

## Online supplementary material 1

### Clinicaltrial.gov searched June 28, 2014

<https://clinicaltrials.gov/>

Keyword used: "hyperfiltration"

Study number	GH cutoff	Method	Context	Status
Study 1	130 ml/min	creatinine clearance	intensive care	unknown
Study 2	130 ml/min	creatinine clearance	obesity	unknown
Study 3	130 ml/min	inulin clearance	obesity	terminated
Study 4	140 ml/min/1.73m <sup>2</sup>	Cr-EDTA	SCD	active
Study 5	135 ml/min/1.73m <sup>2</sup>	inulin	diabetes	completed
Study 6		inulin	diabetes	completed
Study 7		creatinine clearance	healthy	recruiting
Study 8			obesity	active
Study 9			SCD	unknown
Study 10			obesity	completed
Study 11			kidney donor	completed
Study 12			kidney donor	unknown
Study 13			SCD	terminated
Study 14			diabetes	completed
Study 15			prematurity	active
Study 16			diabetes	completed
Study 17			obesity	recruiting

### ISRCTN searched June 28, 2014

<http://www.isrctn.org/>

Keyword used: "hyperfiltration"

Study number	GH cutoff	Method	Context	Status
Study 1		iohexol	diabetes	unknown

### EU clinical trial registration searched June 28, 2014

<https://www.clinicaltrialsregister.eu/ctr-search/search>

Keyword used: "hyperfiltration"

Study number	GH cutoff	Method	Context	Status
Study 1			GSD	ongoing
Study 2			GSD	ongoing
Study 3	140 ml/min/1.73 m <sup>2</sup>	MDRD	SCD	ongoing

### Japan Clinical Trial Registry searched June 28, 2014

[https://dbcentre3.jmacct.med.or.jp/jmactr/Default\\_Eng.aspx](https://dbcentre3.jmacct.med.or.jp/jmactr/Default_Eng.aspx)

Keyword used: "hyperfiltration"

Study number	GH cutoff	Method	Context	Status
No studies				

<http://www.umin.ac.jp/ctr/>

Keyword used: "hyperfiltration"

Study number	GH cutoff	Method	Context	Status
No studies				

## Legends

Cr-EDTA: ethylenediaminetetraacetic acid; EU: European Union; GH: glomerular hyperfiltration; MDRD: modification of diet in renal disease (formula); SCD: sickle cell disease; ISRCTN: International Standard Randomised Controlled Trial Number Register.

## Online supplementary material 2

### **Methods**

Protocol and registration: the protocol has been registered with the PROSPERO database of prospectively registered systematic reviews in health and social care (14).

Data source: we performed a systematic review of the literature from November 2012 to May 2014 using the following databases: Medline (1951 to May 2014) (using Pubmed to access the Medline database), Embase (1980 to May 2014), CINAHL (1981 to May 2014). Searches were conducted from the earliest date of titles or abstracts available for each database to the latest titles or abstracts available as of May, 25, 2014. Citations in Medline before 1950, retrieved through Medline were also screened. The search was conducted using the keyword “hyperfiltration” (Medline and Cinahl) and “glomerular hyperfiltration” (Embase). Research strategy can be found in the online supplementary material 3. Further studies were located through citation searches of major papers and by checking the reference lists in primary and review articles retrieved from the database searches. Finally, we searched the complete personal bibliography in Pubmed and Medline of authors with 3 or more included papers for additional relevant studies. There were no time, language or type of study limits used in any primary database search. Reporting of this systematic review was done according to the 2009 PRISMA statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions, which is included in the online supplementary material 4. All included papers are available upon request to the corresponding author. All included papers can be found in the online supplementary material 6 (bibliographic findings) and 5 (summary of findings).

Study selection: we included studies assessing GFR evaluation in humans, with no restriction on the evaluation methods, age of patients, or disease area. As for study type, human clinical and epidemiological studies were included, and animal or cellular studies were all excluded. As for study design, case reports, narrative or systematic reviews, meta-analysis, comments, abstracts and conference proceedings were excluded. All other study designs (RCT, quasi RCT, before-after trials, cross-over trials; prospective/retrospective cohort studies, case series, uncontrolled longitudinal studies; case-control studies, nested case-control studies, cross-sectional studies) were included. Two of the authors (FC, HC) reviewed the abstracts (Endnote X7, Thompson Reuter) and then the full text of the article. Duplicate between databases were removed using the deduplicate tool in Endnote. All articles with a GH threshold were automatically recorded. Retrieved articles with no GH threshold but exploring the effect of GFR level against another outcome of interest such as blood pressure, proteinuria/micro-albuminuria/stroke/death were also recorded. Where disagreement continued after discussion between the two reviewers, a final decision was reached by open discussion.

Data collection: for each included study, the following items were extracted and recorded in duplicate by 2 independent reviewers (FC and HC) on a pre-specified excel sheet, according to the Cochrane Methods Working Group on Systematic Reviews of Screening and Diagnostic Tests, after a pilot test of 50 study inclusion. In case of discordance, the article was reviewed by FC and HC and items re-recorded together. The following data were recorded from each study: - first author; - publication date; - journal name, journal field of research (diabetology, nephrology or other); - study design (group 1: interventional studies: randomized controlled trials, quasi randomized controlled trials, before-after trials, cross-over trials; group 2: observational studies: prospective/retrospective cohort studies, case series, uncontrolled longitudinal studies, case-control studies, nested case-control studies, case-cohort studies, cross-sectional studies); - participants age range (pediatrics: ≤ 18 years; adult: > 18 years); - diagnosis (group 1: DM type I and II/metabolic syndrome/obesity; group 2: renal reserve/protein loading test; group 3: other (SCD, glycogen storage disease (GSD),

HTN, pregnancy and others)); - GFR evaluation method; - use or not of a threshold value to define GH; and use or not of a study group or a literature reference to define the value of the used threshold.

Time periods (before 1994, 1995-2005 and after 2005) were defined arbitrarily by the authors (FC and HC). Methods for GFR evaluation were regrouped as follow: group 1: inulin clearance; group 2: isotopes clearances (Cr-EDTA, Tc-DTPA), iohexol clearance, radioactive and nonradioactive iothalamate clearance, sodium thiosulfate clearance; group 3: creatinine clearance; group 4: formulas (Cockcroft-Gault, CKD-Epi, Japanese creatinine-based, Cystatin C based, MDRD, Schwartz). If isotopic or inulin clearances were compared to formulas in the same study, we only recorded results according to the isotopic or inulin clearances measurements.

Age range and/or mean age  $\pm$  SD of study participants refers to the reported age range and/or mean age of the participants of the study group, not the control group. When several participants study groups were reported, we recorded the overall age range, encompassing all groups. In case of several groups with different mean age, we recorded the group with the oldest reported mean age. In cohort study, we reported the recorded the age range or mean age, at the time of the first GFR measurement. Mean age was rounded to the unit (year).

We reported the number of participants at the time of randomisation, when the information was available, not including the number of controls. In cohort studies, we reported the number of participants at the time of the first GFR measurement. Information was also searched in the online supplementary material when available.

Statistics: characteristics of the studies were described by percentages and were compared across publication time period using Chi-squared tests or Fisher exact tests. Association between the characteristics of studies and the use of thresholds were assessed using a mixed-effect logistic regression model. A random effect on the intercept was introduced in the model to account for the first author, because one author may publish several papers and an author may probably follow a similar approach in its various studies. Factors associated with the threshold values were also explored, by using a linear model. This analysis was conducted on the sub-group of studies reporting a single threshold value expressed in ml/min/1.73m<sup>2</sup>. As few authors had two more publications in this sub-group, random effects were not introduced in the linear model. A meta-regression analysis was conducted to test the hypothesis that the proportion of participants classified as hyperfiltrating depends on the chosen threshold to define GH in each particular study. The logit of the proportion of GH patients was modelled as a linear function of the threshold value and each study was allocated a weight determined by the sample size (15). The I-squared statistic was used a measure of the heterogeneity in the reported proportions of GH patients. A value of I-squared higher than 75% indicates a high heterogeneity (16). All analyses were conducted with S-plus for windows 8.0 (Insightful Corp., Seattle, WA), STATA/IC 10.1 for Windows (StataCorp 2007. *Stata Statistical Software: Release 10*. College Station, TX: StataCorp LP), and Comprehensive Meta-Analysis 2 (Biostat, Engelwood, NJ.). Inter-rater concordance was evaluated using the kappa-concordance test. Significance was set up at P<0.05.

### **Online supplementary material 3**

#### **Databases search strategy (as of May, 25 2014)**

##### **Pubmed database “hyperfiltration”, free text:**

SEARCH#1	hyperfiltration:	1667 results
----------	------------------	--------------

**Embase database “hyperfiltration”:**

SEARCH #1        “glomerular hyperfiltration”: 883 results

**Cinahl database “hyperfiltration”:**

SEARCH TX        hyperfiltration:        105 results

## **Online supplementary material 4**

Section/topic	#	Checklist item	Reported on page #
<b>TITLE</b>			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
<b>ABSTRACT</b>			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	3-4
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for the review in the context of what is already known.	6
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	6-7 and suppl material online 2
<b>METHODS</b>			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	6
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	7 and suppl material online 2
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	6-7 and suppl material online 2
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	7 and suppl.

			material 2
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	7 and suppl material online 2
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	7 and suppl material online 2
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	7 and suppl material online 2
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	N/A
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	7-8 and suppl material online 2
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., $I^2$ ) for each meta-analysis.	8

Page 1 of 2

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	N/A
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	8 (pre-specified)
<b>RESULTS</b>			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	Figure 1
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Suppl. material 5-

			6
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	N/A
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	N/A
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	N/A
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	N/A
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	10
<b>DISCUSSION</b>			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	11-15
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	14-15
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	14
<b>FUNDING</b>			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	20

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed.1000097

For more information, visit: [www.prisma-statement.org](http://www.prisma-statement.org).

## Online supplementary material 5

### Main findings of included studies (in alphabetical order)

First Author	Journal	Publication Year	Study Type	Total Subjects	Subject Age	Age range	Mean Age (SD)
Abouchakra	Nephrology field	2013	Interventional study	220	Adults		35±10
Agaba	Other field	2004	Observational study	90	Adults		51±8
Agarwal	Other field	2005	Observational study	50	Adults	35-60	
Aloni	Other field	2014	Observational study	65	Pediatrics		7±3
Alvarez	Other field	2012	Interventional study	193	Pediatrics	1.0-2.0	1.1±0.2
Amin	Nephrology field	2005	Observational study	308	Pediatrics	0.5-15.0	
Amin	Other field	2012	Observational study	30	Adults		40±9
Apakkan Aksun	Diabetology field	2003	Observational study	68	Adults	50-66	
Arlet	Nephrology field	2012	Observational study	64	Mixte	18-68	
Arnello	Other field	1999	Observational study	180	Pediatrics		
Arutiunov	Other field	2009	Observational study	2230	Adults		52±10
Askenazi	Nephrology field	2006	Observational study	29	Pediatrics		10±7
Attila	Other field	1998	Observational study	18	Adults	28-42	
Aygun	Nephrology field	2011	Observational study	85	Pediatrics	1.0-18	10±5
Aygun	Other field	2013	Observational study	23	Pediatrics	3.0-14	7±4
Azevedo	Diabetology field	1991	Observational study	21	Adults		30±5
Azevedo	Diabetology field	1994	Observational study	22	Adults		35 ± 4
Azevedo	Diabetology field	1997	Observational study	11	Adults	26-40	34±5
Azevedo	Diabetology field	1995	Interventional study	22	Adults		35±5
Azevedo	Diabetology field	1990	Observational study	17	Adults	22-43	31±6
Azevedo	Other field	1990	Interventional study	17	Adults	22-43	31±6
Bacci	Diabetology field	2000	Interventional study	20	Adults		29±5
Bach	Nephrology field	1994	Interventional study	9	Adults	25-51	
Baker	Nephrology field	1989	Observational study	14	Mixte	1.0-33	
Banerjee	Other field	2005	Observational study	100	Adults		
Bankir	Other field	2004	Observational study	25	Adults		41±2
Barai	Nephrology field	2008	Observational study	109	Adults	19-71	
Barba	Nephrology field	1996	Interventional study	47	Adults	27-57	
Beasley	Other field	2012	Observational study	2419	Adults	50-79	

Becker-Cohen	Nephrology field	2005	Observational study	161	Mixte	1.0-81	
Belsha	Nephrology field	1998	Observational study	62	Pediatrics	10.0-18	
Berg	Diabetology field	1998	Observational study	36	Mixte	13-25	
Bergamaschi	Nephrology field	1990	Interventional study	9	Mixte	17-57	
Bjorck	Nephrology field	1990	Interventional study	10	Adults		25±4
Bjornstad	Other field	2014	Observational study	616	Adults	19-56	37 ± 9
Bjornstad	Diabetology field	2014	Interventional study	75	Adults		15±2
Blankestijn	Diabetology field	1993	Observational study	44	Adults		36±11
Bodas	Nephrology field	2013	Observational study	48	Pediatrics	3.0-17.0	
Boehler	Nephrology field	1992	Interventional study	13	Adults	20-39	
Boehler	Other field	1993	Interventional study	13	Adults		
Boertien	Diabetology field	2012	Observational study	979	Adults	58-75	
Bognetti	Diabetology field	1993	Observational study	19	Mixte		16±4
Bolarinwa	Nephrology field	2012	Observational study	72	Mixte	15-60	
Bouhanick	Diabetology field	1999	Observational study	76	Pediatrics		16±3
Bouhanick	Diabetology field	1995	Observational study	110	Adults	17-65	
Bruce	Diabetology field	1994	Observational study	15	Adults		32±5
Bulum	Other field	2013	Observational study	313	Mixte	18-65	
Cachat	Nephrology field	2012	Observational study	146	Mixte	5.0-21	
Caramori	Diabetology field	2003	Observational study	105	Adults		36±8
Caramori	Diabetology field	1999	Observational study	33	Adults		32±7
Carr	Other field	1990	Observational study	52	Adults	20-72	
Carvalho-Braga	Diabetology field	1991	Observational study	30	Adults		29±10
Catena	Nephrology field	2007	Observational study	56	Adults		54±12
Chagnac	Nephrology field	1989	Interventional study	12	Adults	24-40	
Chagnac	Nephrology field	2000	Observational study	21	Adults	23-46	
Chagnac	Nephrology field	2008	Observational study	12	Adults		37±9
Chagnac	Nephrology field	2003	Interventional study	8	Adults		36±2
Chaiken	Diabetology field	1998	Observational study	194	Adults		59
Chandar	Nephrology field	2007	Observational study	146	Mixte	5.0-19	
Cherney	Diabetology field	2011	Observational study	18	Mixte		17±3
Cherney	Diabetology field	2008	Interventional study	21	Adults		20±1
Cherney	Diabetology field	2010	Interventional study	24	Mixte		20±3
Cherney	Diabetology field	2010	Interventional study	38	Mixte		22±5
Cherney	Nephrology field	2012	Interventional study	37	Mixte		23±5

Cherney	Diabetology field	2010	Interventional study	32	Mixte		18±3
Cherney	Other field	2010	Interventional study	66	Mixte		
Cherney	Nephrology field	2005	Interventional study	22	Pediatrics		15±2
Cherney	Other field	2014	Interventional study	40	Mixte		25±7
Cherney	Diabetology field	2009	Interventional study	20	Adults		40±4
Cherney	Diabetology field	2013	Interventional study	35	Adults		23±1
Cherney	Diabetology field	2013	Interventional study	27	Adults		26±2
Cherney	Nephrology field	2014	Interventional study	41	Adults		23±1
Cherney	Diabetology field	2010	Interventional study	10	Adults		43±4
Chiarelli	Nephrology field	1995	Observational study	23	Mixte	9.0-19.0	15.6
Chiarelli	Diabetology field	2000	Observational study	30	Mixte		19±4
Chowta	Nephrology field	2010	Observational study	168	Adults		57±1
Christiansen	Other field	1998	Observational study	27	Adults		30±7
Ciavarella	Diabetology field	1988	Observational study	104	Mixte	16-53	32±8
Claris-Appiani	Nephrology field	1990	Interventional study	7	Mixte	17-25	
Claris-Appiani	Nephrology field	1998	Interventional study	7	Adults	21-25	
Claris-Appiani	Nephrology field	1988	Interventional study	5	Adults	27-56	
Claris-Appiani	Nephrology field	1988	Interventional study	15	Mixte	17-26	
Claris-Appiani	Nephrology field	1999	Interventional study	7	Adults	22-25	
Claus	Other field	2013	Observational study	128	Adults	49-68	
Coppo	Nephrology field	1993	Interventional study	28	Pediatrics	3.0-17	
Cotroneo	Nephrology field	1998	Observational study	177	Adults		32 ± 9
Cottiero	Nephrology field	1995	Observational study	25	Mixte	9.0-60	
Dahl-Jorgensen	Other field	1986	Interventional study	45	Adults	18-42	
Dahlquist	Nephrology field	2001	Observational study	60	Adults		34.5±2.8
Day	Other field	2012	Observational study	424	Mixte	17-80	
De Carvalho	Other field	2012	Observational study	74	Adults		64±7
De Faria	Diabetology field	1997	Interventional study	10	Adults	25-35	30±3
De Paula	Other field	2013	Observational study	15	Pediatrics		11±5
De Santo	Other field	1992	Interventional study	8	Adults		55 ± 5
De Santo	Nephrology field	1992	Interventional study	10	Adults	20-35	
De Santo	Nephrology field	1992	Interventional study	8	Adults	23-50	
De Santo	Nephrology field	1993	Interventional study	8	Adults	20-30	
De Santo	Nephrology field	1994	Interventional study	8	Adults	20-30	26
De Santo	Diabetology field	1997	Interventional study	10	Adults		26±3

Delles	Nephrology field	2003	Interventional study	58	Adults	51±8
Dell'Osso	Nephrology field	2002	Observational study	186	Adults	51±12
Dengel	Nephrology field	1996	Interventional study	10	Adults	68±6
Dhaene	Nephrology field	1987	Interventional study	6	Adults	24-31
Dimitrov	Other field	1993	Observational study	25	Mixte	15-56
Ditzel	Diabetology field	1984	Observational study	16	Mixte	11.0-34.0
Dmitrova	Other field	2002	Interventional study	114	Adults	31-72
Drummond	Diabetology field	1989	Interventional study	18	Mixte	11.0-19.0
Drummond	Diabetology field	2002	Observational study	243	Mixte	10.0-40.0
Du Cailar	Nephrology field	1991	Observational study	52	Adults	34±2
Ducic	Other field	1989	Observational study	61	Mixte	2.5-19.0
Dullaart	Other field	1992	Interventional study	7	Adults	25-58
Dura	Diabetology field	1992	Observational study	19	Pediatrics	7.0-15.0
Eisenhauer	Other field	1990	Interventional study	19	Adults	21-50
Ekberg	Other field	1990	Observational study	120	Adults	20-40
Ekberg	Other field	1991	Observational study	76	Adults	20-40
Ekberg	Nephrology field	1993	Observational study	96	Adults	20-40
Erben	Other field	1988	Observational study	80	Adults	
Erley	Nephrology field	1992	Observational study	17	Adults	27 ± 6
Ezequiel	Nephrology field	2012	Interventional study	35	Adults	20-65
Felip	Nephrology field	1998	Interventional study	21	Adults	46±2
Ficociello	Diabetology field	2009	Observational study	426	Mixte	15-44
Fioretto	Diabetology field	1992	Observational study	21	Adults	18-45
Fliser	Nephrology field	1993	Interventional study	25	Adults	23-82
Fontseré	Nephrology field	2006	Observational study	87	Adults	31-69
Fontseré	Diabetology field	2008	Observational study	118	Adults	57±10
Francischetti	Other field	1992	Interventional study	10		
Frankfurt	Nephrology field	2012	Observational study	107	Pediatrics	1.0-3.0
Friedman	Nephrology field	2010	Interventional study	17	Adults	45±10
Friedman	Nephrology field	2014	Interventional study	8	Adults	31-58
Fu	Diabetology field	2012	Observational study	112	Adults	24±4
Fu	Diabetology field	2013	Observational study	88	Adults	51±13
Fuster-Lluch	Other field	2008	Observational study	89	Adults	66 ± 20
Futrakul	Other field	2005	Observational study	50	Adults	46 ± 10
Gerchman	Diabetology field	2009	Observational study	144	Adults	34-76

