KDIGO: mission, structure, recent and future activities

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DISCLOSURES

Research support: Amgen, Astra-Zeneca

Speaker: Astra-Zeneca, Bayer, Boehringer-Ingelheim, Mundipharma

Consultancy: Astellas, Astra-Zeneca, Bayer, Boehringer-Ingelheim, CSL Vifor, Fresenius Medical Care Asia Pacific, Mundipharma, Stada Eurogenerics, Vertex

Other : I am since januari 2019 cochair of Kidney Disease: Improving Global Outcomes (KDIGO)

OUTLINE

What is KDIGO – history, mission, structure

KDIGO Activities

- Clinical Practice Guidelines
- Controversies Conferences
- Consensus reports
- Implementation Activities

Challenges and Vision Forward

KDIGO HISTORY

- Clinical Practice Guidelines (DOQI) in Nephrology began in 1995 (USA)
- Concept of Global Clinical Practice Guidelines explored in 2003

  KDIGO launched in 2004

  Non- Profit Foundation incorporated in Belgium

  Initially managed by NKF (US) under a service contract

- KDIGO became independent in 2012

  Led by active volunteers and a small staff

  Over 1,000 clinicians and scientists have participated

- KDIGO is funded by many sources, is transparent and financially stable

  No funding directly from industry for guidelines or guideline updates

  Funding sought for general support, conferences, and implementation activities

KDIGO Mission

Improving the care and outcomes of patients with kidney disease worldwide through the development and implementation of global clinical practice guidelines.

Executive Committee, London, september 2022

2023 KDIGO Leadership

KDIGO Co-Chairs:

Michel Jadoul, Belgium

Wolfgang Winkelmayer, USA

Executive Committee Members:

Gloria Ashuntantang, Cameroon

Sunita Bavanandam , Malaysia

John Davis, CEO, USA

Michelle Denberg, USA

Jenny Flythe, USA

Masafumi Fukagawa, Japan

Morgan Grams, USA, cochair elect

Joe Ix , USA

Markus Ketteler, Germany

Meg Jardine , Australia

Irene Lourdes de Noronha, Brazil

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Patrick Rossignol, Monaco

Paul Stevens, Secretary-Treasurer, UK

Rita Suri, Canada

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John Davis
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Danielle Green
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Chief Scientific Officer
Melissa Thompson
Chief Operating Officer
Amy Earley
Guideline Development Director
Kathleen Conn
Director of Communications
Tanya Green
Events Director
Coral Cyzewski
Events Coordinator
Jennifer King
Medical Writing Director

KDIGO's Agenda

- **Clinical Practice Guidelines and updates**
  - KDIGO's core mission: development, vetting, dissemination, and implementation of guidelines

- **Controversies Conferences**
  - Conferences that examine significant topics in nephrology and related disciplines that are not fully resolved. Around 60 so far. Conference Report, usually in *Kidney International*. A Controversies Conference may prompt development of a guideline.
  - Consensus reports sometimes (Nomenclature / Acute Kidney Disease)

- **Implementation activities**
  - Gathers KOL's from a country or region to discuss barriers and opportunities for implementation of KDIGO recommendations

KDIGO Clinical Practice Guidelines

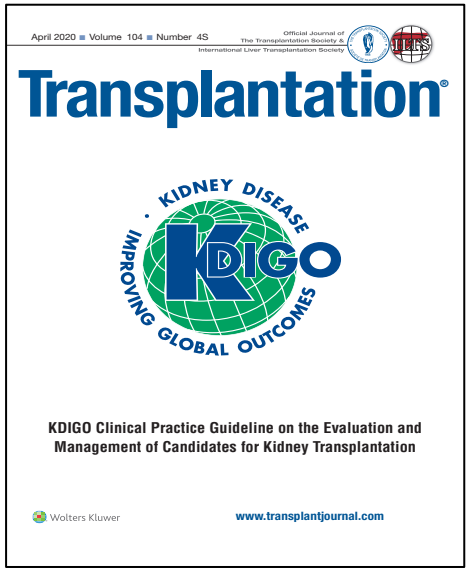
GUIDELINE DEVELOPMENT

- Workgroup (WG) cochairs are appointed by the KDIGO cochairs
- WG cochairs propose the WG composition and discuss it with the KDIGO cochairs and staff
- KDIGO cochairs appoint the WG members
- Evidence-Review Team appointed by KDIGO (WG cochairs, KDIGO cochairs, CEO)
- 2 WG meetings (Face to face) and multiple virtual meetings during the 18-24 months process
- Content of the Guideline is the responsibility of the KDIGO WG
- Robust methodology: systematic reviews/meta-analysis by ERT of RCT(and sometimes observational studies)
- Both the Scope of Work and draft of the Guideline are submitted to Public review (register at www.kdigo.org)

GUIDELINE GOALS

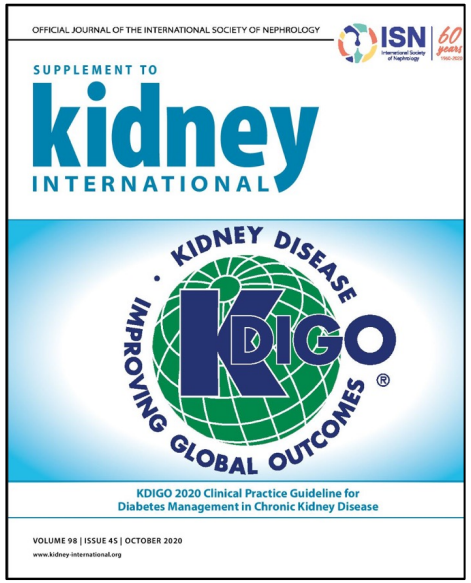
- Generate a useful resource for clinicians and patients
  - Address relevant questions with actionable recommendations
  - Take on controversial topics when sufficient evidence
  - Communicate clearly: highlight figures and tables
- Stay true to evidence
- Target audience: broad, primarily clinicians
- Be mindful of implications for policy and payment
- Propose research questions

