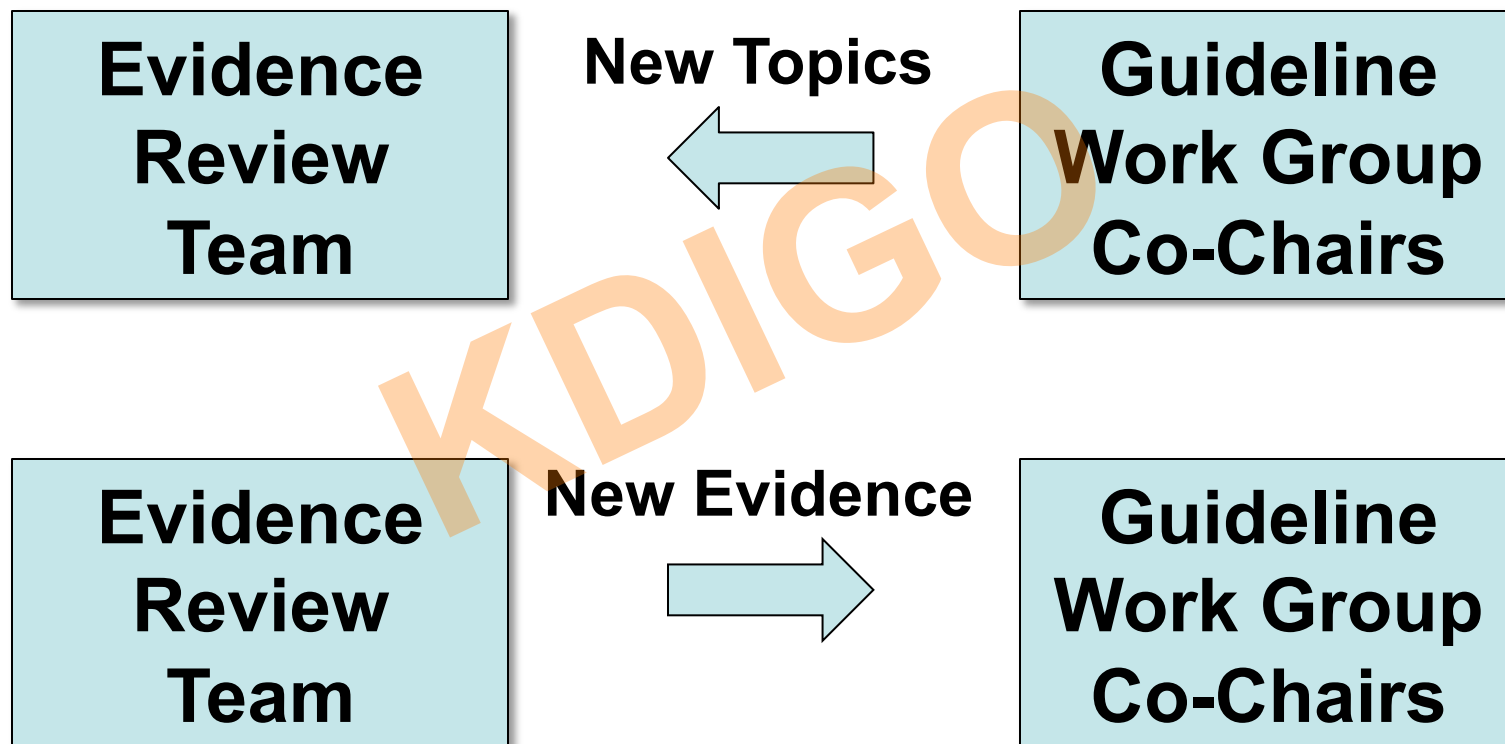
Approach to ongoing evidence surveillance and guideline updates

- PICO*s are defined by a GL Work Group and ERT
 - Not all recommendations have a PICO
 - Not all PICOs have recommendations
- Each PICO is assigned to an ERT
 - The ERT is responsible for surveillance
 - Frequency of searches vary, but generally yearly
- Reports are submitted to KDIGO co-chairs
 - Co-chairs report to EC
- Need for update is suggested by:
 - Strength of the new evidence
 - Need for change

