THE KOREAN SOCIETY OF NEPHROLOGY

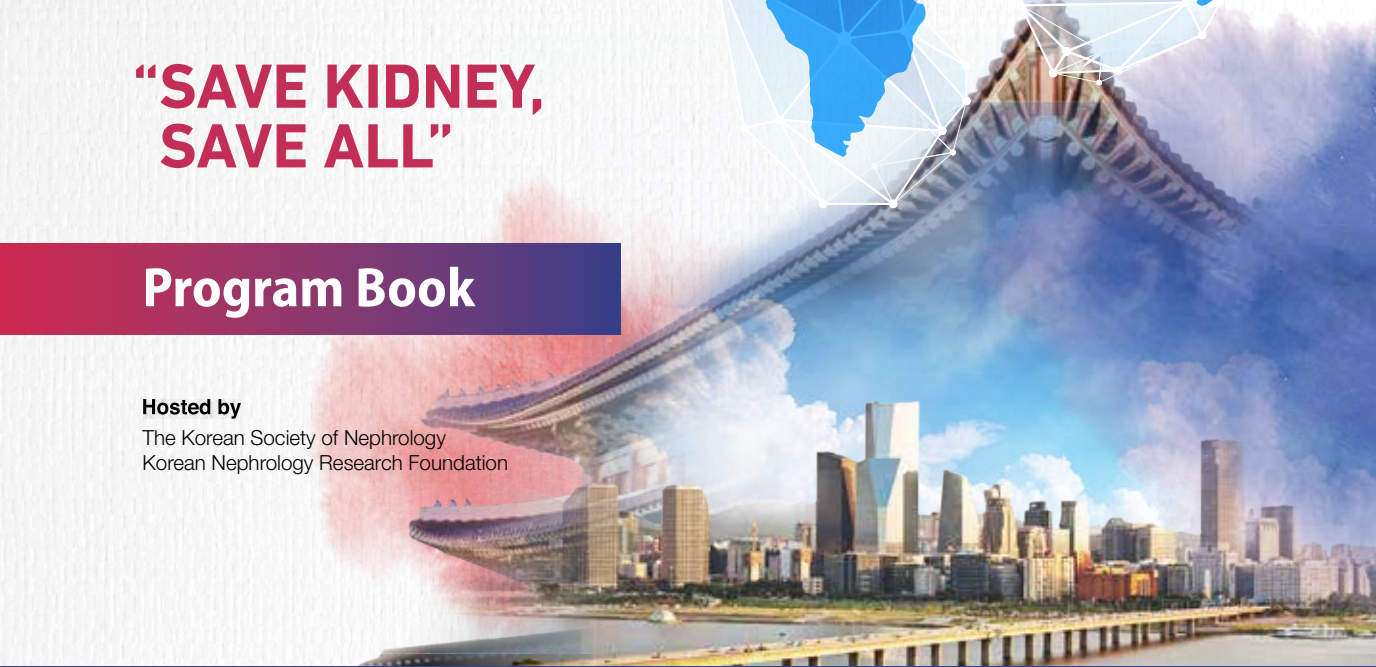
www.ksnmeeting.kr

KSN SEOUL, KOREA 2023

The 43rd Annual Meeting of the Korean Society of Nephrology

April 27(Thu) - 30(Sun), 2023
Coex, Seoul, Korea

"SAVE KIDNEY, SAVE ALL"



Program Book

Hosted by
The Korean Society of Nephrology
Korean Nephrology Research Foundation

PLATINUM Sponsors

FRESENIUS MEDICAL CARE · Baxter · JW Pharmaceutical · Daewon 대원제약 · Otsuka

GOLD Sponsors

HANDOK · inno.N Innovate New & Next · KYOWA KIRIN · YUHAN · BORYUNG · SK chemicals · AstraZeneca · astellas · Bayer · Chong Kun Dang Pharm.

FRESENIUS
MEDICAL CARE

Improving lives together

Fresenius Medical Care is the world's leading provider of dialysis products and services, offering life-sustaining care for people living with chronic kidney failure.

In Asia Pacific, we draw on our decades of experience and expertise to deliver our vision – **Creating a future worth living. For patients. Worldwide. Every day.**

Get in touch

Fresenius Medical Care Korea
(14/F, FKI Tower) 24 Yeoui-daero,
Yeongdeungpo-gu, Seoul, 07320, Rep. of Korea
Telephone: +822 2146 8800
Fax: +822 3453 9213
www.freseniusmedicalcare.asia

Baxter

Homechoice Claria enabled by **Sharesource**

from pediatric to elderly population

Homechoice Claria | **SIMPLE & SMART APD for your patient to maintain daily life**

Sharesource

ON-DEMEND ACCESS to treatment data by GREAT VISIBILITY in APD

- Intuitive Triage Dashboard
- Patient Snapshot
- Treatment Summary

KO-RC55-210119

Making adherence part of their daily lives

FOSRENOL®
(lanthanum carbonate)

Effective phosphate management, simplified

- 포스레놀®은 높은 인(P) 결합력을 가진 인 조절의 1차 선택제입니다.[1]
- 포스레놀®은 츄어블 정제와 경구용 산제 두 가지 제형으로 환자의 편의성을 높였습니다.[2]
- 포스레놀®은 전세계에서 10년 이상 안전하게 사용된 비칼슘계열의 인 결합제입니다.[3]

Reference 1. Patrick Martin, et al. Am J Kidney Dis. 2011;57(5):700-706 2. Fosrenol® SmPC, Mar 2018 3. Hutchison AJ, et al. Nephrology (Carlton). 2016 Dec;21(12):987-994.

[Prescribing Information]

포스레놀정500/750밀리그램 포스레놀산1000밀리그램

[주성분] Lanthanum Carbonate (란타늄 탄산염) 포스레놀정500밀리그램 1정(약954mg) 중 란타늄으로서 500mg, 포스레놀정750밀리그램 1정(약 1431mg) 중 란타늄으로서 750mg, 포스레놀산1000밀리그램 1포(약 1908mg) 중 란타늄으로서 1000mg **[효능·효과]** 혈액투석이나 복막투석을 받는 만성신부전 환자 또는 인 제한 식이요법만으로 혈청 인산 수치가 충분히 조절되지 않고 1.78 mmol/L (약 5.5mg/dL) 이상인 투석을 하지 않는 만성 신장 질환 환자의 고인산혈증 치료 **[용법·용량]** 성인(65세 이상의 고령자 포함): 포스레놀은 매 식사와 함께 혹은 식후 즉시 분복한다. 정제의 경우, 이 약을 그대로 삼키지 않고 반드시 씹어서 복용해야 한다. 씹는 것을 용이하게 하기 위해 이 약을 부수어 복용할 수 있다. 분말의 경우 이 약을 소량의 부드러운 음식에 섞어서 즉시(15분이내) 복용해야 한다. 이 약은 녹지 않으므로 복용을 위해 액체에 녹이지 않는다. 혈청 인산 농도는 란탄으로서 750mg/일 용량에서 조절되기 시작하였고, 대부분의 환자에서 1500~3000mg/일 용량에서 적정 혈청 인산농도로 조절되었다. **[이상반응]** 가장 흔하게 보고된 이상반응은 두통 및 알러지 피부 반응을 제외하고 위장관계 증상이었다. 위장관계 증상은 이 약을 식사와 함께 투여 시 발생빈도가 최소화되고, 일반적으로 투여가 지속될수록 약해진다.

※ 보다 자세한 내용은 제이더블유중외제약 홈페이지(http://www.jw-pharma.co.kr)나 식품의약품안전처 온라인의약도서관(http://drug.mfds.go.kr)를 참고하시기 바랍니다.

KOR/C-APROM/KOR//0870

JW 중외제약

제이더블유중외제약
고객만족팀 : 1588-2675, www.jw-pharma.co.kr
서울시 서초구 남부순환로 2477(구:서초동 1424-2) JW타워
제품에 대한 상세한 내용은 제품 설명서나 본사 홈페이지를 참조하시기 바랍니다.

Takeda

캡슐형 투석지연제
Renamezin cap.
(Spherical Adsorptive Carbon)

캡슐에 다 담았다.

식물성 캡슐, 레나메진으로
환자들에게 더 나은 삶을 선사해주세요.

- 캡슐제형의 투석지연제
- 휴대가 편리한 포장 (Pouch)
- 1회 2g을 약물 손실 없이 모두 복용
- 국산원료, 국내생산
- HPMC 캡슐

대원제약 (우)04808 서울특별시 성동구 천호대로 386 **TEL:** (02)2204-7000, (수신자부담) 080-497-8272 **FAX:** (02)3436-4878 **Website:** www.daewonpharm.com

*보다 자세한 내용은 제품설명서 및 홈페이지를 참조하세요.

CKD, chronic kidney disease; Hb, hemoglobin

References 1. 미쎄라®프리필드주 국내허가사항 (as of 2022-05-10) 2.렌벨라®정 국내허가사항 (as of 2022-05-10) 3. Locatelli F, et al. Once-Monthly Continuous Erythropoietin Receptor Activator (C.E.R.A.) in Patients with Hemodialysis-Dependent Chronic Kidney Disease: Pooled Data from Phase III Trials. Adv Ther. 2016;33(4):610-625. 4. Rodríguez-Osorio L, et al. Use of sevelamer in chronic kidney disease: beyond phosphorus control. Nefrologia. 2015;35(2):207-217.

미쎄라® 프리필드주

30 ㎍/0.3ml, 50 ㎍/0.3ml, 75 ㎍/0.3ml, 100 ㎍/0.3ml, 120 ㎍/0.3ml, 150 ㎍/0.3ml, 200 ㎍/0.3ml, 250 ㎍/0.3ml, 360 ㎍/0.6ml(메톡시폴리에칠렌글리콜-에포에틴 베타)(숙주 : CHO cell, 발현벡터 : DN2-3) / 안정(화)제 : 무수황산나트륨(E.P.), 폴록사머188(E.P.) / 항산화제 : 메치오닌 / 완충제 : 인산이수소나트륨일수화물 / 등장화제 : 만니톨 / pH조정제 : 염산, 수산화나트륨 / 용제 : 주사용수(E.P.)(메톡시폴리에칠렌글리콜-에포에틴 베타)

[성상] 무색 또는 미황색의 투명한 용액이 충전된 프리필드시린지 [효능·효과] 만성 신질환 환자의 증후성 빈혈치료 [용법·용량] 이 약은 피하주사(SC) 또는 정맥주사(IV)로 투여할 수 있다. 이 약은 복부, 팔 또는 대퇴부에 피하주사 될 수 있다. 헤모글로빈 수치가 안정화될 때까지는 매 2주마다, 안정화 이후부터는 주기적으로 헤모글로빈 수치를 모니터하는 것이 권장된다. 이 약은 대개 장기간 투여되나, 필요시 언제든지 중단할 수 있다. 만약 해당 투여일에 이 약 투여를 놓쳤다면 가능한 빨리 그 용량을 투여하고 원래 투여 주기대로 치료를 재개한다. 1. 조혈촉진제를 투여받고 있지 않은 환자 : 목표한 헤모글로빈수치[10g/dl(6.21mmol/L) 초과]에 도달하기 위해 투석을 하는 환자는 초기 권장 용량으로 0.6μg/kg을 매 2주마다 주사 (피하 또는 정맥)하며 투석을 하지 않는 환자는 초기 권장 용량으로 0.6μg/kg을 매 2주마다 주사 (피하 또는 정맥)하거나 1.2μg/kg을 매 4주마다 피하 주사한다. 만약 1개월간의 헤모글로빈 증가 속도가 1.0g/dl(0.621mmol/L)보다 낮다면 용량을 약 25% 증량시킨다. 환자별로 목표한 헤모글로빈 수치에 도달될 때까지 1개월 간격으로 약 25%씩 증량할 수 있다. 1개월간 헤모글로빈 증가 속도가 2g/dl(1.24mmol/L)를 초과하거나 헤모글로빈 수치가 증가하여 12g/dl(7.45mmol/L)에 도달할 경우 용량을 약 25% 감량한다. 헤모글로빈 수치가 계속 증가할 경우 수치가 감소되기 시작할 때까지 투여를 중단하고, 수치가 감소되기 시작하는 시점에 이전 용량에서 약 25% 감량하여 치료를 재개한다. 투여 중단 후 헤모글로빈 수치는 1주당 0.35g/dl씩 감소될 것으로 예상된다. 용량 조절은 1개월에 1회를 초과하지 않도록 한다. 매 2주마다 투여 받은 환자의 헤모글로빈 농도가 10g/dl(6.21mmol/L)를 초과하여 도달했을 경우, 이전 용량(2주 1회 용량)의 2배에 해당하는 용량으로 1개월에 1회씩 투여받을 수 있다. 2. 조혈촉진제를 투여받고 있는 환자 : 현재 다른 조혈촉진제를 투여받고 있는 환자에 이 약을 1개월 1회 대체 투여할 수 있다. 이 약의 초기 용량은 표 1과 같이 투여 받고 있는 다베포에틴 알파 또는 에포에틴의 1주 요법의 용량에 따라 다르다. 이 약의 첫 투여는 이전에 투여된 다베포에틴 알파 또는 에포에틴의 투여주기에 따라 예정된 다음 투여일에 실시된다. 표1. 미쎄라 초기 용량

다베포에틴 알파의 IV 또는 SC 용량 (mcg/week)	에포에틴의 IV 또는 SC 용량 (IU/week)	미쎄라 IV 또는 SC 투여시 용량 (mcg/month, 1개월 1회)
< 40	< 8000	120
40 - 80	8000 - 16000	200
> 80	> 16000	360

목표 헤모글로빈 농도(10g/dl(6.21mmol/L)초과]를 유지하기 위해 용량 조절이 필요한 경우, 1개월당 용량을 약 25%씩 조절 할 수 있다. 1개월간 헤모글로빈 증가속도가 2g/dL(1.24mmol/L)를 초과하거나 헤모글로빈 수치가 증가하여 12g/dl(7.45mmol/L)에 도달할 경우 용량을 약 25% 감량한다. 헤모글로빈 수치가 계속 증가할 경우 수치가 감소되기 시작할 때까지 투여를 중단하고, 수치가 감소되기 시작하는 시점에 이전 용량에서 약 25% 감량하여 치료를 재개한다. 투여 중단 후 헤모글로빈 수치는 1주당 0.35g/dl씩 감소될 것으로 예상된다. 용량 조절은 1개월에 1회를 초과하지 않도록 한다. 복막투석 환자에 대한 치료 경험이 제한적이므로, 이러한 환자의 경우 정기적인 헤모글로빈 모니터링과 용량 조절 지침을 엄격하게 준수하는 것이 권장된다. [사용상 주의사항] 1. 경고 1) 적혈구 수혈이 필요하지 않은 최소의 헤모글로빈 농도를 유지할 수 있는 용량으로 투여할 것. 2) 만성 신질환 환자의 경우 권장 목표 헤모글로빈 농도를 초과하지 않도록 헤모글로빈 농도를 유지하여야 한다. 임상시험에서 조혈촉진제 투여시 혈중 헤모글로빈 농도가 12g/dL(7.5mmol/L)을 초과하는 경우 중대한 심혈관계 부작용 및 사망의 위험성을 증가시키는 것으로 나타났다. 대조임상시험에서도 헤모글로빈 농도가 빈혈증상 조절 및 수혈을 피하는데 필요한 수준을 초과할 경우 에포에틴 투여에 의한 유의한 이점은 나타나지 않았다. 3)방사선 요법을 받고 있는 진행성 두경부암 환자, 화학요법을 받고 있는 전이성 유방암 환자, 화학요법 또는 방사선요법을 받지 않은 활동성 종양환자에서 에리스로포이에틴 제제의 투여로 헤모글로빈 농도가 12g/dL를 초과하는 경우 사망의 위험성이 증가하고 종양의 진행시간을 단축시킨다. 4) 수술 전 동종 적혈구 수혈의 감소를 목적으로 에리스로포이에틴 제제를 투여 받은 환자에서 심부정맥 혈전증의 빈도가 높게 나타났다. 2. 금기 1) 이 약 및 이 약의 구성성분에 과민증인 환자 2) 조절이 되지 않는 고혈압 환자 3. 다음 환자에는 신중히 투여할 것 1) 중증 간질환 환자 2) 헤모글로빈병증 환자 3) 발작 환자 4) 수혈이 필요한 출혈환자 또는 최근에 출혈이 있었던 환자 5) 혈소판 수치가 500 X 10^9/L 보다 높은 환자 1) 보다 자세한 제품 문의 또는 제품 관련 부작용 보고는 (주)한국로슈(02-3451-3600), (주)한독(02-527-5114)로 연락주시기 바랍니다. 2) 가장 최신 제품정보는 (주)한국로슈 홈페이지(www.roche.co.kr)에서 확인하실 수 있습니다.(: Mircera-2021-03-19)

렌벨라®정(세벨라머탄산염) 렌벨라®산0.8그램(세벨라머탄산염)

[원료약품 및 그 분량] 렌벨라정 1정 중 세벨라머탄산염(별규) 800.0mg, 렌벨라산 1포 중 세벨라머탄산염 (별규) 800mg [효능효과] 투석을 받고 있는 만성 신장질환 환자의 혈청 인 조절 [용법 용량] 1일 3회 식사와 함께 복용. 산제 복용시 이 약 1포는 최소 30mL의 물로 완전히 혼합하여 30분 이내에 복용하고, 복용 전에 재현탁한다. 1) 인산결합제를 복용하고 있지 않는 환자에 투여: 이 약의 권장초기용량은 0.8g 내지 1.6g 이며, 이 약 1~2정(포)을 다음과 같이 혈청 인 수치에 따라 매 식사와 함께 복용한다. 혈청 인 5.5 - 7.5 ㎎/dL의 경우 1회 1정(포), 1일 3회, 7.5 ㎎/dL이상의 경우 1회 2정(포), 1일 3회. 2) 세벨라머 염산염 정제를 복용하고 있는 환자에서 이 약을 대체 투여: 동일 용량을 투여한다. 투석을 받는 만성신장질환 환자에서 연구된 세벨라머 탄산염의 최대 1일 용량은 14g이었다. 3) 세벨라머 탄산염의 정제에서 산제로 또는 산제에서 정제로 대체투여: 동일 용량을 투여한다. 4) 초산칼슘제제를 복용하고 있는 환자에게 이 약을 대체 투여하는 경우: 초산칼슘제제 (1정당 초산칼슘 667mg) 1회 1정, 1일 3회 시 이 약 1회 1정(포) 1일 3회, 초산칼슘제제 1회 2정,1일 3회 시 이 약 2정(포) 1회, 1일 3회, 초산칼슘제제 1회3정, 1일 3회 시 이 약 1회 3정(포), 1일 3회 5) 이 약을 복용하고 있는 모든 환자에서의 용량 조절: 목표 혈청 인 수치에 도달하기 위해 적절한 용량 조절이 필요할 수 있다. 필요 시 2주 간격을 두고 1일 3회 이 약의 용량을 0.8g씩 증량 또는 감량한다. [사용상의 주의사항] · 금기: 이 약의 주성분 및 부형제에 과민한 환자, 저인산혈증 환자, 장폐색 환자 (이 약은 장관내에서 팽윤하여 장관천공을 일으킬 우려가 있다.) · 신중투여: 장관협착 또는 변비가 있는 환자 · 이상반응 - 혈액투석환자 대상으로 한 연구에서 세벨라머 탄산염 정제의 이상반응과 세벨라머 염산염에서 보고된 이상반응이 유사하였다. 혈액투석환자를 대상으로 한 또 다른 교차연구에서 세벨라머 탄산염 산제의 이상반응과 세벨라머 염산염에서 보고된 이상반응이 유사하였다. - 세벨라머 염산염 연구에서, 세벨라머 염산염으로 치료받은 환자(n=99)의 5% 이상에서 발생한 이상반응 : 구토(22%), 구역(20%), 설사(19%), 소화불량(16%), 복통(9%), 고창(8%), 변비(8%) - 복막투석환자 대상으로 한 세벨라머 염산염 연구에서 대부분의 이상반응은 혈액투석 환자에서 관찰된 이상반응과 유사하였다. - 세벨라머 탄산염 및 세벨라머 염산염의 시판 후 확인된 이상반응 : 과민반응, 가려움증, 발진, 복통, 대변 막힘, 흔하지 않은 케이스로 장폐색증과 장폐쇄증, 장관천공. 변비증상이 나타나거나 기존의 변비증상이 심해진 환자는 중증의 합병증을 피하기 위해 적절한 의료처치가 필요하다. ※ 보다 자세한 내용은 홈페이지나 제품설명서를 참고하시기 바랍니다. 문안개정연월일 2020.11.23

HANDOK
(주)한독
서울시 강남구 테헤란로 132
TEL 02-527-5114 FAX 02-527-5001
www.handok.co.kr

Roche
(주)한국로슈
서울특별시 서초구 서초대로 411, 17층
(서초동, 지티타워(이스트)) (우: 06615)
TEL: 02) 3451-3600 FAX: 02) 561-7201

sanofi
(주)사노피-아벤티스 코리아
서울특별시 서초구 반포대로 235 (반포동)
Tel .02)2136-9000 Fax. 02)2136-9099

MIRCERA®
methoxy polyethylene glycol-epoetin beta

RenVela®
sevelamer carbonate

KR.NRP.22.05.01 | M-KR-00001172

크레메진®
Spherical adsorptive carbon 2g

만성콩팥병의 '요독소' 증상개선과 '투석 지연'을 위한 선택

크~ 삼키는게 더 편해졌어!
크~레메진 속붕정 출시

NEW PRODUCT

크레메진 속붕정은

소량의 물로 입 안에서 빠르게 부서져 **복용이 편리**하도록 개발된 신제품입니다.