Gorsnostaeva	Other field	2010	Observational study	109	Pediatrics	29-72	
Gragnoli	Nephrology field	1993	Observational study	163	Adults	42-70	59 ± 10
Greene	Nephrology field	1987	Interventional study	10	Adults	23-47	
Groop	Diabetology field	2013	Observational study	4201	Adults		44±8
Guasch	Nephrology field	1997	Observational study	66	Mixte	18-65	
Guizar	Nephrology field	2001	Interventional study	28	Adults		43±8
Gumus	Nephrology field	2009	Observational study	500	Adults		52±8
Hadj-Aissa	Nephrology field	1992	Interventional study	10	Adults		28±5
Haneda	Other field	1992	Observational study	23	Adults		
Hansen	Other field	1992	Observational study	184	Mixte	18-56	
Hansen	Diabetology field	1993	Interventional study	16	Adults	19-49	
Har	Diabetology field	2012	Observational study	49	Adults		25±3
Harrap	Nephrology field	2000	Observational study	100	Adults		22
Harvey	Diabetology field	1992	Observational study	31	Adults		31 ± 2
Haymann	Nephrology field	2010	Observational study	280	Mixte	16-61	
Heering	Nephrology field	1994	Observational study	16	Adults		48 ± 3
Heering	Nephrology field	1994	Interventional study	24	Adults		40±3
Helal	Nephrology field	2011	Observational study	108	Pediatrics	4.0-14	
Hellerstein	Nephrology field	2004	Interventional study	78	Mixte	5.0-21	
Hernandez-Marco	Nephrology field	2009	Observational study	29	Mixte	4.0-20	
Herrera	Nephrology field	1988	Interventional study	10	Adults	19-28	
Hiragushi	Diabetology field	2001	Observational study	166	Adults	40-79	
Hjorth	Other field	2011	Observational study	131	Pediatrics	1.0-18	
Hladunewich	Nephrology field	2004	Observational study	22	Adults		34±5
Hoang	Nephrology field	2003	Observational study	159	Mixte	18-88	
Hohenstein	Nephrology field	2008	Observational study	45	Adults		60±12
Hou	Other field	2012	Interventional study	233	Adults	24-53	33±10
Houlihan	Other field	1999	Observational study	21	Adults	24-77	
Huttunen	Other field	1989	Observational study	32	Pediatrics	9.00-17.00	
Ishida	Diabetology field	1991	Interventional study	71	Adults		42±1
Ishizaka	Nephrology field	2008	Observational study	8054	Adults		56 ± 10
Jacobs	Diabetology field	1997	Interventional study	9	Adults	20-32	
Jacobs	Other field	1999	Interventional study	9	Adults	21-48	34.9
Janssen	Diabetology field	1997	Observational study	108	Adults	18-63	
Javor	Diabetology field	2004	Observational study	25	Mixte	8.0-67	

Jenkins	Diabetology field	1989	Interventional study	8	Adults		33±2
Jesudason	Other field	2013	Interventional study	45	Mixte	18-75	
Jin	Diabetology field	2006	Observational study	342	Adults	20-59	
Jones	Diabetology field	1991	Observational study	26	Mixte	17-49	
Jones	Nephrology field	1992	Interventional study	16	Adults		50±6
Juhl	Diabetology field	1997	Interventional study	24	Adults		31
Juraschek	Nephrology field	2013	Interventional study	164	Adults		54±11
Kalk	Diabetology field	1990	Observational study	127	Mixte	13-36	
Kalk	Other field	1992	Observational study	39	Mixte	14-32	
Kandasamy	Nephrology field	2013	Observational study	39	Pediatrics		0.1
Keller	Nephrology field	1996	Observational study	85	Adults	26-69	
Khalil	Diabetology field	2013	Interventional study	21	Mixte	18-41	
Kimura	Nephrology field	1996	Interventional study	6	Adults	32-60	
Kinebuchi	Other field	2004	Observational study	27	Adults		53±13
King	Other field	2011	Observational study	244	Pediatrics	2.0-14	7±3
Klein	Other field	1995	Interventional study	23	Mixte	18-39	
Koetje	Other field	2011	Observational study	44	Adults		30 ± 4
Korpachev	Other field	2009	Observational study	90	Adults	45-70	
Kotchen	Nephrology field	2000	Interventional study	62	Adults		48±1
Kralickova	Other field	2004	Observational study	26	Adults	44-74	61±9
Krikken	Nephrology field	2007	Interventional study	95	Adults	22-24	
Krishna	Nephrology field	1988	Interventional study	9	Adults	38-47	
Kubo	Nephrology field	1999	Observational study	2446	Adults	40-79	
Kumar	Other field	1996	Observational study	17	Pediatrics	2.0-18	
Laborde	Nephrology field	1990	Observational study	45	Mixte	4.0-20.0	13±4
Lafayette	Nephrology field	1998	Observational study	13	Adults		34±2
Lafayette	Nephrology field	1999	Observational study	34	Adults		34±2
Lalau	Nephrology field	1993	Interventional study	11	Adults	27-77	
Lebovitz	Diabetology field	1990	Observational study	71	Adults	46-54	
Lee	Nephrology field	1993	Observational study	8	Adults	21-68	
Lee	Nephrology field	1995	Observational study	83	Mixte	11.0-35.0	
Lee	Nephrology field	1995	Observational study	284	Adults	25-42	
Lemley	Nephrology field	2000	Observational study	22	Adults		40±13
Lemley	Nephrology field	2005	Observational study	48	Adults		45±9
Lervang	Diabetology field	1988	Observational study	29	Mixte	11.0-39.0	24

Lervang	Diabetology field	1992	Observational study	34	Pediatrics	7.0-18.0	14
Levitt	Diabetology field	1995	Observational study	60	Adults		48±2
Levy-Marchal	Other field	1989	Observational study	29	Pediatrics	4.00-17.0	
Linne	Diabetology field	1991	Interventional study	6	Mixte	18-24	22±2
Losito	Nephrology field	1988	Interventional study	17	Adults		41
Losito	Other field	1988	Interventional study	34	Adults		46±12
Luaces	Nephrology field	2012	Observational study	61	Adults		41 ± 10
Luik	Diabetology field	2002	Observational study	24	Adults		28±6
Luippold	Other field	2001	Interventional study	12	Adults	24-38	28±2
Maeda	Nephrology field	2011	Observational study	72	Adults	40-55	
Magri	Nephrology field	2011	Observational study	313	Adults		61 ± 11
Malaki	Nephrology field	2011	Observational study	63	Mixte	1.0-29	
Mallamaci	Nephrology field	1996	Observational study	14	Adults	30-65	47±9
Mammen	Nephrology field	2012	Observational study	126	Pediatrics		3.0±8.0
Mansy	Other field	1989	Interventional study	12	Adults	43-71	
Manto	Diabetology field	1993	Observational study	89	Adults		30 ± 10
Marcovecchio	Other field	2010	Observational study	183	Mixte		15±4
Marouf	Other field	2006	Observational study	59	Adults	21-33	
Marre	Diabetology field	1992	Observational study	169	Adults		66 ± 4
Martens	Nephrology field	2009	Observational study	39	Mixte	1.0-23	
Marzano	Other field	1998	Observational study	81	Adults	19-60	
Matteucci	Diabetology field	2002	Observational study	79	Adults		39±13
Mauer	Diabetology field	2002	Observational study	243	Mixte	10.0-40	
McCarville	Other field	2012	Observational study	203	Pediatrics	1.0-2.0	
McPherson Yee	Nephrology field	2011	Observational study	410	Mixte	2.0-21	
Meeme	Other field	2010	Observational study	40	Mixte	18-85	
Melis	Diabetology field	2005	Observational study	95	Mixte	1.0-42	
Melsom	Diabetology field	2011	Observational study	1560	Adults	50-62	
Melsom	Nephrology field	2012	Observational study	1506	Adults	50.0-62	
Miller	Nephrology field	2003	Interventional study	20	Mixte		14±2
Miltenyi	Other field	1990	Observational study	9	Pediatrics	10.0-17	12.6
Mimran	Nephrology field	1996	Observational study	38	Adults	21-64	
Mizuiri	Nephrology field	1994	Interventional study	10	Adults		45±13
Mocan	Diabetology field	1994	Observational study	59	Adults		54 ± 10
Mogensen	Diabetology field	1973	Observational study	12	Mixte	17-33	

Mogensen	Other field	1986	Observational study	12	Adults		
Mogensen	Diabetology field	1990	Observational study	53	Mixte	18-49	
Monami	Diabetology field	2009	Observational study	2694	Adults	40-75	
Monster	Other field	2003	Observational study	7365	Adults	28-75	50 ± 13
Montanari	Other field	2012	Interventional study	11	Adults	28-44	36±2
Montini	Nephrology field	2000	Interventional study	5	Pediatrics	9.0-14	
Moran	Nephrology field	2003	Observational study	10	Adults		
Moriya	Nephrology field	2012	Observational study	30	Adults		49±9
Morrone	Nephrology field	2003	Observational study	32	Adults		46±3
Mueller	Nephrology field	1999	Observational study	30	Pediatrics	4.0-17.0	
Myers	Other field	1991	Observational study	20	Adults		35±2
Nair	Diabetology field	1994	Interventional study	10	Adults	28-32	
Nakamura	Diabetology field	1991	Observational study	16	Adults	32-64	
Nakamura	Other field	1990	Interventional study	10	Adults		49±10
Nakamura	Other field	1989	Interventional study	20	Adults		49±10
Nakamura	Diabetology field	1993	Interventional study	6	Adults		43±5
Navarro-Diaz	Nephrology field	2006	Interventional study	61	Adults		41±9
Nelson	Diabetology field	1999	Observational study	26	Adults		
Neto	Nephrology field	2009	Interventional study	140	Adults	18-60	
New	Diabetology field	1998	Interventional study	29	Adults	27-70	52 ± 11
Ng	Other field	2014	Observational study	367	Adults	44-57	50
Nielsen	Diabetology field	2001	Interventional study	9	Adults		30±7
Nistrup							
holmegaard	Other field	2006	Observational study	22	Adults	36-85	
Nordgren	Other field	1994	Observational study	55	Mixte	13-21	18±2
Norgaard	Other field	1991	Interventional study	6	Adults	21-30	
Novikova	Other field	2012	Observational study	86	Adults	35-69	54
Nowack	Nephrology field	1992	Observational study	16	Adults	45-66	
Nyberg	Nephrology field	1994	Observational study	58	Pediatrics	0.5-16	8±2
Odutola	Other field	1997	Observational study	84	Mixte	15-46	
Ohashi	Other field	2001	Observational study	25	Adults	52±10	
Okada	Other field	2014	Observational study	205382	Adults	40-74	
Okada	Nephrology field	2012	Observational study	5003	Adults	35-69	
Okada	Nephrology field	2012	Observational study	99140	Adults	20-89	
Oterdoom	Nephrology field	2007	Observational study	2902	Adults	28-75	48±12

Paiva	Diabetology field	2003	Observational study	86	Adults	65±7
Palatini	Nephrology field	2006	Observational study	502	Adults	37±7
Palatini	Nephrology field	2005	Observational study	976	Adults	35±9
Palatini	Nephrology field	2009	Observational study	101	Adults	33±9
Palatini	Nephrology field	2012	Observational study	1106	Adults	34±8
Palatini	Nephrology field	2013	Observational study	534	Adults	34±8
Palmisano	Diabetology field	1989	Observational study	72	Adults	62 ± 8
Park	Other field	2013	Observational study	34769	Adults	47±10
Pecis	Diabetology field	1997	Observational study	58	Adults	18-54
Pecis	Diabetology field	1994	Interventional study	15	Adults	25±5
Pecly	Other field	2006	Interventional study	23	Adults	51±3
Pedersen	Diabetology field	1991	Interventional study	20	Adults	46±3
Perelstein	Other field	1990	Interventional study	17	Pediatrics	10±2
Perkins	Nephrology field	2012	Interventional study	20	Pediatrics	15±3
Pham	Diabetology field	2012	Observational study	550	Adults	58±11
Piepsz	Other field	2006	Observational study	unclear	Pediatrics	2.0-16
Pinho-Silveiro	Diabetology field	1996	Observational study	64	Adults	43-67
Pinto-Sietsman	Nephrology field	2000	Observational study	7728	Adults	28-75
Pistrosch	Diabetology field	2005	Interventional study	19	Adults	49-70
Ponder	Diabetology field	1990	Observational study	220	Pediatrics	7.0-18.0
Pematane	Diabetology field	2005	Observational study	662	Adults	40-70
Prestidge	Nephrology field	2011	Observational study	63	Mixte	2.0-19
Pruijm	Nephrology field	2010	Observational study	363	Adults	37-63
Quinn	Other field	2011	Observational study	216	Mixte	6.0-75
Raes	Nephrology field	2007	Observational study	51	Pediatrics	8±4
Rajic	Nephrology field	2007	Observational study	53	Adults	49±13
Regolisti	Other field	1992	Observational study	14	Adults	37-55
Reitsma-Bierens	Nephrology field	1992	Observational study	23	Mixte	2.00-22
Ribstein	Nephrology field	1995	Observational study	80	Adults	19-59
Ribstein	Nephrology field	2005	Interventional study	25	Adults	33-66
Rigalleau	Nephrology field	2007	Observational study	63	Adults	49±2
Rius	Nephrology field	1995	Observational study	121	Adults	28-70
Rodriguez-Iturbe	Other field	1985	Observational study	79	Mixte	17-60
Rodriguez-Iturbe	Other field	1988	Interventional study	37	Mixte	18-32
Roels	Other field	1994	Interventional study	76	Adults	29-56

Rota	Nephrology field	1993	Observational study	22	Adults		
Rudberg	Nephrology field	1992	Observational study	64	Mixte	12.0-22.0	17±0.5
Rudberg	Nephrology field	1997	Observational study	15	Mixte	15.0-23.0	18.6
Ruggenenti	Diabetology field	2003	Interventional study	11	Adults	42-72	59
Ruggenenti	Diabetology field	2012	Observational study	600	Adults		61±8
Sackmann	Diabetology field	1998	Interventional study	33	Adults		40±4
Sackmann	Diabetology field	2000	Interventional study	20	Adults		45±3
Sauriasari	Nephrology field	2010	Observational study	649	Mixte	18-67	
Sawacki	Diabetology field	1988	Observational study	148	Adults		34±12
Schell	Nephrology field	2001	Observational study	23	Pediatrics	1.0-16	
Schlaich	Nephrology field	2008	Observational study	310	Adults		49±15
Schmieder	Nephrology field	1994	Observational study	88	Adults		42 ± 7
Schmieder	Nephrology field	1997	Interventional study	37	Adults		26±2
Schmieder	Other field	1990	Observational study	111	Adults		47±9
Schmitt	Nephrology field	1998	Observational study	14	Adults		27±1
Schmitz	Diabetology field	1989	Interventional study	15	Adults	51-68	
Schmitz	Other field	1989	Observational study	18	Adults		62±3
Schmitz	Other field	1990	Observational study	38	Adults	55-70	
Schou	Other field	2007	Observational study	345	Adults	34-92	
Sebekova	Other field	2009	Observational study	18	Pediatrics	5.0-18.0	
Sechi	Diabetology field	2009	Interventional study	54	Adults		53±12
Selistre	Nephrology field	2012	Observational study	52	Pediatrics	1.0-17	10 ± 4
Sellers	Diabetology field	2009	Observational study	90	Pediatrics	10.0-18	
Semplicini	Nephrology field	2002	Interventional study	32	Adults	30-67	44
Serri	Other field	1991	Interventional study	11	Adults	23-52	
Signorini	Other field	1991	Observational study	73	Adults		60±10
Silva Junior	Other field	2012	Observational study	98	Adults	19-67	
Silveiro	Diabetology field	1993	Observational study	71	Adults	32-46	
Simon	Nephrology field	1998	Interventional study	8	Adults	25-45	
Smoyer	Other field	1991	Interventional study	6	Adults		
Sochett	Nephrology field	2006	Interventional study	22	Pediatrics		15±2
Soldo	Other field	1997	Observational study	190	Mixte	18-84	
Solerte	Other field	1999	Interventional study	40	Adults	25-55	
Soper	Nephrology field	1998	Observational study	75	Adults	18-42	
Steinke	Diabetology field	2005	Observational study	170	Mixte		17±6

Stephenson	Nephrology field	2005	Interventional study	12	Adults		30±2
Sterner	Diabetology field	1997	Observational study	56	Adults	25-67	
Strzelecka-Lichota	Other field	2004	Observational study	31	Mixte		13±6
Stuveling	Nephrology field	2003	Observational study	7317	Adults		52±13
Taniwaki	Nephrology field	2000	Observational study	85	Adults	30-76	58±10
ter Wee	Nephrology field	1987	Interventional study	16	Adults	20-51	31
Ter Wee	Other field	1990	Observational study	20	Adults	22-72	
Thomas	Nephrology field	1994	Interventional study	8	Adults		
Thomas	Nephrology field	2004	Observational study	604	Adults		65±0.5
Thompson	Other field	2007	Observational study	65	Adults	19-23	
Thrailkill	Diabetology field	2007	Observational study	93	Mixte		19±6
Tiengo	Diabetology field	1992	Observational study	66	Adults		52±7
Tietze	Nephrology field	1997	Interventional study	14	Adults	23-57	44
Toenshoff	Nephrology field	1993	Interventional study	10	Adults	22-27	
Tomaszewski	Nephrology field	2007	Observational study	1572	Mixte		18.4±1.3
Torbjornsdotter	Diabetology field	2004	Observational study	40	Mixte		18±3
Tsai	Other field	2014	Observational study	3743	Adults	32-40	
Tuttle	Nephrology field	2002	Interventional study	12	Mixte	18-44	27±7
Tuttle	Nephrology field	1992	Interventional study	12	Adults		38±14
Uemasu	Nephrology field	1989	Interventional study	19	Adults	25-36	
Uemasu	Nephrology field	1991	Interventional study	7	Adults	22-36	
Unuigbe	Other field	2005	Observational study	90	Adults		53 ± 11
Valensi	Other field	1996	Observational study	207	Adults		40 ± 13
Vanrenterghem	Nephrology field	1988	Interventional study	6	Adults	22-38	
Vasavda	Other field	2012	Observational study	40	Adults		27±9
Vasovic	Other field	2005	Observational study	27	Adults		
Vedder	Other field	2007	Observational study	71	Mixte	16-73	
Vedel	Diabetology field	1996	Observational study	197	Adults		58 ± 6
Veldman	Diabetology field	2005	Observational study	92	Adults		29±7
Vervoort	Other field	2005	Observational study	54	Adults		28±7
Viberti	Diabetology field	1989	Observational study	19	Adults	20-46	
Vora	Nephrology field	1992	Observational study	110	Adults		53±10
Ware	Other field	2010	Observational study	176	Pediatrics	1.0-2.0	
Weaver	Other field	2003	Observational study	803	Mixte	18-65	