*Population/patient; Intervention; Comparator/control; Outcome



Ongoing interaction of the ERT and WG Co-Chairs

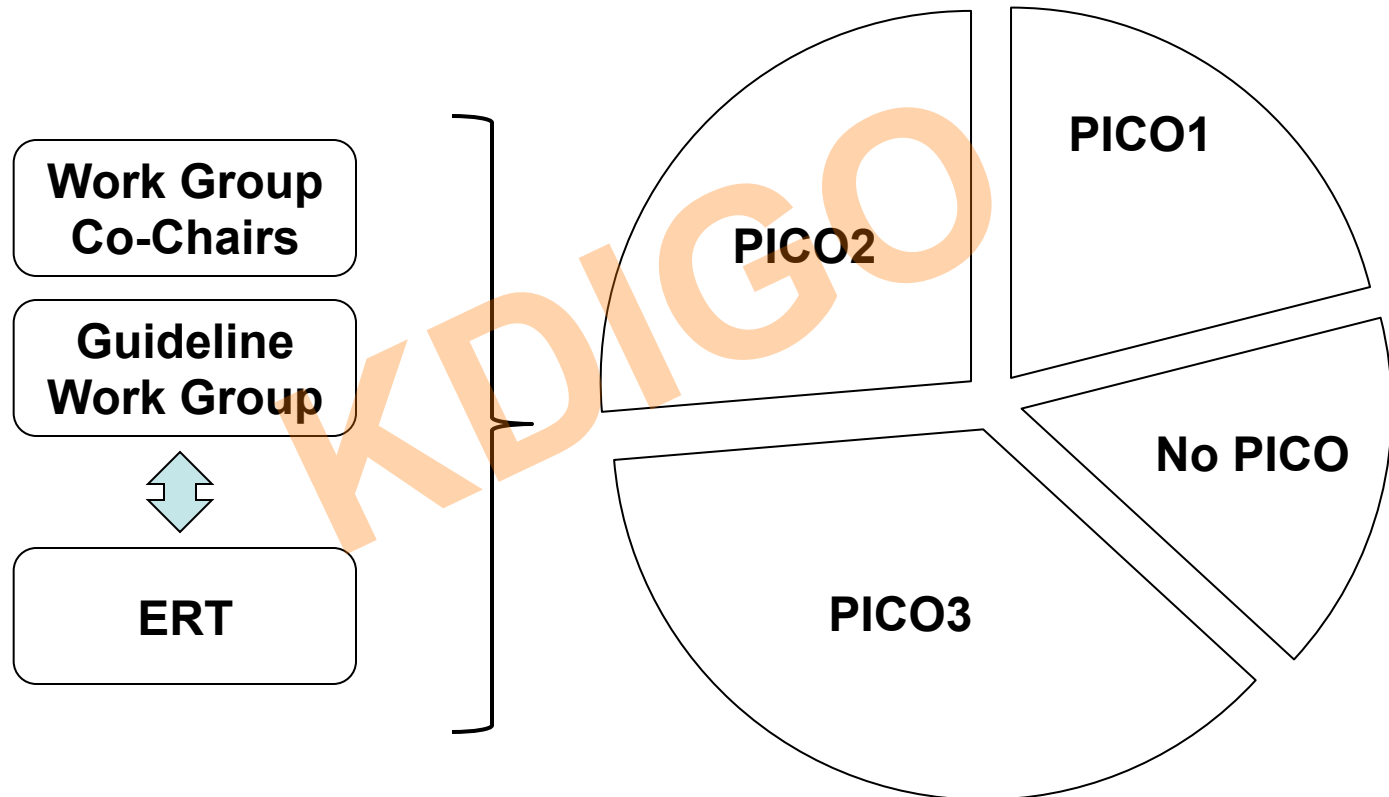


Ongoing evidence surveillance and guideline updates