- ☑ 다수의 약물 복용을 힘들어하는 환우 분이라면
- ☑ 소량의 수분 섭취를 원하는 환우 분이라면

전문의약품 **[제품명]** 크레메진속붕정 **[성분 및 함량]** 이 약 1정(534.5밀리그램) 중 구형흡착탄 500mg **[효능·효과]** 만성신부전증(진행성)에 대한 요독증 증상의 개선 및 투석도입의 지연 **[용법·용량]** 성인 1일 3회, 1회 구형흡착탄 2g(4정) 복용 **[사용상의 주의사항]** 1. 다음 환자에는 투여하지 말 것 - 소화관 통과 장애가 있는 환자 (배설에 지장을 초래할 염려가 있다) ※ 기타 자세한 사항은 제품설명서를 참고하십시오.

inno.N

복용법은 QR코드로 확인하세요.

REGPARA®

Cinacalcet HCl 25mg, 75mg

Treatment for *SHPT*

제품개요

레그파라의 주성분인 시나칼세트는 칼슘유사작용성 화합물(Calcimimetics) 제제로서 부갑상선 주세포 표면에서 세포외 칼슘에 대한 칼슘 감지 수용체의 민감도를 증가시켜 부갑상선호르몬(PTH) 분비를 직접적으로 감소시켜 줍니다. 시나칼세트의 분자식은 $C_{22}H_{22}F_3N \cdot HCl$로서 분자량은 염산염으로서 393.9g/mol입니다. 구조 중에(R) 절대배열(absolute configuration)을 가진 한 개의 키랄 중심(chiral center)이 있고, 광학이성질체로서는 R형이 강력하며 약리작용면에서도 주요한 역할을 담당합니다.

조성 · 성상

제품명	레그파라정 25mg, 75mg
유효성분	레그파라정 25mg: 1정 중 시나칼세트 염산염 27.55mg (시나칼세트로서 25mg) 레그파라정 75mg: 1정 중 시나칼세트 염산염 82.65mg (시나칼세트로서 75mg)
색 · 제형	레그파라정 25mg: 담녹색–담황녹색의 원형의 필름코팅정 레그파라정 75mg: 담황색의 원형필름코팅정

효능 · 효과

투석을 받고 있는 만성신부전 환자와 관련된 이차성 부갑상선 기능 항진증의 치료

용법 · 용량

본 약제의 경구투여시, 분할하여 복용하지 않습니다. 개시 용량으로서는, 성인에게는 1일 1회 시나칼세트로서 25mg을 경구 투여합니다. 이후는, 환자의 부갑상선 호르몬(iPTH) 및 혈청 칼슘 농도를 모니터링하면서 혈청 칼슘치 또는 부갑상선호르몬(iPTH)을 기준으로, 1일 1회 25, 50, 75mg으로 용량을 조정하여, 경구 투여합니다. 다만, 부갑상선호르몬(iPTH)의 개선이 확인되지 않는 경우에는, 1회100mg을 상한으로서 경구 투여합니다. 증량을 실시하는 경우는 증량폭을 25mg로 하여, 3주간 이상의 간격을 두고 실시합니다.

- 이약은 혈중 칼슘의 저하 작용을 가지므로, 혈청 칼슘치가 낮지 않은 것(기준으로서 9.0mg/dL이상)을 확인하고 투여를 개시해야 합니다.
- 혈청 칼슘치는, 본 약제의 개시시 및 용량 조정시는 주 1회 측정하고, 유지기에는 2주에 1회이상 측정하고, 혈청 칼슘치가 8.4mg/dL 미만으로 낮아졌을 경우는, 아래 표와 같이 대응해야 합니다.

혈청칼슘치	대응			
	처치		검사	증량 · 재개
	본 약제의 투여			
8.4mg/dL미만	원칙으로서 본 약제의 증량은 하지 않습니다. (필요시 본 약제를 감량합니다.)	칼슘제나 비타민D제제의 투약을 고려합니다.	혈청칼슘치를 주1회이상 측정합니다. 상기도감시를 실시하는 것이 바람직합니다.	증량할경우에는 8.4mg/dL 이상으로 회복 된 것을 확인후, 증량합니다.
7.5mg/dL미만	즉시 휴약합니다.			재개할경우에는 8.4mg/dL 이상으로 회복 된 것을 확인후, 휴약전의 용량이나 그 이하로 재개하십시오.

혈청 칼슘치의 검사는, 본제의 약효 및 안전성을 적정하게 판단하기 위해서, 복용전에 실시하는 것이 바람직합니다. 또, 저알부민혈증(혈청알부민치가 4.0 g/dL미만)의 경우에는, 보정치를 지표로 이용하는 것이 바람직합니다.
보정 칼슘치 산출 방법 :
보정 칼슘치(mg/dL)=혈청 칼슘치(mg/dL)−혈청알부민치(g/dL)+4.0
(Guidelines for the management of secondary hyperparathyroidism in chronic dialysis patients, 39,10(2006):1440)

사용상의 주의사항

• 경고

- 경력발작: 해외 임상시험에서, 경련 발작의 병력이 있는 환자등에서 경련 발작이 발현했다는 보고가 있습니다.
- 저혈압 및 심부전 악화: 외국의 시판후 조사에서 심부전 환자에서 저혈압 및 심부전 악화가 보고되었으며, 이 부작용은 이 약과의 상관성을 배제할 수 없으며, 혈중 칼슘 농도 감소에 의한 것으로 여겨집니다. 임상시험 결과는 이 약 투여환자의 7%와 위약 투여 환자의 12%에서 저혈압이 발생하였으며, 심부전은 이 약 또는 위약 투여 환자의 2%에서 발생하였습니다.

KR151-2208REG-AD01

한국쿄와기린㈜ | https://www.kyowakirin.com/kr/

KYOWA KIRIN

Jardiance® (empagliflozin)

JardianceDuo® (empagliflozin/metformin HCl)

Glucose Control & CV Event Reduction!

제2형 당뇨병 환자*를 위한 새로운 정면승부

- 심혈관계 사망 위험 **38%** 감소[1†]
- 우수한 HbA_{1c} 강하 효과[2-5]

제2형 당뇨병 환자가 표준치료‡를 받고 있더라도 심혈관계 질환을 동반한 제2형 당뇨병 환자*들은 여전히 심혈관계 사망 위험에 노출되어 있습니다.[6]

심혈관계 질환이 확인된 제2형 당뇨병 환자에서 **심혈관계 사건 발생 영향에 대한 효능·효과가 추가된 유일한 경구 혈당강하제**[7]

* 혈당이 조절되지 않으면서 관상동맥질환, 말초동맥질환, 심근경색이나 뇌졸중의 기왕력을 가지고 있는 제2형 당뇨병 환자.[1]

† 심혈관계 사망은 감소하였지만 비치명적 심근경색, 비치명적 뇌졸중, 4P-MACE는 neutral한 결과를 보였습니다.
3P-MACE의 상대 위험은 위약 대비 14% 감소하였습니다(Hazard ratio, 0.86 [95.02% CI, 0.74–0.99]; *P*=0.04 for superiority).
3P-MACE (primary outcome): 심혈관계 사망, 비치명적 심근경색, 비치명적 뇌졸중.
4P-MACE (key secondary outcome): 심혈관계 사망, 비치명적 심근경색, 비치명적 뇌졸중, 불안정형 협심증으로 인한 입원.

‡ 표준치료: Anti-diabetic agents, RAAS blocker and other anti-hypertensives, statins, and aspirin.

3P-MACE, 3-point major adverse cardiovascular events; **4P-MACE**, 4-point major adverse cardiovascular events; **CI**, confidence interval; **CV**, cardiovascular; **HbA_{1c}**, glycosylated haemoglobin; **RAAS**, renin-angiotensin-aldosterone system.

References **1.** Zinman B, et al. N Engl J Med. 2015;373:2117. **2.** Roden M, et al. Lancet Diabetes Endocrinol. 2013;1:208. **3.** Roden M, et al. Cardiovas Diabetol. 2015;14:154.
4. Ridderstrale M, et al. Diabetes Obes Metab. 2018;20(12):2768. **5.** Hadjadj S, et al. Diabetes Care. 2016;39(10):1718. **6.** Cavender MA, et al. Circulation. 2015;132:923. **7.** 자디앙® 제품설명서.

자디앙® 정 (엠파글리플로진) 10mg, 25mg

[원료약품 및 분량] 자디앙®정 10mg (엠파글리플로진 1정 [257.0mg] 중 주성분 : 엠파글리플로진 [벌규] 10mg | 자디앙®정 25mg (엠파글리플로진 1정 [206.0mg] 중 주성분 : 엠파글리플로진 [벌규] 25mg **[효능·효과]** 이 약은 성인 제 2형 당뇨병 환자의 혈당조절을 향상시키기 위해 식사요법 및 운동요법의 보조제로 투여한다. 1. 이 약은 단독요법으로 투여한다. 2. 이 약은 다음의 경우 병용요법으로 투여한다. - 이전 당뇨병 약물치료를 받은 경험이 없으며 단독요법으로 충분한 혈당 조절이 어려운 경우 이 약을 메트포르민과 병용투여 - 메트포르민 단독요법으로 충분한 혈당조절을 할 수 없는 경우, 이 약을 병용투여 - 메트포르민과 피오글리타존 병용요법, 또는 메트포르민과 설포닐우레아 병용요법으로 충분한 혈당 조절을 할 수 없는 경우, 이 약을 병용투여 - 인슐린 (인슐린 단독 또는 메트포르민 병용 또는 메트포르민 병용 요법으로 충분한 혈당조절을 할 수 없는 경우, 이 약을 병용투여 - 메트포르민과 디펩티딜 펩티다제-4(DPP-4) 저해제인 리나글립틴 병용요법으로 충분한 혈당 조절을 할 수 없는 경우, 이 약을 병용투여. 혈당이 조절되지 않는 제2형 당뇨병 환자중 심혈관계 질환이 확인된 환자에서 심혈관계 사건 발생에 대한 영향은 '사용상의 주의사항' 10. 전문가를 위한 정보 2) 임상시험 정보'참조. **[용법·용량]** 이 약의 권장용량은 단독요법 및 인슐린 등 다른 혈당 강하제와의 추가 병용요법에 대하여 1일 1회 10mg이다. 이 약 10 mg에 내약성이 우수하면서 추가적인 혈당조절이 필요한 경우, 이 약 용량을 1일 1회 25mg으로 증량할 수 있다. 이 약과 설포닐우레아 또는 인슐린을 병용투여시에는 저혈당발생의 위험을 감소시키기 위해 설포닐우레아 또는 인슐린의 용량감소를 고려할 수 있다 (사용상의 주의사항 3. 이상반응 항 참고). 이 약은 식사와 관계없이 투여할 수 있다. 정제는 통째로 삼켜서 복용한다. 이 약의 복용을 잊었을 때에는 생각나는 즉시 복용한다. 하루에 두 배의 용량을 복용하지 않는다. **[사용상의 주의사항]** 1. 다음 환자에는 투여하지 말 것 1) 이 약의 주성분 및 구성성분에 과민반응이 있는 환자 2) 제1형 당뇨병 또는 당뇨병성 케톤산증 환자 3) 사구체 여과율 (eGFR)이 30 mL/ min/1.73m² 미만인 환자, 말기 신질환 (end stage renal disease) 또는 투석 중인 환자 4) 이 약은 유당을 함유하고 있으므로, 갈락토오스 불내성 (galactose intolerance), Lapp 유당분해효소 결핍증 (lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애 (glucose-galactose malabsorption) 등의 유전적인 문제가 있는 환자에게는 투여하면 안 된다. **[저장방법]** 기밀용기, 실온보관 (1-30℃) **[제조자]** Boehringer Ingelheim Pharma GmbH & Co. KG, 독일 [Binger Strasse 173, 55216 Ingelheim am Rhein, Germany] **[수입자]** 한국베링거인겔하임(주), 한국 [서울 중구 통일로 10 연세재단세브란스빌딩 16층]

자디앙듀오® 정 (엠파글리플로진, 메트포르민염산염) 5/500mg, 5/850mg, 5/1000mg, 12.5/500mg, 12.5/850mg, 12.5/1000mg

