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Supplemental Table 1. Median monetary values and multivariable negative binomial regression models between the guideline authors' demographic characteristics and the monetary values of the personal payments

Variables	Median (IQR), US\$	Relative monetary values (95% confidence interval)	P value[†]
Gender			
Male	9,658 (2,322–63,956)	Ref.	0.002**
Female	3,383 (615–9,141)	0.3 (0.1–0.6)	
Type of involvement			
Committee members	5,599 (1,221–15,284)	Ref.	
Working group leaders, vice-leaders, and advisor	92,044 (47,178–196,170)	3.0 (1.7–5.5)	<0.001***
Chairperson and vice-chairperson	232,224 (231,024–233,424)	3.7 (2.0–7.0)	<0.001***
Affiliation			
University (non-professor)	5,067 (1,124–14,839)	Ref.	
University (professor)	123,879 (35,284–214,653)	1.0 (0.4–2.1)	0.91
General hospitals and clinics	7,559 (3,894–16,340)	1.0 (0.4–2.9)	0.96
H-index	–	1.1 (1.0–1.1)	<0.001***
Year since receiving the medical license	–	1.1 (1.0–1.1)	0.055

[†] Significance codes: ***p<0.001, **p<0.01, *p<0.05

Supplemental Table 2. Level of evidence and strength of recommendation by content category

Level of evidence	Strength of recommendation, n (%)			
	Strong recommendations (Level 1)	Weak recommendations or suggestions (Level 2)	Ungraded recommendation	Overall
Disease				9
High (A) ^a	1 (11)	0 (0)	0 (0)	1 (11)
Moderate (B) ^b	2 (22)	0 (0)	0 (0)	2 (22)
Low (C) ^c	2 (22)	0 (0)	3 (33)	5 (56)
Very low (D) ^d	0 (0)	0 (0)	1 (11)	1 (11)
Diagnosis				13
High (A) ^a	0 (0)	0 (0)	0 (0)	0 (0)
Moderate (B) ^b	2 (15)	0 (0)	0 (0)	2 (15)
Low (C) ^c	1 (7)	1 (7)	0 (0)	2 (15)
Very low (D) ^d	3 (23)	3 (23)	2 (15)	8 (62)
Ungraded	1 (8)	0 (0)	0 (0)	1 (8)
Treatment				84
High (A) ^a	3 (4)	1 (1)	0 (0)	4 (5)
Moderate (B) ^b	9 (11)	6 (7)	0 (0)	15 (18)
Low (C) ^c	9 (11)	32 (38)	0 (0)	41 (49)
Very low (D) ^d	1 (1)	13 (16)	10 (11.9)	24 (29)
Total	34	56	16	106

^a High confidence in effect estimates; ^b moderate confidence in effect estimates; ^c low confidence in effect estimates; and ^d very low confidence in effect estimates

Supplemental Table 3. Conflicts of Interest policy review between major guideline developing organizations in Japan, the United States, and Europe

Variable	Guidelines International Network	US National Academy of Medicine	Japanese Association of Medical Sciences	Japanese Society of Nephrology	American Society of Nephrology*	National Kidney Foundation	European Renal Association – European Dialysis and Transplant Association
1) Year of last update	2014 (Guideline Development Checklist) 2015 (Principles for Disclosure of Interests)	2011	2017	2020	2009	2007 (adopted)	2021
2) Existence of guideline specific conflicts of interest policy	Yes	Yes	Yes	No	No	No	No
3) Requiring disclosure of funding source for guideline development	Yes Disclose and publish the funding source and describe the role of the sponsors and support	Yes The processes of guideline development and funding bodies should be detailed	Yes If the association received payments from pharmaceutical companies for guideline development or	Yes If the association received payments from pharmaceutical companies for guideline development	Not considered	Not considered	Not considered