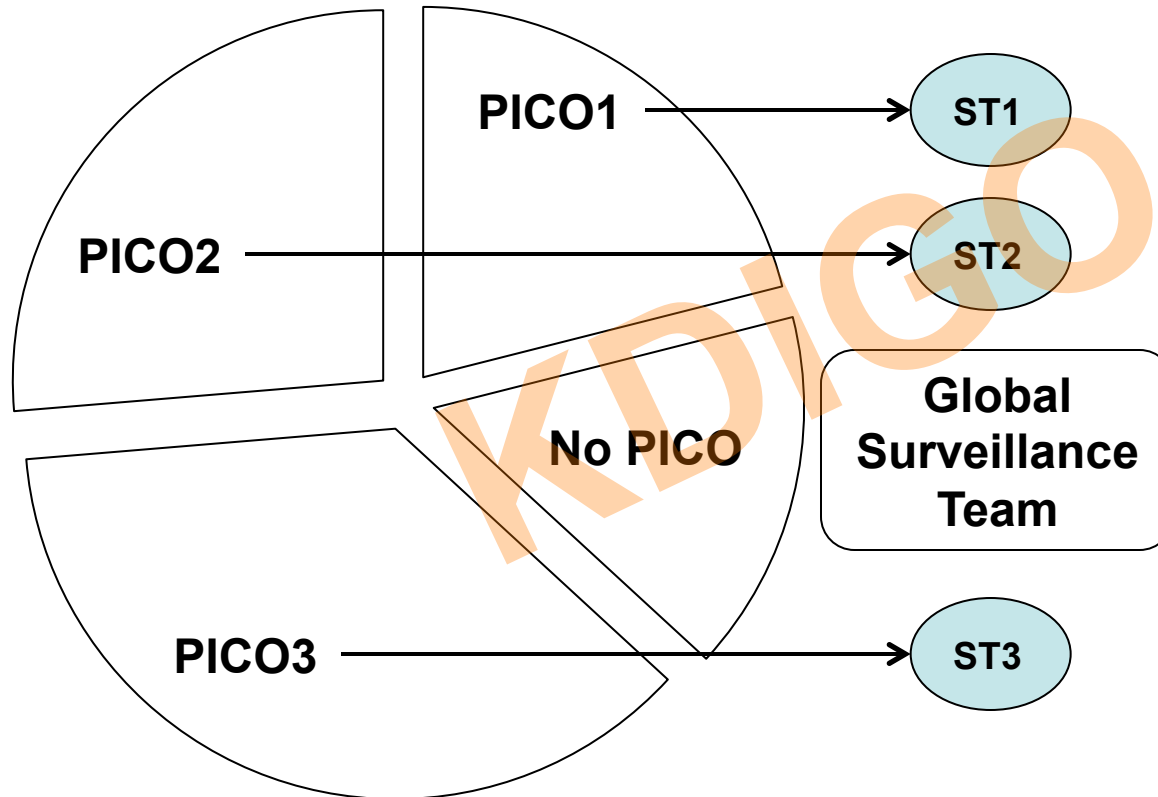
**Five steps in a possible
guideline update process.**



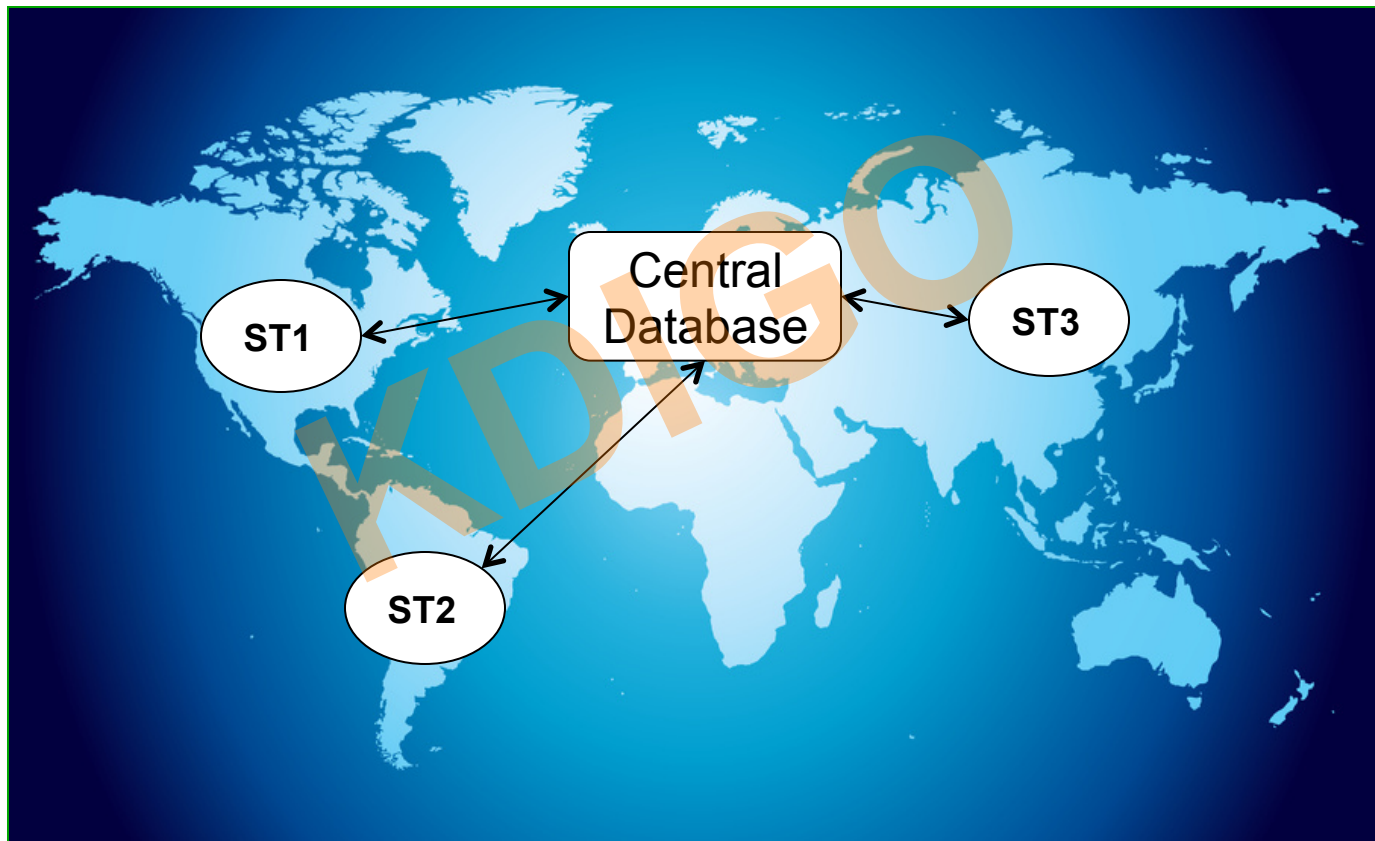
Step 1. The guideline Work Group & ERT define searchable PICO recommendations