[원료약품 및 분량] 5/500mg - 엠파글리플로진(벌규) 5mg, 메트포르민염산염(EP) 500mg, 5/850mg - 엠파글리플로진(벌규) 5mg, 메트포르민염산염(EP) 850mg, 5/1000mg - 엠파글리플로 진(벌규) 5mg, 메트포르민염산염(EP) 1000mg, 12.5/500mg - 엠파글리플로진(벌규) 12.5mg, 메트포르민염산염(EP) 500mg, 12.5/850mg - 엠파글리플로진(벌규) 12.5mg, 메트포르민염산염(EP) 850mg, 12.5/1000mg - 엠파글리플로진(벌규) 12.5mg, 메트포르민염산염(EP) 1000mg **[효능·효과]** 이 약은 엠파글리플로진과 메트포르민의 병용투여가 적절한 성인 제2형 당뇨병 환자의 혈당조절을 향상시키기 위해 식사요법 및 운동요법의 보조제로 투여한다. ①이전 당뇨병 약물치료를 받은 경험이 없으며 단독요법으로 충분한 혈당조절이 어려울 경우 투여한다. ②메트포르민 단독요법으로 충분한 혈당조절을 할 수 없는 경우 투여한다. ③메트포르민과 설포닐우레아의 병용요법으로 충분한 혈당 조절을 할 수 없는 경우 설포닐우레아의 이 약(엠파글리플로진/메트포르민 복합제)를 병용투여한다. ④메트포르민과 피오글리타존 병용요법으로 충분한 혈당조절을 할 수 없는 경우 이 약(엠파글리플로진/메트포르민 복합제)를 병용투여한다. ⑤인슐린과 메트포르민 병용요법으로 충분한 혈당조절을 할 수 없는 경우 인슐린과 이 약(엠파글리플로진/메트포르민 복합제)을 병용투여한다. ⑥디펩티딜펩티다제-4 (DPP-4) 저해제인 리나글립틴 병용요법으로 충분한 혈당조절을 할 수 없는 경우 이 약(엠파글리플로진/메트포르민 복합제)을 병용투여한다. ⑦인슐린과 메트포르민과 설포닐우레아 병용요법으로 충분한 혈당조절을 할 수 없는 경우 인슐린 및 설포닐우레아와의 이 약(엠파글리플로진/메트포르민 복합제)을 병용투여한다. ⑧엠파글리플로진과 메트포르민 병용요법을 대체하는 경우 투여한다. 혈당이 충분히 조절되지 않는 제2형 당뇨병 환자 중 심혈관계 질환이 확인된 환자에서 심혈관계 사건 발생에 대한 영향은 '사용상의 주의사항 12. 전문가를 위한 정보 2) 임상시험 정보'항을 참고한다. **[용법·용량]** 이 약의 권장 용량은 1회 1정, 1일 2회이다. 이 약의 용량은 각 성분의 1일 최대 권장 용량인 엠파글리플로진 25mg과 메트포르민 2000mg을 넘지 않는 범위에서 각 환자의 현재 치료 요법, 유효성, 내약성을 고려하여 결정한다. -메트포르민 단독 또는 인슐린 등 다른 약물과의 병용요법으로 충분한 혈당조절을 할 수 없는 환자가 이 약을 복용하는 경우 권장 용량은 엠파글리플로진 5mg 1일 2회 (1일 총량 10mg)과 메트포르민 기존 복용량이다. 엠파글리플로진 10mg (1일 총량)에 대한 내약성이 우수하면서 추가적인 혈당조절이 필요한 경우, 엠파글리플로진 25mg (1일 총량)으로 증량할 수 있다. 엠파글리플로진(1일 총량 10mg 또는 25mg)과 메트포르민의 병용요법에서 이 약으로 전환하는 환자는 엠파글리플로진의 기존 복용량과 메트포르민의 기존 복용량으로 투여한다. 이 약과 설포닐우레아 또는 인슐린을 병용투여시에는 저혈당 발생의 위험을 감소시키기위해 설포닐우레아 또는 인슐린의 용량감소를 고려할 수 있다 (사용상 주의사항 4. 이상반응 및 6. 상호작용 참고). 이 약은 메트포르민과 관련한 위장관계 부작용을 줄이기 위하여 식사와 함께 복용하여야 한다. 이 약의 복용을 잊었을 때에는 생각나는 즉시 복용한다. 그러나, 한 번에 두 배의 용량을 복용해서는 안 되며, 이러한 경우에는 잊은 복용분은 건너뛴다. 신장애 환자: 경증의 신장애 환자에 대한 용량 조정은 필요하지 않다. 사구체 여과율(eGFR)이 60 ml/min/1.73m² 미만인 환자(또는 크레아티닌청소율(CrCl) < 60 ml/min)에게 이 약으로 치료를 시작해서는 안된다. 이 약은 메트포르민을 함유하기 때문에 사구체 여과율(eGFR)이 45 ml/min/1.73m² 미만인 환자 또는 크레아티닌청소율(CrCl)이 45 ml/min 미만인 환자에 투여할 수 없다(사용상의 주의사항 2. 다음 환자에는 투여하지 말 것 2) 항 참조). 이 약은 eGFR이 45-59 ml/min/1.73m²인 환자 또는 CrCl이 45-59 ml/min인 환자 중 유산산증 위험을 증가시킬만 한 다른 증상을 동반하지 않으면서 엠파글리플로진에 대해서이 우수한 경우에만 투여할 수 있다 (이러한 환자에서 메트포르민의 시작용량은 1일 1회 500mg 또는 850mg이며 최대 투여량은 500mg 1일 2회이고, 엠파글리플로진의 투여 가능 용량은 1일 1회 10mg이다. 신기능을 3-6개월 마다 주의 깊게 모니터링해야 한다 (사용상의 주의사항, 3. 다음 환자에는 신중히 투여할 것 중 1) 항 참조). 만약 CrCl ≤ 45 ml/min 또는 eGFR ≤ 45 ml/min/1.73m²으로 신기능이 감소되는 경우 이 약을 즉시 중단하여야 한다. 고령자: 75세 이상의 환자는 신장 기능과 체액량 감소 위험을 고려해야 한다. 엠파글리플로진은 85세 이상의 고령자에서의 임상 경험이 제한적이므로, 이 약의 투여를 시작하는 것은 권장되지 않는다. **[사용상의 주의사항]** 1. 경고 메트포르민염산염 (드물게 유산산증(Lactic acidosis)를 일으킬 수 있다. 유산산증으로 인한 사망 사례가 보고된 바 있다. 2)인슐린, 설포닐우레아계 등 다른 당뇨병용제와 병용투여하는 경우, 드물게 중증의 저혈당증을 일으킬 수 있으므로 주의한다. 2. 다음 환자에는 투여하지 말 것 1) 이 약의 주성분이 엠파글리플로진 및/또는 메트포르민 또는 이 약의 구성성분에 과민반응이 있는 환자 2) 중등도(stage3b) 및 중증의 신장애 환자(크레아티닌청소율 < 45 ml/min 또는 사구체여과율 < 45 ml/min/1.73m²) 3)신기능에 영향을 줄 수 있는 급성 상태: 예를 들어, 탈수, 중증 감염, 심혈관계 허탈(쇼크), 급성 심근경색, 패혈증 4)제1형 당뇨병, 유산산증, 혼수를 수반하거나 그렇지 않은 당뇨병성 케톤산증을 포함하는 급성 또는 만성 대사성 산증 환자 및 케톤산증의 병력이 있는 환자 (제1형 당뇨병과 당뇨병성 케톤산증은 인슐린으로 치료한다.) 5)당뇨병성 전혼수 6)급성 및 불안정형 심부전 환자 7)방사선 요오드 조영물질을 정맥내 투여하는 검사(예: 정맥요로조영술, 혈관조영술, 관상동맥조영술)를 받으려 하는 환자 (급성신부전을 유발할 수 있고, 메트포르민을 투여 받는 환자에서는 유산산증과 관련이 있다. 따라서 이러한 검사가 계획된 환자 중 사구체여과율 ≥ 60 ml/min/1.73m²인 경우는 적어도 검사 시점 또는 시점에 이 약의 투여를 중단해야 하고, 48시간 이내에는 재투여가 불가능하다. 신기능 재평가 후 추가 손상 위험이 없을 것으로 판명된 이후에만 치료를 재개한다. 중등도 신장애 환자의 경우(사구체여과율 45-60 ml/min/1.73m²)인 이 약은 요오드화 조영제 투여 48시간 전 반드시 중단되어야 하며 48시간 이내에는 재투여가 불가능하다. 신기능 재평가 후 추가 손상 위험이 없을 것으로 판명된 이후에만 재개한다.) 6)중증 감염증 또는 중증의 외상성 전신장애 환자에서는 이 약의 처방는 일시적으로 중지되어야 하고 환자의 경구적 섭취가 회복되고 신기능이 정상으로 판명될 때 치료를 다시 시작해야 한다. 7)수술 과정의 경우에(음식과 수액의 섭취에 제한이 없는 가벼운 수술은 제외) 이 약은 수술 48시간 전에 일시적으로 중지되어야 하고, 최소 48시간이 지난 후 신기능이 정상이라고 판명된 후에 치료를 다시 시작해야 한다. 8)영양불량상태, 기아상태, 쇠약상태, 뇌하수체기능부전 또는 부신기능부전환자 9)간기능장애(손상된 간 기능은 유산산증의 몇몇 경우와 관련이 있기 때문에, 일반적으로 임상적 또는 실험실적으로 간 질환의 증거가 있는 환자에게는 이 약의 투여를 피해야 한다.), 폐경녀, 중증의 폐기능장애 환자 및 기타 저산소혈증을 수반하기 쉬운 상태, 과도한 알코올 섭취자, 탈수증, 쇠사, 구토 등의 위험정후 환자 8)임부, 임신하고 있을 가능성이 있는 여성, 수유부 9)조직 저산소증을 유발할 수 있는 다음의 질환 (특히 급성 질환 또는 만성 질환의 악화): 비대상성 심부전, 호흡기부전, 최근의 심근경색, 쇼크 **[저장방법]** 기밀용기, 실온(1-30℃) 보관 **[포장단위]** 60정/병 **[제조사]** Boehringer Ingelheim Pharma GmbH & Co. KG, 독일 (Binger Strasse 173, 55216 Ingelheim am Rhein, Germany) **[수입사]** 한국베링거인겔하임(주), 한국 (서울 중구 통일로 10 연세재단세브란스빌딩 16층)

보다 자세한 사항은 제품설명서 전문을 참고하시기 바랍니다.

PC-KR-100676

Boehringer Ingelheim 한국베링거인겔하임 서울특별시 중구 통일로 10 연세재단 세브란스빌딩 16층 (04527) www.bikr.co.kr TEL : 080-222-0110

yuhan 유한양행 서울시 동작구 노량진로 74 www.yuhan.co.kr

Lilly 한국릴리 서울특별시 중구 후암로 98 LG 서울역빌딩 4층 www.lilly.co.kr

BORYUNG

TORECA
TOTAL RENAL CARE

PTH*를 빠르게 감소[1]시키는 파리칼시톨 바이알제형

PACITOL

Paricalcitol 5μg/mL

***PTH** : Parathyroid hormone **Ref.) 1.** Sprague SM et al. *Kidney Int.* 2003 Apr;63(4):1483-90. (Calcitriol과 비교 연구)

[제품명] 파시톨주 (PACITOL Injection) **[분류번호]** 311(비타민 A 및 D제) **[성상]** 무색 투명한 바이알에 든 무색 투명한 액상 주사제 **[원료약품 및 분량]** 1 mL 중, 유효성분(주성분) : 파리칼시톨(USP) 5 μg 기타 첨가제 : 에탄올, 프로필렌글리콜, 주사용수 **[효능·효과]** 만성신부전과 관련된 이차적 부갑상샘기능항진증의 치료 및 예방 **[용법·용량]** 이 약의 적절한 용량은 각 환자에 따라 주의 깊게 결정되어야 한다. 만성신부전 환자에서 현재 인정되는 완전한 부갑상샘호르몬(intact PTH) 수치의 목표 범위는 요독증이 없는 정상치 상한의 1.5~3배보다 높지 않다. 이 약의 권장 초기 용량은 2일 1회 또는 이보다 빈번하지 않은 빈도로 투석 시 0.04~0.1 μg/kg(2.8~7 μg)을 일시 주사한다.(상세 내용은 제품 설명서 참조) **[포장정보]** 5바이알/상자[1밀리리터/바이알x5] **[사용기간]** 제조일로부터 24 개월

Ref.) 제품 허가사항. 식약처 의약품안전나라. accessed on 2022.06.20

The Right Key
to High Bleeding Risk Patients in HD & CRRT!

HD: hemodialysis, CRRT: continuous renal replacement therapy

후탄은 출혈성 병변 또는 출혈경향을 갖는 환자의 혈액체외순환 시 사용할 수 있는 **항응고제**입니다.[1]

- 반감기가 짧아(5~8분) 항응고작용이 체외순환로에 국한됩니다.[2,3,4]
- 일본 CRRT 표준매뉴얼의 제 1 선택 항응고제 입니다.[5]
- HD환자에 사용 시 출혈성 병변이 있거나, 수술 전 후, 혈소판수 50,000/mm³ 미만의 저혈소판증 환자인 경우 급여 인정됩니다.[6]

주사용 **후탄**

제품요약정보[1]

전문의약품 | 분류번호 : 399

【제품명】• 주사용후탄(나파모스타트메실산염) • 주사용후탄50(나파모스타트메실산염) 【원료약품 및 그 분량】• 주사용후탄 1 바이알 중 유효성분: 나파모스타트메실산염(JP) 10mg • 주사용후탄50 1 바이알 중 유효성분: 나파모스타트메실산염(JP) 50mg 【효능·효과】 1. 췌염의 급성증상(급성췌염, 만성췌염의 급성 악화기, 수술후의 급성췌염, 췌관조영술 후의 급성췌염, 외상성 췌염)의 개선 2. 파종혈관내응고증(DIC) 3. 출혈성 병변 또는 출혈경향을 갖는 환자의 혈액체외순환시 관류혈액 응고방지(혈액투석 및 혈장분리반출술) 【용법·용량】 가. 투여방법 (중략) 3. 출혈성 병변 또는 출혈경향을 갖는 환자의 혈액체외순환시 관류혈액 응고방지 보통 체외순환개시에 앞서 나파모스타트메실산염으로서 20mg을 소량의 5% 포도당주사액이나 주사용수에 용해한 후 생리식염액 500mL에 용해한 액으로 혈액회로내를 세정·충진하고, 체외순환개시 후에는 나파모스타트메실산염으로서 매시 20~50mg을 5% 포도당주사액에 용해하여 항응고제 주입라인에 지속주입한다. 증상에 따라 적의 증감한다. 임상결과에서는 평균 투여용량이 매시간 35mg이었다. (생략) 【제조의뢰자, 판매자】 에스케이케미칼(주) 【제조자】 • 유한양행 충북 청원구 오창읍 연구단지로 219 / Tel. 02-828-0181 • (주)펜믹스 충남 천안시 서북구 직산읍 가리막길 33 / Tel. 02-703-8234

2018. 5. 28. 개정

※ 처방하시기 전 제품설명서 전문을 참고하십시오. 최신 허가사항에 대한 정보는 '의약품통합정보시스템(https://nedrug.mfds.go.kr)'에서 확인할 수 있습니다.

References: 1. 주사용후탄 허가정보. 의약품안전나라 [Cited 2019.12.11]. Available from: https://nedrug.mfds.go.kr/ 2. H. Hirasawa. Theoretical consideration and practice of CHDF. Japan 1996;25:30. 3. Ohtake Y et al., Nafamostat mesylate as anticoagulant in continuous hemofiltration and continuous hemodiafiltration. Contrib Nephrol. 1991;93:215-7. 4. Shinoda T., Anticoagulation in acute blood purification for acute renal failure in critical care. Contrib Nephrol. 2010;166:119-25. 5. 日本急性血液浄化学会: 日本急性血液浄化学会標準マニュアル. 1st ed. 医学図書出版株式会社. 2013;31-9. 6. Nafamostat 주사제, 보건복지부 고시 제2019-181호, 2019.09.01 시행

SK 케미칼 Life Science Biz. 경기도 성남시 분당구 판교로 310(삼평동) Tel 080-021-3131 www.skchemicals.com/ls

forxiga
(dapagliflozin)

보건의료전문가용

Bring Protection To Life

포시가®와 The 더 지킴

만성콩팥병 환자의 신기능 악화 지연을 위해,

포시가®로 환자를 지켜주세요

- SGLT2i 중 **최초**이자 **유일**하게 **만성 콩팥병 적응증** 획득[1]
- 당뇨 유무와 관계없이 만성 콩팥병 환자에서 **신기능 악화, ESKD, 신장 또는 심혈관 질환으로 인한 사망위험 39% 감소**[2,*]
- 제 2형 당뇨환자에 **알부민뇨 개선 및 악화감소** 이점[3]

일러스트는 가상의 환자입니다.

* The primary outcome was a composite of a sustained decline in the estimated GFR of at least 50%, end-stage kidney disease, or death from renal or cardiovascular causes. (HR 0.61, 95% CI 0.51-0.72; P<0.001)

SGLT2i, sodium-glucose cotransporter 2 inhibitor; ESKD, end-stage kidney disease; HR, hazard ratio; CI, confidence interval

1. 포시가® 국내 허가사항(https://nedrug.mfds.go.kr, as of 12-Aug-2021) **2.** Heerspink HJL et al. Dapagliflozin in Patients with Chronic Kidney Disease N Engl J Med. 2020; 383:1436-1446.; **3.** Mosenzon Ofri. et al. The Effect of Dapagliflozin on Albuminuria in DECLARE-TIMI58. Diabetes Care. 2021 Jul 7;dc210076. doi: 10.2337/dc21-0076. Online ahead of print.

포시가 정10밀리그램 (다파글리플로진프로판디올수화물)

전문의약품

【성분·함량】
이 약 1정 (약 260mg) 중
유효성분: 다파글리플로진프로판디올수화물 (별규) 12.3mg (다파글리플로진으로서 10mg)
첨가제: 무수유당(동물유래성분, 기원동물: 소, 사용부위: 우유), 미결정셀룰로오스, 스테아르산마그네슘, 오파드라이II노란색(85F92582), 이산화규소, 크로스포비돈

【효능·효과】
1. 제2형 당뇨병: 이 약은 제2형 당뇨병 환자의 혈당 조절을 향상시키기 위해 식사요법 및 운동요법의 보조제로 투여한다.
- 단독요법
- 병용요법

혈당이 충분히 조절되지 않는 제2형 당뇨병 환자 중 심혈관계 질환이 확인되었거나 심혈관계 위험인자가 있는 환자에서 심혈관계 사건 발생에 대한 영향은 '사용상의 주의사항, 11. 전문가를 위한 정보 3) 임상시험 정보' 항을 참고한다.
2. 만성 심부전: 좌심실 수축기능이 저하된 만성 심부전(NYHA class II-IV) 환자에서 심혈관 질환으로 인한 사망 및 심부전으로 인한 입원 위험성 감소
이 약은 다른 심부전 표준요법과 병용하여 투여한다.
3. 만성신장병: 만성 신장병 환자에서 추정 사구체 여과율 [estimated glomerular filtration rate (eGFR)]의 지속적인 감소, 말기 신장병에 도달, 심혈관 질환으로 인한 사망 및 신장 관련 사망 위험성 감소
이 약은 다른 신장병 표준요법과 병용하여 투여한다.

【용법·용량】
제2형 당뇨병
단독 요법 및 추가 병용 요법
이 약의 권장 용량은 단독 요법 및 인슐린 등 다른 혈당 강하제와의 추가 병용 요법에 대하여 1일 1회 10mg이다. 이 약을 인슐린 또는 설포닐우레아와 같은 인슐린 분비 촉진제와 병용하여 사용하는 경우, 저혈당의 위험을 줄이기 위해 더 낮은 용량의 인슐린 또는 인슐린 분비 촉진제를 고려할 수 있다.

초기 병용요법
이전 당뇨병 약물치료를 받은 경험이 없는 경우 메트포르민과 병용투여 시, 이 약의 초기 권장용량은 1일 1회 5mg 또는 1일 1회 10mg이다.
만성 심부전 및 만성신장병
이 약의 권장용량은 1일 1회 10 mg이다.
특수 집단
신장애
- eGFR 45mL/min/1.73m² 미만 : 혈당조절 개선 목적으로 이 약을 투여하는 것은 권장되지 않는다.
- eGFR 25mL/min/1.73m² 미만 : 만성 심부전 및 만성 신장병 환자에게 이 약의 투여를 시작하는 것은 권장되지 않는다.
- 투석 중인 환자 : 이 약을 투여하지 않는다.

간장애
경증 또는 중등증의 간장애 환자에 대한 용량 조절은 필요하지 않다. 중증의 간장애 환자에 대하여, 시작 용량으로 5 mg이 권장된다. 내약성이 양호한 경우, 이 용량은 10mg으로 증가시킬 수 있다.
고령자 (≥ 65세)
연령에 근거한 용량 조절은 권장되지 않는다.
소아
만 18세 미만의 소아에 대한 다파글리플로진의 유효성과 안전성은 확립되지 않았다. 관련 자료가 없다.
투여방법
이 약은 음식 섭취와 관계없이, 1일 1회 하루 중 언제라도 경구 투여할 수 있다. 정제는 통째로 삼켜야 한다.

【사용상 주의사항】
1. 다음 환자에는 투여하지 말 것
1) 이 약의 주성분 또는 첨가제에 대한 과민반응 병력이 있는 환자
2) 제1형 당뇨병 또는 당뇨병성 케톤산증 환자
3) 이 약은 유당 무수물을 함유한다. 갈락토오스 불내성(galactose intolerance), Lapp 유당 분해효소 결핍증(Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애(glucose-galactose malabsorption) 등의 유전적인 문제가 있는 환자에게는 투여하면 안된다.
4) 투석 중인 환자

2. 다음 환자에는 신중히 투여할 것
1) 체액량 감소 및 신기능 장애가 있는 환자에서의 투여
이 약은 증상성 저혈압이나 크레아티닌의 급격하고 일시적인 변화로 나타날 수 있는 혈관 내 혈량 저하를 유발할 수 있다. 외국의 시판후 조사에서 이 약을 포함한 SGLT-2 저해제를 투여한 환자에서 급성 신장손상이 보고되었으며, 일부는 입원과 투석을 필요로 하였다. 신기능 장애(eGFR 60mL/min/1.73m² 미만), 고령자, 루프계 이뇨제 등을 사용하고 있는 환자에서 혈량 저하 또는 저혈압 위험이 증가할 수 있다. 이러한 특징들을 가진 환자에 대해 이 약의 투여를 시작하기 전 체액량 상태 및 신장 기능에 대한 평가가 필요하며, 투여를 시작한 후 저혈압 증상 및 징후와 신기능에 대해 모니터링 한다.
혈당 조절에 대한 이 약의 유효성은 신장 기능에 따라 다르다. 중등도의 신장애가 있는 환자에서 혈당 조절 유효성이 감소하며 eGFR 45mL/min/1.73m² 미만인 제2형 당뇨환자에서 혈당조절 목적만으로 이 약을 투여하는 것은 권장되지 않는다(용법·용량 항 참조). 중등도의 신장애 환자에서, 이 약을 투여한 피험자들은 위약을 투여한 피험자들에 비해 크레아티닌, 인, 부갑상샘 호르몬(PTH) 상승 및 저혈압의 이상반응을 나타내는 비율이 더 높았다.
이 약은 eGFR 25 mL/min/1.73 m² 미만인 환자에게 투여를 시작한 경험이 제한적이다.
eGFR 25mL/min/1.73m² 미만인 만성 심부전 환자 및 만성 신장병 환자에서 이 약의 투여를 시작하는 것은 권장되지 않는다(용법·용량 항 참조).