	provided for the development of the guideline.	explicitly and publicly accessible.	other association activity, the company name should be disclosed in a designated table of the guideline.	or other association activity, the company name should be disclosed in a designated table of the guideline.				
4) Requiring the declaration of guideline authors' conflicts of interest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5) Disclosure of guideline authors' financial conflicts of interest, type of financial conflicts of interest, and monetary categories of disclosure	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Payments to participate in a study	Clinical services from which guideline author derives a substantial proportion of his or her incomes	Consulting fee Stock ownership and profit Patent royalty Lecturing fees Writing fee Research payment Donation Endowed chair Other honoraria (travel fees, gifts, etc.)	Consulting fee Stock ownership and profit Patent royalty Lecturing fees Writing fee Research payment Donation Endowed chair Other honoraria (travel fees, gifts, etc.)	Salary Royalty Intellectual property rights Consulting fee Honoraria Ownership interest (like stocks, stock options, or other ownership interest, excluding diversified mutual funds) Other financial benefits.	Consulting, fee-paid work, stock ownership, and gifts with company or individual which the National Kidney Foundation has a transaction or arrangement Financial conflicts of interest were disclosed	All financial interests or beneficiaries in kind of any value. Financial conflicts of interest are disclosed in three categories: less than 1000 Euro; 1000-10,000 Euro; and more than 10,000 Euro	

All direct financial and indirect conflicts of interest should be disclosed with specific monetary value.	Awarded or pending patents Royalties Stock ownership or options Other personal and family member financial interests All current and planned financial conflicts of interest should be disclosed.	Only Fconflicts of interest with more than specific monetary amounts will be declared and disclosed.	Only Fconflicts of interest with more than specific monetary amounts will be declared and disclosed.	Financial conflicts of interest were disclosed without monetary categories or value.
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6) Disclosure of guideline authors' non-financial conflicts of interest	Yes	Yes	No	No	Yes	No	Yes
Authorship of an article expressing an opinion on the effectiveness of an intervention Conducting research on a topic that could be affected by a guideline recommendation	Authoring a publication related to the guideline Acting as an investigator related to the guideline A peer-reviewed grant related to the guideline				Leadership position (voluntary or compensated) in another organization Non-compensated consultancy Leadership position (voluntary or		Membership of potentially competing organizations, involvement in relevant medical charities, and any other similar circumstance.

Being an acknowledged expert in the intervention
 Gaining clinical income from the guideline recommendation
 Leadership or board or committee memberships
 Writing or consulting for an educational company
 Involvement with an advocacy group
 Political, religious, ideological, and other personal convictions or positions

compensated) in foundations/fundraising organizations
 Others

7) Conflicts of interest disclosure duration	Not mentioned	Not mentioned	Past three years and current At the time of guideline publication, each author's	Past three years and current	Past three years If the declarant was involved in continuing	Not mentioned in the policy	Past two years, current and future conflicts of interest
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financial conflicts of interest status for the past three years (going back to the previous year), affiliation, and position must be listed in a designated table before or at the end of the guideline text.

The guideline chairperson and members involved in guideline development must declare the financial conflicts of interest for the past three years at the time of appointment of the guideline author. The declared conflicts of interest must be disclosed in the designated table of the Japanese Association of Medical Sciences in the guideline.

medical education activity, the duration of the declaration was not limited.

8) Financial thresholds for conflicts of interest declaration	No	No	Yes	Yes	No	No	No
	All direct financial and indirect conflicts of interest should be disclosed with specific monetary value.	All current and planned financial conflicts of interest should be disclosed.	Consulting fee \geq ¥1,000,000 (US\$9,363)/year/company Stock ownership and profit \geq ¥1,000,000 (US\$9,363)/year/company or \geq 5% of total stock of the company	Consulting fee \geq ¥1,000,000 (US\$9,363)/year/company Stock ownership and profit \geq ¥1,000,000 (US\$9,363)/year/company	All financial conflicts of interest should be declared and disclosed.	All financial conflicts of interest and material facts must be disclosed.	All financial conflicts of interest should be declared and disclosed with specific monetary categories.

Patent royalty \geq ¥1,000,000 (US\$9,363)/year/company	or \geq 5% of total stock of the company
Lecturing fees \geq ¥500,000 (US\$4,682)/year/company	Patent royalty \geq ¥1,000,000
Writing fee \geq ¥500,000 (US\$4,682)/year/company	(US\$9,363)/year/company
Research payment \geq ¥1,000,000	Lecturing fees \geq ¥500,000 (US\$4,682)/year/company
(US\$9,363)/year/company	Writing fee \geq ¥500,000 (US\$4,682)/year/company
Donation \geq ¥1,000,000 (US\$9,363)/year/company	Research payment \geq ¥1,000,000
Endowed chair \geq ¥1,000,000 (US\$9,363)/year/company	(US\$9,363)/year/company
Other honorarium (travel fees, gifts etc.) \geq ¥50,000 (US\$468)/year/company	Donation \geq ¥1,000,000 (US\$9,363)/year/company
	Endowed chair \geq ¥1,000,000 (US\$9,363)/year/company
	Other honorarium (travel fees, gifts etc.) \geq ¥50,000 (US\$468)/year/company