Weaver	Other field	2011	Observational study	712	Adults	24-71	
Widstam-Attrops	Nephrology field	1992	Observational study	110	Mixte	6.0-25	
Wiesmair	Nephrology field	2005	Observational study	45	Pediatrics	0.5-18.0	
Wigfall	Other field	2000	Observational study	442	Mixte	2.0-21	
Williams	Diabetology field	2006	Interventional study	6	Adults	19-24	
Wirta	Nephrology field	1996	Observational study	109	Adults	56±7	
Wiseman	Nephrology field	1984	Observational study	78	Mixte	16-59	
Wiseman	Diabetology field	1985	Observational study	22	Mixte	16-50	30±12
Wiseman	Nephrology field	1987	Observational study	34	Mixte	18-61	
Woitas	Other field	1997	Interventional study	12	Adults	37±5	
Wolfsdorf	Other field	1999	Observational study	11	Mixte	5.0-21	
Wollesen	Nephrology field	1999	Observational study	80	Adults	41-69	
Wong	Other field	1993	Observational study	38	Adults	34-70	
Wong	Other field	1993	Interventional study	12	Adults	35-69	
Wong	Nephrology field	2004	Observational study	18	Pediatrics	10±6	
Wong	Other field	1996	Interventional study	7	Adults	42-70	
Woo	Other field	2005	Interventional study	12	Adults	62-83	
Wu	Nephrology field	2011	Observational study	130	Adults	50±13	
Wu	Other field	2011	Observational study	576	Adults	51 ± 16	
Wuerzner	Nephrology field	2010	Observational study	301	Adults	36-55	
Yamada	Diabetology field	1995	Interventional study	23	Adults	46±5	
Yang	Other field	2013	Observational study	76	Adults	23±1	
Yang	Diabetology field	2014	Interventional study	58	Mixte	24±6	
Yip	Diabetology field	1996	Observational study	50	Mixte	17-49	
Zerbini	Diabetology field	2006	Observational study	146	Mixte	17±4	
Ziyadeh	Nephrology field	2012	Observational study	50	Mixte	8.0-63	28
Zoccali	Nephrology field	1991	Observational study	68	Adults	37-49	
Zuccala	Nephrology field	1989	Interventional study	35	Mixte	14-59	

**Main findings of included studies (in alphabetical order) (continued)**

First Author	Context	GFR Evaluation	Hyperfiltration CUTOFF Value
Abouchacra	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Agaba	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	125.00
Agarwal	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	120.00
Aloni	Other	Formulas	140
Alvarez	Other	Isotopes / Iohexol / Thiosulfate	135.00
Amin	Diabetes/obesity/metabolic syndrome	Inulin Clearance	125.00
Amin	Other	Isotopes / Iohexol / Thiosulfate	141.00
Apakkan Aksun	Diabetes/obesity/metabolic syndrome	Formulas	140.00
Arlet	Other	Isotopes / Iohexol / Thiosulfate	110.00
Arnello	Other	Isotopes / Iohexol / Thiosulfate	140
Arutiunov	Other	Creatinine Clearance	
Askenazi	Other	Formulas	150.00
Attila	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130.00
Aygun	Other	Isotopes / Iohexol / Thiosulfate	
Aygun	Other	Isotopes / Iohexol / Thiosulfate	124.00
Azevedo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Azevedo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Azevedo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Azevedo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.70
Azevedo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Azevedo	Renal reserve	Isotopes / Iohexol / Thiosulfate	136.8
Bacci	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Bach	Renal reserve	Inulin Clearance	
Baker	Other	Creatinine Clearance	120.00
Banerjee	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120.00
Bankir	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Barai	Renal reserve	Isotopes / Iohexol / Thiosulfate	
Barba	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Beasley	Other	Formulas	
Becker-Cohen	Other	Formulas	175.00
Belsha	Other	Creatinine Clearance	120.00
Berg	Diabetes/obesity/metabolic syndrome	Inulin Clearance	

Bergamaschi	Renal reserve	Creatinine Clearance
Bjorck	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Bjornstad	Diabetes/obesity/metabolic syndrome	Formulas
Bjornstad	Diabetes/obesity/metabolic syndrome	Formulas
Blankestijn	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Bodas	Other	Formulas
Boehler	Renal reserve	Inulin Clearance
Boehler	Other	Inulin Clearance
Boertien	Diabetes/obesity/metabolic syndrome	Formulas
Bognetti	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Bolarinwa	Other	Formulas
Bouhanick	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Bouhanick	Diabetes/obesity/metabolic syndrome	Formulas
Bruce	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Bulum	Diabetes/obesity/metabolic syndrome	Formulas
Cachat	Other	Inulin Clearance
Caramori	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Caramori	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Carr	Diabetes/obesity/metabolic syndrome	Formulas
Carvalho-Braga	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Catena	Other	Creatinine Clearance
Chagnac	Renal reserve	Creatinine Clearance
Chagnac	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Chagnac	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Chagnac	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Chaiken	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate
Chandar	Other	Formulas
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance

Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Cherney	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Chiarelli	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Chiarelli	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Chowta	Diabetes/obesity/metabolic syndrome	Formulas	
Christiansen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Ciavarella	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	148.00
Claris-Appiani	Renal reserve	Inulin Clearance	
Claris-Appiani	Renal reserve	Inulin Clearance	
Claris-Appiani	Renal reserve	Inulin Clearance	
Claris-Appiani	Renal reserve	Inulin Clearance	
Claris-Appiani	Renal reserve	Inulin Clearance	
Claus	Other	Creatinine Clearance	130
Coppo	Renal reserve	Inulin Clearance	
Cotroneo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Cottiero	Other	Isotopes / Iohexol / Thiosulfate	130.00
Dahl-Jorgensen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	131
Dahlquist	Diabetes/obesity/metabolic syndrome	Inulin Clearance	125.00
Day	Other	Formulas	140.00
De Carvalho	Diabetes/obesity/metabolic syndrome	Formulas	140.00
De Faria	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
De Paula	Other	Creatinine Clearance	140
De Santo	Renal reserve	Inulin Clearance	
De Santo	Other	Inulin Clearance	
De Santo	Renal reserve	Inulin Clearance	
De Santo	Renal reserve	Inulin Clearance	
De Santo	Renal reserve	Inulin Clearance	
De Santo	Renal reserve	Inulin Clearance	
Delles	Other	Inulin Clearance	
Dell'Omo	Other	Inulin Clearance	
Dengel	Other	Isotopes / Iohexol / Thiosulfate	

Dhaene	Renal reserve	Creatinine Clearance	
Dimitrakov	Other	Creatinine Clearance	
Ditzel	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	150.00
Dmitrova	Other	Formulas	140
Drummond	Diabetes/obesity/metabolic syndrome	Inulin Clearance	145.00
Drummond	Diabetes/obesity/metabolic syndrome	Inulin Clearance	130.00
Du Cailar	Other	Isotopes / Iohexol / Thiosulfate	
Ducic	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135
Dullaart	Other	Isotopes / Iohexol / Thiosulfate	123.00
Dura	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	140
Eisenhauer	Renal reserve	Inulin Clearance	
Ekberg	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Ekberg	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Ekberg	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Erben	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	132
Erley	Other	Inulin Clearance	
Ezequiel	Diabetes/obesity/metabolic syndrome	Formulas	
Felip	Renal reserve	Inulin Clearance	
Ficociello	Diabetes/obesity/metabolic syndrome	Formulas	134.00
Fioretto	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Fliser	Renal reserve	Inulin Clearance	
Fontseré	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Fontseré	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Francischetti	Other	Creatinine Clearance	
Frankfurt	Other	Formulas	
Friedman	Renal reserve	Isotopes / Iohexol / Thiosulfate	
Friedman	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120
Fu	Diabetes/obesity/metabolic syndrome	Formulas	139.00
Fu	Diabetes/obesity/metabolic syndrome	Formulas	139.00
Fuster-Lluch	Other	Creatinine Clearance	
Futrakul	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Gerchman	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Gorsnostaeva	Diabetes/obesity/metabolic syndrome	Formulas	110
Gragnoli	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	139.00
Greene	Other	Inulin Clearance	

Groop	Diabetes/obesity/metabolic syndrome	Formulas	
Guasch	Other	Inulin Clearance	
Guizar	Renal reserve	Isotopes / Iohexol / Thiosulfate	140.00
Gumus	Other	Formulas	
Hadj-Aissa	Renal reserve	Inulin Clearance	
Haneda	Diabetes/obesity/metabolic syndrome	Inulin Clearance	150
Hansen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Hansen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Har	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135.00
Harrap	Other	Inulin Clearance	
Harvey	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	132.00
Haymann	Other	Formulas	130.00
Heering	Renal reserve	Inulin Clearance	
Heering	Other	Inulin Clearance	
Helal	Other	Creatinine Clearance	140.00
Hellerstein	Renal reserve	Formulas	
Hernandez-Marco	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	150.00
Herrera	Renal reserve	Inulin Clearance	
Hiragushi	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Hjorth	Other	Isotopes / Iohexol / Thiosulfate	175.00
Hladunewich	Other	Inulin Clearance	
Hoang	Other	Inulin Clearance	
Hohenstein	Diabetes/obesity/metabolic syndrome	Formulas	140.00
Hou	Diabetes/obesity/metabolic syndrome	Formulas	125.00
Houlihan	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Huttunen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Ishida	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Ishizaka	Other	Formulas	90.70
Jacobs	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	129.00
Jacobs	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Janssen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130.00
Javor	Other	Creatinine Clearance	125.00
Jenkins	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Jesudason	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120
Jin	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	

Jones	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Jones	Diabetes/obesity/metabolic syndrome	Inulin Clearance	129.00
Juhl	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	125.00
Juraschek	Renal reserve	Formulas	
Kalk	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Kalk	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	150.00
Kandasamy	Other	Formulas	
Keller	Diabetes/obesity/metabolic syndrome	Inulin Clearance	131.00
Khalil	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Kimura	Other	Creatinine Clearance	
Kinebuchi	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
King	Other	Formulas	165.00
Klein	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Koetje	Other	Inulin Clearance	
Korpachev	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Kotchen	Other	Inulin Clearance	
Kralickova	Other	Formulas	
Krikken	Other	Isotopes / Iohexol / Thiosulfate	
Krishna	Renal reserve	Inulin Clearance	
Kubo	Other	Formulas	
Kumar	Other	Formulas	120.00
Laborde	Diabetes/obesity/metabolic syndrome	Inulin Clearance	160.00
Lafayette	Other	Inulin Clearance	
Lafayette	Other	Inulin Clearance	
Lalau	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Lebovitz	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Lee	Other	Isotopes / Iohexol / Thiosulfate	
Lee	Other	Inulin Clearance	
Lee	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Lemley	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Lemley	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Lervang	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Lervang	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Levitt	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Levy-Marchal	Diabetes/obesity/metabolic syndrome	Inulin Clearance	160.00

Linne	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Losito	Other	Creatinine Clearance	
Losito	Renal reserve	Creatinine Clearance	
Luaces	Diabetes/obesity/metabolic syndrome	Formulas	120.00
Luik	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Luippold	Renal reserve	Inulin Clearance	
Maeda	Other	Formulas	117.00
Magri	Diabetes/obesity/metabolic syndrome	Formulas	120.00
Malaki	Other	Formulas	130.00
Mallamaci	Other	Creatinine Clearance	
Mammen	Other	Isotopes / Iohexol / Thiosulfate	150.00
Mansy	Renal reserve	Isotopes / Iohexol / Thiosulfate	
Manto	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Marcovecchio	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Marouf	Other	Formulas	140.00
Marre	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Martens	Other	Isotopes / Iohexol / Thiosulfate	145.00
Marzano	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	138.00
Matteucci	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Mauer	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130.00
McCarville	Other	Isotopes / Iohexol / Thiosulfate	120
McPherson Yee	Other	Formulas	
Meeme	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	130.00
Melis	Other	Creatinine Clearance	
Melsom	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Melsom	Other	Isotopes / Iohexol / Thiosulfate	
Miller	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Miltenyi	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Mimran	Other	Isotopes / Iohexol / Thiosulfate	
Mizuiri	Renal reserve	Inulin Clearance	
Mocan	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	137.00
Mogensen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Mogensen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Mogensen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	150.00
Monami	Diabetes/obesity/metabolic syndrome	Formulas	102.50

Monster	Other	Creatinine Clearance	
Montanari	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Montini	Renal reserve	Inulin Clearance	
Moran	Other	Inulin Clearance	
Moriya	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Morrone	Renal reserve	Inulin Clearance	
Mueller	Other	Creatinine Clearance	
Myers	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Nair	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Nakamura	Renal reserve	Creatinine Clearance	
Nakamura	Renal reserve	Creatinine Clearance	
Nakamura	Renal reserve	Creatinine Clearance	
Nakamura	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Navarro-Diaz	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	140.00
Nelson	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Neto	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	140.00
New	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00
Ng	Other	Isotopes / Iohexol / Thiosulfate	
Nielsen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Nistrup			
holmegaard	Other	Creatinine Clearance	150.00
Nordgren	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	145.00
Norgaard	Renal reserve	Isotopes / Iohexol / Thiosulfate	
Novikova	Diabetes/obesity/metabolic syndrome	Formulas	110
Nowack	Diabetes/obesity/metabolic syndrome	Inulin Clearance	140.00
Nyberg	Other	Inulin Clearance	
Odutola	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	125.00
Ohashi	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	140
Okada	Diabetes/obesity/metabolic syndrome	Formulas	114
Okada	Other	Formulas	103.00
Okada	Diabetes/obesity/metabolic syndrome	Formulas	117.00
Oterdoom	Other	Creatinine Clearance	
Paiva	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Palatini	Other	Creatinine Clearance	150.00
Palatini	Other	Creatinine Clearance	140.00

Palatini	Other	Creatinine Clearance	
Palatini	Other	Creatinine Clearance	150.00
Palatini	Other	Creatinine Clearance	150
Palmisano	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140
Park	Other	Formulas	122.00
Pecis	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Pecis	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	134.00
Pecly	Renal reserve	Inulin Clearance	
Pedersen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Perelstein	Other	Creatinine Clearance	
Perkins	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135.00
Pham	Diabetes/obesity/metabolic syndrome	Formulas	
Piepsz	Other	Isotopes / Iohexol / Thiosulfate	135.00
Pinho-Silveiro	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	137
Pinto-Sietsman	Other	Formulas	
Pistrosch	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Ponder	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	140.2
Pematane	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130.00
Prestidge	Other	Isotopes / Iohexol / Thiosulfate	145.00
Prujm	Diabetes/obesity/metabolic syndrome	Inulin Clearance	140.00
Quinn	Other	Creatinine Clearance	187.00
Raes	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Rajic	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	137.00
Regolisti	Other	Isotopes / Iohexol / Thiosulfate	
Reitsma-Bierens	Other	Isotopes / Iohexol / Thiosulfate	145.00
Ribstein	Other	Isotopes / Iohexol / Thiosulfate	140.00
Ribstein	Other	Isotopes / Iohexol / Thiosulfate	
Rigalleau	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130.00
Rius	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	157.00
Rodriguez-Iturbe	Renal reserve	Creatinine Clearance	
Rodriguez-Iturbe	Renal reserve	Inulin Clearance	
Roels	Renal reserve	Creatinine Clearance	
Rota	Diabetes/obesity/metabolic syndrome	Inulin Clearance	150.00
Rudberg	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	125.00
Rudberg	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	125.00

Ruggenenti	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Ruggenenti	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120.00
Sackmann	Diabetes/obesity/metabolic syndrome	Inulin Clearance	140.00
Sackmann	Diabetes/obesity/metabolic syndrome	Inulin Clearance	
Sauriasari	Other	Creatinine Clearance	96.70
Sawacki	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	140
Schell	Other	Inulin Clearance	170.00
Schlach	Other	Inulin Clearance	
Schmieder	Other	Creatinine Clearance	
Schmieder	Other	Inulin Clearance	
Schmieder	Other	Creatinine Clearance	130.00
Schmitt	Other	Inulin Clearance	
Schmitz	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Schmitz	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Schmitz	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Schou	Other	Formulas	
Sebekova	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	
Sechi	Other	Creatinine Clearance	
Selistre	Other	Inulin Clearance	135.00
Sellers	Diabetes/obesity/metabolic syndrome	Formulas	140.00
Semplicini	Other	Inulin Clearance	
Serri	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	133.00
Signorini	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Silva Junior	Other	Formulas	120.00
Silveiro	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	137.10
Simon	Renal reserve	Inulin Clearance	
Smoyer	Renal reserve	Inulin Clearance	
Sochett	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135.00
Soldo	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	130
Solerte	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Soper	Diabetes/obesity/metabolic syndrome	Inulin Clearance	145.00
Steinke	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130
Stephenson	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120.00
Sterner	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120.00
Strzelecka-	Other	Creatinine Clearance	150

Lichota				
Stuveling	Other	Creatinine Clearance		
Taniwaki	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate		
ter Wee	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	130.00	
Ter Wee	Renal reserve	Isotopes / Iohexol / Thiosulfate		
Thomas	Other	Isotopes / Iohexol / Thiosulfate		
Thomas	Diabetes/obesity/metabolic syndrome	Formulas	130.00	
Thompson	Other	Isotopes / Iohexol / Thiosulfate		
Thrailkill	Diabetes/obesity/metabolic syndrome	Formulas	130.00	
Tiengo	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00	
Tietze	Renal reserve	Isotopes / Iohexol / Thiosulfate		
Toenshoff	Diabetes/obesity/metabolic syndrome	Inulin Clearance		
Tomaszewski	Diabetes/obesity/metabolic syndrome	Formulas		
Torbjornsdotter	Diabetes/obesity/metabolic syndrome	Inulin Clearance		
Tsai	Diabetes/obesity/metabolic syndrome	Formulas		
Tuttle	Diabetes/obesity/metabolic syndrome	Inulin Clearance		
Tuttle	Diabetes/obesity/metabolic syndrome	Formulas	127.00	
Uemasu	Renal reserve	Inulin Clearance		
Uemasu	Renal reserve	Creatinine Clearance		
Unuigbe	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	125.00	
Valensi	Diabetes/obesity/metabolic syndrome	Creatinine Clearance		
Vanrenterghem	Renal reserve	Inulin Clearance		
Vasavda	Other	Formulas	140.00	
Vasovic	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	125	
Vedder	Other	Creatinine Clearance	125.00	
Vedel	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	140.00	
Veldman	Diabetes/obesity/metabolic syndrome	Inulin Clearance	150.00	
Vervoort	Diabetes/obesity/metabolic syndrome	Inulin Clearance	130.00	
Viberti	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135.00	
Vora	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120.00	
Ware	Other	Isotopes / Iohexol / Thiosulfate	120	
Weaver	Other	Creatinine Clearance		
Weaver	Other	Formulas		
Widstam-Attrops	Diabetes/obesity/metabolic syndrome	Inulin Clearance	125.00	
Wiesmayr	Other	Formulas	80.00	

Wigfall	Other	Formulas	120.00
Williams	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	120.00
Wirta	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	129.00
Wiseman	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Wiseman	Other	Isotopes / Iohexol / Thiosulfate	135.00
Wiseman	Other	Isotopes / Iohexol / Thiosulfate	
Woitas	Other	Inulin Clearance	
Wolfsdorf	Other	Creatinine Clearance	140.00
Wollesen	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Wong	Other	Inulin Clearance	
Wong	Other	Inulin Clearance	
Wong	Other	Isotopes / Iohexol / Thiosulfate	
Wong	Other	Inulin Clearance	
Woo	Other	Formulas	150.00
Wu	Other	Formulas	
Wu	Other	Formulas	111.50
Wuerzner	Diabetes/obesity/metabolic syndrome	Inulin Clearance	140.00
Yamada	Diabetes/obesity/metabolic syndrome	Creatinine Clearance	150.00
Yang	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Yang	Diabetes/obesity/metabolic syndrome	Inulin Clearance	135
Yip	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	135.00
Zerbini	Diabetes/obesity/metabolic syndrome	Isotopes / Iohexol / Thiosulfate	
Ziyadeh	Other	Formulas	134.00
Zoccali	Other	Creatinine Clearance	150.00
Zuccala	Other	Creatinine Clearance	

## **Online supplementary material 6**

### **Summary of bibliographic findings**

#### **Retrieved papers from the 3 databases no selection**

A list of the 2013 retrieved articles from the 3 databases is available upon request to the corresponding author.

#### **Selected reference for full text reading after title and abstract reading**

A list of the 694 selected articles for full text reading is available upon request to the corresponding author.