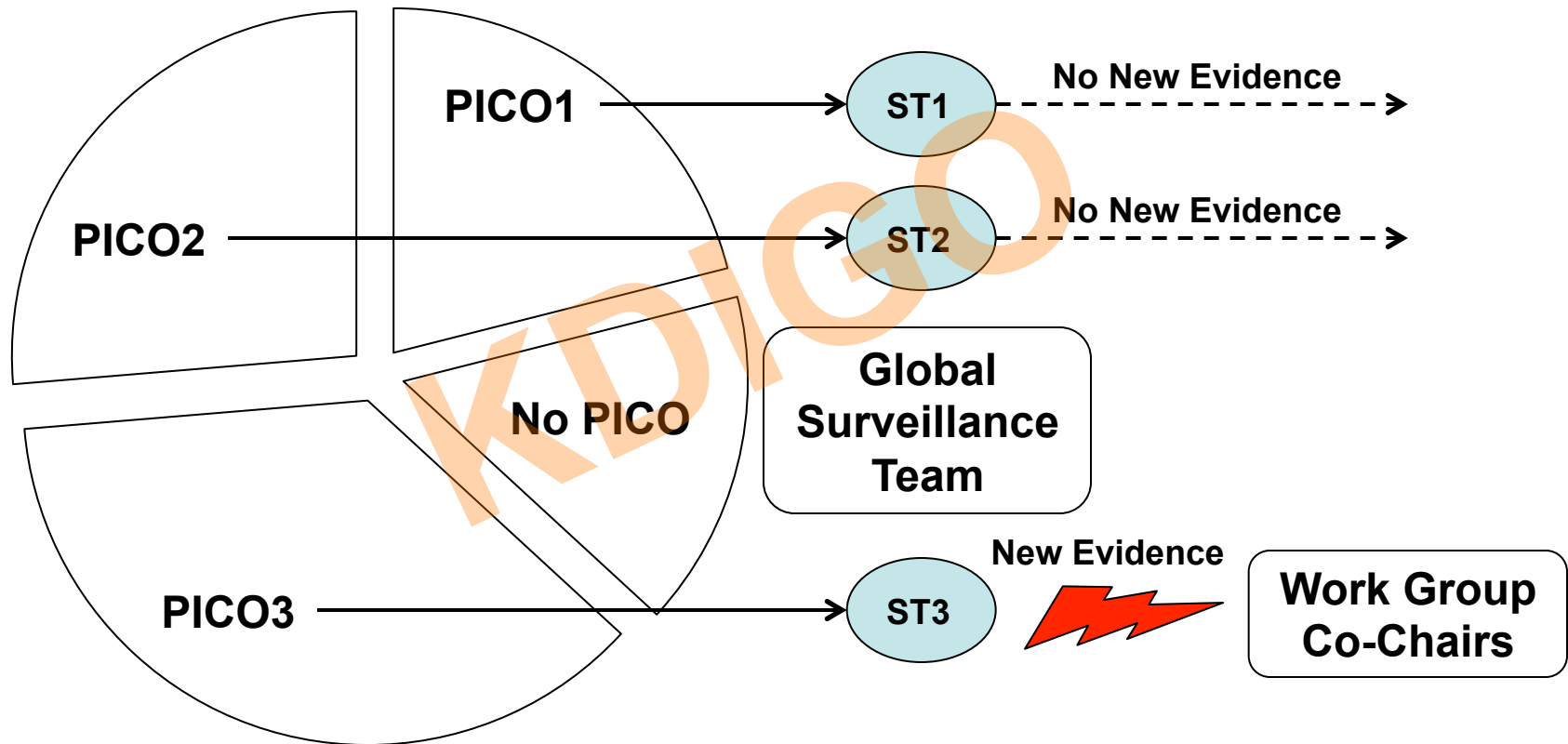
Step 2. PICO topics are searched by a global evidence surveillance team (ST)