9) Penalties for deviation from conflicts of interest policy	Not mentioned	Not mentioned	Yes	Yes	Not mentioned	Yes	Yes
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The Association recommended that the guideline producing organizations should establish disciplinary guidelines for guideline violations. However detailed items were not considered.

In case of doubt or other problems arising after a paper has been published, the Board chair will investigate the facts and take measures such as retraction of the paper if there is a violation, and if the violation seriously undermines the social credibility of the Society, the Board chair will take measures against membership in accordance with the Society's policy.

If the guideline author seems to deviate from the policy, the guideline author will have the opportunity to explain alleged failure to disclose; after hearing the author's response and after making further investigation as warranted by the circumstances, the Board, committee, or Compliance Officer determines that the guideline author has failed to disclose an actual or possible conflict of interest; and appropriate disciplinary and

In case of violation of conflicts of interest policy, the guideline chair should reprimand the guideline author who deviated from the policy. In case of continued deviation from the policy, the guideline author will dismiss and will not be allowed to have any nominated position within the Society for at least five years.

						corrective action shall be taken.	
10) Population required to declare conflicts of interest in guideline	All members of a guideline producing group	The declarant himself/herself, and his/her family	The declarant himself/herself, his/her spouse, relatives in the first degree, or those who share income or property with the declarant.	The declarant himself/herself, his/her spouse, relatives in the first degree, or those who share income or property with the declarant.	The declarant himself/herself	If the declarant is involved in continuing medical education activity, his/her spouse needs to declare conflicts of interest.	The declarant himself/herself, his/her spouse, and his/her children
11) Restriction for guideline chairperson's conflicts of interest	Yes The guideline chair should have no direct financial or relevant indirect conflicts of interest. When direct or indirect conflicts of interest of a chair are unavoidable, a co-chair with no	Yes The guideline chairperson should not have conflicts of interest.	Yes A person with more than predefined financial or institutional conflicts of interest should not be a guideline chairperson. However, even if the guideline chair has less than predetermined conflicts of interest, if the guideline chair has conflicts of interest	Not considered	Not applicable	Not considered	Yes If the guideline chair has conflicts of interest, another guideline author (usually the co-chair, vice-chair, or secretary in that order) should take the role of the guideline chair.

conflicts of interest should be appointed to lead guideline authors.

with multiple companies and the conflicts of interest are expected to influence the guideline, the vice guideline chairperson should take over that task as appropriate.

The predefined financial conflicts of interest include
 Lecturing fees \geq ¥1,000,000
 (US\$9,363)/year/company
 Writing fee \geq ¥1,000,000
 (US\$9,363)/year/company
 Research payment \geq
 ¥10,000,000
 (US\$93,628)/year/company
 Donation \geq ¥5,000,000
 (US\$46,816)/year/company
 Other honorarium (travel fees, gifts, etc.) \geq ¥200,000
 (US\$1,873)/year/company

12) Conflicts of interest disclosure of guideline

Yes

Yes

Yes

Yes

Not applicable

Not considered

Not considered

**development
organization**

If the association received payments from pharmaceutical companies for guideline development or other association activity, the company name should be disclosed in a designated table of the guideline.

If the association received payments from pharmaceutical companies for guideline development or other association activity, the company name should be disclosed in a designated table of the guideline.