#### **Complete references of selected studies final selection after full text reading**

1. Abouchacra S, Chaaban A, Gebran N, Hussein Q, Ahmed M, Bernieh B, et al. GFR estimation in the morbidly obese pre- and postbariatric surgery: one size does not fit all. International urology and nephrology. 2013;45(1):157-62.
2. Agaba EI, Agaba PA, Puepet FA, Achinge G. Pattern of glomerular filtration rate abnormalities in type 2 diabetes mellitus in Jos, Nigeria. The Nigerian postgraduate medical journal. 2004;11(4):262-4.
3. Agrawal V, Liu XJ, Lagoy A, Discenza I, Romanelli J, Silva JE, et al. Effect of protein intake on amelioration of glomerular hyperfiltration in morbidly obese adults after Roux-en-Y gastric bypass surgery. American Journal of Kidney Diseases. 2011;57(4):A18.
4. Aloni MN, Ngiyulu RM, Gini-Ehungu JL, Nsibu CN, Ekila MB, Lepira FB, et al. Renal function in children suffering from sickle cell disease: challenge of early detection in highly resource-scarce settings. PloS one. 2014;9(5):e96561.
5. Alvarez O, Miller ST, Wang WC, Luo Z, McCarville MB, Schwartz GJ, et al. Effect of hydroxyurea treatment on renal function parameters: results from the multi-center placebo-controlled BABY HUG clinical trial for infants with sickle cell anemia. Pediatric blood & cancer. 2012;59(4):668-74.
6. Amin A, El-Sayed S, Taher N, Sedki M, Nasr H. Tc-99m diethylenetriamine pentaacetic acid (DTPA) renal function reserve estimation: is it a reliable predictive tool for assessment of preclinical renal involvement in scleroderma patients? Clinical rheumatology. 2012;31(6):961-6.
7. Amin R, Turner C, van Aken S, Bahu TK, Watts A, Lindsell DR, et al. The relationship between microalbuminuria and glomerular filtration rate in young type 1 diabetic subjects: The Oxford Regional Prospective Study. Kidney Int. 2005;68(4):1740-9.
8. Apakkan Aksun S, Ozmen B, Ozmen D, Parildar Z, Senol B, Habif S, et al. Serum and urinary nitric oxide in Type 2 diabetes with or without microalbuminuria: Relation to glomerular hyperfiltration. Journal of diabetes and its complications. 2003;17(6):343-8.
9. Appiani AC, Assael BM, Tirelli AS, Cavanna G, Marra G. Sodium excretion and hyperfiltration during glucose infusion in man. Am J Nephrol. 1990;10(2):103-8.
10. Arlet JB, Ribeil JA, Chatellier G, Eladari D, De Seigneux S, Souberbielle JC, et al. Determination of the best method to estimate glomerular filtration rate from serum creatinine in adult patients with sickle cell disease: A prospective observational cohort study. BMC Nephrology. 2012;13(1).
11. Arnello F, Ham HR, Tondeur M, Piepsz A. Overall and single-kidney clearance in children with urinary tract infection and damaged kidneys. Journal of nuclear medicine : official publication, Society of Nuclear Medicine. 1999;40(1):52-5.
12. Arutiunov GP, Oganezova LG. [Hyperfiltration in hypertensive patients: results of epidemiological studies]. Terapevticheskii arkhiv. 2009;81(8):24-30.

13. Askenazi DJ, Feig DI, Graham NM, Hui-Stickle S, Goldstein SL. 3-5 year longitudinal follow-up of pediatric patients after acute renal failure. *Kidney Int.* 2006;69(1):184-9.
14. Aygun B, Mortier NA, Smeltzer MP, Hankins JS, Ware RE. Glomerular hyperfiltration and albuminuria in children with sickle cell anemia. *Pediatric Nephrology*. 2011;26(8):1285-90.
15. Aygun B, Mortier NA, Smeltzer MP, Shulkin BL, Hankins JS, Ware RE. Hydroxyurea treatment decreases glomerular hyperfiltration in children with sickle cell anemia. *American journal of hematology*. 2013;88(2):116-9.
16. Azevedo MJ, Gross JL. Systolic hypertension in IDDM patients with hyperfiltration and normal albumin excretion rates. *Diabetes Care*. 1990;13(4):452-3.
17. Azevedo MJ, Gross JL. Follow-up of glomerular hyperfiltration in normoalbuminuric Type 1 (insulin-dependent) diabetic patients. *Diabetologia*. 1991;34(8):611.
18. Azevedo MJ, Pinotti AF, Gross JL, Stumpf AG, Ribeiro JP. Preserved left ventricular systolic and diastolic function in normoalbuminuric insulin-dependent diabetic patients with glomerular hyperfiltration. *Diabetes research and clinical practice*. 1994;25(2):103-10.
19. Bacci S, De Cosmo S, Garruba M, Placentino G, Liuzzi A, Barbano F, et al. Role of insulin-like growth factor (IGF)-1 in the modulation of renal haemodynamics in Type I diabetic patients. *Diabetologia*. 2000;43(7):922-6.
20. Bach D, Mrowka H, Schauseil S, Grabensee B. Renal functional reserve in patients with IgA glomerulopathy. *Renal failure*. 1994;16(5):617-27.
21. Baker L, Dahlem S, Goldfarb S, Kern EF, Stanley CA, Egler J, et al. Hyperfiltration and renal disease in glycogen storage disease, type I. *Kidney Int*. 1989;35(6):1345-50.
22. Banerjee S, Ghosh US, Saha SJ. Role of GFR estimation in assessment of the status of nephropathy in type 2 diabetes mellitus. *The Journal of the Association of Physicians of India*. 2005;53:181-4.
23. Bankir L, Sellin F, Maillard M, Chiolero A, Burnier M. Influence of moderate body weight excess on the nycthemeral pattern of blood pressure, renal function and sodium and water excretion in patients with essential hypertension. *Archives des maladies du coeur et des vaisseaux*. 2004;97(7-8):777-81.
24. Barba G, Cappuccio FP, Russo L, Stinga F, Iacone R, Strazzullo P. Renal function and blood pressure response to dietary salt restriction in normotensive men. *Hypertension*. 1996;27(5):1160-4.
25. Beasley JM, Aragaki AK, LaCroix AZ, Neuhouser ML, Tinker LF, Cauley JA, et al. Higher biomarker-calibrated protein intake is not associated with impaired renal function in postmenopausal women. *The Journal of nutrition*. 2011;141(8):1502-7.
26. Becker-Cohen R, Elstein D, Abrahamov A, Algur N, Rudensky B, Hadas-Halpern I, et al. A comprehensive assessment of renal function in patients with Gaucher disease. *American Journal of Kidney Diseases*. 2005;46(5):837-44.
27. Belsha CW, Wells TG, McNiece KL, Seib PM, Plummer JK, Berry PL. Influence of diurnal blood pressure variations on target organ abnormalities in adolescents with mild essential hypertension. *American journal of hypertension*. 1998;11(4 Pt 1):410-7.
28. Berg UB, Torbjornsdotter TB, Jaremo G, Thalme B. Kidney morphological changes in relation to long-term renal function and metabolic control in adolescents with IDDM. *Diabetologia*. 1998;41(9):1047-56.
29. Bergamaschi E, Buzio C, Mutti A, Perazzoli F, Alinovi R, Negro A. Renal response to acute protein loads: hyperfiltration and proteinuria are time-related effects not influenced by the quality of ingested proteins. *Contributions to nephrology*. 1990;83:170-4.
30. Berry GT, Baynes JW, Wells-Knecht KJ, Szwergold BS, Santer R. Elements of diabetic nephropathy in a patient with GLUT2 deficiency. *Molecular genetics and metabolism*. 2005;86(4):473-7.
31. Bjorck S, Aurell M, Bresater LE, Herlitz H, Welin L, Wikstrand J. Renal sensitivity to angiotensin II in type 1 diabetes. *Scandinavian journal of urology and nephrology*. 1990;24(4):267-73.

32. Bjornstad P, McQueen RB, Snell-Bergeon JK, Cherney D, Pyle L, Perkins B, et al. Fasting Blood Glucose-A Missing Variable for GFR-Estimation in Type 1 Diabetes? *PloS one*. 2014;9(4):e96264.
33. Blankestijn PJ, Derkx FH, Birkenhager JC, Lamberts SW, Mulder P, Verschoor L, et al. Glomerular hyperfiltration in insulin-dependent diabetes mellitus is correlated with enhanced growth hormone secretion. *The Journal of clinical endocrinology and metabolism*. 1993;77(2):498-502.
34. Bodas P, Huang A, O'Riordan MA, Sedor JR, Dell KM. The prevalence of hypertension and abnormal kidney function in children with sickle cell disease -a cross sectional review. *BMC Nephrol*. 2013;14:237.
35. Boertien WE, Riphagen II, Drion I, Alkhafaf A, Bakker SJL, Groenier KH, et al. Copeptin, a surrogate marker for vasopressin, is associated with chronic kidney disease progression in patients with diabetes mellitus (ZODIAC-33). *Diabetologia*. 2012;55:S70.
36. Bognetti E, Meschi F, Bonfanti R, Gianolli L, Chiumello G. Decrease of glomerular hyperfiltration in short-term diabetic adolescents without microalbuminuria. *Diabetes Care*. 1993;16(1):120-4.
37. Bohler J, Becker A, Reetze-Bonorden P, Woitas R, Keller E, Schollmeyer P. Effect of antihypertensive drugs on glomerular hyperfiltration and renal haemodynamics. Comparison of captopril with nifedipine, metoprolol and celiprolol. *European journal of clinical pharmacology*. 1993;44 Suppl 1:S57-61.
38. Bohler J, Woitas R, Keller E, Reetze-Bonorden P, Schollmeyer PJ. Effect of nifedipine and captopril on glomerular hyperfiltration in normotensive man. *American Journal of Kidney Diseases*. 1992;20(2):132-9.
39. Bolarinwa RA, Akinlade KS, Kuti MA, Olawale OO, Akinola NO. Renal disease in adult Nigerians with sickle cell anemia: a report of prevalence, clinical features and risk factors. *Saudi journal of kidney diseases and transplantation : an official publication of the Saudi Center for Organ Transplantation, Saudi Arabia*. 2012;23(1):171-5.
40. Bouhanick B, Gallois Y, Hadjadj S, Boux de Casson F, Limal JM, Marre M. Relationship between glomerular hyperfiltration and ACE insertion/deletion polymorphism in type 1 diabetic children and adolescents. *Diabetes Care*. 1999;22(4):618-22.
41. Bouhanick B, Suraniti S, Berrut G, Bled F, Simard G, Lejeune JJ, et al. Relationship between fat intake and glomerular filtration rate in normotensive insulin-dependent diabetic patients. *Diabète et Métabolisme*. 1995;21(3):168-72.
42. Bruce R, Rutland M, Cundy T. Glomerular hyperfiltration in young Polynesians with type 2 diabetes. *Diabetes research and clinical practice*. 1994;25(3):155-60.
43. Bulum T, Kolaric B, Prkacin I, Duvnjak L. Hyperfiltration in normoalbuminuric type 1 diabetic patients: Relationship with urinary albumin excretion rate. *Collegium antropologicum*. 2013;37(2):471-6.
44. Cachat F, Combescure C, Chehade H, Zeier G, Mosig D, Meyrat B, et al. Microalbuminuria and hyperfiltration in subjects with nephro-urological disorders. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2013;28(2):386-91.
45. Carr S, Mbanya JC, Thomas T, Keavey P, Taylor R, Alberti KG, et al. Increase in glomerular filtration rate in patients with insulin-dependent diabetes and elevated erythrocyte sodium-lithium countertransport. *The New England journal of medicine*. 1990;322(8):500-5.
46. Carvalho-Braga D, Almeida R, Azevedo M, Amaral I, Medina J, Hargreaves M. Glomerular hyperfiltration in insulin-dependent diabetes mellitus: no evidence for enhanced activity of the renin-angiotensin-aldosterone system. *The Journal of diabetic complications*. 1991;5(2-3):126-7.
47. Catena C, Colussi G, Nadalini E, Chiuchi A, Baroselli S, Lapenna R, et al. Relationships of plasma renin levels with renal function in patients with primary aldosteronism. *Clinical journal of the American Society of Nephrology : CJASN*. 2007;2(4):722-31.
48. Chagnac A, Gaftier U, Zevin D, Hirsch Y, Markovitz I, Levi J. Enalapril attenuates glomerular hyperfiltration following a meat meal. *Nephron*. 1989;51(4):466-9.

49. Chagnac A, Herman M, Zingerman B, Erman A, Rozen-Zvi B, Hirsh J, et al. Obesity-induced glomerular hyperfiltration: Its involvement in the pathogenesis of tubular sodium reabsorption. *Nephrology Dialysis Transplantation*. 2008;23(12):3946-52.
50. Chagnac A, Weinstein T, Herman M, Hirsh J, Gafter U, Ori Y. The effects of weight loss on renal function in patients with severe obesity. *Journal of the American Society of Nephrology*. 2003;14(6):1480-6.
51. Chaiken RL, Eckert-Norton M, Bard M, Banerji MA, Palmisano J, Sachimechi I, et al. Hyperfiltration in African-American patients with type 2 diabetes. Cross-sectional and longitudinal data. *Diabetes Care*. 1998;21(12):2129-34.
52. Chandar J, Abitbol C, Montane B, Zilleruelo G. Angiotensin blockade as sole treatment for proteinuric kidney disease in children. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2007;22(5):1332-7.
53. Cherney DZ, Miller JA, Scholey JW, Bradley TJ, Slorach C, Curtis JR, et al. The effect of cyclooxygenase-2 inhibition on renal hemodynamic function in humans with type 1 diabetes. *Diabetes*. 2008;57(3):688-95.
54. Cherney DZ, Miller JA, Scholey JW, Nasrallah R, Hebert RL, Dekker MG, et al. Renal hyperfiltration is a determinant of endothelial function responses to cyclooxygenase 2 inhibition in type 1 diabetes. *Diabetes Care*. 2010;33(6):1344-6.
55. Cherney DZ, Perkins BA, Soleymanolou N, Maione M, Lai V, Lee A, et al. Renal hemodynamic effect of sodium-glucose cotransporter 2 inhibition in patients with type 1 diabetes mellitus. *Circulation*. 2014;129(5):587-97.
56. Cherney DZ, Reich HN, Jiang S, Har R, Nasrallah R, Hebert RL, et al. Hyperfiltration and effect of nitric oxide inhibition on renal and endothelial function in humans with uncomplicated type 1 diabetes mellitus. *American journal of physiology Regulatory, integrative and comparative physiology*. 2012;303(7):R710-8.
57. Cherney DZ, Sochett EB. Evolution of renal hyperfiltration and arterial stiffness from adolescence into early adulthood in type 1 diabetes. *Diabetes Care*. 2011;34(8):1821-6.
58. Cherney DZ, Sochett EB, Dekker MG, Perkins BA. Ability of cystatin C to detect acute changes in glomerular filtration rate provoked by hyperglycaemia in uncomplicated Type 1 diabetes. *Diabetic medicine : a journal of the British Diabetic Association*. 2010;27(12):1358-65.
59. Cherney DZ, Sochett EB, Lai V, Dekker MG, Slorach C, Scholey JW, et al. Renal hyperfiltration and arterial stiffness in humans with uncomplicated type 1 diabetes. *Diabetes Care*. 2010;33(9):2068-70.
60. Cherney DZ, Sochett EB, Miller JA. Gender differences in renal responses to hyperglycemia and angiotensin-converting enzyme inhibition in diabetes. *Kidney Int*. 2005;68(4):1722-8.
61. Chiarelli F, Cipollone F, Romano F, Tumini S, Costantini F, di Ricco L, et al. Increased circulating nitric oxide in young patients with type 1 diabetes and persistent microalbuminuria: relation to glomerular hyperfiltration. *Diabetes*. 2000;49(7):1258-63.
62. Chiarelli F, Verrotti A, Morgese G. Glomerular hyperfiltration increases the risk of developing microalbuminuria in diabetic children. *Pediatric Nephrology*. 1995;9(2):154-8.
63. Chowta MN, Adhikari PM, Chowta NK, Shenoy AK, D'Souza S. Serum C peptide level and renal function in diabetes mellitus. *Indian journal of nephrology*. 2010;20(1):25-8.
64. Christiansen EH, Molgaard H, Christensen PD, Sorensen KE, Christensen CK, Mogensen CE. Increased left ventricular systolic function in insulin dependent diabetic patients with normal albumin excretion. *European heart journal*. 1998;19(11):1735-9.
65. Ciavarella A, Galuppi V, Forlani G, Vannini P. The prevalence of glomerular hyperfiltration in type 1 (insulin-dependent) diabetes mellitus. *Diabete & metabolisme*. 1988;14(1):73-4.
66. Claris-Appiani A, Assael BM, Tirelli AS, Cavanna G, Corbetta C, Marra G. Proximal tubular function and hyperfiltration during amino acid infusion in man. *American Journal of Nephrology*. 1988;8(2):96-101.
67. Claris-Appiani A, Assael BM, Tirelli AS, Marra G, Cavanna G. Lack of glomerular hemodynamic stimulation after infusion of branched-chain amino acids. *Kidney Int*. 1988;33(1):91-4.

68. Claris-Appiani A, Tirelli AS, Ardissino G, Dacco V, Moretto E, Corbetta C, et al. Hypotonic saline infusion alters the renal response to amino acids in men. *The American journal of physiology*. 1999;276(1 Pt 2):F137-42.
69. Claus BO, Hoste EA, Colpaert K, Robays H, Decruyenaere J, De Waele JJ. Augmented renal clearance is a common finding with worse clinical outcome in critically ill patients receiving antimicrobial therapy. *Journal of critical care*. 2013;28(5):695-700.
70. Coppo R, Porcellini MG, Gianoglio B, Alessi D, Peruzzi L, Amore A, et al. Glomerular permselectivity to macromolecules in reflux nephropathy: microalbuminuria during acute hyperfiltration due to aminoacid infusion. *Clin Nephrol*. 1993;40(6):299-307.
71. Cotroneo P, Manto A, Todaro L, Manto A, Jr., Pitocco D, Saponara C, et al. Hyperfiltration in patients with type I diabetes mellitus: a prevalence study. *Clin Nephrol*. 1998;50(4):214-7.
72. Cottiero RA, Madaio MP, Levey AS. Glomerular filtration rate and urinary albumin excretion rate in systemic lupus erythematosus. *Nephron*. 1995;69(2):140-6.
73. Dahl-Jorgensen K, Brinchmann-Hansen O, Hanssen KF. Effect of near normoglycaemia for two years on progression of early diabetic retinopathy, nephropathy, and neuropathy: The Oslo study. *British Medical Journal*. 1986;293(6556):1195-9.
74. Dahlquist G, Stattin EL, Rudberg S. Urinary albumin excretion rate and glomerular filtration rate in the prediction of diabetic nephropathy; A long-term follow-up study of childhood onset type-1 diabetic patients. *Nephrology Dialysis Transplantation*. 2001;16(7):1382-6.
75. Day TG, Drasar ER, Fulford T, Sharpe CC, Thein SL. Association between hemolysis and albuminuria in adults with sickle cell anemia. *Haematologica*. 2012;97(2):201-5.
76. De Azevedo MJ, Ramos OL, Gross JL. Renin-aldosterone axis in normoalbuminuric insulin-dependent diabetes mellitus patients with glomerular hyperfiltration. *Diabetes research and clinical practice*. 1995;27(3):205-10.
77. De Azevedo MJ, Ramos OL, Gross JL. Lack of effect of captopril on glomerular hyperfiltration in normoalbuminuric normotensive insulin-dependent diabetic patients. *Hormone and Metabolic Research*. 1997;29(10):516-9.
78. De Carvalho JA, Bochi GV, Sangui MB, Moresco RN. Assessment of urinary gamma-glutamyltransferase in type 2 diabetic patients with glomerular hyperfiltration. *Clinica chimica acta; international journal of clinical chemistry*. 2012;413(7-8):817-8.
79. De Faria JBL. Renal functional response to protein loading in type 1 (insulin-dependent) diabetic patients on normal or high salt intake. *Nephron*. 1997;76(4):411-7.
80. de Paula RP, Nascimento AF, Sousa SM, Bastos PR, Barbosa AA. Glomerular filtration rate is altered in children with sickle cell disease: a comparison between Hb SS and Hb SC. *Revista brasileira de hematologia e hemoterapia*. 2013;35(5):349-51.
81. De Santo NG, Anastasio P, Loguerio C, del Vecchio Blanco C, Capasso G, Coppola S, et al. Glucagon-independent renal hyperaemia and hyperfiltration after an oral protein load in Child A liver cirrhosis. *European journal of clinical investigation*. 1992;22(1):31-7.
82. De Santo NG, Anastasio P, Spitali L, Cirillo M, Santoro D, Pollastro RM, et al. The renal hemodynamic response to an oral protein load is normal in IgA nephropathy. *Nephron*. 1997;76(4):406-10.
83. De Santo NG, Calo L, Coppola S, Anastasio P, Cantaro S, Favaro S, et al. Renal prostaglandins and thromboxane A2 lack a functional significance in the genesis of protein-induced glomerular hyperfiltration in human renal disease. *Nephron*. 1993;63(1):49-53.
84. De Santo NG, Capasso G, Anastasio P, Coppola S, Bellini L, Lombardi A. Brain-gut peptides and the renal hemodynamic response to an oral protein load: a study of gastrin, bombesin, and glucagon in man. *Renal physiology and biochemistry*. 1992;15(1):53-6.