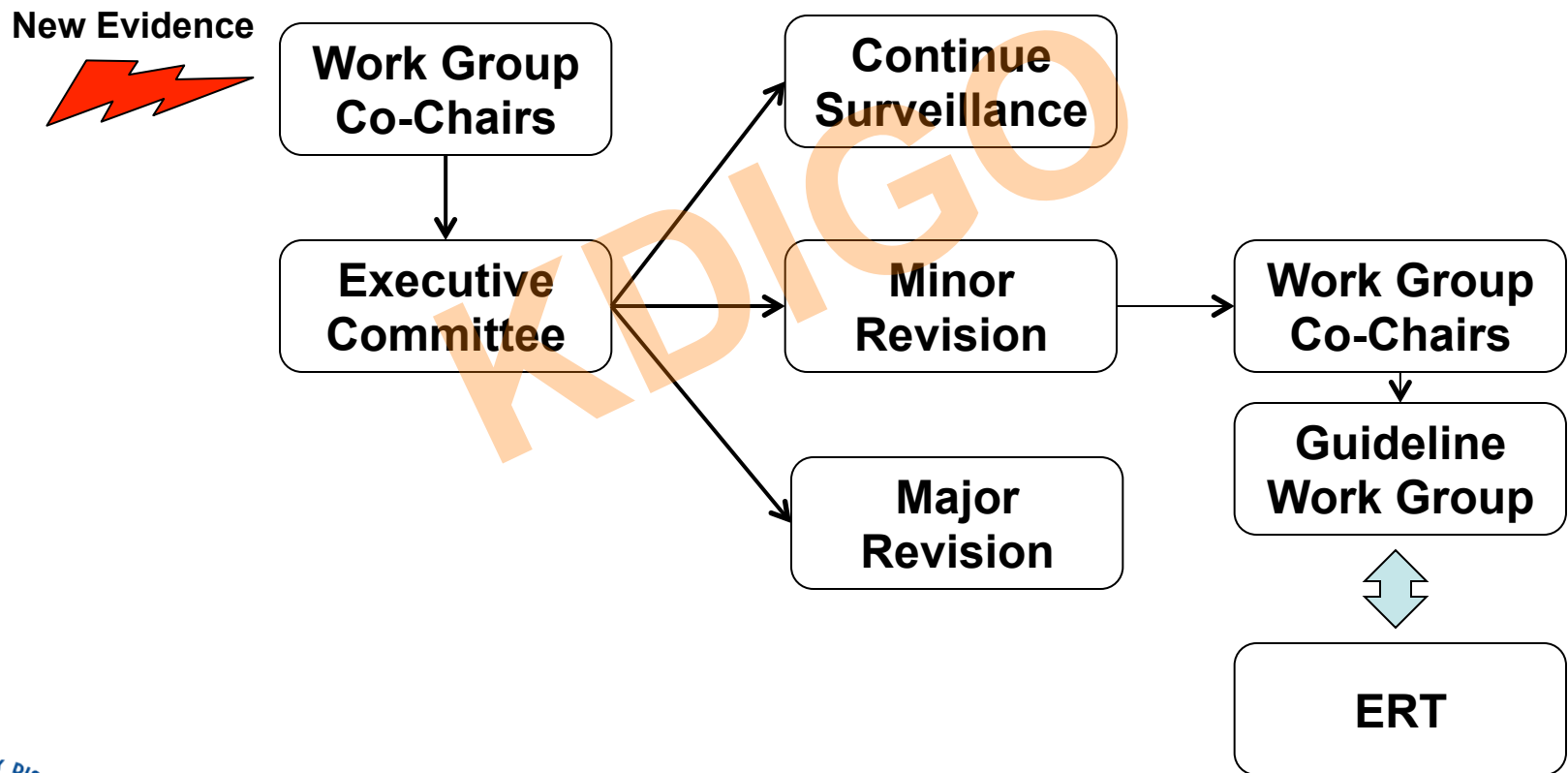
Global Evidence Surveillance Team