KDIGO GUIDELINES: 2020 - 2022



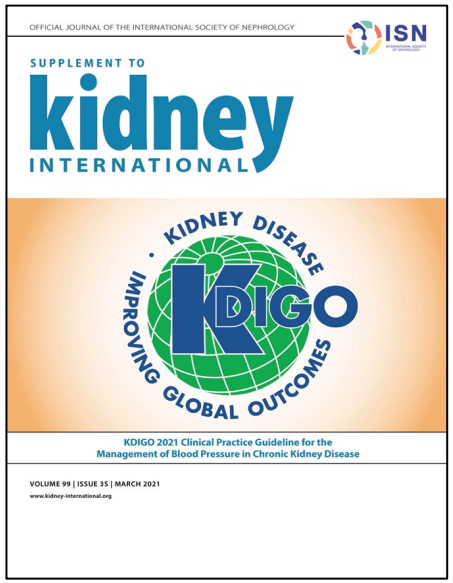
Transplant Candidate

April 2020



Diabetes in CKD

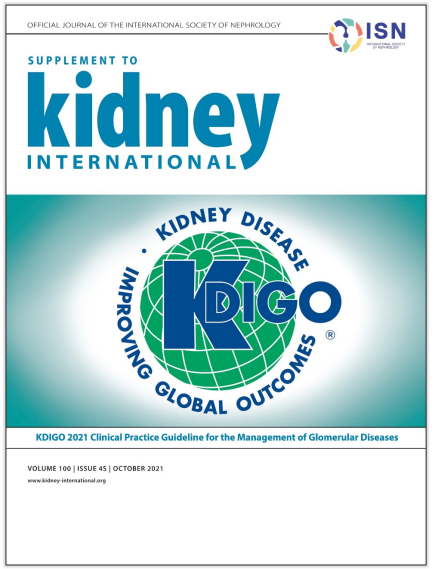
October 2020



Blood Pressure in CKD

March 2021

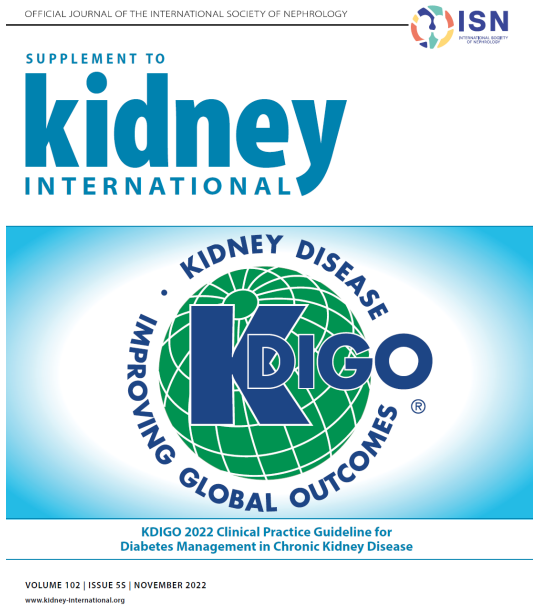
Update



Glomerular Diseases

October 2021

Update



Diabetes in CKD

October 2022

Update

Diabetes management in chronic kidney disease: a consensus report by the American Diabetes Association (ADA) and Kidney Disease: Improving Global Outcomes (KDIGO)

Ian H. de Boer[1], Kamlesh Khunti[2], Tami Sadusky[3], Katherine R. Tuttle[4], Joshua J. Neumiller[5], Connie M. Rhee[6], Sylvia E. Rosas[7], Peter Rossing[8,9] and George Bakris[10]

[1]Kidney Research Institute, University of Washington, Seattle, Washington, USA; [2]Diabetes Research Centre, University of Leicester, Leicester, UK; [3]University of Washington, Seattle, Washington, USA; [4]University of Washington, Spokane, Washington, USA; [5]College of Pharmacy and Pharmaceutical Sciences, Washington State University, Spokane, Washington, USA; [6]University of California, Irvine, Orange, California, USA; [7]Joslin Diabetes Center and Harvard Medical School, Boston, Massachusetts, USA; [8]Steno Diabetes Center Copenhagen, Copenhagen, Demark; [9]University of Copenhagen, Copenhagen, Denmark; and [10]University of Chicago Medicine, Chicago, Illinois, USA

Who and when to screen?

T1D Yearly starting 5 years after diagnosis

T2D Yearly starting at diagnosis

How to screen?

Spot urine ACR

and

eGFR

What to do with a positive result?

Repeat and confirm:

- Evaluate possible temporary or spurious causes
- Consider using cystatin C and creatinine to more precisely estimate GFR
- Only persistent abnormalities define CKD

Initiate evidence-based treatments

What defines CKD diagnosis?