개정년월일 : 2021년8월12일
보다 자세한 사항은 제품설명서 전문을 참고하시기 바랍니다.
aFOR20210820

KR-9036 | Exp. 2023-08 (Prep.2021-08)

포시가정은 (1) 제2형 당뇨병 환자의 혈당 조절의 향상, (2) 좌심실 수축기능이 저하된 만성 심부전(NYHA class II-IV) 환자에서 심혈관 질환으로 인한 사망 및 심부전으로 인한 입원 위험성 감소, (3) 만성 신장병 환자에서 추정 사구체 여과율 (eGFR)의 지속적인 감소, 말기 신장병에 도달, 심혈관 질환 으로 인한 사망 및 신장 관련 사망 위험성 감소를 효능·효과 로 허가받았습니다. 한국 아스트라제네카는 어떤 상황에서도 포시가의 미허가 사용을 권장하지 않습니다.

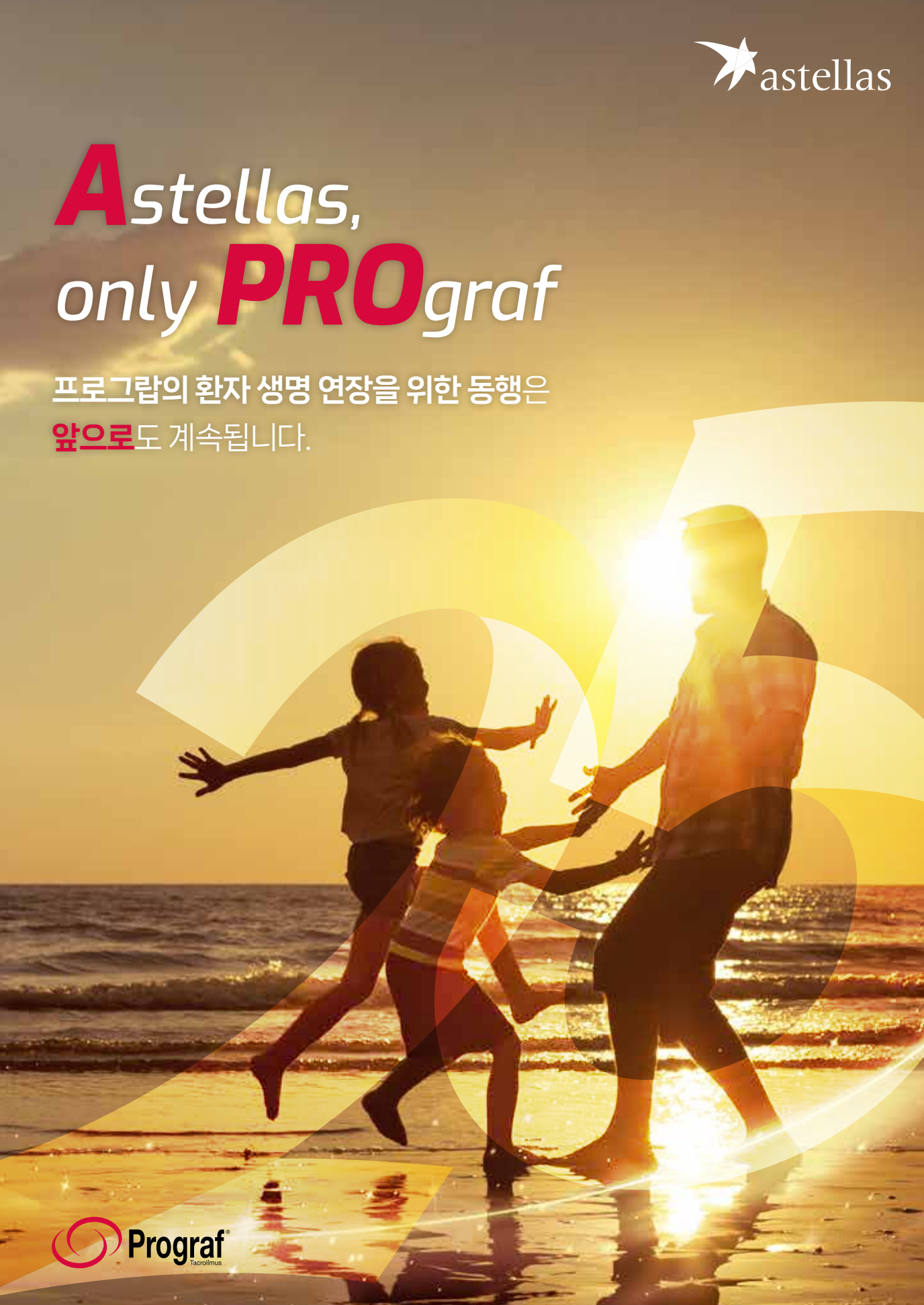
AstraZeneca **수입(수입자): 한국아스트라제네카** 서울시 강남구 영동대로 517 아셈타워 21층
전화: (02) 2188-0800 팩스: (02) 2188-0852

DAEWOONG **공동판매자: (주)대웅제약** 서울 강남구 봉은사로 114길 12 대웅제약빌딩
고객센터: 080-550-8308~9

astellas

Astellas, only PROgraf

프로그랍의 환자 생명 연장을 위한 동행은
앞으로도 계속됩니다.



Prograf® Tacrolimus

의료전문인용

Kerendia®
finerenone
10mg, 20mg tablets

For patients with CKD in T2DM
A different pathway leads to different possibilities

케렌디아®는 혈압과 혈당조절이 충분한 제2형 당뇨병 환자들에서

Inflammation과 fibrosis 억제를 통해 만성신장병 진행 지연을 입증했습니다.

제2형 당뇨병을 동반한 만성신장병의 진행에 inflammation 과 fibrosis는 주요 요인 중 하나이며,
MR의 과활성화 억제로 inflammation/fibrosis를 감소시켜 이로 인한 신장 손상을 줄일 수 있습니다.

CKD : chronic kidney disease; HbA1c: glycated hemoglobin; MR: mineralocorticoid receptor; T2D: type 2 diabetes.

References: 1. Duckworth W, ea al; VADT Investigators. *N Engl J Med.* 2009;360(2): 129-139. **2.** The ACCORD Study Group. *N Engl J Med.* 2010;362(17):1575-1585. **3.** Tesch GH, et al. *Front Pharmacol.* 2017;8. doi:10.3389/fphar. 2017. 00313. **4.** Alicic RZ, et al. *Clin J Am Soc Nephrol.* 2017;12(12):2032-2045. **5.** Toth-Manikowski S, et al. *J Diabetes Res.* 2015;2015. doi:10.1155/2015/697010. **6.** Black LM, et al. *J Histochem Cytochem.* 2019;67(9):663-681.

BAYER
바이엘코리아(주)
07335 서울시 영등포구 여의대로 108 (여의도동 파크원) 타워 2
TEL. 02-829-6600 http://www.bayer.co.kr | PP-KER-KR-0028-1

Kerendia®제품정보
QR코드를 통해
제품설명서를 확인해주세요.

국내 최초 지속형 ESA 제제 바이오시밀러

네스벨®

Darbepoetin alfa

Prefilled syringe 20μg/30μg/40μg/60μg/120μg

- 국내 최초 **Darbepoetin alfa** 바이오 시밀러
- **1주~4주 1회 용법**, 투약 편의성 개선
- **국내 3상 임상**으로 대조약과 동등한 효과 및 장기 안전성 입증

종근당

KSN SEOUL, KOREA 2023

The 43rd Annual Meeting of the Korean Society of Nephrology

CONTENTS

Overview

Title	The 43rd Annual Meeting of the Korean Society of Nephrology (KSN 2023)
Date	April 27 (Thu) - 30 (Sun), 2023
Hosted by	The Korean Society of Nephrology, Korean Nephrology Research Foundation
Meeting Format	Offline Meeting
Official Language	English, Korean
Program	Opening Ceremony & Welcome Reception, Plenary Lectures, Invited Lecture Sessions, Oral & Poster Sessions, Exhibition
Secretariat	The Korean Society of Nephrology #301 (Miseung Bldg.) 23, Apgujeong-ro 30-gil, Gangnam-gu, Seoul, 06022, Korea Tel: +82-2-3486-8736 | Fax: 82-2-3486-8737 | E.mail: ksn@ksn.or.kr KSN 2023 Secretariat 4Fl. 10, Yeoksam-ro 7-gil, Gangnam-Gu, Seoul, 06244, Korea Tel : +82-2-3452-7265 | Fax : +82-2-521-8683 | E-mail : office@ksnmeeting.kr

The Korean Society of Nephrology Organization

Organizing Committee

Congress President	Byoung Geun Han, M.D.	**Congress Vice-President**	Min Hyun Cho, M.D. Seong Nam Kim, M.D.
Auditor	Eun Young Lee, M.D.	**President**	Chun Soo Lim, M.D.
Secretary General	Sung Gyun Kim, M.D.	**Vice-Secretary General**	Jwa-Kyung Kim, M.D. Yong Chul Kim, M.D. Jin Joo Cha, M.D.
Editor in Chief, Kidney Research and Clinical Practice	Tae-Hyun Yoo, M.D.	**Director, the Scientific Programs**	Seung Hyeok Han, M.D.
Director, the External Affairs and Cooperation	Jung Pyo Lee, M.D. Byung Ha Chung, M.D.	**Director, the Collaborative Studies**	Jin Seok Jeon, M.D.
Director, the Clinical Practice Guidelines	Sungjin Chung, M.D.	**Director, the Training and Education**	Dong Ki Kim, M.D. Jae Il Shin, M.D.
Director, the KORDS Registry	Seon Ho Ahn, M.D. Yong Kyun Kim, M.D.	**Director, the Insurance and Legal Affairs**	Hyung Jong Kim, M.D. Dae Eun Choi, M.D. Hankyu Lee, M.D.

Treasurer	Bum Soon Choi, M.D.	Director, the Ethical Issues	Seung-Ho Park, M.D. Sang-Youb Han, M.D.
Director, the Public Relation	Sang Heon Song, M.D.	Director, the Dialysis Quality Assurance	Chang Su Boo, M.D. Ho Sik Shin, M.D. Myung-Gyu Kim, M.D.
Director, the Disaster Preparedness and Response	Young-Ki Lee, M.D.	Director, the Social Contribution	Ho Seok Koo, M.D.
Director, at Large	Hyun-Lee Kim, M.D. Sun-Hee Park, M.D. Soon Kil Kwon, M.D. Beom Jin Lim, M.D. Jae Won Yang, M.D.		

Advisory Board

Acute Kidney Injury	Sejoong Kim, M.D.	Diabetes and Obesity	Eun Young Lee, M.D.
Dialysis (HD)	Soon Kil Kwon, M.D.	Dialysis (PD)	Sun-Hee Park, M.D.
Glomerular and Tubulointerstitial Disorders	Ho Jun Chin, M.D.	Pediatric Nephrology	Hee Gyung Kang, M.D.
Fluid and Electrolyte	Eun Hui Bae, M.D.	Hypertension and Vascular Biology	Tae-Hyun Yoo, M.D.
Transplantation	Chan-Duck Kim, M.D.	CKD	Kook-Hwan Oh, M.D.
Pathology	Beom Jin Lim, M.D.	Basic research	Heon Yung Gee, M.D.
Genetic Disease	Heeyeon Cho, M.D.	Geriatric Nephrology	Soon Hyo Kwon, M.D.
Big Data	Gang Jee Ko, M.D.		

Scientific Commitee

Chair	Seung Hyeok Han, M.D.		
Secretary	Tae Hyun Ban, M.D.	Hyung Woo Kim, M.D.	
Members	Eun Sil Koh, M.D. Ji Hyun Kim, M.D. Hyoungnae Kim, M.D. Sehoon Park, M.D. Se Won Oh, M.D. Jong Cheol Jeong, M.D Young Su Joo, M.D	Young Eun Kwon, M.D. Chang Seong Kim, M.D. Hyosang Kim, M.D. Chung Hee Baek, M.D. Mi Jung Lee, M.D. Ji Yong Jung, M.D Jong Hyun Jhee, M.D	Kyeong Min Kim, M.D. Hyunsuk Kim, M.D. Ju-Young Moon, M.D. Su Hyun Song, M.D. Tae Ik Chang, M.D. Chan-Young Jung, M.D Young Youl Hyun, M.D

Welcome Message

Dear Colleagues,

On behalf of the Organizing Committee, it is our great honor to invite you to the 43rd Annual Meeting of the Korean Society of Nephrology (KSN 2023) which will be held at the COEX, Seoul Korea from April 27 (Thu) to 30 (Sun), 2023.

Despite the continuous COVID-19 situation, we successfully hosted the KSN meeting in a hybrid format in 2022 thanks to the solid support and interest of all the members.

In the hope that the global situation will improve this year, we are preparing to hold the upcoming congress in person. With the know-how gained from hosting the hybrid format meeting in 2022, we are confident that we have the experience to overcome this uncertain situation caused by the COVID-19 pandemic, and organize a meeting that participants can fully engage in and enjoy whichever way they may choose to attend it.

Under the theme **"Save Kidney, Save All"**, KSN 2023 is designing the best possible program with high quality scientific sessions that will provide a great opportunity for participants to keep up-to-date with the latest research findings in various fields of nephrology, including Plenary Sessions with key opinion leaders in the global nephrology community and joint symposia with related societies.

It is the wish of the KSN to have the privilege to share its experience and knowhow with colleagues from all over the world through KSN 2023. We cordially invite the members of the nephrology community to come and share your valuable expertise with us as well as enjoy all the programs we have prepared for you at KSN 2023.

Stay safe and well until we meet you at KSN 2023!

Sincerely yours,

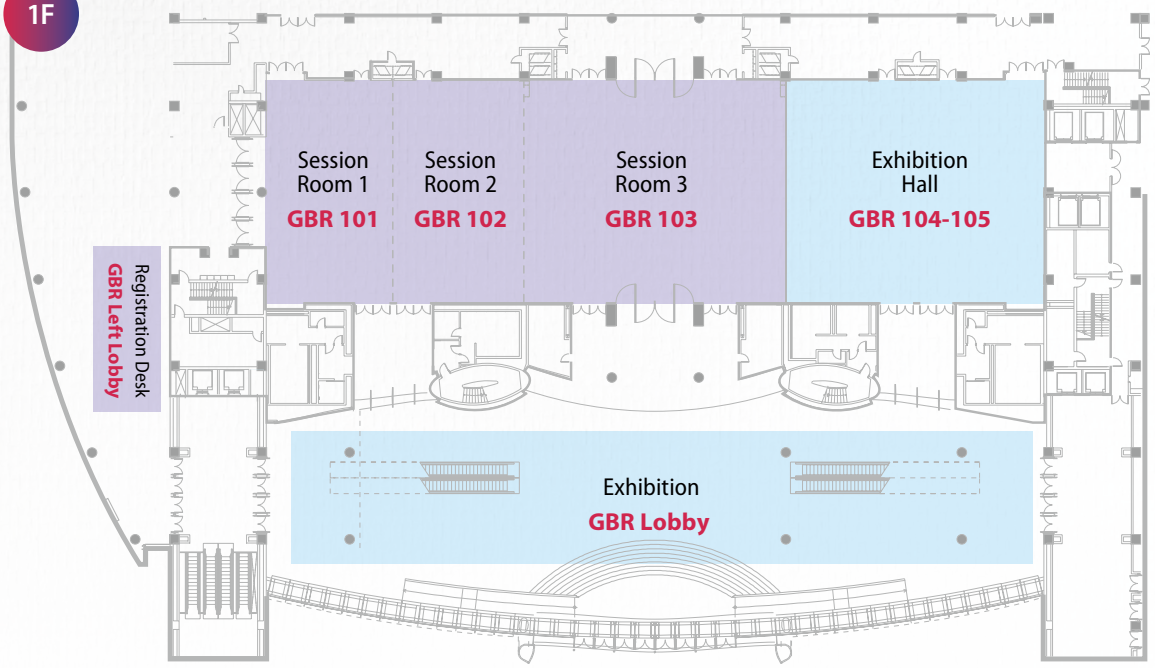
Chun Soo Lim, M.D.
President, Korean Society of Nephrology