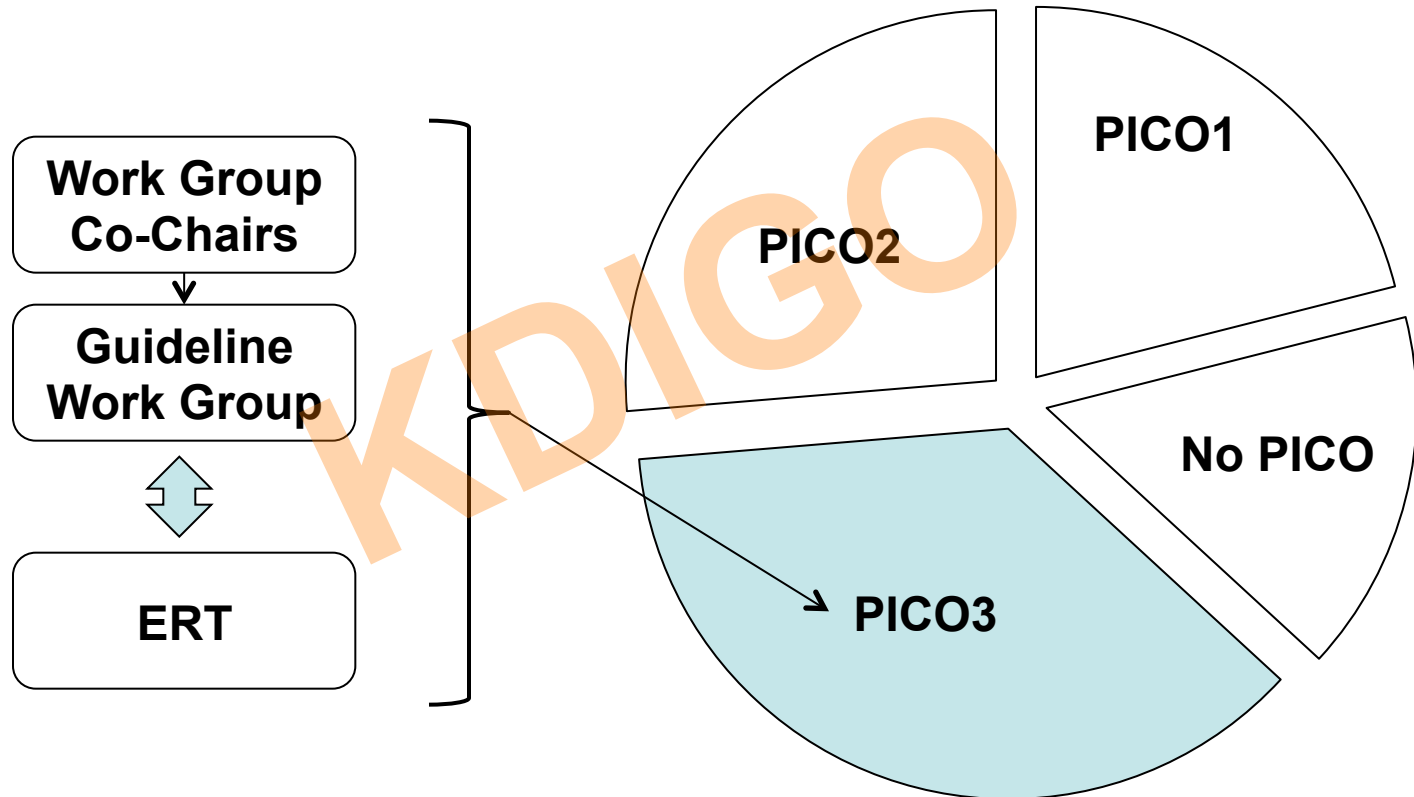
Step 3. New evidence is referred to the original Work Group Co-Chairs