Persistent urine ACR ≥30 mg/g

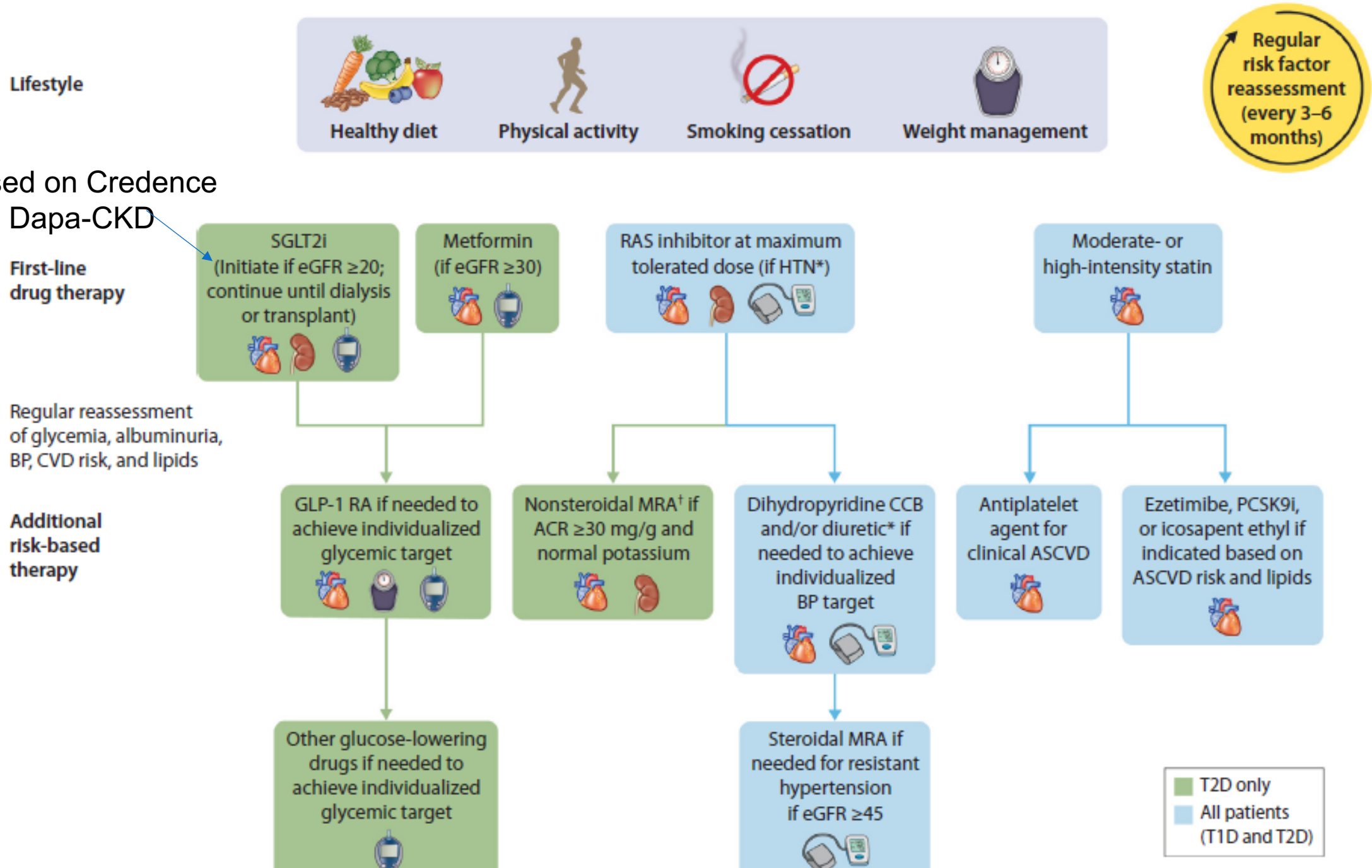
and/or

Persistent eGFR <60 mL/min/1.73 m^2

and/or

Other evidence of kidney damage

Based on Credence and Dapa-CKD



Januari 2022

KDIGO Announces Launch of CKD Guideline Update

Kidney Disease: Improving Global Outcomes (KDIGO) announces the formal launch of the update to the 2012 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease (CKD). The CKD Guideline aims to provide state-of-the-art guidance for clinicians treating patients with kidney disease. Dr. Adeera Levin (Canada) and Dr. Paul Stevens (United Kingdom) will co-chair the CKD Guideline Update as they did for the 2012 CKD Guideline.

"The 2012 KDIGO CKD Guideline represented a significant contribution to the advancement of global nephrology and refined the CKD classification scheme emphasizing the conceptual importance of describing Cause, GFR level, and degree of Albuminuria (CGA), thereby improving the recognition and understanding of kidney diseases," said Dr. Levin. "However, a lot has happened in global nephrology since then, and it is time to revisit this important KDIGO Guideline. We are eager to appraise the latest evidence for clinicians around the world and are confident that this update will be just as informative and impactful as the original."

Launch of public review of the KDIGO CKD Guideline expected in Q2 2023
Register on www.kdigo.org

EMPA-KIDNEY: key inclusion and exclusion criteria[1,2]

Key inclusion criteria*

- Age ≥18 years or at 'full age' as required by local regulation
- **Evidence of CKD** at risk of kidney disease progression, defined by ≥3 months before and at the time of screening visit
  - **eGFR ≥45 to <90 ml/min/1.73 m² with UACR A2–A3 (≥200 mg/g) , or**
  - **eGFR ≥20 to <45 ml/min/1.73 m²**
- Clinically appropriate doses of single-agent RAS-inhibition with either ACEi or ARB unless either is not tolerated or not indicated
- Neither requires an SGLT2 or SGLT1/2 inhibitor, nor that such treatment is inappropriate

Key exclusion criteria*

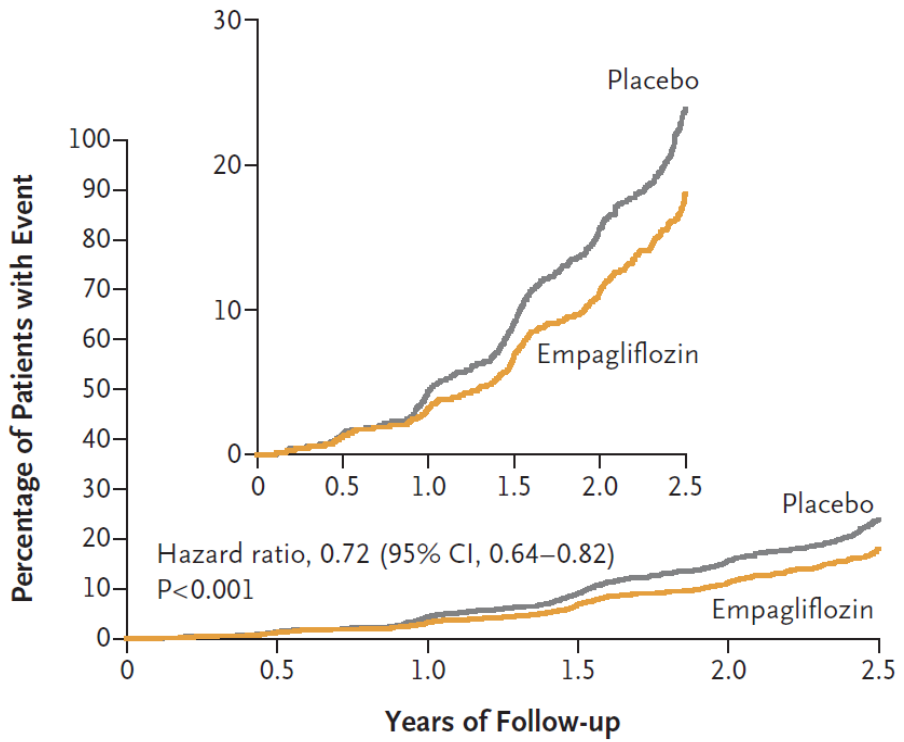
- Currently receiving an SGLT2 or dual SGLT1/2 inhibitor
- T2D and prior atherosclerotic CV disease with eGFR >60 ml/min/1.73 m²
- Receiving dual RAS-inhibition (two of ACEi, ARB, DRI)
- Any IV immunosuppression therapy in the last 3 months or anyone currently on >45 mg prednisolone (or equivalent)
- **Maintenance dialysis, functioning kidney transplant or scheduled living donor transplant**
- **Polycystic kidney disease**
- T1D†

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Empagliflozin in Patients with Chronic Kidney Disease