Byoung Geun Han, M.D.
Congress President, Korean Society of Nephrology

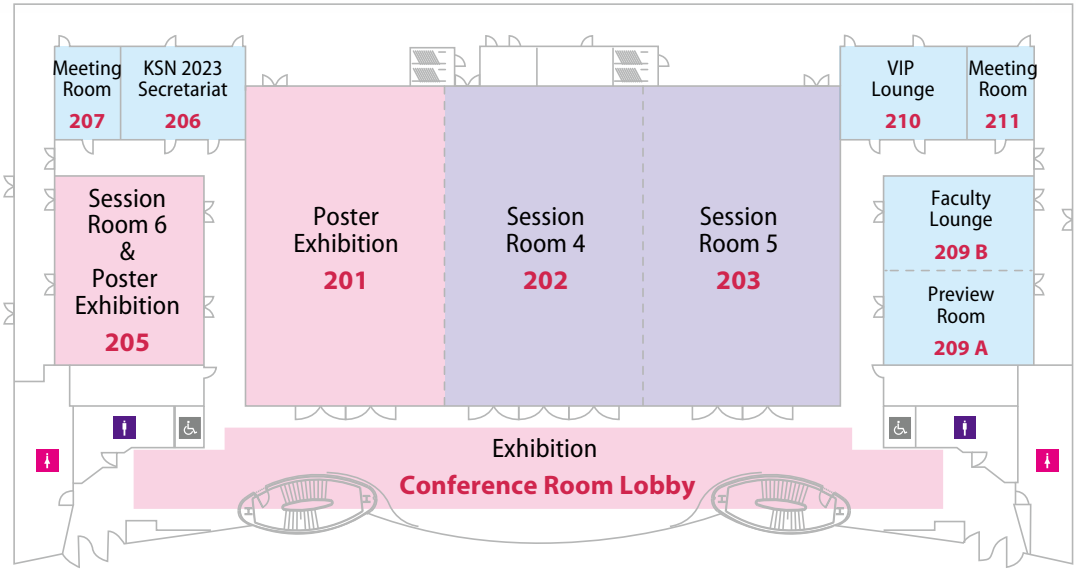
Floor Plan

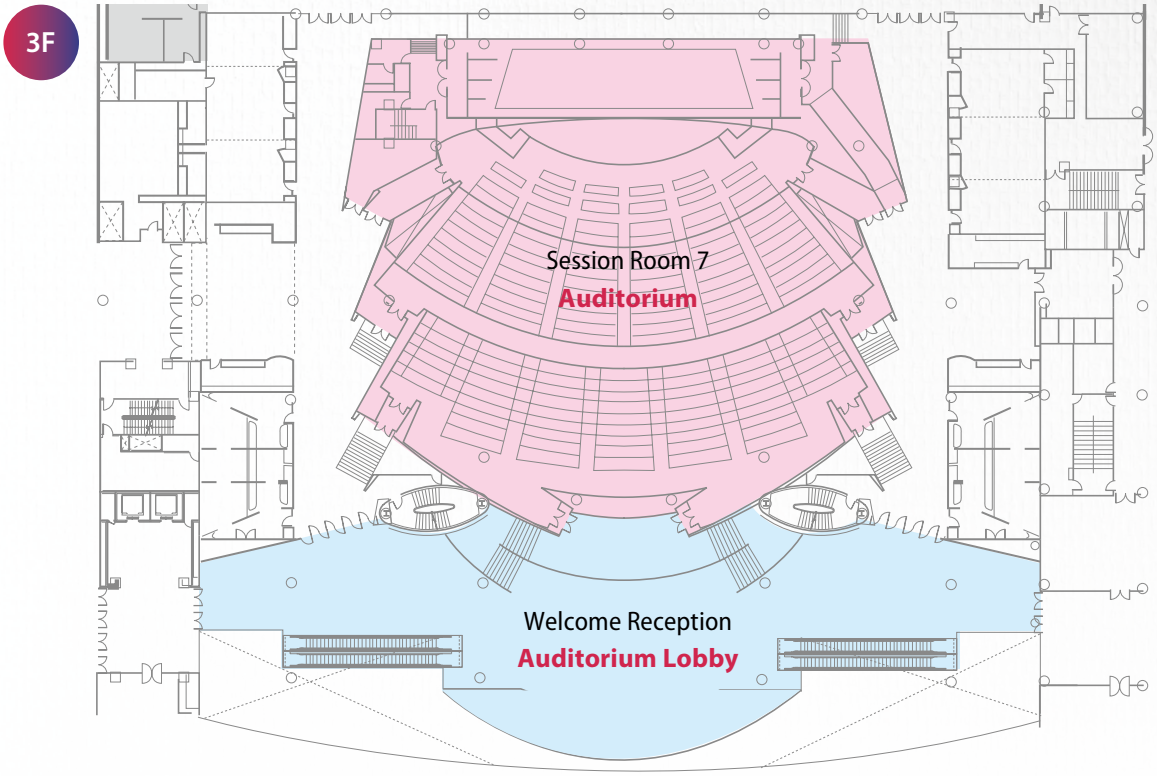
Floor Plan

1F



2F





Facility Operating Hours

Registration Desk

Date	Operating Hours	Location
April 27 (Thu)	09:30 - 17:00	Grand Ballroom Left Lobby (1F)
April 28 (Fri)	07:30 - 17:40	
April 29 (Sat)	07:30 - 16:30	
April 30 (Sun)	07:30 - 11:40	

Preview Room

Date	Operating Hours	Location
April 27 (Thu)	09:30 - 18:00	Room 209 A (2F)
April 28 (Fri)	07:30 - 18:40	
April 29 (Sat)	07:30 - 17:30	
April 30 (Sun)	07:30 - 12:40	

Faculty Lounge

Date	Operating Hours	Location
April 27 (Thu)	09:30 - 18:00	Room 209 B (2F)
April 28 (Fri)	07:30 - 18:40	
April 29 (Sat)	07:30 - 17:30	
April 30 (Sun)	07:30 - 12:40	

Exhibition

Date	Operating Hours	Location
April 27 (Thu)	10:00 - 18:00	Grand Ballroom Lobby (1F)
April 28 (Fri)	08:00 - 18:40	Grand Ballroom 104-105 (1F)
April 29 (Sat)	08:00 - 17:30	
April 30 (Sun)	08:00 - 12:40	Conference Room Lobby (2F)

Program at a glance

Time	Room 1 GBR 101	Room 2 GBR 102	Room 3 GBR 103	Room 4 Room 202	Room 5 Room 203	Room 6 Room 205	Room 7 Auditorium	 Room 201
Thursday, April 27								
10:30 - 12:00 (90')	**PG Education 1** Dialysis (HD + PD + IN)		**PG Education 2** Glomerular Disease	**PG Education 3** Fluid & Electrolyte	**PG Education 4** Kidney Transplantation			
12:00 -13:00 (60')			**Industry Symposium 1** Organon Korea					
13:00 - 14:30 (90')	**PG Education 5** CKD		**Oral Communications 1** Acute Kidney Injury		**Genetic Disease** (13:00 - 15:00)			
14:30 - 15:00 (30')	Break							
15:00 - 17:00 (120')	**Big Data**	**Hypertension and Vasuclar Biology**	**Oral Communications 2** Electrolyte / Hypertension	**Pathology** (14:00 - 17:00)	**Kidney Policy Forum** (15:00 - 16:30) **Vision Proclamation Ceremony for Kidney Health Plan 2033 (국민 콩팥건강지킴 선포식)** (16:30 - 17:00)	**KORDS Report/ Dialysis Center Accreditation**		
17:00 - 17:10 (10')	Break							
17:10 - 18:00 (50')							**Plenary Lecture 1** Hiddo L. Heerspink	
18:00 - 19:40 (100')							**Opening Ceremony & Welcome Reception**	
Friday, April 28								
08:30 - 10:30 (120')	**Fluid & Electrolyte**	**Oral Communications 3** Glomerulonephritis	**KSN - ISN Joint Symposium**	**Peritoneal Dialysis** (08:30-10:20)	**Basic Research**	**Poster Exhibition**		**Poster Exhibition**
10:30 - 10:40 (10')	Break & Poster Visiting			**ISPD - KSN MOU Ceremony** (10:20-10:40)	Break & Poster Visiting		Break & Poster Visiting	
10:40-12:40 (120')	**Becoming a New Basic Researcher**	**Oral Communications 4** Kidney Transplantation	**KSN-EDTA Joint Symposium**	**KSN Research Fund Project**	**Glomerulonephritis**			
12:40 - 13:30 (50')	**Industry Symposium 2** ChongKunDang Pharm.	**Industry Symposium 3** Astrazeneca	**Industry Symposium 4** Korea Otsuka Pharmaceutical Co., Ltd	**Industry Symposium 5** HK Inno.N	**Industry Symposium 6** Astellas Pharma Inc.			
13:30 - 14:20 (50')							**Plenary Lecture 2** Hermann Haller	
14:20 - 14:50 (30')	Break & Poster Visiting						Break & Poster Visiting	
14:50 - 16:50 (120')	**Clinical Trial 1**	**Oral Communications 5** Diabetic Nephrology / Metabolic Abnormality	**Chronic Kidney Disease 1**	**Kidney Transplantation 1**	**Pediatric Nephrology** (14:50 - 16:30) **ESPN-KSN-KSPN MOU Ceremony** (16:30 - 16:50)		**Award Session** (14:50 - 15:40) **Best Abstracts** (15:40 - 16:50)	
16:50 - 17:00 (10')	Break & Poster Visiting						Break & Poster Visiting	
17:00 - 18:40 (100')	**Oral Communications 6** Pediatric / Genetics	**Oral Communications 7** Big Data / Geriatric	**Chronic Kidney Disease 2**	**Kidney Transplantation 2**	**Acute Kidney Injury**			

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

Time	Room 1 GBR 101	Room 2 GBR 102	Room 3 GBR 103	Room 4 Room 202	Room 5 Room 203	Room 6 Room 205	Room 7 Auditorium	 Room 201
Saturday, April 29								
07:00-08:30 (90')			**Council Meeting of the KSN**					
08:30-10:30 (120')	**APSN-KSN CME Course 1**	**Oral Communications 8** Chronic Kidney Disease	**Diabetic kidney Disease**	**AKI: KSN-KSCCM Joint Symposium**	**KSN Cooperative Study**			
10:30-10:40 (10')	Break & Poster Visiting						Break & Poster Visiting	
10:40 - 11:30 (50')						**Poster Exhibition**	**Plenary Lecture 3** Sanjeev Sethi	
11:30 - 12:20 (50')	**Industry Symposium 7** Baxter	**Industry Symposium 8** Kyowa Kirin Korea Co., Ltd.	**Industry Symposium 9** Daewon Pharmaceutical	**Industry Symposium 10** SK Chemicals	**Industry Symposium 11** Fresenius Medical Care Korea			**Poster Exhibition**
12:20 - 12:50 (30')			**General Assembly**					
12:50 - 14:50 (120')	**APSN-KSN CME Course 2**	**KSN-TSN-JSDT Joint Symposium**	**Hemodialysis**	**Geriatric Nephrology**	**KSN-KES Joint Symposium** (Korean Endorine Society)			
14:50 - 15:30 (40')	**Best Poster Presentation** (Grand Ballroom Lobby, 1F)							
15:30 - 17:30 (120')	**Asian Nephrology Forum**	**Oral Communications 9** Dialysis	**KDIGO-KSN Joint Symposium**	**Kidney Health Plan (KHP)**	**KSN-KSH Joint Symposium** (Korean Society of Hypertension)	**Poster Exhibition**	**Ethics Education**	
Sunday, April 30								
08:30 - 10:30 (120')	**Dialysis Nurse Course 1**		**Dialysis Specialist Physician Course 1**	별도 현장등록 필요 **Nephrology Board Review Course 1**	**KSN-KSCN-ISRNM Joint Symposium** (08:30 - 10:10) **KSN - ISRNM MOU Ceremony** (10:10 - 10:30)	**Hands On Session** (인터벤션)		
10:30 - 10:40 (10')	Break							
10:40 - 12:40 (120')	**Dialysis Nurse Course 2**		**Dialysis Specialist Physician Course 2**	별도 현장등록 필요 **Nephrology Board Review Course 2**	**Disaster Preparedness and Response** (재난대응위원회)	**Hands On Session** (인터벤션)		
12:40-13:30 (50')								

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

Day 1 April 27 (Thu)

10:30 - 12:00	**PG Education 1 (Dialysis (HD + PD + IN))**	KOR↔ENG	**Room 1+2**
Chair(s)	Hyung Jong Kim CHA University Bundang Medical Center, Korea		
PG01-S1	Volume Control in PD - Tips for Volume Management for High-Quality PD	Jwa-Kyung Kim Hallym University Sacred Heart Hospital, Korea	
PG01-S2	New Guidelines and PD - How to Apply New Guideline from ISPD in Clinical Practice	Tae Ik Chang National Health Insurance Service Ilsan Hospital, Korea	
PG01-S3	Hemodialysis of Elderly Patients	Soon Hyo Kwon Soonchunhyang University College, Seoul Hospital, Korea	
10:30 - 12:00	**PG Education 2 (Glomerular Disease)**	KOR↔ENG	**Room 3**
Chair(s)	Ho Jun Chin Seoul National University Bundang Hospital, Korea Yaerim Kim Keimyung University School of Medicine, Korea		
PG02-S1	IgA Nephropathy	Ho Jun Chin Seoul National University Bundang Hospital, Korea	
PG02-S2	Membranous Nephropathy	Sun-Hee Park Kyungpook National University Hospital, Korea	
PG02-S3	ANCA Related Glomerulonephritis	Bum Soon Choi The Catholic University of Korea, Eunpyeong St. Mary's Hospital, Korea	
10:30 - 12:00	**PG Education 3 (Fluid & Electrolyte)**	KOR↔ENG	**Room 4**
Chair(s)	Soo Wan Kim Chonnam National University Hospital, Korea Sejoong Kim Seoul National University Bundang Hospital, Korea		
PG03-S1	Potassium Disorders in Dialysis Patients	Hoon Young Choi Gangnam Severance Hospital, Korea	
PG03-S2	Metabolic Acidosis in Chronic Kidney Disease: An Update	Hyo Jin Kim Pusan National University Hospital, Korea	
PG03-S3	Fluid Therapy in Critically Ill Patients	Su Hyun Song Chonnam National University Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

10:30 - 12:00	**PG Education 4 (Kidney Transplantation)** *What Should We Know When Caring for KTRs?*	KOR↔ENG	**Room 5**
Chair(s)	Gyu Tae Shin Ajou University, School of Medicine, Korea Wooseong Huh Samsung Medical Center, Korea		
PG04-S1	Immunology and Clinical Patterns of Allograft Rejection	Myung-Gyu Kim Korea University Anam Hospital, Korea	
PG04-S2	Perioperative Management of the Kidney Transplantation	Jong Cheol Jeong Seoul National University Bundang Hospital, Korea	
PG04-S3	Long-term Non-Infectious Complications of Kidney Transplantation	Sang Heon Song Pusan National University Hospital, Korea	
12:00 - 12:50	**Industry Symposium 1** Sponsored by ORGANON	KOR↔ENG	**Room 3**
Chair(s)	Kwon-Wook Joo Seoul National University Hospital, Korea		
IS01-S1	Renoprotection with ARB: Focus on Evidence of losartan	Hyoungnae Kim Soonchunhyang University Seoul Hospital, Korea	
13:00 - 14:30	**PG Education 5 (CKD)**	KOR↔ENG	**Room 1+2**
Chair(s)	Sungjin Chung The Catholic University of Korea, College of Medicine, Korea		
PG05-S1	Updates in Anemia Management in CKD	Sungjin Chung The Catholic University of Korea, College of Medicine, Korea	
PG05-S2	Novel Therapeutic Agents in CKD Management : SGLT2i, MRA and Others	Jwa-Kyung Kim Hallym University Sacred Heart Hospital, Korea	
PG05-S3	Current Updates in Diagnosis and Treatment of CKD-MBD	Shin Young Ahn Korea University Guro Hospital, Korea	
13:00 - 14:30	**Oral Communications 1** *Acute Kidney Injury*	ENG	**Room 3**
Chair(s)	Sang-kyung Jo Korea University Anam Hospital, Korea Tae Hee Kim Inje University Busan Paik Hospital, Korea		
	OC01-S1 ~ OC01-S10		
14:00 - 17:00	**Pathology**	KOR↔ENG	**Room 4**
Chair(s)	Sun Hee Sung Ewha Womans University Mokdong Hospital, Korea Gheeyoung Kwon Samsung Medical Center, Korea		
PATH-S1	Recent Advances in IgA Nephropathy	Ian S. D. Roberts Oxford University Hospitals, United Kingdom	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

PATH-S2	Mechanism of Podocyte Injury	Jun Oh University Medical Center Hamburg-Eppendorf, Germany
	Internal Medicine	Seung Hyeok Han Severance Hospital, Korea
CPC-01	Clinical Discussion	Seung Seok Han Seoul National University Hospital, Korea
	Pathology	Minsun Jung Yonsei University College of Medicine, Korea
	Internal Medicine	Hee-Yeon Jung Kyungpook National University Hospital, Korea
CPC-02	Clinical Discussion	Eun Sil Koh The Catholic University of Korea, Yeouido St. Mary's Hospital, Korea
	Pathology	Yong-jin Kim Kyungpook National University Hospital, Korea
	Internal Medicine	Jun Young Lee Yonsei University Wonju College of Medicine, Korea
CPC-03	Clinical Discussion	Hyo-Wook Gil Soonchunhyang University Cheonan Hospital, Korea
	Pathology	Minseob Eom Yonsei University Wonju Severance Christian Hospital, Korea

13:00 - 15:00 Genetic Disease

Multidisciplinary Approach to Screening and Management of Genetic Kidney Disease: From Clinical Clue to Genetic Counselling

KOR↔ENG **Room 5**

Chair(s)
Min Hyun Cho Kyungpook National University Hospital, Korea
Young Joo Kwon Korea University Guro Hospital, Korea

GD01-S1	Alport Syndrome - Early Detection?	Oliver Gross University of Göttingen, Germany
GD01-S2	Diagnostic Approach for Genetic Disease by Translating Whole Genome Big Data	Soyoung Lee Hallym University Sacred Heart Hospital, Korea
GD01-S3	Various Clinical Aspect and Genetic Counselling of Hereditary Kidney Disease	Beom Hee Lee Asan Medical Center, Korea
GD01-S4	Public Aspect of Genetic Kidney Disease	Jiwon Lee Korea Disease Control and Prevention Agency, Korea

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

15:00 - 17:00	**Big Data** *다양한 보건의료 빅데이터 활용 연구 방법 소개*	KOR↔ENG	**Room 1**
Chair(s)	Dong Ki Kim Seoul National University Hospital, Korea Tae Ik Chang National Health Insurance Service Ilsan Hospital, Korea		
BD01-S1	Guide to the Analysis Research Process Based on National Health Insurance Corporation Data	Kyungdo Han Soongsil University, Korea	
BD01-S2	Research Process Using the UK Biobank Database	Sehoon Park Seoul National University Hospital, Korea	
BD01-S3	KoGES Data-Driven Analysis Research Process	Jong Hyun Jhee Gangnam Severance Hospital, Korea	
BD01-S4	Evaluating Treatment Effects in Observational Settings: Target Trial Emulation	Jung-Im Shin Johns Hopkins University, United States	
15:00 - 17:00	**Hypertension and Vascular Biology** *Vascular Calcification in CKD*	KOR↔ENG	**Room 2**
Chair(s)	Tae-Hyun Yoo Severance Hospital, Korea Gang Jee Ko Korea University Guro Hospital, Korea		
HAVB-S1	Bone and Cardiovascular Crosstalk in CKD	Rukshana Shroff Great Ormond Street Hospital, United Kingdom	
HAVB-S2	Pathophysiologic Mechanisms of Vascular Calcification in CKD	Catherine M Shanahan King's College London, United Kingdom	
HAVB-S3	Vascular Calcification in CKD	Shin Young Ahn Korea University Guro Hospital, Korea	
HAVB-S4	Vascular Calcification in Cardiovascular Disease	Sungha Park Severance Hospital, Korea	
15:00 - 17:00	**Oral Communications 2** *Electrolyte / Hypertension*	ENG	**Room 3**
Chair(s)	Ji Yong Jung Gachon University Gil Medical Center, Korea Young Youl Hyun Kangbuk Samsung Hospital, Korea		
	OC02-S1 ~ OC02-S11		
15:00 - 16:30	**Kidney Policy Forum**	KOR↔ENG	**Room 5**
Chair(s)	Chun Soo Lim SMG-SNU Boramae Medical Center, Korea		
KPF-S1	Current Burden and Policy of Renal Replacement Therapy in Korea	Yong Kyun Kim The Catholic University of Korea, St. Vincent's Hospital, Korea	
KPF-S2	Global Trend and Challenges in ESKD Care	Adrian Liew Tan Tock Seng Hospital, Singapore	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