Step 4. The EC can continue surveillance or start a minor or major guideline revision



Step 5. The Guideline Work Group & ERT produce a minor guideline revision



Example: Care of the Kidney Transplant Recipient Guideline surveillance



Kidney Disease: Improving Global Outcomes

PICO* Topic 1: Induction Therapy

- 1.2: We recommend including induction therapy with a biologic agent as part of the initial immunosuppressive regimen in KTRs. (1A)**
- 1.2.1: We recommend that an IL2-RA be the first-line induction therapy. (1B)**
- 1.2.2: We suggest using a lymphocyte-depleting agent, rather than an IL2-RA, for KTRs at high immunologic risk. (2B)**

*Population/patient; Intervention; Comparator/control; Outcome



Step 1. The guideline Work Group & ERT define searchable PICO recommendations

Topic: Induction Therapy

Population	Kidney transplant recipients
Intervention	Biologic agent
Comparator/control	Placebo or another biologic
Outcome	Patient survival, graft survival, acute rejection, DGF

Additional Search Criteria:

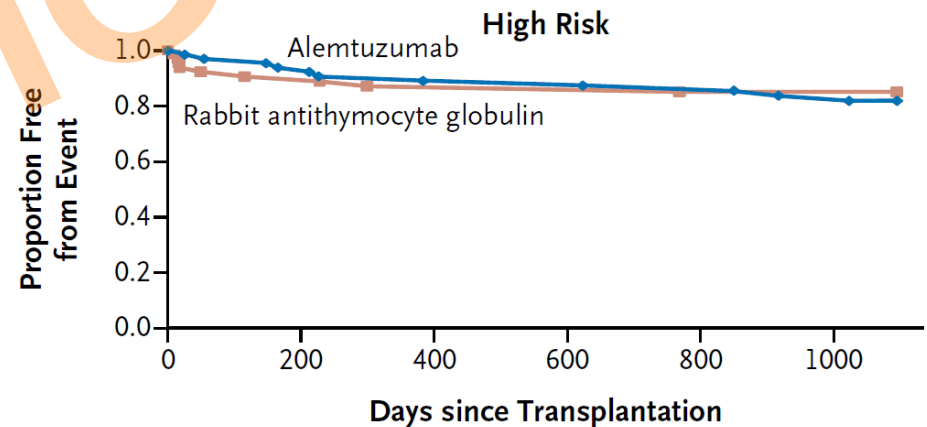
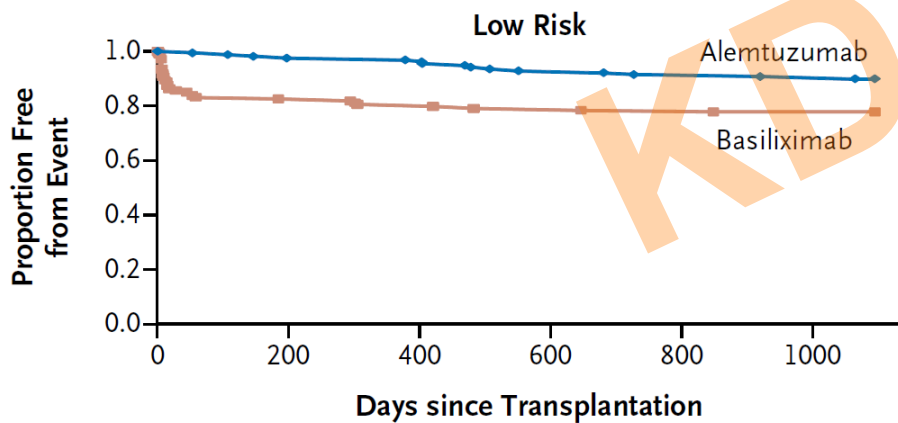
Randomized trial.

Minimum sample size 100 per group.



Step 2. PICO topics are searched by a global evidence surveillance team

Surveillance team finds only one new randomized trial with adequate statistical power.