The EMPA-KIDNEY Collaborative Group*

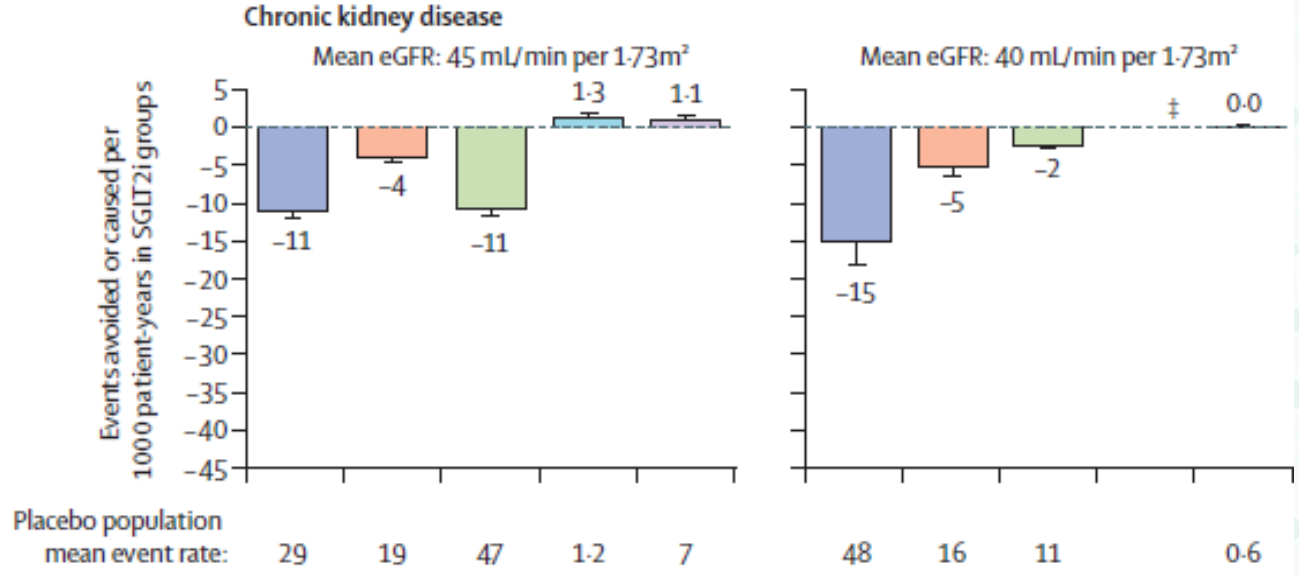


No. at Risk						
Placebo	3305	3250	3129	2243	1496	592
Empagliflozin	3304	3252	3163	2275	1538	624

Impact of diabetes on the effects of sodium glucose co-transporter-2 inhibitors on kidney outcomes: collaborative meta-analysis of large placebo-controlled trials

The Nuffield Department of Population Health Renal Studies Group and the SGLT2 inhibitor Meta-Analysis Cardio-Renal Trialists' Consortium**

Interpretation In addition to the established cardiovascular benefits of SGLT2 inhibitors, the randomised data support their use for modifying risk of kidney disease progression and acute kidney injury, not only in patients with type 2 diabetes at high cardiovascular risk, but also in patients with chronic kidney disease or heart failure irrespective of diabetes status, primary kidney disease, or kidney function.



www.thelancet.com **Published online November 6, 2022** **https://doi.org/10.101**

Implementation, not hesitation, for SGLT2 inhibition as foundational therapy for chronic kidney disease

This meta-analysis is expected to change chronic kidney disease guidelines with its robust findings on the benefits of SGLT2 inhibition in a wide range of patients with chronic kidney disease, including many without diabetes,

*Patrick B Mark, *Naveed Sattar*
naveed.sattar@glasgow.ac.uk; @MetaMedTeam

School of Cardiovascular and Metabolic Health, College of Medical and Veterinary Sciences, University of Glasgow, Glasgow G12 8TA, UK

INTERNATIONAL SOCIETY OF NEPHROLOGY

SUPPLEMENT TO

kidney INTERNATIONAL

Chapters 1 (diagnosis) and 3 (prevention in hemodialysis) of the 2018 Guideline unchanged

KDIGO 2022 Clinical Practice Guideline for the Prevention, Diagnosis, Evaluation, and Treatment of Hepatitis C in Chronic Kidney Disease

VOLUME 102 | ISSUE 6S | DECEMBER 2022

www.kidney-international.org

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CKD populations	Direct-acting antiviral (DAA) regimens[a]	HCV genotypes	Quality of evidence (total N)[b]
G1–G3b,[c] not KTR	Any licensed DAA regimen	All	Not evaluated
G4–G5ND,[d] including KTR[e,f]	Sofosbuvir / Daclatasvir, 12 or 24 wk Glecaprevir / Pibrentasvir, 8 wk Grazoprevir / Elbasvir, 12 wk Sofosbuvir / Velpatasvir, 12 wk Sofosbuvir / Ledipasvir, 12 wk	All All 1a, 1b, 4 All All	High (571) High (132) High (857) Low (99) Very low (43)
G5D[g]	Sofosbuvir / Velpatasvir, 12 wk Glecaprevir / Pibrentasvir, 8 wk Sofosbuvir / Daclatasvir, 12 or 24 wk Sofosbuvir / Ledipasvir, 12 wk Grazoprevir / Elbasvir, 12 wk PrO ± D, 12 wk Daclatasvir / Asunaprevir, 24 wk	All All All All 1a, 1b, 4 1a, 1b, 4 1b	High (405) Moderate (529) Moderate (278) Moderate (220) Moderate (962) Moderate (582) Low (341)
KTR,[e] G1–G3b[c]	Sofosbuvir / Ledipasvir, 12 or 24 wk Sofosbuvir / Daclatasvir, 12 or 24 wk PrO ± D, 12 wk Grazoprevir / Elbasvir, 12 wk	All All 1a, 1b, 4 1a, 1b, 4	High (300) High (290) Very low (33) Very low (21)

Figure 1 | Direct-acting antiviral (DAA) regimens with evidence of effectiveness for various chronic kidney disease (CKD) populations.

Transplantation of HCV + Kidneys (deceased donors) into HCV – recipients

- 16 studies with at least 10 cases
- A total of 525 HCV-uninfected patients transplanted with a kidney from an HCV-infected donor, followed by DAA therapy
- Overall HCV cure : 97.7% (95% CI: 96.3-98.8%)
- 98% one year patient and graft survival
- A few caveats
  - 3 cases of fibrosing cholestatic hepatitis (in all 3, DAA initiated > 30 days after TP)
  - data beyond one year : limited, a single study with 5 y. data OK
  - in some studies, more BKV and CMV infections in recipients of HCV+ kidneys: more data required

Overall, HCV+ kidneys can be offered to recipients regardless of HCV status, if authorized by national/regional laws and regulations

4.2.3: We recommend that kidneys from HCV-infected donors be considered regardless of HCV status of potential kidney transplant recipients (1C).

4.2.4: When transplanting kidneys from HCV-infected donors into HCV-uninfected recipients, transplant centers must ensure that patients receive education and are engaged in discussion with sufficient information to provide informed consent. Patients should be informed of the risks and benefits of transplantation with an HCV-infected kidney, including the need for DAA treatment (Not Graded).