13) Threshold of authors with conflicts of interest	Yes	Yes	Yes	Not considered	Not applicable	Not considered	Not considered
	<p>guideline producing organizations should make all possible efforts to not include experts with direct financial or relevant indirect conflicts of interest.</p> <p>Experts with any conflicts of interest should be a minority of guideline authors.</p>	<p>Experts with any conflicts of interest should not be more than the majority of guideline authors.</p>	<p>Experts with defined conflicts of interest should not be more than half of the guideline authors.</p> <p>The predefined financial conflicts of interest include Lecturing fees \geq ¥2,000,000 (US\$187,264)/year/company Writing fee \geq ¥2,000,000 (US\$187,264)/year/company</p>				

			Research payment ≥ ¥20,000,000 (US\$187,264)/year/company				
			Donation ≥ ¥10,000,000 (US\$93,628)/year/company				
			Other honorarium (travel fees, gifts, etc.) ≥ ¥500,000 (US\$4,682)/year/company				
14) Strategies for authors' financial activity with pharmaceutical companies during and after guideline development	Yes	Yes	Not considered	Not considered	Not applicable	Not considered	Yes
	guideline authors should avoid future financial conflicts of interest.	guideline authors should divest their and their family's financial conflicts of interest, and not participate in marketing activities or advisory boards of, entities whose interests could be affected by guideline recommendations.	However, if a guideline author has more than specific conflicts of interest with a pharmaceutical company during guideline development, the guideline author should report the conflicts of interest to the guideline chair as quickly as possible, and the guideline chair should take appropriate action, such as excluding the guideline author from voting				Guideline committee members must not participate in an industry-sponsored event. Guideline committee members should decline an invitation to an industry-sponsored event.

on guideline
recommendations.

15) Response to authors	Yes	Yes	Yes	Yes	Not applicable	Yes	Yes
with conflicts of							
interest for guideline development	guideline authors with direct financial conflicts of interest should not decide about direction and strength of recommendation.	Experts with conflicts of interest, who have unique knowledge about the topic under consideration, can share their expertise with the guideline authors as consultants and as reviewers of GDG products, but generally should not serve as guideline authors.	A guideline author exceeding one of the specific thresholds for each item should not participate in the guideline development. However, if the individual is indispensable to the formulation of the guideline, the individual can participate in voting. In the event that a guideline author during guideline development has more than a specific amount of financial conflicts of interest, the president of the affiliated society must	A guideline author exceeding one of the specific thresholds for each item is allowed to participate in the deliberations but must not have a vote. However, if the Board chair or guideline chair considers the individual is indispensable to the formulation of the guideline, the individual can participate in voting. The guideline chair (or Chair) can request that a candidate with significant conflicts of interest	Not applicable	The guideline author with financial interests determined as financial conflicts of interest will require to leave the meeting during the discussion and the voting.	A guideline author with significant personal conflicts of interest should not participate in the discussion of and voting on a particular topic. Significant personal conflicts of interest included any interest which may affect or be affected by the decision on a particular topic, such as involvement with any competitor company linked to the specific activity of the guideline.

			promptly report the case and take appropriate measures.	withdraw from the guideline author.			The significance of conflicts of interest was judged by the guideline chair or a secret ballot of all guideline authors.
16) Establishment of conflicts of interest monitoring or review committee	Yes	Yes	Yes	Not considered in the policy	Yes	Yes	Not considered in the policy
	An oversight committee should be responsible for developing and implementing conflicts of interest policy			But the Society has a conflict of interest committee and an evidence review team.	The society has a conflict of interest committee.	The Foundation has a conflict of interest committee.	But the Society has a conflict of interest committee and an evidence review team.
17) Multi-disciplinary experts and patients' involvement in guideline development	Yes	Yes	Yes	Not considered	Not applicable	Not considered	Not mentioned in the policy
		guideline developing group should be multidisciplinary and balanced, comprising a variety of experts such as methodologists and clinicians, and patients.	The composition of the committee should emphasize diversity in terms of the expertise and fields of the participants, including epidemiologists and				But the guideline included multi-disciplinary experts such as nephrologists, surgeons, radiologists,

statisticians, and should not be biased toward members who have an interest in a particular company or commercial organization. Participants representing patients and citizen groups should be included as members of the guideline development committee, so that the committee can share common values with healthcare professionals.

researchers, nurses, and patients.

* The American Society of Nephrology has not developed a guideline under the authority of the Society, but we have included it in the conflicts of interest policy assessment as a counterpart of the Japanese Society of Nephrology and European Renal Association – European Dialysis and Transplant Association.

US\$ was converted using 2020 monthly average ¥106.8 per US\$1.

Supplemental Table 4. Anonymized raw payment data reported by pharmaceutical companies between 2016 and 2019