85. Delles C, Klingbeil AU, Schneider MP, Handrock R, Weidinger G, Schmieder RE. Direct Comparison of the Effects of Valsartan and Amlodipine on Renal Hemodynamics in Human Essential Hypertension. *American journal of hypertension*. 2003;16(12):1030-5.
86. Dell'Osso G, Penno G, Giorgi D, Di Bello V, Mariani M, Pedrinelli R. Association between high-normal albuminuria and risk factors for cardiovascular and renal disease in essential hypertensive men. *American journal of kidney diseases : the official journal of the National Kidney Foundation*. 2002;40(1):1-8.
87. Dengel DR, Goldberg AP, Mayuga RS, Kairis GM, Weir MR. Insulin resistance, elevated glomerular filtration fraction, and renal injury. *Hypertension*. 1996;28(1):127-32.
88. DeSanto NG, Calo L, Anastasio P, Coppola S, Cantaro S, Favaro S, et al. Renal synthesis of prostaglandins and thromboxane has no causative role for protein-induced glomerular hyperfiltration in healthy humans. *Nephron*. 1994;66(1):45-51.
89. DeSanto NG, Capasso G, Anastasio P, Coppola S, DeTommaso G, Coscarella G, et al. Renal handling of sodium after an oral protein load in adult humans. *Renal physiology and biochemistry*. 1992;15(1):41-52.
90. Dhaene M, Sabot JP, Philippart Y, Doutreleau JM, Vanherweghem JL. Effects of acute protein loads of different sources on glomerular filtration rate. *Kidney International*. 1987;32(SUPPL. 22):S-25-S-8.
91. Dimitrakov D, Kumchev E, Lyutakova E, Grigorov L. Glomerular hyperfiltration and serum beta 2-microglobulin used as early markers in diagnosis of autosomal dominant polycystic kidney disease. *Folia medica*. 1993;35(1-2):59-62.
92. Ditzel J. Glomerular hyperfiltration and blood viscosity in type I (insulin-dependent) diabetic subjects. *Diabète et Métabolisme*. 1984;10(1):7-11.
93. Dmitrova TB, Kotovskaya Iu V, Kobalava Zh D, Moiseev VS. [Possibilities of achieving target blood pressure in patients with essential hypertension in relation to renal functional status and age]. *Terapevticheskii arkhiv*. 2002;74(12):29-33.
94. Drummond K, Levy-Marchal C, Laborde K, Kindermans C, Wright C, Dechaux M, et al. Enalapril does not alter renal function in normotensive, normoalbuminuric, hyperfiltering Type 1 (insulin-dependent) diabetic children. *Diabetologia*. 1989;32(4):255-60.
95. Du Cailar G, Ribstein J, Mimran A. Glomerular hyperfiltration and left ventricular mass in mild never-treated essential hypertension. *Journal of Hypertension*. 1991;9(SUPPL. 6):S158-S9.
96. Ducic V, Grujic E. Diseases of the kidney in children and adolescents with insulin-dependent diabetes mellitus. *Acta medica Jugoslavica*. 1989;43(4):265-74.
97. Dullaart RP, Meijer S, Marbach P, Sluiter WJ. Effect of a somatostatin analogue, octreotide, on renal haemodynamics and albuminuria in acromegalic patients. *European journal of clinical investigation*. 1992;22(7):494-502.
98. Dura Trave T, Moya Benavent M, Casero Ariza J. Glomerular hyperfiltration, microalbuminuria and hypercalciuria in children with diabetes mellitus. *Endocrinología*. 1992;39(4):118-22.
99. Eisenhauer T, Jungmann E, Warneboldt D, Ansorge G, Scherberich J, Talartschik J. [Behavior of the renal functional reserve in type I diabetic patients: effect of ACE-inhibition]. *Klinische Wochenschrift*. 1990;68(15):750-7.
100. Ekberg G, Grefberg N, Larsson LO. Cigarette smoking and urinary albumin excretion in insulin-treated diabetics without manifest nephropathy. *Journal of internal medicine*. 1991;230(5):435-42.
101. Ekberg G, Grefberg N, Larsson LO, Vaara I. Cigarette smoking and glomerular filtration rate in insulin-treated diabetics without manifest nephropathy. *Journal of internal medicine*. 1990;228(3):211-7.
102. Ekberg G, Sjofors G, Grefberg N, Larsson LO, Vaara I. Protein intake and glomerular hyperfiltration in insulin-treated diabetics without manifest nephropathy. *Scandinavian journal of urology and nephrology*. 1993;27(4):441-6.
103. Erben J, Smahelova A, Skaunic V. The effect of obesity on glomerular hyperfiltration as a sign of incipient diabetic nephropathy. *Vnitri lekarstvi*. 1988;34(7):639-45.

104. Erley CM, Holzer M, Kramer BK, Risler T. Renal haemodynamics and organ damage in young hypertensive patients with different plasma renin activities after ACE inhibition. *Nephrology Dialysis Transplantation*. 1992;7(3):216-20.
105. Felip A, Bonet J, Galan A, Romero R. Response to oral protein load in diabetics with early nephropathy and patients with glomerulonephritis. *Nefrologia : publicacion oficial de la Sociedad Espanola Nefrologia*. 1998;18(1):42-8.
106. Ficociello LH, Perkins BA, Roshan B, Weinberg JM, Aschengrau A, Warram JH, et al. Renal hyperfiltration and the development of microalbuminuria in type 1 diabetes. *Diabetes Care*. 2009;32(5):889-93.
107. Fioretto P, Sambataro M, Cipollina MR, Giorato C, Carraro A, Opocher G, et al. Role of atrial natriuretic peptide in the pathogenesis of sodium retention in IDDM with and without glomerular hyperfiltration. *Diabetes*. 1992;41(8):936-45.
108. Fontserè N, Bonal J, Salinas I, de Arellano MR, Ríos J, Torres F, et al. Is the new Mayo Clinic Quadratic equation useful for the estimation of glomerular filtration rate in type 2 diabetic patients? *Diabetes Care*. 2008;31(12):2265-7.
109. Fontserè N, Salinas I, Bonal J, Bayes B, Riba J, Torres F, et al. Are prediction equations for glomerular filtration rate useful for the long-term monitoring of type 2 diabetic patients? *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2006;21(8):2152-8.
110. Francischetti EA, Barroso I, da Silva A, Fagundes VG. Effects of long-term administration of isradipine on renal hemodynamics and sodium metabolism. *Journal of cardiovascular pharmacology*. 1992;19 Suppl 3:S90-2.
111. Frankfurt JA, Duncan AF, Heyne RJ, Rosenfeld CR. Renal function and systolic blood pressure in very-low-birth-weight infants 1-3 years of age. *Pediatric nephrology (Berlin, Germany)*. 2012;27(12):2285-91.
112. Friedlander G, Blanchet-Benqué F, Nitengberg A, Laborie C, Assan R, Amiel C. Glucagon secretion is essential for aminoacid-induced hyperfiltration in man. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 1990;5(2):110-7.
113. Friedman AN, Quinney SK, Inman M, Mattar SG, Shihabi Z, Moe S. Influence of dietary protein on glomerular filtration before and after bariatric surgery: A cohort study. *American Journal of Kidney Diseases*. 2014;63(4):598-603.
114. Friedman AN, Yu Z, Julian BE, Nguyen JT, Strother M, Quinney SK, et al. Independent influence of dietary protein on markers of kidney function and disease in obesity. *Kidney International*. 2010;78(7):693-7.
115. Fu WJ, Fang YG, Deng RT, Wen S, Chen ML, Huang ZH, et al. Correlation of high urinary Smad1 level with glomerular hyperfiltration in type 2 diabetes mellitus. *Endocrine*. 2013;43(2):346-50.
116. Fu WJ, Li BL, Wang SB, Chen ML, Deng RT, Ye CQ, et al. Changes of the tubular markers in type 2 diabetes mellitus with glomerular hyperfiltration. *Diabetes research and clinical practice*. 2012;95(1):105-9.
117. Fuster-Lluch O, Geronimo-Pardo M, Peyro-Garcia R, Lizan-Garcia M. Glomerular hyperfiltration and albuminuria in critically ill patients. *Anaesthesia and intensive care*. 2008;36(5):674-80.
118. Futrakul N, Vongthavarawat V, Sirisalipotch S, Chairatanarat T, Futrakul P, Suwanwalaikorn S. Tubular dysfunction and hemodynamic alteration in normoalbuminuric type 2 diabetes. *Clinical hemorheology and microcirculation*. 2005;32(1):59-65.
119. Gerchman F, Tong J, Utzschneider KM, Zraika S, Udayasankar J, McNeely MJ, et al. Body mass index is associated with increased creatinine clearance by a mechanism independent of body fat distribution. *Journal of Clinical Endocrinology and Metabolism*. 2009;94(10):3781-8.
120. Gornostaeva E, Novikova MS, Beloborodova AV, Akarachkova ES, Shilov EM, Shvarkov SB. [Autonomic imbalance in patients with metabolic syndrome: role in the development of hyperfiltration--an early marker of renal lesions]. *Terapevticheskiy arkhiv*. 2010;82(6):49-53.

121. Gragnoli G, Signorini AM, Tanganeli I, Fondelli C, Borgogni P, Borgogni L, et al. Prevalence of glomerular hyperfiltration and nephromegaly in normo- and microalbuminuric type 2 diabetic patients. *Nephron*. 1993;65(2):206-11.
122. Groop PH, Thomas MC, Moran JL, Wadden J, Thorn LM, Makinen VP, et al. The presence and severity of chronic kidney disease predicts all-cause mortality in type 1 diabetes. *Diabetes*. 2009;58(7):1651-8.
123. Gumus, II, Uz E, Bavbek N, Kargili A, Yanik B, Turgut FH, et al. Does glomerular hyperfiltration in pregnancy damage the kidney in women with more parities? *International urology and nephrology*. 2009;41(4):927-32.
124. Hadj-Aissa A, Bankir L, Fraysse M, Bichet DG, Laville M, Zech P, et al. Influence of the level of hydration on the renal response to a protein meal. *Kidney Int*. 1992;42(5):1207-16.
125. Haneda M, Kikkawa R, Ebata K, Sugimoto T, Shigeta Y. [Measurement of renal plasma flow and glomerular filtration rates in diabetic subjects]. *Rinsho byori The Japanese journal of clinical pathology*. 1992;40(7):692-6.
126. Hansen KW, Mau Pedersen M, Christensen CK, Schmitz A, Christiansen JS, Mogensen CE. Normoalbuminuria ensures no reduction of renal function in type 1 (insulin-dependent) diabetic patients. *Journal of internal medicine*. 1992;232(2):161-7.
127. Hansen KW, Pedersen MM, Christiansen JS, Mogensen CE. Acute renal effects of angiotensin converting enzyme inhibition in microalbuminuric type 1 diabetic patients. *Acta diabetologica*. 1993;30(3):149-53.
128. Har R, Scholey JW, Daneman D, Mahmud FH, Dekker R, Lai V, et al. The effect of renal hyperfiltration on urinary inflammatory cytokines/chemokines in patients with uncomplicated type 1 diabetes mellitus. *Diabetologia*. 2013;56(5):1166-73.
129. Harrap SB, Cumming AD, Davies DL, Foy CJ, Fraser R, Kamitani A, et al. Glomerular hyperfiltration, high renin, and low- extracellular volume in high blood pressure. *Hypertension*. 2000;35(4):952-7.
130. Harvey JN, Edmundson AW, Jaffa AA, Martin LL, Mayfield RK. Renal excretion of kallikrein and eicosanoids in patients with Type 1 (insulin-dependent) diabetes mellitus. Relationship to glomerular and tubular function. *Diabetologia*. 1992;35(9):857-62.
131. Haymann JP, Stankovic K, Levy P, Avellino V, Tharaux PL, Letavernier E, et al. Glomerular hyperfiltration in adult sickle cell anemia: A frequent hemolysis associated feature. *Clinical Journal of the American Society of Nephrology*. 2010;5(5):756-61.
132. Heering P, Bach D, Niederau C, Grabensee B. Functional reserve capacity in patients with IgA glomerulopathy. *Nieren- und Hochdruckkrankheiten*. 1994;23(11):575-9.
133. Heering P, Wyes D, Plum J, Grabensee B. Influence of the renin-angiotensin system and atrial natriuretic peptide on renal functional reserve. *Nephron*. 1994;66(1):14-20.
134. Helal I, Reed B, Schrier RW. Emergent early markers of renal progression in autosomal-dominant polycystic kidney disease patients: Implications for prevention and treatment. *American Journal of Nephrology*. 2012;36(2):162-7.
135. Hellerstein S, Berenbom M, Erwin P, Wilson N, DiMaggio S. Measurement of renal functional reserve in children. *Pediatric Nephrology*. 2004;19(10):1132-6.
136. Hernandez-Marco R, Codoner-Franch P, Pons Morales S, Del Castillo Villaescusa C, Boix Garcia L, Valls Belles V. Oxidant/antioxidant status and hyperfiltration in young patients with type 1 diabetes mellitus. *Pediatric nephrology (Berlin, Germany)*. 2009;24(1):121-7.
137. Herrera J, Rodriguez-Iturbe B, Parra G, Coello J, Garcia R, Colina-Chourio J, et al. Urinary prostaglandin E and kallikrein activity in glomerular hyperfiltration induced by a meat meal in man. *Clinical Nephrology*. 1988;30(3):151-7.
138. Hjorth L, Wiebe T, Karpman D. Hyperfiltration evaluated by glomerular filtration rate at diagnosis in children with cancer. *Pediatric blood & cancer*. 2011;56(5):762-6.

139. Hladunewich MA, Lafayette RA, Derby GC, Blouch KL, Bialek JW, Druzin ML, et al. The dynamics of glomerular filtration in the puerperium. *American Journal of Physiology - Renal Physiology*. 2004;286(3 55-3):F496-F503.
140. Hohenstein B, Hugo CP, Hausknecht B, Boehmer KP, Riess RH, Schmieder RE. Analysis of NO-synthase expression and clinical risk factors in human diabetic nephropathy. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2008;23(4):1346-54.
141. Hou CC, Shyu RS, Lee WJ, Ser KH, Lee YC, Chen SC. Improved renal function 12 months after bariatric surgery. *Surgery for obesity and related diseases : official journal of the American Society for Bariatric Surgery*. 2013;9(2):202-6.
142. Houlihan C, Jenkins M, Osicka T, Scott A, Parkin D, Jerums G. A comparison of the plasma disappearance of iohexol and 99mTc-DTPA for the measurement of glomerular filtration rate (GFR) in diabetes. *Australian and New Zealand journal of medicine*. 1999;29(5):693-700.
143. Huttunen NP, Knip M, Kaar ML, Puukka R, Akerblom HK. Clinical significance of urinary C-peptide excretion in children with insulin-dependent diabetes mellitus. *Acta paediatrica Scandinavica*. 1989;78(2):271-7.
144. Ishida K, Ishibashi F, Takashina S. Comparison of renal hemodynamics in early non-insulin-dependent and insulin-dependent diabetes mellitus. *The Journal of diabetic complications*. 1991;5(2-3):143-5.
145. Ishizaka N, Ishizaka Y, Toda E, Shimomura H, Koike K, Seki G, et al. Association between cigarette smoking and chronic kidney disease in Japanese men. *Hypertension research : official journal of the Japanese Society of Hypertension*. 2008;31(3):485-92.
146. Jacobs EM, Vervoort G, Branten AJ, Klasen I, Smits P, Wetzel JF. Atrial natriuretic peptide increases albuminuria in type I diabetic patients: evidence for blockade of tubular protein reabsorption. *European journal of clinical investigation*. 1999;29(2):109-15.
147. Jacobs ML, Derkx FH, Stijnen T, Lamberts SW, Weber RF. Effect of long-acting somatostatin analog (Somatulolin) on renal hyperfiltration in patients with IDDM. *Diabetes Care*. 1997;20(4):632-6.
148. Janssen JA, Jacobs ML, Derkx FH, Weber RF, van der Lely AJ, Lamberts SW. Free and total insulin-like growth factor I (IGF-I), IGF-binding protein-1 (IGFBP-1), and IGFBP-3 and their relationships to the presence of diabetic retinopathy and glomerular hyperfiltration in insulin-dependent diabetes mellitus. *The Journal of clinical endocrinology and metabolism*. 1997;82(9):2809-15.
149. Javor ED, Moran SA, Young JR, Cochran EK, DePaoli AM, Oral EA, et al. Proteinuric nephropathy in acquired and congenital generalized lipodystrophy: baseline characteristics and course during recombinant leptin therapy. *The Journal of clinical endocrinology and metabolism*. 2004;89(7):3199-207.
150. Jenkins DA, Craig K, Collier A, Watson ML, Clarke BF. Evidence against a role for prostaglandins in sustaining renal hyperfiltration in type 1 diabetes mellitus. *Diabetic medicine : a journal of the British Diabetic Association*. 1989;6(6):502-5.
151. Jesudason DR, Pedersen E, Clifton PM. Weight-loss diets in people with type 2 diabetes and renal disease: a randomized controlled trial of the effect of different dietary protein amounts. *American Journal of Clinical Nutrition*. 2013;98(2):494-501.
152. Jin Y, Moriya T, Tanaka K, Matsubara M, Fujita Y. Glomerular hyperfiltration in non-proteinuric and non-hypertensive Japanese type 2 diabetic patients. *Diabetes research and clinical practice*. 2006;71(3):264-71.
153. Jones SL, Kontessis P, Wiseman M, Dodds R, Bognetti E, Pinto J, et al. Protein intake and blood glucose as modulators of GFR in hyperfiltering diabetic patients. *Kidney International*. 1992;41(6):1620-8.
154. Jones SL, Wiseman MJ, Viberti GC. Glomerular hyperfiltration as a risk factor for diabetic nephropathy: Five-year report of a prospective study. *Diabetologia*. 1991;34(1):59-60.
155. Juhl B, Klein F, Christiansen JS. Unchanged glomerular hyperfiltration following 3 months of aldose reductase inhibition with tolrestat in normoalbuminuric IDDM patients. *Endocrinology and Metabolism*. 1997;4(5):305-11.