4.2.5: When transplanting kidneys from HCV-infected donors into HCV-uninfected recipients, transplant centers should confirm availability of DAAs for initiation in the early post-transplant period (Not Graded).

Chapter 5 (HCV-related GN)

5.1: HCV-infected patients with a typical presentation of immune-complex proliferative glomerulonephritis can be managed without a confirmatory kidney biopsy. However, a biopsy may be indicated in certain clinical circumstances (Figure 4) (*Not Graded*).

5.2: We recommend that patients with HCV-associated glomerulonephritis receive antiviral therapy (*1A*).

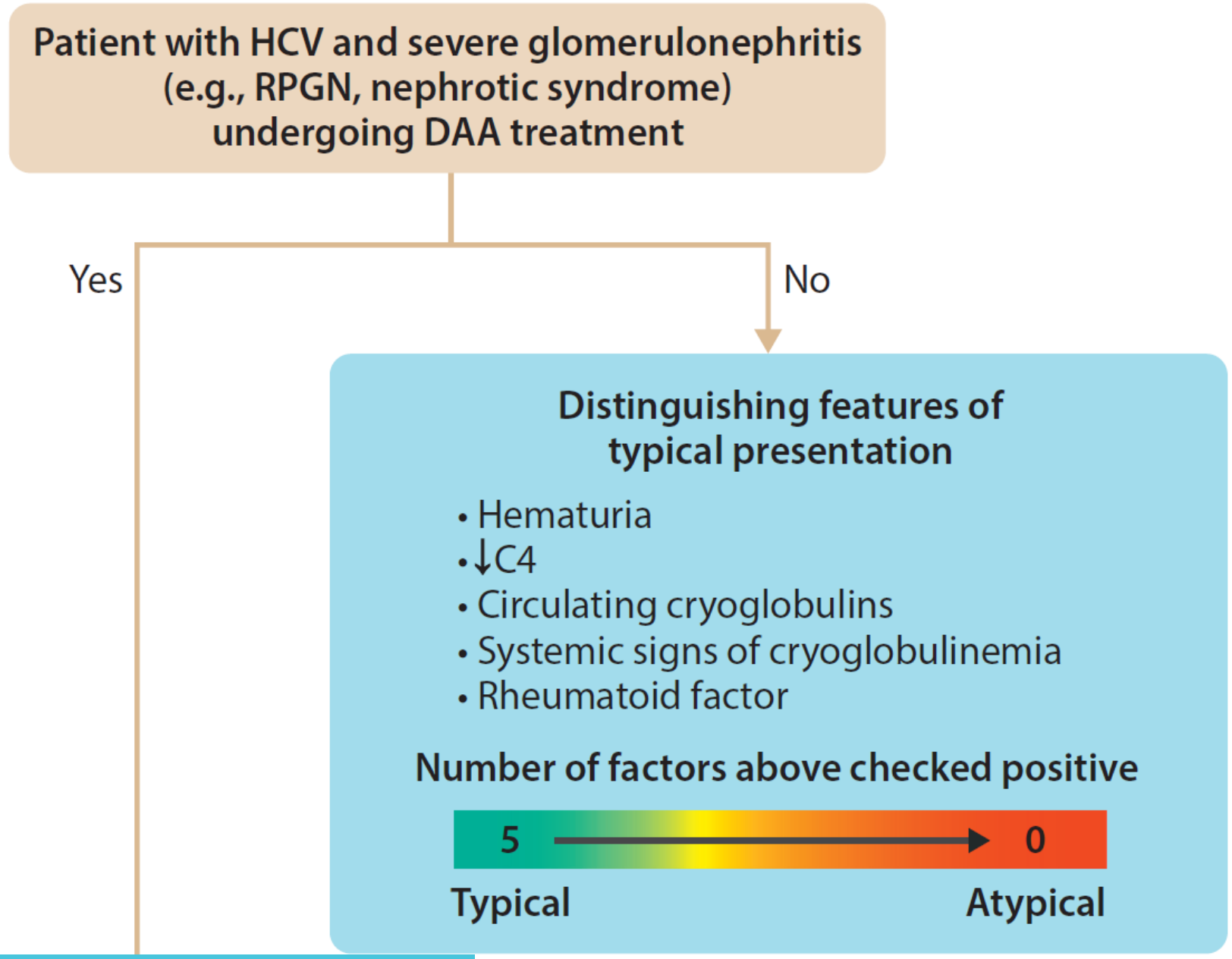
5.2.1: We recommend that patients with HCV-associated glomerulonephritis, stable kidney function, and without nephrotic syndrome be treated with DAAs prior to other treatments *(1C)*.

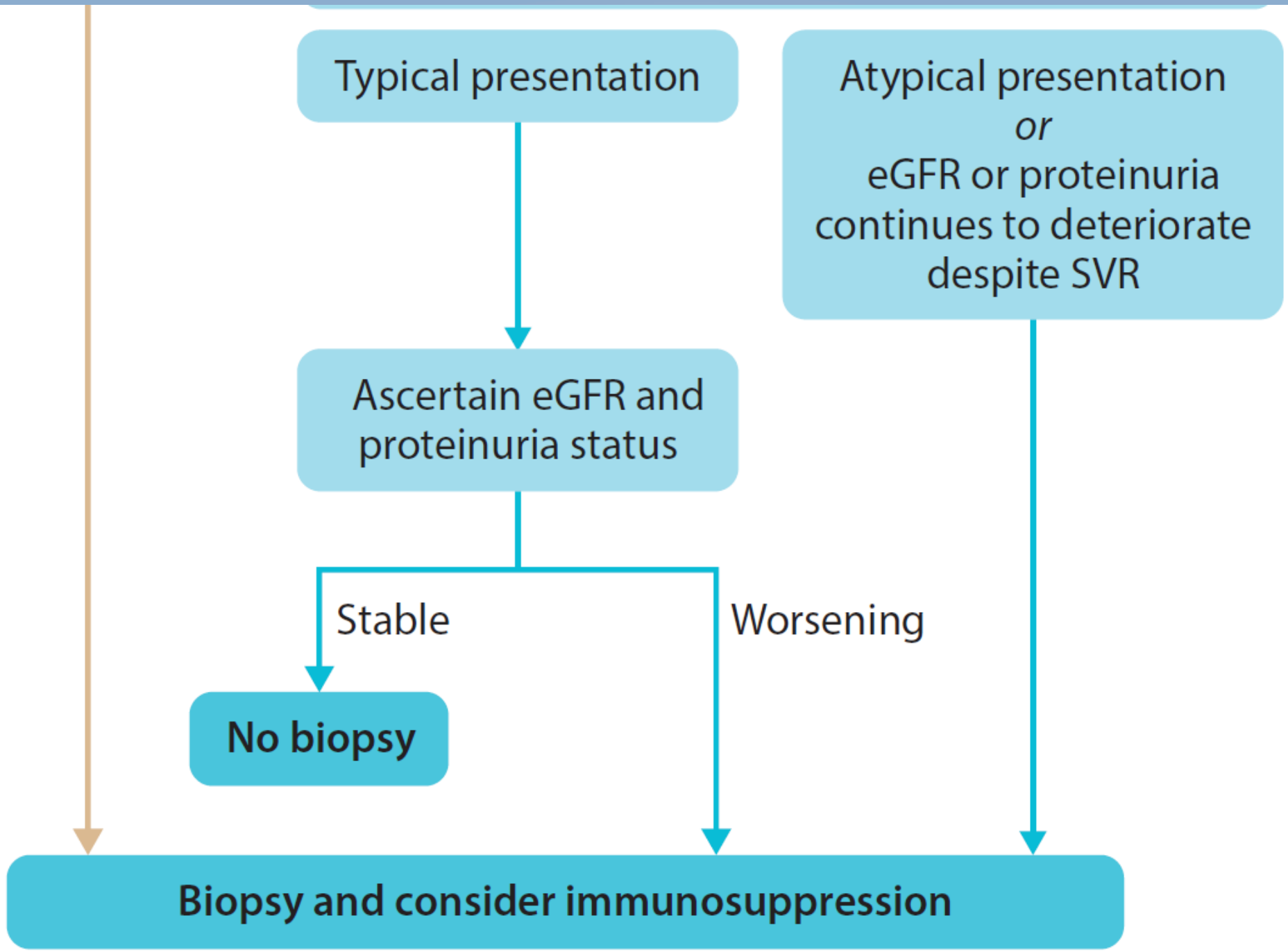
5.2.2: We recommend that patients with cryoglobulinemic flare or rapidly progressive glomerulonephritis be treated with both DAAs and immunosuppressive agents with or without plasma exchange (*1C*).