KPF-S3	Advanced American Kidney Health Initiative	Stephanie Silverman Venn Strategies, United States	
KPF-S4	Kidney Health Plan 2033	Sung Gyun Kim Hallym University Sacred Heart Hospital, Korea	
Panel Discussion	Yong Kyun Kim The Catholic University of Korea, St. Vincent's Hospital, Korea Adrian Liew Tan Tock Seng Hospital, Singapore Stephanie Silverman Venn Strategies, United States Sung Gyun Kim Hallym University Sacred Heart Hospital, Korea Han Sook Kim Ministry of Health and Welfare (MOHW), Korea Jinhan Lee The Dong-A Ilbo, Korea Sunmi Kwon The JoongAng Ilbo, Korea		
16:30 - 17:00	**Vision Proclamation Ceremony for Kidney Health Plan 2033 (국민 콩팥건강지킴 선포식)**	KOR	**Room 5**
15:00 - 17:00	**KORDS Report / Dialysis Center Accreditation**	KOR	**Room 6**
Chair(s)	Seon Ho Ahn Wonkwang University School of Medicine, Korea Chang Su Boo Choo Medical Center, Korea Ho Sik Shin Kosin University Gospel Hospital, Korea		
KRCA-S1	우리나라 투석 환자 발병률 및 유병률 변화, KORDS 2023 Annual Report	Tae Hyun Ban The Catholic University of Korea, Eunpyeong St. Mary's Hospital, Korea	
KRCA-S2	우리나라 투석 환자의 임상적 특징 변화, KORDS 2023 Annual Report	Yu Ah Hong The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea	
KRCA-S3	우리나라 투석환자의 생존률 변화와 위험인자, KORDS 2023 Annual Report	Tae Hee Kim Inje University Busan Paik Hospital, Korea	
KRCA-S4	2023년 인공신장실 인증평가 보고	Myung-Gyu Kim Korea University Anam Hospital, Korea	
KRCA-S5	복막투석 재택관리 시범사업 보고	Young-Ki Lee Hallym University Kangnam Sacred Heart Hospital, Korea	
KRCA-S6	재택 투석의 미래	Kyung Don Yoo Ulsan University Hospital, Korea	
17:10 - 18:00	**Plenary Lecture 1**	KOR↔ENG	**Auditorium**
Chair(s)	Chun Soo Lim SMG-SNU Boramae Medical Center, Korea Sung Gyun Kim Hallym University Sacred Heart Hospital, Korea		
PL01-S1	New Therapies for the Treatment of CKD: Are We Ready to Move from a One-size-fits-all Approach to a One-fit for Everyone?	Hiddo L. Heerspink University Medical Center Groningen, The Netherlands	
18:00 - 19:40	**Opening Ceremony & Welcome Reception**	KOR↔ENG	**Auditorium**

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

Day 2 April 28 (Fri)

08:30 - 10:30	**Fluid & Electrolyte** *Deep Dive into the Fluid and Electrolyte*	KOR↔ENG	**Room 1**
Chair(s)	Gheun-Ho Kim Hanyang University Medical Center, Korea Eun Hui Bae Chonnam National University Hospital, Korea		
FE01-S1	Cerebral/Renal Salt Wasting: Typical Cases and Pathophysiology	John Maesaka NYU Long Island School of Medicine, United States	
FE01-S2	Urate Homeostasis and Risk of Hyperuricemia in Kidney Disease	Su Hyun Kim Chung-Ang University Gwangmyeong Hospital, Korea	
FE01-S3	Common Cases Referred to Nephrologists for Magnesium Disturbance	Jeonghwan Lee SMG-SNU Boramae Medical Center, Korea	
FE01-S4	Common Cases Referred to Nephrologists for Calcium Disturbance	Seon Ha Baek Hallym University Dongtan Sacred Heart Hospital, Korea	
08:30 - 10:30	**Oral Communications 3** *Glomerulonephritis*	ENG	**Room 2**
Chair(s)	Jung Eun Lee Sungkyunkwan University, School of Medicine, Korea Jieun Oh Kangdong Sacred Heart Hospital, Korea		
	OC03-S1 ~ OC03-S12		
08:30 - 10:30	**KSN-ISN Joint Symposium** *Differences of Routine Clinical Practice in Nephrology around the World*	KOR↔ENG	**Room 3**
Chair(s)	Yon Su Kim Seoul National University College of Medicine, Korea Masaomi Nangaku The University of Tokyo Graduate School of Medicine, Japan		
KIJS-S1	Difference in Diagnosis and Management of GN around the World	Seung Hyeok Han Severance Hospital, Korea	
KIJS-S2	Difference in CRRT Implementation around the World	Harin Rhee Pusan National University Hospital, Korea	
KIJS-S3	Global Nutrition Care in Kidney Disease	Angela Yee-Moon Wang Queen Mary Hospital, The University of Hong Kong, Hong Kong	
KIJS-S4	OncoNephrology Update: Clinical Practice Guidelines for the Management of Kidney Injury during Anticancer Drug Therapy 2022	Motoko Yanagita Kyoto University Graduate School of Medicine, Japan	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

08:30 - 10:20	**Peritoneal Dialysis** *Current Challenges and New Perspective of PD*	KOR↔ENG	**Room 4**
Chair(s)	Yong-Lim Kim Kyungpook National University School of Medicine, Korea Duk-Hee Kang Ewha Womans University Seoul Hospital, Korea		
PD01-S1	Reappraisal of Peritoneal Dialysis as a Home Treatment Therapy	Edwina Brown Imperial College of London, United Kingdom	
PD01-S2	Current Challenges of PD In Korea: Lessions from PDOPPS Korea	Kook-Hwan Oh Seoul National University Hospital, Korea	
PD01-S3	The Utility of Remote Patient Monitoring in Patients on PD	Seok Hui Kang Yeungnam University Medical Center, Korea	
PD01-S4	Achieving Global PD Standards	Adrian Liew Tan Tock Seng Hospital, Singapore	
10:20 - 10:40	**International Society for Peritoneal Dialysis (ISPD)-KSN MOU Ceremony**	KOR↔ENG	**Room 4**
08:30 - 10:30	**Basic Research** *Basic Science - Organoids for Urinary System*	KOR↔ENG	**Room 5**
Chair(s)	Heon Yung Gee Yonsei University College of Medicine, Korea Jong Hoon Park Sookmyung Women's University, Korea		
BARE-S1	New Challenges of Kidney Organoids	Benjamin Beno Freedman University of Washington, United States	
BARE-S2	Generation of 3D Kidneys from Pluripotent Stem Cells	Ryuichi Nishinakamura Kumamoto University, Japan	
BARE-S3	Creation of Human Assembloids Recapitulating Epithelial-Stomal Interaction in Human Cancer	Kun Yoo Shin Seoul National University, Korea	
BARE-S4	Single Cell Analysis of Human Organoid Models	Jihwan Park Gwangju Institute of Science and Technology (GIST), Korea	
10:40 - 12:40	**Becoming a New Basic Researcher**	KOR	**Room 1**
Chair(s)	Heon Yung Gee Yonsei University College of Medicine, Korea Min Goo Lee Yonsei University College of Medicine, Korea		
BNBR-S1	의학연구자와 함께하는 NRF 기초연구사업	Sung Joon Kim Seoul National University, Korea	
BNBR-S2	New Trends in the Study of Human Diseases	Eui-Cheol Shin Korea Advanced Institute of Science and Technology (KAIST), Korea	
BNBR-S3	A Baby Step into Basic Research	Cheol Ho Park Severance Hospital, Korea	
BNBR-S4	My Life Story on Fact-Finding on Appetite as a Clinician and Scientist	Min-seon Kim Asan Medical Center, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

10:40 - 12:40	**Oral Communications 4** *Kidney Transplantation*	ENG	**Room 2**
Chair(s)	Chan-Duck Kim Kyungpook National University Hospital, Korea Hyeon Seok Hwang Kyung Hee University School of Medicine, Korea		
	OC04-S1 ~ OC04-S11		
10:40 - 12:40	**KSN-EDTA Joint Symposium**	KOR↔ENG	**Room 3**
Chair(s)	Byung Ha Chung The Catholic University of Korea, Seoul St. Mary's Hospital, Korea Alberto Ortiz IIS-Fundacion Jimenez Díaz University Hospital, Spain		
KEJS-S1	Glycogen Storage Disease and Kidney Function: Translational Approach	Francesco Trepiccione University of Campania Luigi Vanvitelli, Italy	
KEJS-S2	Cell Death in Kidney Disease	Andreas Linkermann Technische Universität Dresden, Germany	
KEJS-S3	Evidence-based Application of Hemodialysis in Acute Kidney Injury	Seung Seok Han Seoul National University Hospital, Korea	
KEJS-S4	Vascular Access for Hemodialysis: Clinical Predictors of Recurrent Cephalic Arch Stenosis and Impact of Access Flow Reduction on Patency Rate	Yaeni Kim The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
10:40 - 12:40	**KSN Research Fund Project**	KOR↔ENG	**Room 4**
Chair(s)	Jung Eun Lee Sungkyunkwan Univervisty, School of Medicine, Korea Myung-Gyu Kim Korea University Anam Hospital, Korea		
KRFP-S1	Identification of Regional, Environmental, and Ethnic Factors Related to Renal Function Decline Using the Korean Genome and Epidemiology Study Database	Ji Eun Kim Korea University Guro Hospital, Korea	
KRFP-S2	Confirmation of the Electrolyte Concentration in the Dialysate Supplied Through Central Dialysis Fluid Delivery System	Mun Jang Yemidam Hospital, Korea	
KRFP-S3	Novel Non-invasive Chronic Kidney Disease Risk Stratification Tool Derived from Retina-based Deep learning and Clinical Factors for People with Preserved Kidney Function	Jung Tak Park Severance Hospital, Korea	
KRFP-S4	Prediction of Intradialytic Hypotension Using Pre-dialysis Features – A Deep Learning Based Artificial Intelligence Model (CMC-IDH-X)	Hanbi Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
KRFP-S5	Circulating MicroRNA as a Marker for Scrub Typhus-associated Acute Kidney Injury	In O Sun Presbyterian Medical Center, Korea	
KRFP-S6	Effectiveness of Heart Rate Variability Test in Predicting Intradialytic Hypotension in Chronic Hemodialysis Patients	Yohan Park Konyang University Hospital, Korea	
KRFP-S7	Erythropoietin Modulates Cell Cycle Arrest to Ameliorate Kidney Fibrosis	Jong Hyun Jhee Gangnam Severance Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

KRFP-S8	Effects of Angiotensin-converting Enzyme Inhibitors and Agiotensin Receptor Blockers on the Intrarenal Renin-angiotensin System and Ischemic Acute Renal Injury	Junseok Jeon Samsung Medical Center, Korea
KRFP-S9	Albuminuria and Young Age Onset Diabetes: A Nationwide Population-based Study	Yaerim Kim Keimyung University School of Medicine, Korea
KRFP-S10	Effect of Donor and Recipient Size Mismatching on the Survival of the Transplanted Kidney in Pediatric Kidney Transplant Patients	Min Hyun Cho Kyungpook National University Hospital, Korea
KRFP-S11	Evaluation of Interobserver Agreement between Renal Pathologists in the Classification of Lupus Nephritis Using Digital Pathology Image Sets	Sung-Eun Choi CHA University Bundang Medical Center, Korea
KRFP-S12	Efficacy of Mesenchymal Stem Cell (MSC)-derived Extracellular Vesicles (EVs) in Cisplatin Nephrotoxicity Using Three-dimensional Gravity-driven Two-layer Tubule-on-a-chip (3D-MOTIVE chip)	Seokwoo Park Seoul National University Bundang Hospital, Korea
KRFP-S13	Mendelian Randomization Analysis Reveals Causal Factors Related to Kidney Function	Sehoon Park Seoul National University Hospital, Korea
KRFP-S14	Maternal Exposure to Airborne Particulate Matter during Pregnancy and Lactation induces Kidney Injury in Rat Dams and Their Male Offspring: The Role of Vitamin D in Pregnancy and Beyond	Hyung Eun Yim Korea University Ansan Hospital, Korea
KRFP-S15	Kidney Disease after COVID19 Vaccination in South Korea: Multicenter Study	Minsun Jung Yonsei University College of Medicine, Korea
10:40 - 12:40	**Glomerulonephritis** *Pathogenesis of Albuminuria and Minimal Change Disease*	KOR↔ENG **Room 5**
Chair(s)	Hee Gyung Kang Seoul National University Hospital, Korea Dong Ki Kim Seoul National University Hospital, Korea	
GLOM-S1	Mechanism of Proteinuria in MCD Including Role of CD80	Gabriel Cara-Fuentes Children's Hospital Colorado, United States
GLOM-S2	Mechanism Underlying Selective Albuminuria in Minimal Change Disease	Akihiro Tojo Dokkyo Medical University, Japan
GLOM-S3	Mitochondrial Injury in Pathogenesis of Minimal Change Disease	Byung Chul Yu Soonchunhyang University Bucheon Hospital, Korea
GLOM-S4	Generation of a Glomerular Filtration Barrier on a Glomerulus-on-a Chip Platform	Stefano Da Sacco Keck School of Medicine of University of Southern California, United States
12:40 - 13:30	**Industry Symposium 2** Sponsored by Chong Kun Dang Pharm	KOR **Room 1**
Chair(s)	Byoung Geun Han Yonsei University Wonju College of Medicine, Korea	
IS02-S1	만성콩팥병 환자에서 NESBELL 빈혈관리	Hoon Young Choi Gangnam Severance Hospital, Korea

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

12:40 - 13:30	**Industry Symposium 3** Sponsored by AstraZeneca	KOR	**Room 2**
Chair(s)	Ki Ryang Na Chungnam National University Hospital, Korea		
IS03-S1	The New Breakthrough Treatment for CKD, Forxiga®	Jung Eun Lee Sungkyunkwan University, School of Medicine, Korea	
12:40 - 13:30	**Industry Symposium 4** Sponsored by Otsuka	KOR↔ENG	**Room 3**
Chair(s)	Yun Kyu Oh SMG-SNU Boramae Medical Center, Korea		
IS04-S1	Are You Ready to Come Along with ADPKD Patients?	Yeonsoon Jung Kosin University Gospel Hospital, Korea	
12:40 - 13:30	**Industry Symposium 5** Sponsored by inno.N	KOR↔ENG	**Room 4**
Chair(s)	Sang Youb Han Inje University Ilsan Paik Hospital, Korea		
IS05-S1	Optimal Dosage of Kremezin in CKD	Eun Hui Bae Chonnam National University Hospital, Korea	
12:40 - 13:30	**Industry Symposium 6** Sponsored by astellas	KOR↔ENG	**Room 5**
Chair(s)	Chul Woo Yang The Catholic University of Korea, Seoul St. Mary's Hospital, Korea		
IS06-S1	Opportunities to Optimize Tacrolimus Therapy in Kidney Transplantation: Report of the European Consensus Conference	Dirk Kuypers Leuven University Hospital, Belgium	
13:30 - 14:20	**Plenary Lecture 2**	KOR↔ENG	**Auditorium**
Chair(s)	Yon Su Kim Seoul National University Hospital, Korea Yong-Lim Kim Kyungpook National University School of Medicine, Korea		
PL02-S1	Cardiorenal Benefits of Finerenone: A New Distinctive Approach for Patient with DKD	Hermann Haller Hannover Medical School, Germany	
14:50 - 16:50	**Clinical Trials**	KOR↔ENG	**Room 1**
Chair(s)	Seung Hyeok Han Severance Hospital, Korea Sun-Hee Park Kyungpook National University Hospital, Korea		
CT01-S1	The Clinical Trial Potentials in Asia Pacific	Muh Geot Wong The University of Sydney, Australia	
CT01-S2	What Comes Next after SGLT2 Inhibitors– Emerging CKD Treatments in Clinical Development at Boehringer Ingelheim	Dominik Steubl Boehringer Ingelheim, Germany	
CT01-S3	Role of Finerenone in CKD	Hermann Haller Hannover Medical School, Germany	
CT01-S4	Targeting Complement in Glomerular Diseases	Samir Parikh The Ohio State University Wexner Medical Center, United States	

Detailed Program

KOR Korean | ENG English | KOR↔ENG KOR/ENG Simultaneous Interpretation | Plenary Lecture & Official Program | Oral Communication (English)

14:50 - 16:50	**Oral Communications 5** *Diabetic Nephrology / Metabolic Abnormality*	ENG	**Room 2**
Chair(s)	Hyunjin Noh Soonchunhyang University Seoul Hospital, Korea Won Kim Jeonbuk National University Medical School, Korea		
	OC05-S1 ~ OC5-S12		
14:50 - 16:50	**Chronic Kidney Disease 1** *Translational Research in CKD*	KOR↔ENG	**Room 3**
Chair(s)	Soo Wan Kim Chonnam National University Hospital, Korea Sue Kyung Park Seoul National University College of Medicine, Korea		
CKD1-S1	Serum and Urine Biomarker Studies in CKD	Eun Hui Bae Chonnam National University Hospital, Korea	
CKD1-S2	Urinary Podocyte Markers in Kidney Disease	Cheuk Chun Szeto The Chinese University of Hong Kong, Hong Kong	
CKD1-S3	OMICS (GWAS) Research in CKD	Sue Kyung Park Seoul National University College of Medicine, Korea	
CKD1-S4	Integrated Metagenomics and Metabolomics Analysis in CKD	I-Wen Wu Keelung Chang Gung Memorial Hospital, Taiwan	
14:50 - 16:50	**Kidney Transplantation 1** *What Do You Need to Know to Improve Long-Term Survival?*	KOR↔ENG	**Room 4**
Chair(s)	Chul Woo Yang The Catholic University of Korea, Seoul St. Mary's Hospital, Korea Beom Seok Kim Severance Hospital, Korea		
KT01-S1	Donor Specific HLA & Non-HLA Antibodies: Is Progress Being Made	Hyosang Kim Asan Medical Center, Korea	
KT01-S2	Practical Approach to Individualizing Immunosuppression Strategies According to Alloimmune Risk	Jaeseok Yang Severance Hospital, Korea	
KT01-S3	Emerging Therapeutic Options for Chronic Active ABMR	Hideki Ishida Tokyo Women's Medical University Hospital, Japan	
KT01-S4	From Causes to Care Plan: Non-Immune Mediated Late Graft Failure	Byung Ha Chung The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
14:50 - 16:30	**Pediatric Nephrology** *How to Prevent CKD Progression in Children*	KOR↔ENG	**Room 5**
Chair(s)	Ji Hong Kim Gangnam Severance Hospital, Korea Dieter Haffner Hannover Medical School, Germany		
PN01-S1	Diet Recommendation for Children with CKD	Joo Hoon Lee Asan Medical Center, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