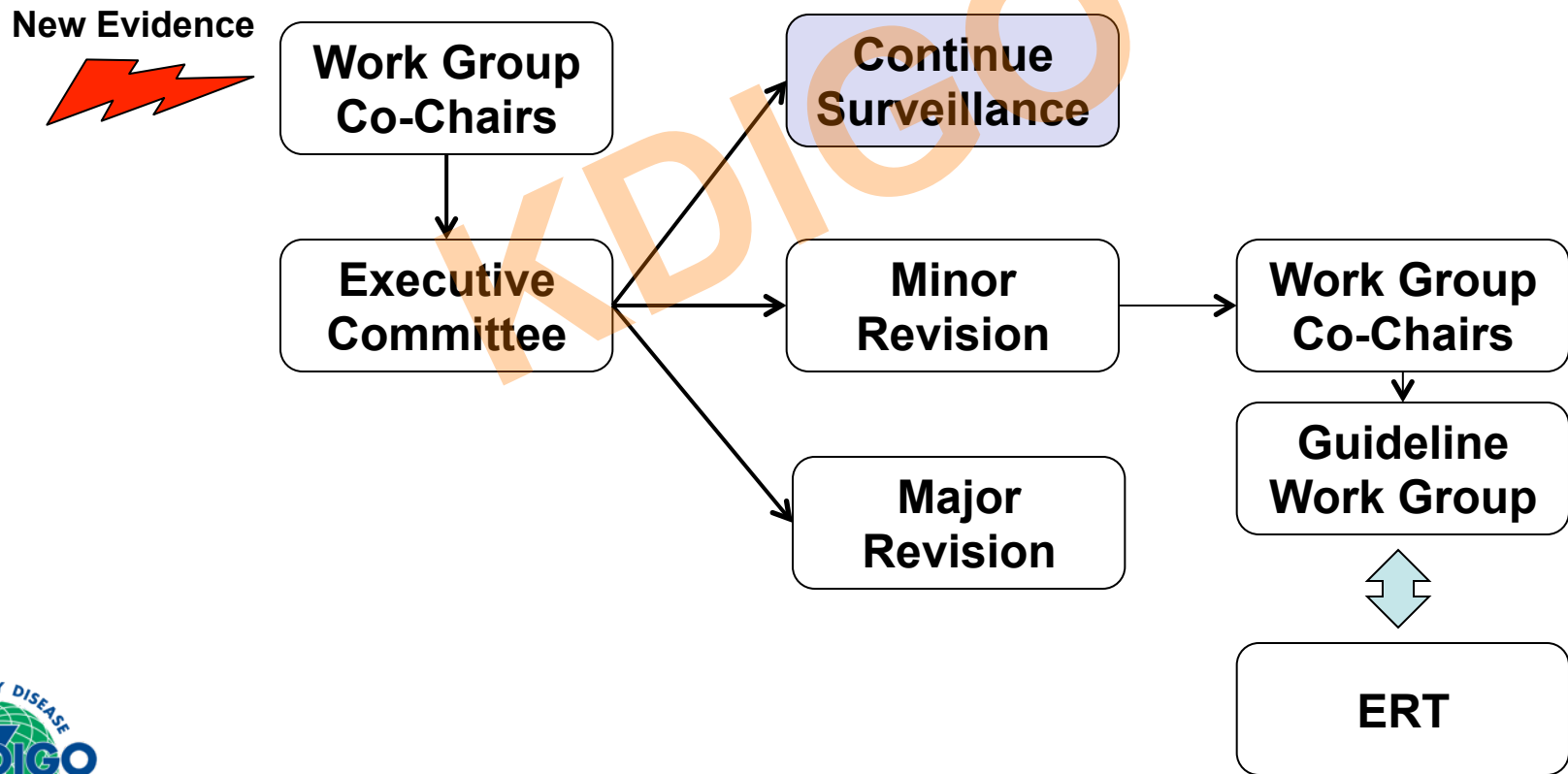
Step 3. New evidence is referred to the original Work Group Co-Chairs

The Work Group Co-chairs conclude that there is no new evidence that would likely change the original guideline recommendation.



Step 4. The EC can continue surveillance or start a minor or major guideline revision

The EC elects to continue surveillance.



What is needed to implement timely global guideline updates?

- Resources to maintain a central database
- Volunteers (?) to update evidence reviews
- Work Group Co-chairs who can present recommendations for guideline updates to the KDIGO Executive Committee
- Electronic guideline publication that allows modular updates



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Thank you!