5.2.2.1: The decision whether to use immunosuppressive agents in patients with nephrotic syndrome should be individualized (*Not Graded*).

5.2.3: We recommend immunosuppressive therapy in patients with histologically active HCV-associated glomerulonephritis who do not respond to antiviral therapy, particularly those with cryoglobulinemic kidney disease (*1B*).

5.2.3.1: We recommend rituximab as the first-line immunosuppressive treatment (*1C*).


Patient with HCV and severe glomerulonephritis (e.g., RPGN, nephrotic syndrome) undergoing DAA treatment
Yes
No
Distinguishing features of typical presentation
• Hematuria
• ↓C4
• Circulating cryoglobulins
• Systemic signs of cryoglobulinemia
• Rheumatoid factor
Number of factors above checked positive
5
0
Typical
Atypical
Biopsy and consider immunosuppression


Typical presentation
Atypical presentation
or
eGFR or proteinuria
continues to deteriorate
despite SVR
Ascertain eGFR and
proteinuria status
Stable
Worsening
No biopsy
Biopsy and consider immunosuppression

KDIGO-ISN Webinar on the KDIGO Hepatits C Guideline Update

WEBINAR FEBRUARY, 2023

BACK TO ALL EVENTS

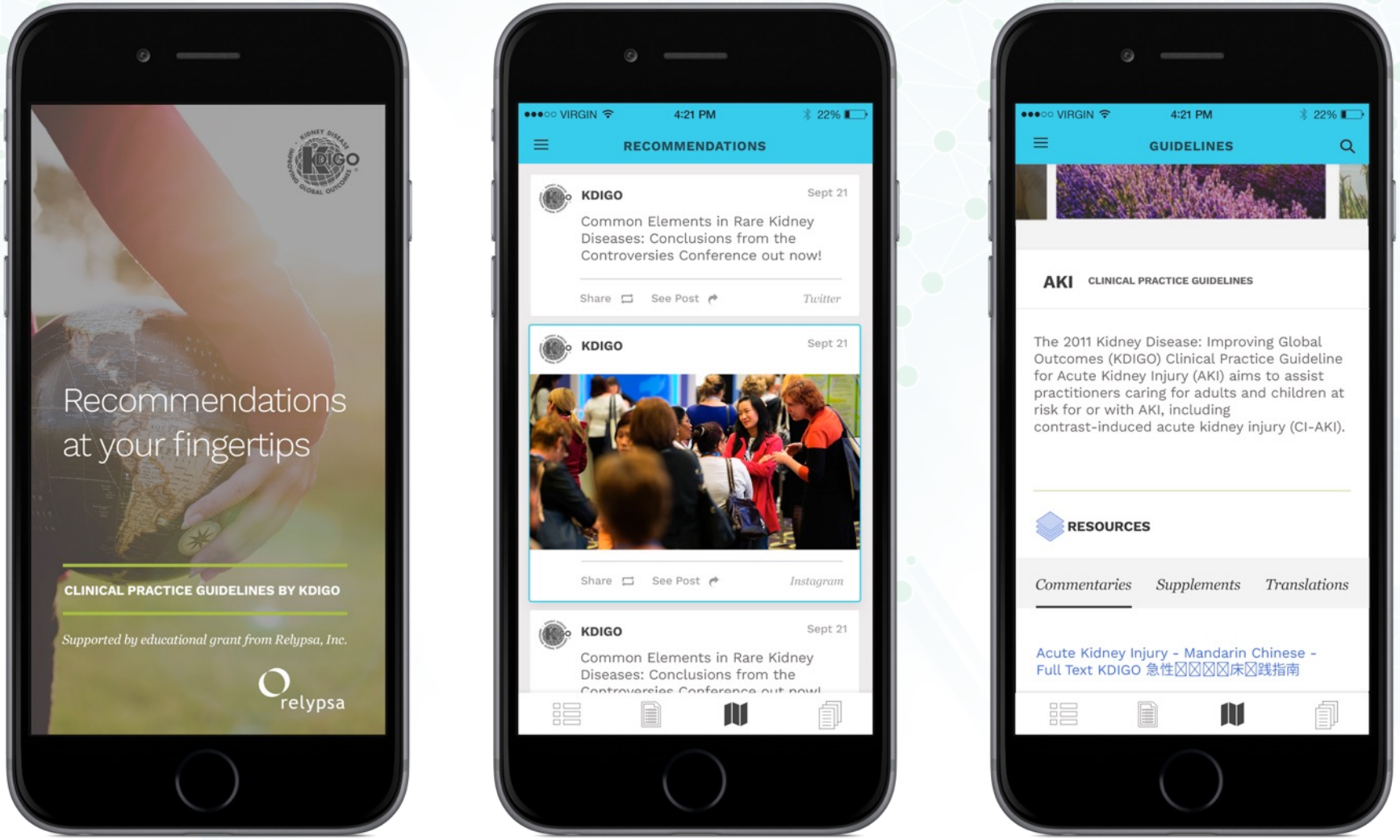
Click image to register

RESOURCES

KDIGO Activities

- **Clinical Practice Guidelines currently under development:**
  - Glomerular Diseases Modular Update (1st : ANCA, Lupus 2023)
  - ADPKD (T1-2 2023)
  - CKD Evaluation & Management Update (T3-4 2023)
  - Anemia in CKD Update (T4 2023 or early 2024)
  - Acute Kidney Injury update (starting)