156. Juraschek SP, Appel LJ, Anderson CA, Miller ER, 3rd. Effect of a high-protein diet on kidney function in healthy adults: results from the OmniHeart trial. *American journal of kidney diseases : the official journal of the National Kidney Foundation.* 2013;61(4):547-54.
157. Kalk WJ, Osler C, Constable J, Kruger M, Panz V. Influence of dietary protein on glomerular filtration and urinary albumin excretion in insulin-dependent diabetes. *American Journal of Clinical Nutrition.* 1992;56(1):169-73.
158. Kalk WJ, Osler C, Taylor D, Panz VR, Esse JD, Reinach SG. The prevalence of micro-albuminuria and glomerular hyperfiltration in young patients with IDDM. *Diabetes research and clinical practice.* 1990;8(2):145-53.
159. Kandasamy Y, Smith R, Wright IM, Lumbers ER. Relationships between glomerular filtration rate and kidney volume in low-birth-weight neonates. *Journal of nephrology.* 2013;26(5):894-8.
160. Keller CK, Bergis KH, Fliser D, Ritz E. Renal findings in patients with short-term type 2 diabetes. *Journal of the American Society of Nephrology : JASN.* 1996;7(12):2627-35.
161. Khalil CA, Travert F, Fetita S, Rouzet F, Porcher R, Riveline JP, et al. Fetal exposure to maternal type 1 diabetes is associated with renal dysfunction at adult age. *Diabetes.* 2010;59(10):2631-6.
162. Kimura G, Uzu T, Nakamura S, Inenaga T, Fujii T. High sodium sensitivity and glomerular hypertension/hyperfiltration in primary aldosteronism. *Journal of Hypertension.* 1996;14(12):1463-8.
163. Kinebuchi S, Kazama JJ, Satoh M, Sakai K, Nakayama H, Yoshizawa H, et al. Short-term use of continuous positive airway pressure ameliorates glomerular hyperfiltration in patients with obstructive sleep apnoea syndrome. *Clinical science (London, England : 1979).* 2004;107(3):317-22.
164. King L, MooSang M, Miller M, Reid M. Prevalence and predictors of microalbuminuria in Jamaican children with sickle cell disease. *Archives of Disease in Childhood.* 2011;96(12):1135-9.
165. Klein F, Juhl B, Christiansen JS. Unchanged renal haemodynamics following high dose ascorbic acid administration in normoalbuminuric IDDM patients. *Scandinavian journal of clinical and laboratory investigation.* 1995;55(1):53-9.
166. Koetje PM, Spaan JJ, Kooman JP, Spaanderman ME, Peeters LL. Pregnancy reduces the accuracy of the estimated glomerular filtration rate based on Cockcroft-Gault and MDRD formulas. *Reproductive sciences (Thousand Oaks, Calif).* 2011;18(5):456-62.
167. Korpachev VV, Hurina NM, Korpacheva TI, Shuprovych AA, Mosendz IO. [Peculiarities of uric acid balance disorders in patients with type 2 diabetes and metabolic syndrome]. *Fiziologichnyi zhurnal (Kiev, Ukraine : 1994).* 2009;55(3):133-40.
168. Kotchen TA, Piering AW, Cowley AW, Grim CE, Gaudet D, Hamet P, et al. Glomerular hyperfiltration in hypertensive African Americans. *Hypertension.* 2000;35(3):822-6.
169. Kralickova P, Melichar B, Malir F, Roubal T. Renal tubular dysfunction and urinary zinc excretion in breast cancer patients treated with anthracycline-based combination chemotherapy. *Journal of experimental & clinical cancer research : CR.* 2004;23(4):579-84.
170. Krikken JA, Lely AT, Bakker SJ, Navis G. The effect of a shift in sodium intake on renal hemodynamics is determined by body mass index in healthy young men. *Kidney International.* 2007;71(3):260-5.
171. Krishna GG, Newell G, Miller E, Heeger P, Smith R, Polansky M, et al. Protein-induced glomerular hyperfiltration: Role of hormonal factors. *Kidney International.* 1988;33(2):578-83.
172. Kubo M, Kiyohara Y, Kato I, Iwamoto H, Nakayama K, Hirakata H, et al. Effect of hyperinsulinemia on renal function in a general Japanese population: the Hisayama study. *Kidney Int.* 1999;55(6):2450-6.
173. Kumar M, Kedar A, Neiberger RE. Kidney function in long-term pediatric survivors of acute lymphoblastic leukemia following allogeneic bone marrow transplantation. *Pediatric hematology and oncology.* 1996;13(4):375-9.

174. Laborde K, Levy-Marchal C, Kindermans C, Dechaux M, Czernichow P, Sachs C. Glomerular function and microalbuminuria in children with insulin-dependent diabetes. *Pediatric nephrology* (Berlin, Germany). 1990;4(1):39-43.
175. Lafayette RA, Malik T, Druzin M, Derby G, Myers BD. The dynamics of glomerular filtration after Caesarean section. *Journal of the American Society of Nephrology*. 1999;10(7):1561-5.
176. Lalau JD, Westeel PF, Tenenbaum F, Debussche X, Nussberger J, Tribout B, et al. Natriuretic and vasoactive hormones and glomerular hyperfiltration in hyperglycaemic type 2 diabetic patients: Effect of insulin treatment. *Nephron*. 1993;63(3):296-302.
177. Lebovitz HE, Palmisano J. Cross-sectional analysis of renal function in black Americans with NIDDM. *Diabetes Care*. 1990;13(11):1186-90.
178. Lee HC, Mitchell HC, Van Dreal P, Pettinger WA. Hyperfiltration and conservation of renal function in hypertensive nephrosclerosis patients. *American Journal of Kidney Diseases*. 1993;21(4 SUPPL. 1):68-74.
179. Lee KU, Park JY, Hwang IR, Hong SK, Kim GS, Moon DH, et al. Glomerular hyperfiltration in Koreans with non-insulin-dependent diabetes mellitus. *American Journal of Kidney Diseases*. 1995;26(5):722-6.
180. Lee PJ, Dalton RN, Shah V, Hindmarsh PC, Leonard JV. Glomerular and tubular function in glycogen storage disease. *Pediatric Nephrology*. 1995;9(6):705-10.
181. Lervang HH, Jensen S, Brochner-Mortensen J, Ditzel J. Early glomerular hyperfiltration and the development of late nephropathy in Type 1 (insulin-dependent) diabetes mellitus. *Diabetologia*. 1988;31(10):723-9.
182. Lervang HH, Jensen S, Brochner-Mortensen J, Ditzel J. Does increased glomerular filtration rate or disturbed tubular function early in the course of childhood Type 1 diabetes predict the development of nephropathy? *Diabetic Medicine*. 1992;9(7):635-40.
183. Levine DZ. Hyperfiltration, nitric oxide, and diabetic nephropathy. *Current hypertension reports*. 2006;8(2):153-7.
184. Levitt NS, Adams G, Salmon J, Marks IN, Musson G, Swanepoel C, et al. The prevalence and severity of microvascular complications in pancreatic diabetes and IDDM. *Diabetes Care*. 1995;18(7):971-4.
185. Levy-Marchal C, Laborde K, Kindermans C, Dechaux M. Persisting glomerular hyperfiltration in short-term diabetic children without microalbuminuria. *Acta paediatrica Scandinavica*. 1989;78(5):712-6.
186. Linne T, Korner A, Rudberg S, Persson B, Aperia A. Renal functional effects of prostaglandin synthesis inhibition in patients with insulin-dependent diabetes mellitus of long duration without nephropathy. *Hormone and metabolic research = Hormon- und Stoffwechselforschung = Hormones et metabolisme*. 1991;23(8):383-6.
187. Losito A, Fortunati F, Zampi I, Del Favero A. Impaired renal functional reserve and albuminuria in essential hypertension. *British Medical Journal*. 1988;296(6636):1562-4.
188. Losito A, Zampi I, Fortunati I, del Favero A. Glomerular hyperfiltration and albuminuria in essential hypertension. *Nephron*. 1988;49(1):84-5.
189. Luaces M, Martinez-Martinez E, Medina M, Miana M, Gonzalez N, Fernandez-Perez C, et al. The impact of bariatric surgery on renal and cardiac functions in morbidly obese patients. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2012;27 Suppl 4:iv53-7.
190. Luik PT, Hoogenberg K, Van Der Kleij FG, Beusekamp BJ, Kerstens MN, De Jong PE, et al. Short-term moderate sodium restriction induces relative hyperfiltration in normotensive normoalbuminuric Type I diabetes mellitus. *Diabetologia*. 2002;45(4):535-41.
191. Luippold G, Schneider S, Stefanescu A, Benohr P, Muhlbauer B. Dopamine D2-like receptors and amino acid-induced glomerular hyperfiltration in humans. *British journal of clinical pharmacology*. 2001;51(5):415-21.

192. Maeda I, Hayashi T, Sato KK, Koh H, Harita N, Nakamura Y, et al. Cigarette smoking and the association with glomerular hyperfiltration and proteinuria in healthy middle-aged men. *Clinical Journal of the American Society of Nephrology*. 2011;6(10):2462-9.
193. Magri CJ, Fava S. Albuminuria and glomerular filtration rate in type 2 diabetes mellitus. *Minerva urologica e nefrologica = The Italian journal of urology and nephrology*. 2011;63(4):273-80.
194. Malaki M, Sorkhabi RS, Shoaran M, Shafiqhe B. Beta thalassemia major: the effect of age on glomerular filtration rate. *Saudi journal of kidney diseases and transplantation : an official publication of the Saudi Center for Organ Transplantation, Saudi Arabia*. 2011;22(5):963-8.
195. Mallamaci F, Leonardis D, Bellizzi V, Zoccali C. Does high salt intake cause hyperfiltration in patients with essential hypertension? *Journal of human hypertension*. 1996;10(3):157-61.
196. Mammen C, Al Abbas A, Skippen P, Nadel H, Levine D, Collet JP, et al. Long-term Risk of CKD in Children Surviving Episodes of Acute Kidney Injury in the Intensive Care Unit: A Prospective Cohort Study. *American Journal of Kidney Diseases*. 2012;59(4):523-30.
197. Mansy H, Goodship TH, Tapson JS, Hartley GH, Keavey P, Wilkinson R. Effect of a high protein diet in patients with the nephrotic syndrome. *Clinical science (London, England : 1979)*. 1989;77(4):445-51.
198. Manto A, Cotroneo P, Porcelli G, D'Errico G, Marra G, Magnani P, et al. Urinary kallikrein excretion in type 1 (insulin-dependent) diabetes mellitus. *Diabetologia*. 1993;36(5):423-7.
199. Marcovecchio ML, Dalton RN, Turner C, Prevost AT, Widmer B, Amin R, et al. Symmetric dimethylarginine, an endogenous marker of glomerular filtration rate, and the risk for microalbuminuria in young people with type 1 diabetes. *Archives of Disease in Childhood*. 2010;95(2):119-24.
200. Marouf R, Mojiminiyi O, Abdella N, Kortom M, Al Wazzan H. Comparison of renal function markers in Kuwaiti patients with sickle cell disease. *Journal of clinical pathology*. 2006;59(4):345-51.
201. Marre M, Hallab M, Roy J, Lejeune JJ, Jallet P, Fressinaud P. Glomerular hyperfiltration in type I, type II, and secondary diabetes. *Journal of diabetes and its complications*. 1992;6(1):19-24.
202. Martens DH, Rake JP, Navis G, Fidler V, van Dael CM, Smit GP. Renal function in glycogen storage disease type I, natural course, and renopreservative effects of ACE inhibition. *Clinical journal of the American Society of Nephrology : CJASN*. 2009;4(11):1741-6.
203. Marzano MA, Pompili M, Rapaccini GL, Covino M, Cotroneo P, Manto A, et al. Early renal involvement in diabetes mellitus: Comparison of renal Doppler US and radioisotope evaluation of glomerular hyperfiltration. *Radiology*. 1998;209(3):813-7.
204. Matteucci E, Rossi L, Mariani S, Fagnani F, Quilici S, Cinapri V, et al. Blood levels of total homocysteine in patients with type 1 diabetes (with no complications, diabetic nephropathy and/or retinopathy) and in their non-diabetic relatives. *Nutrition, metabolism, and cardiovascular diseases : NMCD*. 2002;12(4):184-9.
205. Mauer M, Drummond K. The early natural history of nephropathy in type 1 diabetes: I. Study design and baseline characteristics of the study participants. *Diabetes*. 2002;51(5):1572-9.
206. McCarville MB, Luo Z, Huang X, Rees RC, Rogers ZR, Miller ST, et al. Abdominal ultrasound with scintigraphic and clinical correlates in infants with sickle cell anemia: baseline data from the BABY HUG trial. *AJR American journal of roentgenology*. 2011;196(6):1399-404.
207. Meeme A, Kasozi H. Effect of glycaemic control on glomerular filtration rate in diabetes mellitus patients. *African health sciences*. 2009;9 Suppl 1:S23-6.
208. Melis D, Parenti G, Gatti R, Casa RD, Parini R, Riva E, et al. Efficacy of ACE-inhibitor therapy on renal disease in glycogen storage disease type 1: a multicentre retrospective study. *Clinical endocrinology*. 2005;63(1):19-25.
209. Melsom T, Mathisen UD, Eilertsen BA, Ingebretsen OC, Jenssen T, Njolstad I, et al. Physical exercise, fasting glucose, and renal hyperfiltration in the general population: the Renal Iohexol Clearance Survey in Tromso 6 (RENIS-T6). *Clinical journal of the American Society of Nephrology : CJASN*. 2012;7(11):1801-10.

210. Melsom T, Mathisen UD, Ingebretsen OC, Jenssen TG, Njolstad I, Solbu MD, et al. Impaired fasting glucose is associated with renal hyperfiltration in the general population. *Diabetes Care*. 2011;34(7):1546-51.
211. Miller JA, Curtis JR, Sochett EB. Relationship between diurnal blood pressure, renal hemodynamic function, and the renin-angiotensin system in type 1 diabetes. *Diabetes*. 2003;52(7):1806-11.
212. Miltenyi M, Szabo A, Tulassay T, Korner A, Kenesei E, Dobos M. Reduced glomerular filtration and elevated urinary protein excretion in diabetic ketoacidosis. *Acta paediatrica Scandinavica*. 1990;79(4):444-7.
213. Mimran A, Ribstein J, DuCailar G, Halimi JM. Hyperfiltration in lean essential hypertension. *Contributions to nephrology*. 1996;119:98-102.
214. Mizuiri S, Fushimi T, Nakanishi T, Nagasaki N, Kobayashi M, Tanaka T, et al. Amino acid-induced hyperfiltration--mediators and effect of captopril. *Clin Nephrol*. 1994;42(1):38-43.
215. Mocan Z, Erem C, Yildirim M, Telatar M, Deger O. Urinary beta 2-microglobulin levels and urinary N-acetyl-beta-D-glucosaminidase enzyme activities in early diagnosis of non-insulin-dependent diabetes mellitus nephropathy. *Diabetes research (Edinburgh, Lothian)*. 1994;26(3):101-7.
216. Mogensen CE. Early glomerular hyperfiltration in insulin-dependent diabetics and late nephropathy. *Scandinavian journal of clinical and laboratory investigation*. 1986;46(3):201-6.
217. Mogensen CE, Christensen CK, Pedersen MM, Alberti KG, Boye N, Christensen T, et al. Renal and glycemic determinants of glomerular hyperfiltration in normoalbuminuric diabetics. *The Journal of diabetic complications*. 1990;4(4):159-65.
218. Monami M, Pala L, Bardini G, Francesconi P, Cresci B, Marchionni N, et al. Glomerular hyperfiltration and metabolic syndrome: Results from the FIrenze-BAgno A Ripoli (FIBAR) Study. *Acta diabetologica*. 2009;46(3):191-6.
219. Monster TB, de Jong PE, de Jong-van den Berg LT. Drug-induced renal function impairment: a population-based survey. *Pharmacoepidemiology and drug safety*. 2003;12(2):135-43.
220. Montanari A, Biggi A, Cabassi A, Pelloni I, Pigazzani F, Pinelli S, et al. Renal hemodynamic response to L-arginine in uncomplicated, type 1 diabetes mellitus: the role of buffering anions and tubuloglomerular feedback. *American journal of physiology Renal physiology*. 2012;303(5):F648-58.
221. Montini G, Sacchetto E, Murer L, Dall'Amico R, Masiero M, Passerini-Glazel G, et al. Renal glomerular response to the inhibition of prostaglandin E2 synthesis and protein loading after the relief of unilateral ureteropelvic junction obstruction. *Journal of Urology*. 2000;163(2):556-60.
222. Moran P, Baylis PH, Lindheimer MD, Davison JM. Glomerular ultrafiltration in normal and preeclamptic pregnancy. *Journal of the American Society of Nephrology : JASN*. 2003;14(3):648-52.
223. Moriya T, Tsuchiya A, Okizaki S, Hayashi A, Tanaka K, Shichiri M. Glomerular hyperfiltration and increased glomerular filtration surface are associated with renal function decline in normo- and microalbuminuric type 2 diabetes. *Kidney International*. 2012;81(5):486-93.
224. Morrone LF, Ramunni A, Fassianos E, Saracino A, Coratelli P, Passavanti G. Nitrendipine and amlodipine mimic the acute effects of enalapril on renal haemodynamics and reduce glomerular hyperfiltration in patients with chronic kidney disease. *Journal of human hypertension*. 2003;17(7):487-93.
225. Muller D, Sievers E, Eggert P. Influence of hyperfiltration on the measurement of urinary N-acetyl-beta-D-glucosaminidase. *Pediatric nephrology (Berlin, Germany)*. 1999;13(6):519-23.
226. Myers BD, Nelson RG, Williams GW, Bennett PH, Hardy SA, Berg RL, et al. Glomerular function in Pima Indians with noninsulin-dependent diabetes mellitus of recent onset. *The Journal of clinical investigation*. 1991;88(2):524-30.
227. Nair KS, Pabico RC, Truglia JA, McKenna BA, Statt M, Lockwood DH. Mechanism of glomerular hyperfiltration after a protein meal in humans. Role of hormones and amino acids. *Diabetes Care*. 1994;17(7):711-5.
228. Nakamura H, Ito S, Ebe N, Shibata A. Renal effects of different types of protein in healthy volunteer subjects and diabetic patients. *Diabetes Care*. 1993;16(8):1071-5.

229. Nakamura H, Takasawa M, Kashara S, Tsuda A, Momotsu T, Ito S, et al. Effects of acute protein loads of different sources on renal function of patients with diabetic nephropathy. *The Tohoku journal of experimental medicine*. 1989;159(2):153-62.
230. Nakamura H, Yamazaki M, Chiba Y, Tamura N, Momotsu T, Ito S, et al. Glomerular filtration response to acute loading with protein from different sources in healthy volunteers and diabetic patients. *The Tohoku journal of experimental medicine*. 1990;162(3):269-78.
231. Nelson RG, Tan M, Beck GJ, Bennett PH, Knowler WC, Mitch WE, et al. Changing glomerular filtration with progression from impaired glucose tolerance to Type II diabetes mellitus. *Diabetologia*. 1999;42(1):90-3.
232. Neto AS, Rossi FMB, Dal Moro Amarante R, Buriti NA, Saheb GCB, Rossi M. Effect of weight loss after Roux-en-Y gastric bypass, on renal function and blood pressure in morbidly obese patients. *Journal of nephrology*. 2009;22(5):637-46.
233. New JP, Marshall SM, Bilous RW. Renal autoregulation is normal in newly diagnosed, normotensive, NIDDM patients. *Diabetologia*. 1998;41(2):206-11.
234. Ng DK, Jacobson LP, Brown TT, Palella FJ, Jr., Martinson JJ, Bolan R, et al. HIV therapy, metabolic and cardiovascular health are associated with glomerular hyperfiltration among men with and without HIV infection. *AIDS (London, England)*. 2014;28(3):377-86.
235. Nielsen S, Hove KY, Dollerup J, Poulsen PL, Christiansen JS, Schmitz O, et al. Losartan modifies glomerular hyperfiltration and insulin sensitivity in type 1 diabetes. *Diabetes, Obesity and Metabolism*. 2001;3(6):463-71.
236. Nistrup Holmegaard S, Christoffersen H, Haase J. Albuminuria, intermittent hyperfiltration and salt wasting in patients with stroke: a pilot study. *Scandinavian journal of clinical and laboratory investigation*. 2006;66(5):437-49.
237. Nordgren H, Freyschuss U, Persson B. Blood pressure response to physical exercise in healthy adolescents and adolescents with insulin-dependent diabetes mellitus. *Clinical Science*. 1994;86(4):425-32.
238. Norgaard K, Jensen T, Skott P, Thorsteinsson B, Bruun NE, Giese J, et al. Effects of insulin on renal haemodynamics and sodium handling in normal subjects. *Scandinavian journal of clinical and laboratory investigation*. 1991;51(4):367-76.
239. Novikova MS, Shilov EM, Borisov VV. [Hyperfiltration--early sign of chronic renal disease development in males with metabolic syndrome]. *Terapevticheskii arkhiv*. 2010;82(4):52-6.
240. Nowack R, Raum E, Blum W, Ritz E. Renal hemodynamics in recent-onset type II diabetes. *American Journal of Kidney Diseases*. 1992;20(4):342-7.
241. Nyberg E, Bohman SO, Berg U. Glomerular volume and renal function in children with different types of the nephrotic syndrome. *Pediatric nephrology (Berlin, Germany)*. 1994;8(3):285-9.
242. Odutola TA, Mabadeje AF, Mabayaje MO. Effect of diabetes mellitus on glomerular filtration rate in an urban hospital diabetic population. *African journal of medicine and medical sciences*. 1997;26(1-2):19-21.
243. Ohashi H, Oda H, Ohno M, Watanabe S. [Weight reduction improves high blood pressure and microalbuminuria in hypertensive patients with obesity]. *Nihon Jinzo Gakkai shi*. 2001;43(4):333-9.
244. Okada R, Yasuda Y, Tsushita K, Wakai K, Hamajima N, Matsuo S. Glomerular hyperfiltration in prediabetes and prehypertension. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2012;27(5):1821-5.
245. Okada R, Yasuda Y, Tsushita K, Wakai K, Hamajima N, Matsuo S. The number of metabolic syndrome components is a good risk indicator for both early- and late-stage kidney damage. *Nutrition, metabolism, and cardiovascular diseases : NMCD*. 2014;24(3):277-85.
246. Oterdoom LH, de Vries AP, Gansevoort RT, de Jong PE, Gans RO, Bakker SJ. Fasting insulin modifies the relation between age and renal function. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 2007;22(6):1587-92.