PN01-S2	Nutritional Approach to Deter the Progression of Pediatric CKD	Rukshana Shroff Great Ormond Street Hospital, United Kingdom	
PN01-S3	Immunosuppression to Prevent CKD in Children with IgA Vasculitis	Jae Il Shin Severance Hospital, Korea	
PN01-S4	Management of IgAN and IgAV	Yuko Shima Wakayama Medical University, Japan	
16:30 - 16:50	**European Society of Paediatric Nephrology (ESPN)-KSN-Korean Society of Pediatric Nephrology (KSPN) MOU Ceremony**	KOR↔ENG	**Room 5**
14:50 - 15:40	**Award Session**	KOR↔ENG	**Auditorium**
Chair(s)	Chun Soo Lim SMG-SNU Boramae Medical Center, Korea Sung Gyun Kim Hallym University Sacred Heart Hospital, Korea		
AS01-S1	KSN Young Investigator Award Winner Lecture	Young Su Joo Yongin Severance Hospital, Korea	
AS01-S2	KSN Academic Excellence Award Winner Lecture	Sehoon Park Seoul National University Hospital, Korea	
AS01-S3	KSN Lifetime Achievement Ceremony Award	Suhnggwon Kim Seoul K-Clinic, Korea	
15:50 - 16:50	**Best Abstracts**	ENG	**Auditorium**
Chair(s)	Tae-Hyun Yoo Severance Hospital, Korea Sang-kyung Jo Korea University Anam Hospital, Korea		
BA01-S1	Understanding Cell-Type Convergence of Kidney Disease and Traits through Interpretable Eqtls Informed By Single-Cell Epigenomic Data	Seong Kyu Han Boston Children's Hospital, United States	
BA01-S2	Intrarenal Renin-Angiotensin System Activation Alters Relationship between Systolic Blood Pressure and Progression Of Chronic Kidney Disease: Findings from Know-CKD Study	Cheol Ho Park Severance Hospital, Korea	
BA01-S3	Antibiotics-induced Intestinal Microbiota Depletion Can Attenuate Acute Kidney Injury Transition to Chronic Kidney Disease Via Nox2 and Trimethylamine-N-Oxide Inhibition	Jeonghwan Lee SMG-SNU Boramae Medical Center, Korea	
BA01-S4	Real-Time Dual Prediction of Intradialytic Hypotension and Hypertension Using an Explainable Deep Learning Model	Donghwan Yun Seoul National University Hospital, Korea	
BA01-S5	The Effects of Dietary Salt on Intrarenal Immune Cells and Endothelial Cells	Kyungho Lee Samsung Medical Center, Cell and Gene Therapy Institute, Sungkyunkwan University School of Medicine, Korea	
BA01-S6	Aerobic Exercise Capacity and Kidney Function Decline in Heart Failure with Preserved Ejection Fraction Patients	Jae Young Kim National Health Insurance Service Ilsan Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

17:00 - 18:40	**Oral Communications 6** *Pediatric / Genetics*	ENG	**Room 1**
Chair(s)	Joo Hoon Lee Asan Medical Center, Korea Heeyeon Cho Samsung Medical Center, Korea		
	OC06-S1 ~ OC6-S8		
17:00 - 18:40	**Oral Communications 7** *Big Data / Geriatric*	ENG	**Room 2**
Chair(s)	Gang Jee Ko Korea University Guro Hospital, Korea Hoon Young Choi Gangnam Severance Hospital, Korea		
	OC07-S1 ~ OC7-S10		
17:00 - 18:40	**Chronic Kidney Disease 2** *CKD Outcome Studies from Long-Term Cohort*	KOR↔ENG	**Room 3**
Chair(s)	Kook-Hwan Oh Seoul National University Hospital, Korea Tae-Hyun Yoo Severance Hospital, Korea		
CKD2-S1	Cardiovascular Risk Factors and CKD Outcomes: Insight from KNOW-CKD Study	Sang Heon Suh Chonnam National University Hospital, Korea	
CKD2-S2	The Chronic Renal Insufficiency Cohort (CRIC) Study – A Landmark Study of Chronic Kidney Disease	Mahboob Rahman Case Western Reserve University, United States	
CKD2-S3	Clinical Implication of Vascular Calcification in CKD Not Receiving KRT	Chan-Young Jung Asan Medical Center, Korea	
17:00 - 18:40	**Kidney Transplantation 2** *What Is New in the Management after KT?*	KOR↔ENG	**Room 4**
Chair(s)	Jong Soo Lee Ulsan University Hospital, Korea Chan-Duck Kim Kyungpook National University Hospital, Korea		
KT02-S1	Updates on Atypical HUS and C3GN: Prevention and Management Posttransplant	Yong Chul Kim Seoul National University Hospital, Korea	
KT02-S2	The Impact of Anti-Viral Therapy and Vaccination on Outcomes In KTRs with Covid-19	Jeong-Hoon Lim Kyungpook National University Chilgok Hospital, Korea	
KT02-S3	Are Sodium-Glucose Cotransporter-2 (SGLT-2) Inhibitors a Game Changer for Improving Posttransplant Outcomes?	Eun Jeong Ko The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
KT02-S4	New Techniques and Breakthroughs in Noninvasive Allograft Monitoring	Sang Ho Lee Kyung Hee University Hospital at Gangdong, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

17:00 - 18:40	**Acute Kidney Injury** *Precise Prediction and Novel Therapeutic Approach of AKI*	KOR↔ENG	**Room 5**
Chair(s)	Won Kim Jeonbuk National University Medical School, Korea Sang-kyung Jo Korea University Anam Hospital, Korea		
AKI1-S1	TIMP-2/IGFBP7 for Predicting AKI	Mina Hur Konkuk University Medical Center, Korea	
AKI1-S2	Prediction of AKI with a Help of AI	Kipyo Kim Inha University Hospital, Korea	
AKI1-S3	How Close the Exosome Therapy is to Us?	Tae-Hyun Yoo Severance Hospital, Korea	
AKI1-S4	Kidney MicroPhysiological Models for Nephrotoxicity Assessment	Sejoong Kim Seoul National University Bundang Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

Day 3 April 29 (Sat)

08:30 - 10:30	**APSN-KSN CME Course 1** *Green Nephrology*	KOR↔ENG	**Room 1**
Chair(s)	Jihyun Yang Kangbuk Samsung Hospital, Korea Duk-Hee Kang Ewha Womans University Seoul Hospital, Korea		
AKC1-S1	Green Nephrology: Its Relevance in Asia	Anoushka Krishnan Royal Perth Hospital, Australia	
AKC1-S2	Point of Care Device for Peritoneal Dialysis- Does It Make PD Greener?	Muh Geot Wong The University of Sydney, Australia	
AKC1-S3	Greenness and Kidney? - Epidemiological Studies on the Relationship Between Green Space and Kidney Diseases	Whanhee Lee Pusan National University, Korea	
AKC1-S4	Risk of Air Pollution, Environmental Chemicals, and Climate Changes on Kidney Disease Outcomes	Jeonghwan Lee SMG-SNU Boramae Medical Center, Korea	
08:30 - 10:30	**Oral Communications 8** *Chronic Kidney Disease*	ENG	**Room 2**
Chair(s)	Jung Pyo Lee SMG-SNU Boramae Medical Center, Korea Kook-Hwan Oh Seoul National University Hospital, Korea		
	OC08-S1 ~ OC08-S12		
08:30 - 10:30	**Diabetic Kidney Disease** *New Therapeutic Targets for DKD and Obesity*	KOR↔ENG	**Room 3**
Chair(s)	Eun Young Lee Soonchunhyang University Cheonan Hospital, Korea Sang Youb Han Inje University Ilsan Paik Hospital, Korea		
DKD1-S1	New Therapies for Patients with Type 2 Diabetes and Obesity	Hiddo L. Heerspink University Medical Center Groningen, The Netherlands	
DKD1-S2	TGF-beta Signaling in DKD	Kyung Lee Icahn School of Medicine, United States	
DKD1-S3	The Role of Lactic Acidosis on Renal Fibrosis and Its Dysfunction in DKD	Won Ho Kim National Institute of Health, Korea	
DKD1-S4	Klotho Protects Diabetic Nephropathy via Regulating Podocyte $Ca2^{+}$-Permeable Channels	Seung-Kuy Cha Yonsei University Wonju College of Medicine, Korea	
08:30 - 10:30	**AKI: KSN-KSCCM Joint Symposium**	KOR↔ENG	**Room 4**
Chair(s)	Young-Jae Cho Seoul National University Bundang Hospital, Korea Sejoong Kim Seoul National University Bundang Hospital, Korea		
AKJS-S1	Impact of RRT on Clinical Outcomes in AKI	Hye Ryoun Jang Samsung Medical Center, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

AKJS-S2	Obesity and Sepsis Associated AKI	Hong Yeul Lee Seoul National University Hospital, Korea
AKJS-S3	Optimal Blood Pressure Target for the Patient with Septic AKI: Lower	Chi-Ryang Chung Samsung Medical Center, Korea
AKJS-S4	Optimal Blood Pressure Target for the Patient with Septic AKI: Higher	Yaerim Kim Keimyung University School of Medicine, Korea
08:30 - 10:30	**KSN Cooperative Study**	KOR **Room 5**
Chair(s)	Jin Seok Jeon Soonchunhyang University Hospital Seoul, Korea Sang Heon Song Pusan National University Hospital, Korea	
KCS-S1	[2021년 연구회지원사업] 국소분절사구체경화증의 유전적 원인 탐색	Hee Gyung Kang Seoul National University Hospital, Korea
KCS-S2	[2021년 연구회지원사업] 투석치료방법에 따른 알부민 소실과 단백결합요독 제거 효과 비교	Yang Gyun Kim Kyung Hee University Hospital at Gangdong, Korea
KCS-S3	[2021년 연구회지원사업] 혈액투석환자에서 혈관통로의 전향적 코호트 구성을 통한 추적관찰연구	Do Hyoung Kim Hallym University Kangnam Sacred Heart Hospital, Korea
KCS-S4	[2022년 협동연구과제] Clinical Data Warehouse(CDW)을 활용한 수술 후 급성 신손상의 발생 및 장기적인 신장의 예후 예측 인공지능 모델	Hye Eun Yoon The Catholic University of Korea, Incheon St. Mary's Hospital, Korea
10:40 - 11:30	**Plenary Lecture 3**	KOR↔ENG **Auditorium**
Chair(s)	Chul Woo Yang The Catholic University of Korea, Seoul St. Mary's Hospital, Korea Byoung Geun Han Yonsei University Wonju College of Medicine, Korea	
PL03-S1	Membranous Nephropathy – Beyond PLA2R	Sanjeev Sethi Mayo Clinic, United States
11:30 - 12:20	**Industry Symposium 7** Sponsored by Baxter	KOR↔ENG **Room 1**
Chair(s)	Dong Ki Kim Seoul National University Hospital, Korea	
IS07-S1	Use of Sharesource in Home-Based Therapy	Jeonghwan Lee SMG-SNU Boramae Medical Center, Korea
11:30 - 12:20	**Industry Symposium 8** Sponsored by Kyowa Kirin	KOR↔ENG **Room 2**
Chair(s)	Gang Jee Ko Korea University Guro Hospital, Korea	
IS08-S1	Future Perspective of CKD-MBD Management	Masahide Mizobuchi Showa University School of Medicine, Japan
11:30 - 12:20	**Industry Symposium 9** Sponsored by Daewon 대원제약	KOR↔ENG **Room 3**
Chair(s)	Jong Woo Yoon Chuncheon Sacred Heart Hospital, Korea	
IS09-S1	Uremic Toxins Meaning for Kidney Diseases	Hyun Suk Kim Chuncheon Sacred Heart Hospital, Korea

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

11:30 - 12:20	**Industry Symposium 10** Sponsored by SK chemicals	KOR↔ENG	**Room 4**
Chair(s)	Jieun Oh Kangdong Sacred Heart Hospital, Korea		
IS10-S1	Treatment of Hemodialysis-associated Pruritus	Takahashi Naoko Hiroshima Omachitsuchiya Clinic, Japan	
11:30 - 12:20	**Industry Symposium 11** Sponsored by FRESENIUS MEDICAL CARE	KOR	**Room 5**
Chair(s)	Gyu Tae Shin Ajou University, School of Medicine, Korea		
IS11-S1	Dialysis Adequacy Monitoring with On-line Clearance Monitoring	Hyeon Seok Hwang Kyung Hee University Medical Center, Korea	
12:20 - 12:50	**General Assembly**	KOR	**Room 3**
12:50 - 14:50	**APSN-KSN CME Course 2** *Organ Crosstalk*	KOR↔ENG	**Room 1**
Chair(s)	Muh Geot Wong The University of Sydney, Australia Yeong Hoon Kim Inje University Busan Paik Hospital, Korea		
AKC2-S1	Molecular Mechanisms in Inter-Organ Crosstalk (Kidney-Lung Axis)	Yohei Komaru Washington University, United States	
AKC2-S2	An Update on Management of Cardiorenal Syndrome	Ruslinda Mustafar National University of Malaysia, Malaysia	
AKC2-S3	Impact of Chronic Kidney Disease on Brain	Hyo-Wook Gil Soonchunhyang University Cheonan Hospital, Korea	
AKC2-S4	Renohepatic Crosstalk: Mechanisms and Therapeutic Approaches	Ho Sik Shin Kosin University Gospel Hospital, Korea	
12:50 - 14:50	**KSN-TSN-JSDT Joint Symposium** *Improving Outcomes in the Elderly Patients with ESKD*	KOR↔ENG	**Room 2**
Chair(s)	Won Min Hwang Konyang University Hospital, Korea Mai-Szu Wu Taipei Medical University, Taiwan Yoshiaki Takemoto Osaka City University, Japan		
KTJS-S1	Choice of RRT Modality In the Elderly	Jang-Hee Cho Kyungpook National University, Korea	
KTJS-S2	Frailty in Elderly ESKD Patient: What Can We Do?	Yu Ah Hong The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea	
KTJS-S3	Vascular Access in the Elderly HD Patients	Toshihide Naganuma Osaka Metropolitan University, Japan	
KTJS-S4	Dialysis Withdrawal in ESKD	Yi-Wen Chiu Kaohsiung Medical University, Taiwan	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

12:50 - 14:50	**Hemodialysis** *Improvement of Hemodialysis Outcomes*	KOR↔ENG	**Room 3**
Chair(s)	Soon Kil Kwon Chungbuk National University College of Medicine , Korea Hankyu Lee Lee Hankyu Clinic, Korea		
HEMO-S1	High-Performance Membrane Dialyzers in Hemodialysis Patients	Ikuto Masakane Yabuki Hospital, Japan	
HEMO-S2	Management of High Output AVF Failure	Hoon Suk Park The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
HEMO-S3	Clinical Usage of Ultrasonography in AVF	Hyun Suk Kim Chuncheon Sacred Heart Hospital, Korea	
HEMO-S4	Parenteral Nutrition of Hemodialysis Patients	So Mi Kim Dankook University Hospital, Korea	
12:50 - 14:50	**Geriatric Nephrology**	KOR↔ENG	**Room 4**
Chair(s)	Soon Hyo Kwon Soonchunhyang University College, Seoul Hospital, Korea Sungjin Chung The Catholic University of Korea, College of Medicine, Korea		
GN01-S1	Normal Reference Values for Glomerular Filtration Rate in Older Adults: Fixed or Age Adjusted?	Moo Yong Park Soonchunhyang University Bucheon Hospital, Korea	
GN01-S2	Common Glomerular Disorders in Older Population	Jin Seok Jeon Soonchunhyang University Hospital Seoul, Korea	
GN01-S3	Conservative or Dialysis Treatment in Stage 5 CKD Old Adults: Insights from Cochrane Reviews	Jun Young Lee Yonsei University Wonju College of Medicine, Korea	
GN01-S4	Are Old Adults Safe and Suitable Candidate Donors or Recipients for Kidney Transplantation?	Chung Hee Baek Asan Medical Center, Korea	
12:50 - 14:50	**KSN-KES Joint Symposium**	KOR	**Room 5**
Chair(s)	Cheol Whee Park The Catholic University of Korea, Seoul St. Mary's Hospital, Korea Hyuk-Sang Kwon The Catholic University of Korea, Yeouido St. Mary's Hospital, Korea		
KKJS-S1	The Use of Bone Turn-Over Marker in CKD	Yun Kyung Jeon Pusan National University Hospital, Korea	
KKJS-S2	Ectopic Fat, Metabolic Abnormality and Cardiovascular Disease	Sung Hee Choi Seoul National University Bundang Hospital, Korea	
KKJS-S3	Triglycerides - Does It Matter in CKD?	Sang Heon Suh Chonnam National University Hospital, Korea	
KKJS-S4	Obesity Control in CKD	Hae Ryoung Yun Yongin Severance Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

14:50 - 15:30	**Best Poster Presentation**	KOR	**Grand Ballroom Lobby, 1F**
Chair(s)	Tae Hyun Ban The Catholic University of Korea, Eunpyeong St. Mary's Hospital, Korea Eun Sil Koh The Catholic University of Korea, Yeouido St. Mary's Hospital, Korea Hyung Woo Kim Severance Hospital, Korea Young Su Joo Yongin Severance Hospital, Korea Jong Cheol Jeong Seoul National University Bundang Hospital, Korea		
BPP1-S1	Glutamyl-prolyl-tRNA-synthetase 1 Regulates Kidney Fibrosis by Controlling STAT3 and Mitochondrial Dysfunction	Seung Seob Son Soonchunhyang University College of Medicine, Korea	
BPP1-S2	Preferences on Mobile Monitoring App for Peritoneal Dialysis Patients and Healthcare Professionals in South Korea: A Choice-Based Conjoint Analysis	Kyung Yi Kim Yonsei University College of Medicine, Korea	
BPP1-S3	Cancer Status and Mortality in Older Hemodialysis Patients: Data from a Korean Society of Geriatric Nephrology Retrospective Cohort	Hyunjeong Cho Chungbuk National University Hospital, Korea	
BPP1-S4	Untargeted approach for Breath Markers of Chronic Kidney Disease through TD-GC/MS (Thermal Desorption Gas Chromatography Massspectrometry)	Jieun Oh Kangdong Sacred Heart Hospital, Korea	
BPP1-S5	Shortening of the Primary Cilia Length Involves Urine Concentration in the Kidneys	Min Jung Kong Kyungpook National University School of Medicine, Korea	
15:30 - 17:30	**Asian Nephrology Forum**	KOR↔ENG	**Room 1**
Chair(s)	Hye Ryoun Jang Samsung Medical Center, Korea Motoko Yanagita Kyoto University Graduate School of Medicine, Japan		
ANF1-S1	Prevention and Diagnosis of AKI: Community-and Hospital-acquired AKI	Nattachai Srisawat Chulalongkorn University, Thailand	
ANF1-S2	Medical Management of AKI	Sejoong Kim Seoul National University Bundang Hospital, Korea	
ANF1-S3	Renal Support for Acute Kidney Injury in Critically Ill Patients	Manish Kaushik Singapore General Hospital, Singapore	
ANF1-S4	Biomarker Utilization in AKI	Zoltán H. Endre Prince of Wales Hospital, Australia	
15:30 - 17:30	**Oral Communications 9** *Dialysis*	ENG	**Room 2**
Chair(s)	Yeong Hoon Kim Inje University Busan Paik Hospital, Korea Ki Ryang Na Chungnam National University Hospital, Korea		
	OC09-S1 ~ OC9-S12		