KDIGO Clinical Practice Guidelines App



for both Android and IPhone

KDIGO Controversies Conferences
Consensus Conferences

MORE PAST CONTROVERSIES CONFERENCES

Controversies Conference on Women and Kidney Health

ATHENS, GREECE FEBRUARY, 2023

Controversies Conference on the Role of Complement in Kidney Disease

FLORENCE, ITALY SEPTEMBER, 2022

Controversies Conference on Improving CKD Quality of Care: Trends and Perspectives

BERLIN, GERMANY JUNE, 2022

Controversies Conference on Symptom-Based Complications in Dialysis

BERLIN, GERMANY MAY, 2022

Controversies Conference on Challenges in Management of the Kidney Allograft: From Decline to Failure

VIRTUAL MARCH, 2022

Controversies Conference on Novel Anemia Therapies in CKD

VIRTUAL DECEMBER, 2021

youtube.com/channel/UCm7zHM_wBaPbQxRDJwyvqMg/videos

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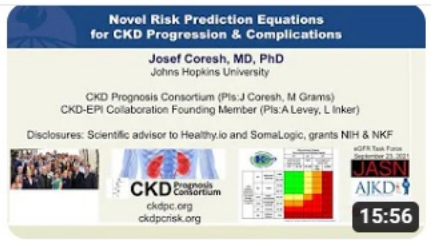
Plenary Presentation - CKD in Elderly Individuals

306 vues • il y a 2 mois



Plenary Presentation - Novel Risk Prediction Equations for CKD...

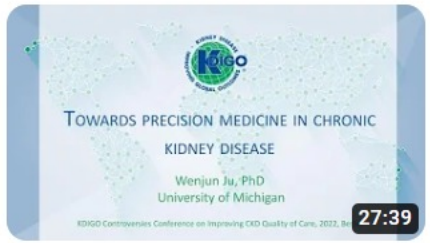
251 vues • il y a 2 mois

Plenary Presentation - Principles and Practice of GFR Evaluation

432 vues • il y a 2 mois

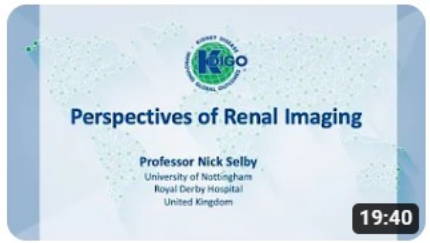
Plenary Presentation - Using Urine as a Liquid Biopsy: What Urinary...

312 vues • il y a 2 mois



Plenary Presentation - Towards Precision Medicine in Chronic...

98 vues • il y a 2 mois

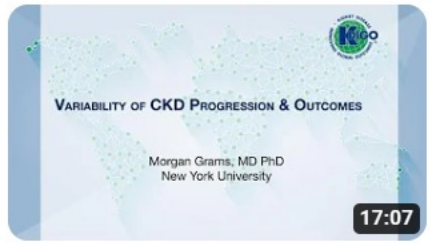


Plenary Presentation - Perspectives of Renal Imaging

106 vues • il y a 2 mois

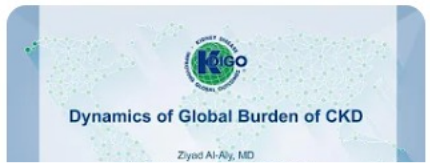
Plenary Presentation - Health Impact of CKD Complications:...