247. Paiva H, Lehtimaki T, Laakso J, Ruokonen I, Rantalaiho V, Wirta O, et al. Plasma concentrations of asymmetric-dimethyl-arginine in type 2 diabetes associate with glycemic control and glomerular filtration rate but not with risk factors of vasculopathy. *Metabolism: clinical and experimental*. 2003;52(3):303-7.
248. Palatini P, De Toni R, Zaninotto M, Santonastaso M, Mos L, Cozzio S. Cystatin C as predictor of microalbuminuria in the early stage of hypertension. *Journal of Clinical Hypertension*. 2009;11(4):A9-A10.
249. Palatini P, Dorigatti F, Saladini F, Benetti E, Mos L, Mazzer A, et al. Factors associated with glomerular hyperfiltration in the early stage of hypertension. *American journal of hypertension*. 2012;25(9):1011-6.
250. Palatini P, Mormino P, Dorigatti F, Santonastaso M, Mos L, De Toni R, et al. Glomerular hyperfiltration predicts the development of microalbuminuria in stage 1 hypertension: the HARVEST. *Kidney International*. 2006;70(3):578-84.
251. Palatini P, Mormino P, Mos L, Mazzer A, Dorigatti F, Zanata G, et al. Microalbuminuria, renal function and development of sustained hypertension: A longitudinal study in the early stage of hypertension. *Journal of Hypertension*. 2005;23(1):175-82.
252. Palatini P, Mos L, Ballerini P, Mazzer A, Saladini F, Bortolazzi A, et al. Relationship between GFR and albuminuria in stage 1 hypertension. *Clinical Journal of the American Society of Nephrology*. 2013;8(1):59-66.
253. Palmisano JJ, Lebovitz HE. Renal function in black Americans with type II diabetes. *The Journal of diabetic complications*. 1989;3(1):40-4.
254. Park M, Ko Y, Song SH, Kim S, Yoon HJ. Association of low aerobic fitness with hyperfiltration and albuminuria in men. *Medicine and science in sports and exercise*. 2013;45(2):217-23.
255. Pecis M, Azevedo MJ, Gross JL. Glomerular hyperfiltration is associated with blood pressure abnormalities in normotensive normoalbuminuric IDDM patients. *Diabetes Care*. 1997;20(8):1329-33.
256. Pecis M, De Azevedo MJ, Gross JL. Chicken and fish diet reduces glomerular hyperfiltration in IDDM patients. *Diabetes Care*. 1994;17(7):665-72.
257. Pecl IM, Genelhu V, Francischetti EA. Renal functional reserve in obesity hypertension. *International journal of clinical practice*. 2006;60(10):1198-203.
258. Pedersen MM, Christiansen JS, Mogensen CE. Reduction of glomerular hyperfiltration in normoalbuminuric IDDM patients by 6 mo of aldose reductase inhibition. *Diabetes*. 1991;40(5):527-31.
259. Perelstein EM, Grunfeld BG, Simsolo RB, Gimenez MI, Gianantonio CA. Renal functional reserve compared in haemolytic uraemic syndrome and single kidney. *Archives of Disease in Childhood*. 1990;65(7):728-31.
260. Perkins BA, Sochett EB, Cherney DZ. Ability of Cystatin C to detect changes in glomerular filtration rate after ACE inhibition in patients with uncomplicated type 1 diabetes. *Clinical and experimental hypertension (New York, NY : 1993)*. 2012;34(8):606-11.
261. Pham PC, Pham PM, Pham PT. Patients with diabetes mellitus type 2 and hypomagnesemia may have enhanced glomerular filtration via hypocalcemia. *Clin Nephrol*. 2012;78(6):442-8.
262. Piepsz A, Tondeur M, Ham H. Revisiting normal (51)Cr-ethylenediaminetetraacetic acid clearance values in children. *European journal of nuclear medicine and molecular imaging*. 2006;33(12):1477-82.
263. Pinto-Sietsma SJ, Janssen WM, Hillege HL, Navis G, De Zeeuw D, De Jong PE. Urinary albumin excretion is associated with renal functional abnormalities in a nondiabetic population. *Journal of the American Society of Nephrology : JASN*. 2000;11(10):1882-8.
264. Pistrosch F, Herbrig K, Kindel B, Passauer J, Fischer S, Gross P. Rosiglitazone improves glomerular hyperfiltration, renal endothelial dysfunction, and microalbuminuria of incipient diabetic nephropathy in patients. *Diabetes*. 2005;54(7):2206-11.
265. Ponder SW, Brouhard BH, Travis LB. Hyperphosphaturia and Hypermagnesuria in children with IDDM. *Diabetes Care*. 1990;13(4):437-41.

266. Premaratne E, Macisaac RJ, Tsalamandris C, Panagiotopoulos S, Smith T, Jerums G. Renal hyperfiltration in type 2 diabetes: effect of age-related decline in glomerular filtration rate. *Diabetologia*. 2005;48(12):2486-93.
267. Prestidge C, Chilvers MA, Davidson AG, Cho E, McMahon V, White CT. Renal function in pediatric cystic fibrosis patients in the first decade of life. *Pediatric nephrology (Berlin, Germany)*. 2011;26(4):605-12.
268. Pruijm M, Wuerzner G, Maillard M, Bovet P, Renaud C, Bochud M, et al. Glomerular hyperfiltration and increased proximal sodium reabsorption in subjects with type 2 diabetes or impaired fasting glucose in a population of the African region. *Nephrology Dialysis Transplantation*. 2010;25(7):2225-31.
269. Quinn CT, Johnson VL, Kim HY, Trachtenberg F, Vogiatzi MG, Kwiatkowski JL, et al. Renal dysfunction in patients with thalassaemia. *British journal of haematology*. 2011;153(1):111-7.
270. Raes A, Donckerwolcke R, Craen M, Hussein MC, Vande Walle J. Renal hemodynamic changes and renal functional reserve in children with type I diabetes mellitus. *Pediatric Nephrology*. 2007;22(11):1903-9.
271. Rajic M, Ilic S, Vlajkovic M, Antic S, Velickovic L, Stefanovic V. Radionuclide staging of renal function in type 1 diabetes mellitus. *Renal failure*. 2007;29(6):685-91.
272. Reitsma-Bierens WC, Smit GP, Troelstra JA. Renal function and kidney size in glycogen storage disease type I. *Pediatric nephrology (Berlin, Germany)*. 1992;6(3):236-8.
273. Ribstein J, Du Cailar G, Fesler P, Mimran A. Relative glomerular hyperfiltration in primary aldosteronism. *Journal of the American Society of Nephrology*. 2005;16(5):1320-5.
274. Ribstein J, du Cailar G, Mimran A. Combined renal effects of overweight and hypertension. *Hypertension*. 1995;26(4):610-5.
275. Rigalleau V, Raffaitin C, Perlemoine C, Gin H, Lasseur C, Chauveau P, et al. Higher hemoglobin levels in diabetic subjects with renal hyperfiltration. *American journal of kidney diseases : the official journal of the National Kidney Foundation*. 2007;49(2):346.
276. Rius F, Pizaro E, Salinas I, Lucas A, Sanmarti A, Romero R. Age as a determinant of glomerular filtration rate in non-insulin-dependent diabetes mellitus. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 1995;10(9):1644-7.
277. Rodriguez-Iturbe B, Herrera J, Garcia R. Relationship between glomerular filtration rate and renal blood flow at different levels of protein-induced hyperfiltration in man. *Clinical science (London, England : 1979)*. 1988;74(1):11-5.
278. Roels H, Lauwers R, Konings J, Buchet JP, Bernard A, Green S, et al. Renal function and hyperfiltration capacity in lead smelter workers with high bone lead. *Occupational and environmental medicine*. 1994;51(8):505-12.
279. Rota R, Timsit J, Hannedouche T, Ikeni A, Boitard C, Guicheney P. Erythrocyte Na+/Li+ countertransport and glomerular hyperfiltration in insulin-dependent diabetics. *American journal of hypertension*. 1993;6(6 Pt 1):534-7.
280. Rudberg S, Osterby R. Decreasing glomerular filtration rate--an indicator of more advanced diabetic glomerulopathy in the early course of microalbuminuria in IDDM adolescents? *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 1997;12(6):1149-54.
281. Ruggenenti P, Flores C, Aros C, Ene-Iordache B, Trevisan R, Ottomano C, et al. Renal and metabolic effects of insulin lispro in type 2 diabetic subjects with overt nephropathy. *Diabetes Care*. 2003;26(2):502-9.
282. Ruggenenti P, Porrini EL, Gaspari F, Motterlini N, Cannata A, Carrara F, et al. Glomerular hyperfiltration and renal disease progression in type 2 diabetes. *Diabetes Care*. 2012;35(10):2061-8.
283. Sackmann H, Tran-Van T, Tack I, Hanaire-Broutin H, Tauber JP, Ader JL. Renal functional reserve in IDDM patients. *Diabetologia*. 1998;41(1):86-93.

284. Sackmann H, Tran-Van T, Tack I, Hanaire-Broutin H, Tauber JP, Ader JL. Contrasting renal functional reserve in very long-term Type I diabetic patients with and without nephropathy. *Diabetologia*. 2000;43(2):227-30.
285. Sauriasari R, Sakano N, Wang DH, Takaki J, Takemoto K, Wang B, et al. C-reactive protein is associated with cigarette smoking-induced hyperfiltration and proteinuria in an apparently healthy population. *Hypertension research : official journal of the Japanese Society of Hypertension*. 2010;33(11):1129-36.
286. Sawicki PT, Heinemann L, Rave K, Hohmann A, Berger M. Atrial natriuretic factor in various stages of diabetic nephropathy. *The Journal of diabetic complications*. 1988;2(4):207-9.
287. Schell M, Lachaux A, Hadj-Aissa A, Dubourg L, Mahmoud A, Boillot O, et al. Fading renal hyperfiltration in children following liver transplantation. *Pediatric transplantation*. 2001;5(1):51-5.
288. Schlaich MP, Schmitt D, Ott C, Schmidt BM, Schmieder RE. Basal nitric oxide synthase activity is a major determinant of glomerular haemodynamics in humans. *J Hypertens*. 2008;26(1):110-6.
289. Schmieder RE, Messerli FH, Garavaglia G, Nunez B. Glomerular hyperfiltration indicates early target organ damage in essential hypertension. *Journal of the American Medical Association*. 1990;264(21):2775-80.
290. Schmieder RE, Veelken P, Gatzka CD, Ruddel H, Schachinger H. Predictors for hypertensive nephropathy: Results of a 6-year follow-up study in essential hypertension. *Journal of Hypertension*. 1995;13(3):357-65.
291. Schmieder RE, Veelken R, Schobel H, Dominiak P, Mann JF, Luft FC. Glomerular hyperfiltration during sympathetic nervous system activation in early essential hypertension. *Journal of the American Society of Nephrology : JASN*. 1997;8(6):893-900.
292. Schmitt F, Martinez F, Brillet G, Giatras I, Choukroun G, Girot R, et al. Early glomerular dysfunction in patients with sickle cell anemia. *American journal of kidney diseases : the official journal of the National Kidney Foundation*. 1998;32(2):208-14.
293. Schmitz A, Christensen T, Taagehoej Jensen F. Glomerular filtration rate and kidney volume in normoalbuminuric non-insulin-dependent diabetics--lack of glomerular hyperfiltration and renal hypertrophy in uncomplicated NIDDM. *Scandinavian journal of clinical and laboratory investigation*. 1989;49(2):103-8.
294. Schou M, Gustafsson F, Kistorp CN, Corell P, Kjaer A, Hildebrandt PR. Effects of body mass index and age on N-terminal pro brain natriuretic peptide are associated with glomerular filtration rate in chronic heart failure patients. *Clinical chemistry*. 2007;53(11):1928-35.
295. Sebekova K, Somoza V, Jarcusko M, Heidland A, Podracka L. Plasma advanced glycation end products are decreased in obese children compared with lean controls. *International journal of pediatric obesity : IJPO : an official journal of the International Association for the Study of Obesity*. 2009;4(2):112-8.
296. Sechi LA, Di Fabio A, Bazzocchi M, Uzzau A, Catena C. Intrarenal hemodynamics in primary aldosteronism before and after treatment. *The Journal of clinical endocrinology and metabolism*. 2009;94(4):1191-7.
297. Selistre L, de Souza V, Ranchin B, Hadj-Aissa A, Cochard P, Dubourg L. Early renal abnormalities in children with postnatally diagnosed autosomal dominant polycystic kidney disease. *Pediatric nephrology (Berlin, Germany)*. 2012;27(9):1589-93.
298. Sellers EA, Blydt-Hansen TD, Dean HJ, Gibson IW, Birk PE, Ogborn M. Macroalbuminuria and renal pathology in First Nation youth with type 2 diabetes. *Diabetes Care*. 2009;32(5):786-90.
299. Serri O, Beauregard H, Brazeau P, Abribat T, Lambert J, Harris A, et al. Somatostatin analogue, octreotide, reduces increased glomerular filtration rate and kidney size in insulin-dependent diabetes. *Journal of the American Medical Association*. 1991;265(7):888-92.
300. Signorini AM, Tanganello I, Fondelli C, Vattimo A, Ferrari F, Borgogni P, et al. Glomerular filtration and renal volume in type II diabetes (non-insulin-dependent): study in normal and microalbuminuria patients. *Bollettino della Societa italiana di biologia sperimentale*. 1991;67(8):767-72.
301. Silva Junior GB, Liborio AB, Vieira AP, Bem AX, Lopes Filho AS, Figueiredo Filho AC, et al. Evaluation of renal function in sickle cell disease patients in Brazil. *Brazilian journal of medical and biological research*.

research = Revista brasileira de pesquisas medicas e biologicas / Sociedade Brasileira de Biofisica [et al]. 2012;45(7):652-5.

302. Silveiro SP, Friedman R, Gross JL. Glomerular hyperfiltration in NIDDM patients without overt proteinuria. *Diabetes Care*. 1993;16(1):115-9.
303. Simmons D. Diabetic nephropathy in New Zealand Maori and Pacific Islands people. *Nephrology*. 1998;4(SUPPL.):S72-S5.
304. Simon AH, Lima PR, Almerinda M, Alves VF, Bottini PV, de Faria JB. Renal haemodynamic responses to a chicken or beef meal in normal individuals. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 1998;13(9):2261-4.
305. Smoyer WE, Brouhard BH, Rassin DK, LaGrone L. Enhanced GFR response to oral versus intravenous arginine administration in normal adults. *The Journal of laboratory and clinical medicine*. 1991;118(2):166-75.
306. Sochett EB, Cherney DZ, Curtis JR, Dekker MG, Scholey JW, Miller JA. Impact of renin angiotensin system modulation on the hyperfiltration state in type 1 diabetes. *Journal of the American Society of Nephrology : JASN*. 2006;17(6):1703-9.
307. Soldo D, Brkljacic B, Bozikov V, Drinkovic I, Hauser M. Diabetic nephropathy. Comparison of conventional and duplex Doppler ultrasonographic findings. *Acta radiologica (Stockholm, Sweden : 1987)*. 1997;38(2):296-302.
308. Solerte SB, Rondanelli M, Giacchero R, Stabile M, Lovati E, Cravello L, et al. Serum glucagon concentration and hyperinsulinaemia influence renal haemodynamics and urinary protein loss in normotensive patients with central obesity. *International Journal of Obesity*. 1999;23(9):997-1003.
309. Soper CP, Barron JL, Hyer SL. Long-term glycaemic control directly correlates with glomerular filtration rate in early Type 1 diabetes mellitus before the onset of microalbuminuria. *Diabetic medicine : a journal of the British Diabetic Association*. 1998;15(12):1010-4.
310. Stephenson TJ, Setchell KD, Kendall CW, Jenkins DJ, Anderson JW, Fanti P. Effect of soy protein-rich diet on renal function in young adults with insulin-dependent diabetes mellitus. *Clin Nephrol*. 2005;64(1):1-11.
311. Sterner NG, Nilsson H, Rosen U, Lilja B, Sundkvist G. Relationships among glomerular filtration rate, albuminuria, and autonomic nerve function in insulin-dependent and non-insulin-dependent diabetes mellitus. *Journal of diabetes and its complications*. 1997;11(3):188-93.
312. Strzelecka-Lichota A. Renal function in subjects with minimal change steroid-responsive nephrotic syndrome in childhood. *Annales Academiae Medicae Stetinensis*. 2004;50(2):41-9.
313. Stuveling EM, Hillege HL, Bakker SJ, Gans RO, De Jong PE, De Zeeuw D. C-reactive protein is associated with renal function abnormalities in a non-diabetic population. *Kidney Int*. 2003;63(2):654-61.
314. Taniwaki H, Ishimura E, Emoto M, Kawagishi T, Matsumoto N, Shoji T, et al. Relationship between urinary albumin excretion and glomerular filtration rate in normotensive, nonproteinuric patients with type 2 diabetes mellitus. *Nephron*. 2000;86(1):36-43.
315. Ter Wee PM, Tegzess AM, Donker AJM. Renal reserve filtration capacity before and after kidney donation. *Journal of internal medicine*. 1990;228(4):393-9.
316. ter Wee PM, van Ballegooie E, Rosman JB, Meijer S, Donker AJ. Renal reserve filtration capacity in patients with type 1 (insulin-dependent) diabetes mellitus. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 1987;2(6):504-9.
317. Thomas DM, Coles GA, Williams JD. Dopamine does not mediate protein-induced hyperfiltration. *Experimental nephrology*. 1994;2(5):294-8.