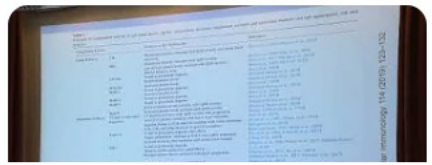
69 vues • il y a 2 mois

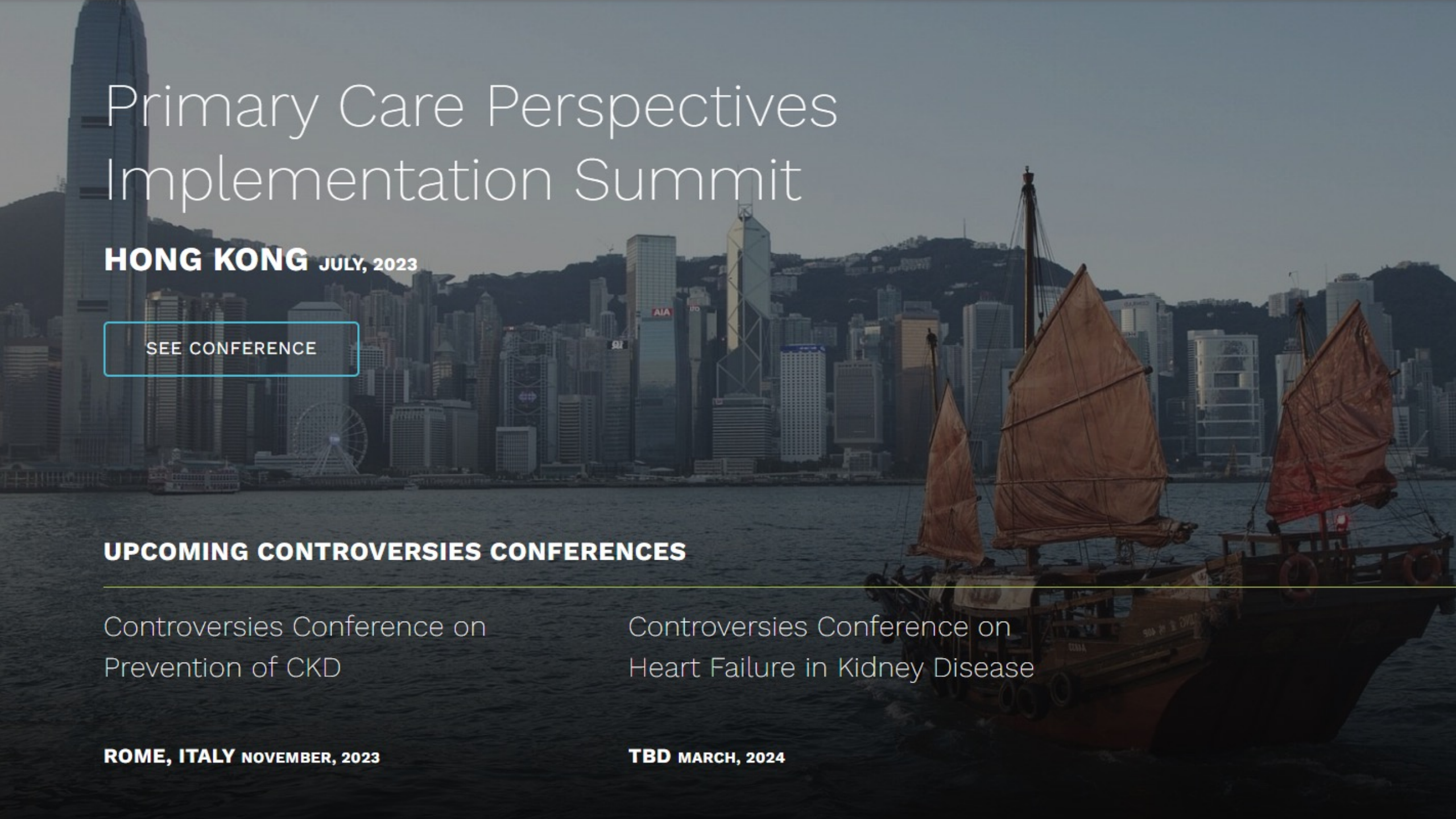


Plenary Presentation - Variability of CKD Progression & Outcomes

82 vues • il y a 2 mois







Primary Care Perspectives Implementation Summit

HONG KONG JULY, 2023

SEE CONFERENCE

UPCOMING CONTROVERSIES CONFERENCES

Controversies Conference on Prevention of CKD

ROME, ITALY NOVEMBER, 2023

Controversies Conference on Heart Failure in Kidney Disease

TBD MARCH, 2024

Consensus reports

www.kidney-international.org

KDIGO conference report

Nomenclature for kidney function and disease: report of a Kidney Disease: Improving Global Outcomes (KDIGO) Consensus Conference

Check for updates

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KDIGO executive conclusions

www.kidney-international.org

Harmonizing acute and chronic kidney disease definition and classification: report of a Kidney Disease: Improving Global Outcomes (KDIGO) Consensus Conference

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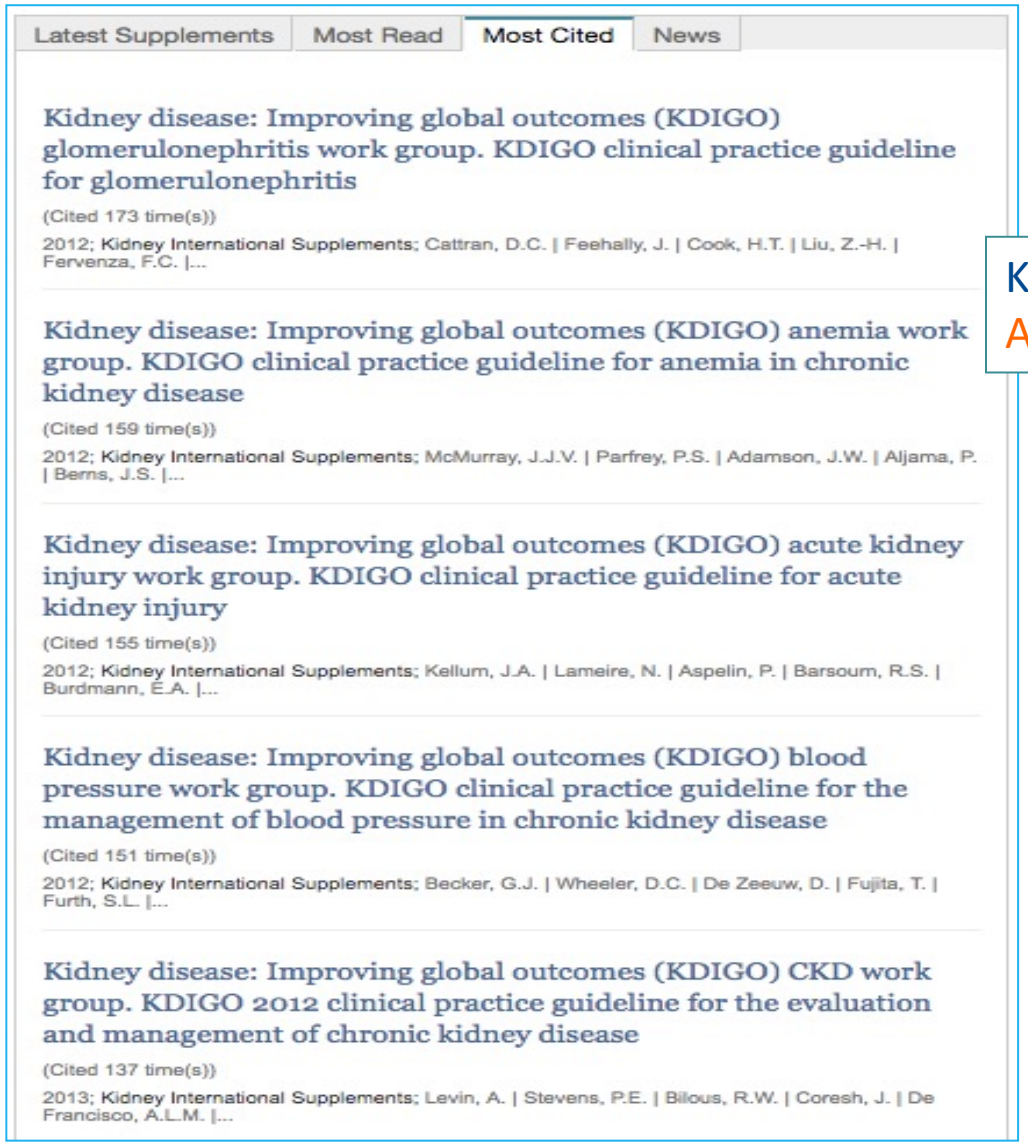
KDIGO Impact

KDIGO Guidelines – Most Cited in KI Supplements



KDIGO Guidelines are the TOP FIVE MOST CITED ARTICLES in *Kidney International Supplements*

What Lies Ahead – Challenges & Forward Vision

- Expand KDIGO's Guideline portfolio
- Much more frequent updates of Guidelines
- Expand outreach beyond nephrology
- Further increase diversity in all KDIGO Activities
- Better document KDIGO's impact on populations

QUESTIONS?