318. Thomas MC, Tsalamandris C, MacIsaac R, Medley T, Kingwell B, Cooper ME, et al. Low-molecular-weight AGEs are associated with GFR and anemia in patients with type 2 diabetes. *Kidney Int.* 2004;66(3):1167-72.
319. Thraillkill KM, Bunn RC, Moreau CS, Cockrell GE, Simpson PM, Coleman HN, et al. Matrix metalloproteinase-2 dysregulation in type 1 diabetes. *Diabetes Care.* 2007;30(9):2321-6.
320. Tiengo A, Briani G, Scaldaferri E, Riva F, Jori E, Sgnaolin E, et al. Renal hemodynamics and albumin excretion rate in patients with diabetes secondary to acquired pancreatic disease. *Diabetes Care.* 1992;15(11):1591-7.
321. Tietze IN, Sorensen SS, Ivarsen PR, Nielsen CB, Pedersen EB. Impaired renal haemodynamic response to amino acid infusion in essential hypertension during angiotensin converting enzyme inhibitor treatment. *J Hypertens.* 1997;15(5):551-60.
322. Tomaszewski M, Charchar FJ, Maric C, McClure J, Crawford L, Grzeszczak W, et al. Glomerular hyperfiltration: A new marker of metabolic risk. *Kidney International.* 2007;71(8):816-21.
323. Tonshoff B, Nowack R, Kurilenko S, Blum WF, Seyberth HW, Mehls O, et al. Growth hormone-induced glomerular hyperfiltration is dependent on vasodilating prostanoids. *American Journal of Kidney Diseases.* 1993;21(2):145-51.
324. Torbjornsdotter TB, Jaremo GA, Berg UB. Nondipping and its relation to glomerulopathy and hyperfiltration in adolescents with type 1 diabetes. *Diabetes Care.* 2004;27(2):510-6.
325. Tsai YW, Ho CI, Chen JY, Chang KC, Weng YM, Chen SY, et al. Impact of body composition on estimated glomerular filtration rate in relatively healthy adults in Taiwan. *European journal of clinical nutrition.* 2014.
326. Tuttle KR, Bruton JL. Effect of insulin therapy on renal hemodynamic response to amino acids and renal hypertrophy in non-insulin-dependent diabetes. *Kidney International.* 1992;42(1):167-73.
327. Tuttle KR, Puhlman ME, Cooney SK, Short RA. Effects of amino acids and glucagon on renal hemodynamics in type 1 diabetes. *American Journal of Physiology - Renal Physiology.* 2002;282(1 51-1):F103-F12.
328. Uemasu J, Hori T, Uemasu Y, Kawasaki H. Effects of a rice meal on renal hemodynamics and excretory functions in normal subjects. *Nephron.* 1991;57(2):187-91.
329. Uemasu J, Maeda N, Suyama A, Kawasaki H, Hirayama C. Lack of effect of indomethacin and captopril on protein-induced glomerular hyperfiltration in normal subjects. *Japanese Journal of Nephrology.* 1989;31(2):179-83.
330. Unuigbe EI, Azubike CO, Eregie A. Assessment for markers of nephropathy in newly diagnosed type 2 diabetics. *West African journal of medicine.* 2005;24(2):134-8.
331. Valensi P, Assayag M, Busby M, Paries J, Lormeau B, Attali JR. Microalbuminuria in obese patients with or without hypertension. *International Journal of Obesity.* 1996;20(6):574-9.
332. Vanrenterghem Ch YF, Verberckmoes RKA, Roels LM, Michielsen PJ. Role of prostaglandins in protein-induced glomerular hyperfiltration in normal humans. *American Journal of Physiology - Renal Fluid and Electrolyte Physiology.* 1988;254(4):23/4.
333. Vasavda N, Gutierrez L, House MJ, Drasar E, St Pierre TG, Thein SL. Renal iron load in sickle cell disease is influenced by severity of haemolysis. *British journal of haematology.* 2012;157(5):599-605.
334. Vasovic O, Zamaklar M, Lalic K, Milosevic D, Zikic L, Popovic L, et al. [Relationship between low glomerular filtration rate, hypertension, and microalbuminuria in type 1 diabetes mellitus]. *Vojnosanitetski pregled Military-medical and pharmaceutical review.* 2005;62(5):349-55.
335. Vedder AC, Linthorst GE, van Breemen MJ, Groener JE, Bemelman FJ, Strijland A, et al. The Dutch Fabry cohort: diversity of clinical manifestations and Gb3 levels. *Journal of inherited metabolic disease.* 2007;30(1):68-78.
336. Vedel P, Obel J, Nielsen FS, Bang LE, Svendsen TL, Pedersen OB, et al. Glomerular hyperfiltration in microalbuminuric NIDDM patients. *Diabetologia.* 1996;39(12):1584-9.

337. Veldman BA, Vervoort G, Blom H, Smits P. Reduced plasma total homocysteine concentrations in Type 1 diabetes mellitus is determined by increased renal clearance. *Diabetic medicine : a journal of the British Diabetic Association*. 2005;22(3):301-5.
338. Vervoort G, Veldman B, Berden JH, Smits P, Wetzel JF. Glomerular hyperfiltration in type 1 diabetes mellitus results from primary changes in proximal tubular sodium handling without changes in volume expansion. *European journal of clinical investigation*. 2005;35(5):330-6.
339. Viberti GC, Benigni A, Bognetti E, Remuzzi G, Wiseman MJ. Glomerular hyperfiltration and urinary prostaglandins in Type 1 diabetes mellitus. *Diabetic Medicine*. 1989;6(3):219-23.
340. Ware RE, Rees RC, Sarnaik SA, Iyer RV, Alvarez OA, Casella JF, et al. Renal Function in Infants with Sickle Cell Anemia: Baseline Data from the BABY HUG Trial. *Journal of Pediatrics*. 2010;156(1):66-70.e1.
341. Weaver VM, Kim NS, Jaar BG, Schwartz BS, Parsons PJ, Steuerwald AJ, et al. Associations of low-level urine cadmium with kidney function in lead workers. *Occupational & Environmental Medicine*. 2011;68(4):250-6.
342. Weaver VM, Lee B, Ahn K, Lee G, Todd AC, Stewart WF, et al. Associations of lead biomarkers with renal function in Korean lead workers. *Occupational & Environmental Medicine*. 2003;60(8):551-62.
343. Widstam-Attorps U, Berg U. Urinary protein excretion and renal function in young people with diabetes mellitus. *Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association*. 1992;7(6):487-92.
344. Wiesmayr S, Jungraithmayr TC, Ellemunter H, Stelzmuller I, Bonatti H, Margreiter R, et al. Long-term glomerular filtration rate following pediatric liver transplantation. *Pediatric transplantation*. 2005;9(5):604-11.
345. Wigfall DR, Ware RE, Burchinal MR, Kinney TR, Foreman JW. Prevalence and clinical correlates of glomerulopathy in children with sickle cell disease. *Journal of Pediatrics*. 2000;136(6):749-53.
346. Williams RM, Yuen K, White D, Mallard B, Dalton RN, Acerini CL, et al. Short-term suppression of elevated growth hormone concentrations following insulin-like growth factor 1 administration in young adults with type 1 diabetes does not alter glomerular filtration or albumin excretion rates. *Clinical endocrinology*. 2006;65(4):439-45.
347. Wirta O, Pasternack A, Laippala P, Turjanmaa V. Glomerular filtration rate and kidney size after six years disease duration in non-insulin-dependent diabetic subjects. *Clin Nephrol*. 1996;45(1):10-7.
348. Wiseman MJ, Hunt R, Goodwin A. Dietary composition and renal function in healthy subjects. *Nephron*. 1987;46(1):37-42.
349. Wiseman MJ, Mangili R, Alberetto M, Keen H, Viberti G. Glomerular response mechanisms to glycemic changes in insulin-dependent diabetics. *Kidney Int*. 1987;31(4):1012-8.
350. Wiseman MJ, Redmond S, House F. The glomerular hyperfiltration of diabetes is not associated with elevated plasma levels of glucagon and growth hormone. *Diabetologia*. 1985;28(10):718-21.
351. Wiseman MJ, Viberti GC, Keen H. Threshold effect of plasma glucose in the glomerular hyperfiltration of diabetes. *Nephron*. 1984;38(4):257-60.
352. Wolfsdorf JI, Crigler JF, Jr. Effect of continuous glucose therapy begun in infancy on the long-term clinical course of patients with type I glycogen storage disease. *Journal of pediatric gastroenterology and nutrition*. 1999;29(2):136-43.
353. Wollesen F, Brattstrom L, Refsum H, Ueland PM, Berglund L, Berne C. Plasma total homocysteine and cysteine in relation to glomerular filtration rate in diabetes mellitus. *Kidney Int*. 1999;55(3):1028-35.
354. Wong F, Logan A, Blendis L. Hyperinsulinemia in preascitic cirrhosis: Effects on systemic and renal hemodynamics, sodium homeostasis, forearm blood flow, and sympathetic nervous activity. *Hepatology (Baltimore, Md)*. 1996;23(3):414-22.
355. Wong F, Massie D, Colman J, Dudley F. Glomerular hyperfiltration in patients with well-compensated alcoholic cirrhosis. *Gastroenterology*. 1993;104(3):884-9.

356. Wong F, Massie D, Hsu P, Dudley F. Indomethacin-induced renal dysfunction in patients with well-compensated cirrhosis. *Gastroenterology*. 1993;104(3):869-76.
357. Wong H, Vivian L, Weiler G, Filler G. Patients with autosomal dominant polycystic kidney disease hyperfiltrate early in their disease. *American Journal of Kidney Diseases*. 2004;43(4):624-8.
358. Wu VC, Kuo CC, Wang SM, Liu KL, Huang KH, Lin YH, et al. Primary aldosteronism: changes in cystatin C-based kidney filtration, proteinuria, and renal duplex indices with treatment. *Journal of Hypertension*. 2011;29(9):1778-86.
359. Wu VC, Yang SY, Lin JW, Cheng BW, Kuo CC, Tsai CT, et al. Kidney impairment in primary aldosteronism. *Clinica Chimica Acta*. 2011.
360. Wuerzner G, Pruijm M, Maillard M, Bovet P, Renaud C, Burnier M, et al. Marked association between obesity and glomerular hyperfiltration: A cross-sectional study in an African population. *American Journal of Kidney Diseases*. 2010;56(2):303-12.
361. Yamada K, Nakano H, Nakayama M, Nozaki O, Miura Y, Nishimura M, et al. Endothelium-dependent relaxation in peripheral vasculature and kidney of non-insulin-dependent diabetes mellitus. *Journal of diabetes and its complications*. 1995;9(4):203-7.
362. Yang GK, Maahs DM, Perkins BA, Cherney DZ. Renal hyperfiltration and systemic blood pressure in patients with uncomplicated type 1 diabetes mellitus. *PloS one*. 2013;8(7):e68908.
363. Yip JW, Jones SL, Wiseman MJ, Hill C, Viberti G. Glomerular hyperfiltration in the prediction of nephropathy in IDDM: A 10-year follow-up study. *Diabetes*. 1996;45(12):1729-33.
364. Zerbini G, Bonfanti R, Meschi F, Bognetti E, Paesano PL, Gianolli L, et al. Persistent renal hypertrophy and faster decline of glomerular filtration rate precede the development of microalbuminuria in type 1 diabetes. *Diabetes*. 2006;55(9):2620-5.
365. Ziyadeh FN, Musallam KM, Mallat NS, Mallat S, Jaber F, Mohamed AA, et al. Glomerular hyperfiltration and proteinuria in transfusion-independent patients with beta-thalassemia intermedia. *Nephron Clinical practice*. 2012;121(3-4):c136-43.
366. Zoccali C, Mallamaci F, Postorino M, Cuzzola F, Leonardi D, Parlongo S, et al. Hyperfiltration and calcium metabolism in essential hypertension. *American journal of hypertension*. 1991;4(12 Pt 1):944-50.
367. Zuccala A, Gaggi R, Zucchelli A, Zucchelli P. Renal functional reserve in patients with a reduced number of functioning glomeruli. *Clin Nephrol*. 1989;32(5):229-34.

**Hand-searched papers, included:**

368. Cherney DZ1, Reich HN, Miller JA, Lai V, Zinman B, Dekker MG, Bradley TJ, Scholey JW, Sochett EB. Age is a determinant of acute hemodynamic responses to hyperglycemia and angiotensin II in humans with uncomplicated type 1 diabetes mellitus. *Am J Physiol Regul Integr Comp Physiol*. 2010;299:R206-14.
369. Barai S, Gambhir S, Prasad N, Sharma RK, Ora M, Kumar A, Gupta A, Parasar DS, Suneetha B. Levels of GFR and protein-induced hyperfiltration in kidney donors: a single-center experience in India. *Am J Kidney Dis*. 2008;51:407-14.
370. Claris-Appiani A, Ardissono G, Tirelli AS, Daccò V, Corbetta C, Guidi L, Moretto E, Assael BM, Sereni F. Metabolic factors in the renal response to amino acid infusion. *Am J Nephrol*. 1998;18:359-66.
371. Fliser D1, Zeier M, Nowack R, Ritz E. Renal functional reserve in healthy elderly subjects. *J Am Soc Nephrol*. 1993;3:1371-7.
372. Greene SA1, Dalton RN, Turner C, Haycock GB, Chantler C. Hyperglycemia with and without glycosuria: effect on inulin and para-amino hippurate clearance. *Kidney Int*. 1987;32:896-9.
373. Lemley KV, Boothroyd DB, Blouch KL, Nelson RG, Jones LI, Olshen RA, Myers BD. Modeling GFR trajectories in diabetic nephropathy. *Am J Physiol Renal Physiol*. 2005;289:F863-70.

374. McPherson Yee M, Jabbar SF, Osunkwo I, Clement L, Lane PA, Eckman JR, Guasch A. Chronic kidney disease and albuminuria in children with sickle cell disease. *Clin J Am Soc Nephrol*. 2011;6:2628-33.
375. Regolisti G, Buzio C, Cavatorta A, De Martin L, Cavalli R, Perazzoli F, Coghi P, Cabassi A, Pucci F, Borghetti A. Glomerular hyperfiltration in essential hypertension: hormonal aspects. *Acta Biomed Ateneo Parmense*. 1992;63:163-73.
376. Rodríguez-Iturbe B, Herrera J, García R. Response to acute protein load in kidney donors and in apparently normal postacute glomerulonephritis patients: evidence for glomerular hyperfiltration. *Lancet*. 1985;2(8453):461-4.
377. Semplicini A, Ceolotto G, Sartori M, Maresca A, Baritono E, De Toni R, Paparella I, Calò L. Regulation of glomerular filtration in essential hypertension: role of abnormal Na<sup>+</sup> transport and atrial natriuretic peptide. *J Nephrol*. 2002;15(5):489-96.
378. Vora JP, Dolben J, Dean JD, Thomas D, Williams JD, Owens DR, Peters JR. Renal hemodynamics in newly presenting non-insulin dependent diabetes mellitus. *Kidney Int*. 1992;41:829-35.
379. Woitas RP, Heller J, Stoffel-Wagner B, Spengler U, Sauerbruch T. Renal functional reserve and nitric oxide in patients with compensated liver cirrhosis. *Hepatology* 1997;26:858-64.
380. Caramori ML, Fioretto P, Mauer M. Low glomerular filtration rate in normoalbuminuric type 1 diabetic patients: an indicator of more advanced glomerular lesions. *Diabetes*. 2003;52:1036-40.
381. Chagnac A, Weinstein T, Korzets A, Ramadan E, Hirsch J, Gaftor U. Glomerular hemodynamics in severe obesity. *Am J Physiol Renal Physiol*. 2000;278:F817-22.
382. Schmitz A, Hansen HH, Christensen T. Kidney function in newly diagnosed type 2 (non-insulin-dependent) diabetic patients, before and during treatment. *Diabetologia*. 1989;32:434-9.
383. Mogensen CE, Andersen MJ. Increased kidney size and glomerular filtration rate in early juvenile diabetes. *Diabetes*. 1973;22:706-12.
384. Schmitz A, Christensen T, Møller A, Mogensen CE. Kidney function and cardiovascular risk factors in non-insulin-dependent diabetics (NIDDM) with microalbuminuria. *J Intern Med*. 1990;228(4):347-52.
385. Nakamura H, Yamazaki M, Chiba Y, Tani N, Momotsu T, Kamoi K, Ito S, Yamaji T, Shibata A. Acute loading with proteins from different sources in healthy volunteers and diabetic patients. *J Diabet Complications*. 1991;5(2-3):140-2.
386. Hoang K, Tan JC, Derby G, Blouch KL, Masek M, Ma I, Lemley KV, Myers BD. Determinants of glomerular hypofiltration in aging humans. *Kidney Int*. 2003;64:1417-24.
387. Navarro-Díaz M, Serra A, Romero R, Bonet J, Bayés B, Homs M, Pérez N, Bonal J. Effect of drastic weight loss after bariatric surgery on renal parameters in extremely obese patients: long-term follow-up. *J Am Soc Nephrol*. 2006;17(12 Suppl 3):S213-7.
388. Thompson J, Reid M, Hambleton I, Serjeant GR. Albuminuria and renal function in homozygous sickle cell disease: observations from a cohort study. *Arch Intern Med*. 2007;167:701-8.
389. Woo KT, Lau YK, Chan CM, Wong KS. ATRA therapy restores normal renal function and renal reserve and prevents renal failure. *Ann Acad Med Singapore* 2005;34:52-9.
390. Bierens WC, Smit GP, Troelstra JA. Renal function and kidney size in glycogen storage disease type I. *Pediatr Nephrol* 1992;6:236-8.
391. Lafayette RA, Druzin M, Sibley R, Derby G, Malik T, Huie P, Polhemus C, Deen WM, Myers BD. Nature of glomerular dysfunction in pre-eclampsia. *Kidney Int* 1998;54(4):1240-9.
392. Drummond K, Mauer M; International Diabetic Nephropathy Study Group. The early natural history of nephropathy in type 1 diabetes: II. Early renal structural changes in type 1 diabetes. *Diabetes*. 2002 May;51(5):1580-7.
393. Lemley KV, Abdulla I, Myers BD, Meyer TW, Blouch K, Smith WE, Bennett PH, Nelson RG. Evolution of incipient nephropathy in type 2 diabetes mellitus. *Kidney Int*. 2000;58(3):1228-37. Erratum in: *Kidney Int* 2000 Nov;58(5):2257.

394. Steinke JM et al. The early natural history of nephropathy in type 1 diabetes. III. Predictors of 5-year urinary albumin excretion rate patterns in initially normoalbuminuric patients. *Diabetes* 2005;54:2164-2171
395. Okada R et al. Renal hyperfiltration in prediabetes confirmed by fasting plasma glucose and haemoglobin A1c. *Renal Failure* 2012;34:1084-1090
396. Caramori ML, Gross JL, Pecis M, de Azevedo MJ. Glomerular filtration rate, urinary albumin excretion rate, and blood pressure changes in normoalbuminuric normotensive type 1 diabetic patients: an 8-year follow-up study. *Diabetes Care* 1999;22:1512-6
397. Bjornstad P, Maahs DM, Cherney DZ, Cree-Green M, West A, Pyle L, Nadeau KJ. Insulin sensitivity is an important determinant of renal health in adolescents with type 2 diabetes. *Diabetes Care* 2014 Nov;37:3033-9
398. Yang GK, Har RL, Lytvyn Y, Yip P, Cherney DZ. Renal hyperfiltration is associated with glucose-dependent changes in fractional excretion of sodium in patients with uncomplicated type 1 diabetes. *Diabetes Care* 2014;37:2774-81
399. Azevedo MJ1, Padilha LM, Gross JL. A short-term low-protein diet reduces glomerular filtration rate in insulin-dependent diabetes mellitus patients. *Braz J Med Biol Res* 1990;23:647-54400. Silveiro SP1, Friedman R, de Azevedo MJ, Canani LH, Gross JL. Five-year prospective study of glomerular filtration rate and albumin excretion rate in normofiltering and hyperfiltering normoalbuminuric NIDDM patients. *Diabetes Care* 1996;19(2):171-4
401. Cherney DZ, Scholey JW, Zhou J, Zimpelmann J, Kennedy C, Burns KD, Lai V, Miller JA. Endothelial nitric oxide synthase gene polymorphisms and the renal hemodynamic response to L-arginine. *Kidney Int* 2009;75:327-32
402. Cherney DZ, Lai V, Miller JA, Scholey JW, Reich HN. The angiotensin II receptor type 2 polymorphism influences haemodynamic function and circulating RAS mediators in normotensive humans. *Nephrol Dial Transplant* 2010;25:4093-6
403. Cherney DZ1, Reich HN, Scholey JW, Daneman D, Mahmud FH, Har RL, Sochett EB. The effect of aliskiren on urinary cytokine/chemokine responses to clamped hyperglycaemia in type 1 diabetes. *Diabetologia* 2013;56:2308-17
404. Cherney DZ1, Scholey JW, Sochett EB. Sex differences in renal responses to hyperglycemia, L-arginine, and L-NMMA in humans with uncomplicated type 1 diabetes. Sex differences in renal responses to hyperglycemia, L-arginine, and L-NMMA in humans with uncomplicated type 1 diabetes. *Diabetes Care* 2013;36:1290-6
405. Cherney DZ1, Montanari A. Gender, clamped hyperglycemia and arterial stiffness in patients with uncomplicated type 1 diabetes mellitus. *Clin Exp Hypertens* 2014;36:187-93