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

15:30 - 17:30	**KDIGO-KSN Joint Symposium** *Genetics and Precision Medicine in Kidney Disease*	ENG	**Room 3**
Chair(s)	Jung Pyo Lee SMG-SNU Boramae Medical Center, Korea Jung-Im Shin Johns Hopkins University, United States		
KDJS-S1	How to Apply Genetics to the Kidney Transplant Recipients	Sang Ho Lee Kyung Hee University Hospital at Gangdong, Korea	
KDJS-S2	Is There Significant Advance in Using Genetics for Pediatric Patients?	Hee Gyung Kang Seoul National University Hospital, Korea	
KDJS-S3	Genetics in Research – Towards Understanding Pathophysiology	Morgan Grams NYU Langone, United States	
KDJS-S4	Genetics in CKD – Where are We and Where are We Going? Outcomes from the 2021 KDIGO Controversies Conference on Genetics in CKD	Andrew Mallett Townsville University Hospital, Australia	
15:30 - 17:10	**Kidney Health Plan** *Diabetic Kidney Disease in Korea: Where Do We Stand?*	KOR↔ENG	**Room 4**
Chair(s)	Chun Soo Lim SMG-SNU Boramae Medical Center, Korea Dae Ryong Cha Korea University Ansan Hospital, Korea		
KHP-S1	Diabetes Factsheet in Korea: An Appraisal of Current Status	Mi Kyung Kim Keimyung University Dongsan Medical Center, Korea	
KHP-S2	Epidemiologic Characteristics of Diabetic Kidney Disease in Korea	Sang Youb Han Inje University Ilsan Paik Hospital, Korea	
KHP-S3	KSN 2023 Practical Recommendations for Management of Diabetic Kidney Disease	Sungjin Chung The Catholic University of Korea, College of Medicine, Korea	
KHP-S4	National Chronic Disease Strategy on Diabetes and Diabetic Kidney Disease	Sanghui Kweon National Institute of Health, Korea	
Panel Discussion	Mi Kyung Kim Keimyung University Dongsan Medical Center, Korea Sang Youb Han Inje University Ilsan Paik Hospital, Korea Sungjin Chung The Catholic University of Korea, College of Medicine, Korea Sanghui Kweon National Institute of Health, Korea Nan Hee Kim Korea University Ansan Hospital, Korea		
15:30 - 17:30	**KSN-KSH Joint Symposium**	KOR	**Room 5**
Chair(s)	Tae-Hyun Yoo Severance Hospital, Korea Sang Hyun Ihm The Catholic University of Korea, Bucheon St. Mary's Hospital, Korea		
KSJS-S1	Relationship Between Resistant Hypertension and Renal Outcome	Sungha Park Severance Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

KSJS-S2	Current Status of RDN and Perspectives for Renal Protection	Chan Joon Kim The Catholic University of Korea, Uijeongbu St. Mary's Hospital, Korea
KSJS-S3	Which BP Metrics Should Be Used in Patients on Dialysis?	Ji Yong Jung Gachon University Gil Medical Center, Korea
KSJS-S4	Clinical Implication of BP Variability in CKD	Jong Hyun Jhee Gangnam Severance Hospital, Korea
15:30 - 17:30	**Ethics Education**	KOR **Auditorium**
Chair(s)	Seung Ho Park Hub IM Clinic, Korea Sung Joon Shin Dongguk University Ilsan Hospital, Korea	
EE01-S1	노인 진료/의료에 있어 고려해야 할 윤리와 연명의료결정	Eun-Young Lee Catholic University of Pusan, Korea
EE01-S2	노인 말기신부전 환자의 돌봄과 치료에 있어 윤리적 고려사항	Sung Joon Shin Dongguk University Ilsan Hospital, Korea
EE01-S3	노인 말기신부전 환자의 치료결정	In O Sun Presbyterian Medical Center, Korea
EE01-S4	노인 말기신부전 환자의 예후 평가 및 보존적 돌봄의 실제	Seo Rin Kim Pusan National University Yangsan Hospital, Korea
Panel Discussion	Sung Joon Shin Dongguk University Ilsan Hospital, Korea In O Sun Presbyterian Medical Center, Korea Seo Rin Kim Pusan National University Yangsan Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

Day 4 April 30 (Sun)

08:30 - 10:30	**Dialysis Nurse Course 1**	KOR	**Room 1+2**
Chair(s)	Yo Han Ahn Seoul National University Hospital, Korea Jin Hee Han Asan Medical Center, Korea		
DNC1-S1	인공신장실 감염관리	Jongrim Choi Keimyung University College of Nursing, Korea	
DNC1-S2	지속적신대체요법(Continuous Renal Replacement Therapy)의 원리와 이해	Ji Hyun Kim CHA University Bundang Medical Center, Korea	
DNC1-S3	혈액투석환자 식이관리	Cho Hee Park Hallym University Kangnam Sacred Heart Hospital, Korea	
DNC1-S4	소아 혈액투석(Hemodialysis in Children)	Hyo Jin Kim Asan Medical Center, Korea	
08:30 - 10:30	**Dialysis Specialist Physician Course 1** *Nephrologists as Primary Care Physicians*	KOR	**Room 3**
Chair(s)	Jung Geon Lee Nam Seoul Clinic, Korea		
DSP1-S1	Lipid Management in Patients with Kidney Diseases	Mi Yeon Yu Hanyang University Guri Hospital, Korea	
DSP1-S2	Immunization in CKD and ESRD	Sun Hee Na Hallym University Kangnam Sacred Heart Hospital, Korea	
DSP1-S3	Cancer Screening in Dialysis Patients	Sihyung Park Inje University Haeundae Paik Hospital, Korea	
DSP1-S4	Approach to Depression Screening and Treatment in ESRD patients	Sunyoung Moon Hallym University Kangnam Sacred Heart Hospital, Korea	
08:30 - 10:30	**Nephrology Board Review Course 1**	KOR	**Room 4**
Chair(s)	Sang Heon Song Pusan National University Hospital, Korea		
NBR1-S1	Heart-kidney Crosstalk in CKD	Seok Hui Kang Yeungnam University Medical Center, Korea	
NBR1-S2	Recent Update of AKI to CKD Transition	Eun Sil Koh The Catholic University of Korea, Yeouido St. Mary's Hospital, Korea	
NBR1-S3	Renovascular Hypertension: Choice of Treatment Options	Soon Kil Kwon Chungbuk National University College of Medicine, Korea	
NBR1-S4	Lifestyle Changes for Preventing the CKD Progression	Jae Seok Kim Yonsei University Wonju College of Medicine, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

08:30 - 10:10	**KSN-KSCN-ISRNM Joint Symposium** *Sarcopenia and Nutritional Management in Kidney Disease*		KOR↔ENG	**Room 5**
Chair(s)	Hyeong Cheon Park Gangnam Severance Hospital, Korea Yoo Kyoung Park Graduate School of East-West Medical Science Kyunghee University, Korea Angela Yee-Moon Wang Queen Mary Hospital, The University of Hong Kong, Hong Kong			
ISJS-S1	Personalized Nutrition Management in Transition from Non-Dialysis CKD to Dialysis		Connie Rhee University of California, Irvine, United States	
ISJS-S2	Lessons from Clinical Nutrition Educational Course: TNT Renal		Csaba Kovesdy University of Tennessee Health Science Center, United States	
ISJS-S3	Effect of Pharmacologic Therapeutics in Sarcopenic Patients with Chronic Kidney Disease		Ran-Hui Cha National Medical Center, Korea	
ISJS-S4	Nutritional Intervention In Patients under Continuous Renal Replacement Therapy		Eun-Joo Bae CHA University Bundang Medical Center, Korea	
ISJS-S5	Nutrition Intervention for Sarcopenia in Chronic Dialysis Patients		Meera Kweon Seoul National University Hospital, Korea	
10:10 - 10:30	**KSN-International Society of Renal Nutrition and Metabolism (ISRNM) MOU Ceremony**		KOR↔ENG	**Room 5**
08:30 - 12:30	**Hands on Session (인터벤션)**		KOR	**Room 6**
HOS-S1	Point-of-care Ultrasound for Nephrologists		Eun Jung Kim Hallym University Dongtan Sacred Heart Hospital, Korea	
Hands-on Instructor	Sangeon Gwoo Lifeline Vascular Clinic, Korea	Do Hyoung Kim Hallym University Kangnam Sacred Heart Hospital, Korea	Hoon Suk Park The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
	Narae Joo Hanmaeum Hospital, Korea	Jin Ho Lee Leesin Hemodialysis and Intervention Clinic, Korea	Hyung Seok Lee Hallym University Sacred Heart Hospital, Korea	
	Yongseon Choi Bundang Jesaeng General Hospital, Korea	Chang Min Heo Inje University Haeundae Paik Hospital, Korea		
10:40 - 12:40	**Dialysis Nurse Course 2**		KOR	**Room 1+2**
Chair(s)	Young-Sun Kang Korea University Ansan Hospital, Korea Yeongil Kim CHA University Bundang Medical Center, Korea			
DNC2-S1	Basic Principle of Peritoneal Dialysis		Jin Ho Hwang Chung-Ang University Hospital, Korea	
DNC2-S2	Clinical Guidelines for Infectious Complications in Peritoneal Dialysis Patients		Hye Eun Yoon The Catholic University of Korea, Incheon St. Mary's Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

DNC2-S3	복막투석 합병증 발생과 관리	Hyesuk Choi The Catholic University of Korea, Seoul St. Mary's Hospital, Korea	
DNC2-S4	복막투석 검사의 이해	EunHwa Shin The Catholic University of Korea, Eunpyeong St. Mary's Hospital, Korea	
10:40 - 12:40	**Dialysis Specialist Physician Course 2** *Miscellaneous Issues in Hemodialysis Patients*	KOR	**Room 3**
Chair(s)	Hun-Kwan Lim Seoul Woori Medicine, Korea		
DSP2-S1	Hemodialysis Adequacy	Hyung Woo Kim Severance Hospital, Korea	
DSP2-S2	Vascular Access Examination and Management	Cheolsu Kim KCS Clinic, Korea	
DSP2-S3	Optimal Treatment and Management Strategies for CKD-Associated Pruritus	Youn Kyung Kee Kangdong Sacred Heart Hospital, Korea	
DSP2-S4	Hemodialysis in Pregnant Patient	Yu Ho Lee CHA University Bundang Medical Center, Korea	
10:40 - 12:40	**Nephrology Board Review Course 2**	KOR	**Room 4**
Chair(s)	Hyun-Lee Kim Chosun University Hospital, Korea		
NBR2-S1	Management of Autosomal Dominant Polycystic Kidney Disease: Current Best Practice	Yang Gyun Kim Kyung Hee University Hospital at Gangdong, Korea	
NBR2-S2	Management of Diabetic Kidney Disease: Current Best Practice	Mi Yeun Han National Medical Center, Korea	
NBR2-S3	Management of Blood Pressure in CKD: Current Best Practice	Il Young Kim Pusan National University Yangsan Hospital, Korea	
NBR2-S4	Kidney Replacement Therapy in Geriatric Patients with ESKD: Issues to be Considered	Soon Hyo Kwon Soonchunhyang University College, Seoul Hospital, Korea	
10:40 - 12:40	**Disaster Preparedness and Response (재난대응위원회)**	KOR	**Room 5**
Chair(s)	Young-Ki Lee Hallym University Kangnam Sacred Heart Hospital, Korea Seong Jung Kim National Emergency Medical Center, Korea		
KOR1-S1	한국 재난응급의료 대응과 대한신장학회 협력방안 Korean Disaster Medical Response system and Cooperation with KSN	Jeong Eon Kim National Medical Center, Korea	
KOR1-S2	개원의가 꼭 알아야할 인공신장실 화재 관련 소방법규 Fire Regulation Related to Dialysis Center That Practitioners Must Know	Won Min Hwang Konyang University Hospital, Korea	

Detailed Program

KOR Korean ENG English KOR↔ENG KOR/ENG Simultaneous Interpretation Plenary Lecture & Official Program Oral Communication (English)

KOR1-S3	인공신장실 재난 대응 훈련의 실제 Practice of Disaster Response Training in Hemodialysis Room at Private Clinic	Sun Young Park Yonsei Sun Clinic, Korea
KOR1-S4	인공신장실이 침수된다면?: 태풍/수해/단수 대비 Disaster Preparedness of Dialysis Patients for Typhoon and Flood Damage in Jeju Island	Hwa Young Lee Jeju National University Hospital, Korea
KOR1-S5	인공신장실의 흔하지만 위험한 정전 재난대비 Electrical shutdown in Dialysis Units: Facing the Darkest Hour	Sang Heon Suh Chonnam National University Hospital, Korea
KOR1-S6	국민건강보험공단 빅데이터를 이용한 COVID-19 투석환자의 임상 성적 및 예후 연구 Clinical outcomes in COVID-19 patients with ESKD: Korean Health Insurance Database	Ajin Cho Hallym University Kangnam Sacred Heart Hospital, Korea

Oral Communication List

Day 1 April 27 (Thu)

13:00 - 14:30	**Oral Communications 1** *Acute Kidney Injury*	ENG	**Room 3**

Presentation No.	Title	Presenting Author
OC01-S1	The kidney-gut-brain axis: effect of restoring gut microbiome on the longterm development of dementia following AKI	Young Eun Choi Korea University Anam Hospital, Korea
OC01-S2	Dynamic nature and prognostic value of the neutrophil-to-lymphocyte ratio in critically ill patients with acute kidney injury on continuous renal replacement therapy: A multicenter cohort study	Hyun Lee Ko Uijeoungbu Eulji University Hospital, Korea
OC01-S3	Impaired NRF2 inhibits the recovery of ischemic reperfusion injury in aging kidney	Min Jee Jo Korea University Guro Hospital, Korea
OC01-S4	Association between body mass index and patient outcome in patients with acute kidney injury requiring continuous renal replacement therapy	Eunghyun Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
OC01-S5	The impact of C-reactive protein-to-albumin ratio on mortality in patients with acute kidney injury requiring continuous renal replacement therapy: A multicenter retrospective study	Yoon Ju Kim Kyungpook National University School of Medicine, Korea
OC01-S6	The renal outcome post contrast exposure in patient with diabetes and SGLT2 inhibitor	Chih-Chin Kao Taipei Medical University Hospital, Taiwan
OC01-S7	Acute kidney injury, glomerulonephritis and tubulointerstitial nephritis following vaccination: VigiBase analysis	Soo-Young Yoon Kyung Hee University Hospital, Korea
OC01-S8	A retrospective chart review study to evaluate the clinical outcome according to treatment in atypical hemolytic uremic syndrome patients in South Korea: A interim analysis	Hyo-Wook Gil Soonchunhyang University Cheonan Hospital, Korea
OC01-S9	3D-printed omentum patch transplantation reduces kidney fibrosis after acute kidney injury	Wencheng Jin Seoul National University College of Medicine, China
OC01-S10	Serum cystatin – C as a potential predictor of renal damage in pre-eclampsia	Thanh-Tam Tran-Thai Can Tho University of Medicine and Pharmacy, Thailand

Oral Communication List

Day 1 April 27 (Thu)

15:00 - 17:00	**Oral Communications 2** *Electrolyte / Hypertension*	ENG	**Room 3**

Presentation No.	Title	Presenting Author
OC02-S1	TAZ-knockdown affects the vasopressin-induced aquaporin-2 (AQP2) trafficking and protein abundance in kidney collecting duct cells	HongSeok Choi Kyungpook National University School of Medicine, Korea
OC02-S2	Poly(ADP-ribose) polymerase 1 affects the vasopressin-mediated AQP2 expression via an interaction with β-catenin	Hyo-Ju Jang Kyungpook National University School of Medicine, Korea
OC02-S3	The association between magnesium intake and atherosclerotic cardiovascular disease	Young Su Joo Yongin Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC02-S4	Tolvaptan reverses duloxetine-induced antidiuresis in lithium-induced nephrogenic diabetes insipidus	Gheun-Ho Kim Hanyang University Medical Center, Korea
OC02-S5	A scoring system for the progression of chronic kidney disease progression based on urinary electrolytes: Results from KNOW-CKD	Ye Eun Ko Yonsei University College of Medicine / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC02-S6	Response of relowering treatment and clinical significance in severe hyponatremia: A post-hoc analysis of the SALSA trial	Seon Ha Baek Hallym University Dongtan Sacred Heart Hospital, Korea
OC02-S7	The 2021 KDIGO blood pressure target and the progression of chronic kidney disease: Findings from KNOW-CKD study	Cheol Ho Park Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC02-S8	In vitro modeling of uremic cardiomyopathy using induced pluripotent stem cell-derived cardiomyocytes and simplified uremic toxin mixture	Junseok Jeon Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea
OC02-S9	Effects of polygenic risk score and sodium, potassium intake on hypertension in asians: A nationwide prospective cohort study	Eunjin Bae Gyeongsang National University Changwon Hospital, Korea
OC02-S10	The clinical significance of diastolic dysfunction assessed by echocardiography in patients with end-stage kidney disease	Hojin Jeon Sungkyunkwan University School of Medicine, Korea
OC02-S11	Estradiol replacement mitigated blood pressure elevation via suppression of sodium chloride cotransporter in angiotensin II-infused ovariectomized female rats	Yang Gyun Kim Kyung Hee University Hospital at Gangdong, Korea

Oral Communication List

Day 2 April 28 (Fri)

08:30 - 10:30	**Oral Communications 3** *Glomerulonephritis*	ENG	**Room 2**

Presentation No.	Title	Presenting Author
OC03-S1	Development of drug efficacy testing platform for glomerulonephritis	Eunjeong Kwon Seoul National University Bundang Hospital, Korea
OC03-S2	BAG2, a novel chaperone in renal fibrosis, acts to enhance TGF-β/smad3 binding in CKD patients	Min-Ji Sung CHA University, Korea
OC03-S3	Promoting podocyte-endothelial interactions in human kidney organoids using microfluidic chips	Hongxia Fu University of Washington, United States
OC03-S4	Updated interim results of a phase 1/2 study of bion-1301 in patients with IGA nephropathy	Sung Gyun Kim Hallym University Sacred Heart Hospital, Korea
OC03-S5	Glomerular hyperfiltration as risk factor of major adverse cardiovascular events after acute myocardial infarction	Hyo-Jin Lee Kyung Hee University Medical Center, Korea
OC03-S6	uPA deficiency aggravates cBSA-induced membranous nephropathy through Th2-prone immune response in mice	Jin-Shuen Chen Kaohsiung Veterans General Hospital, Taiwan
OC03-S7	Atrasentan for the treatment of IGA nephropathy: Interim results of the affinity study	Seung Hyeok Han Yonsei University College of Medicine / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC03-S8	Spatially resolved transcriptomic analysis for glomerular and tubulointerstitial gene expression profile of C3 glomerulonephritis	Jung Hun Koh Seoul National University Hospital, Korea
OC03-S9	Identification of glomerulonephritis-associated differentially expressed genes by spatial transcriptomic analysis	Jeong Min Cho Seoul National University Hospital, Korea
OC03-S10	Spatially resolved transcriptomic signature of relapsing minimal change disease	Semin Cho Chung-Ang University College of Medicine, Korea
OC03-S11	Efficacy of AGB-100, TGF-β type I receptor (ALK5) inhibitor, using renal fibrosis on a chip model	Sejoong Kim Seoul National University Bundang Hospital, Korea
OC03-S12	Factors associated with the development and severity of polycystic liver in patients with autosomal-dominant polycystic kidney disease	Yaerim Kim Keimyung University School of Medicine, Korea

Oral Communication List

Day 2 April 28 (Fri)

10:40 - 12:40	**Oral Communications 4** Kidney Transplantation	ENG	**Room 2**

Presentation No.	Title	Presenting Author
OC04-S1	Combined use of tocilizumab (IL-6 receptor blocking antibody) and mesenchymal stem cells attenuate the development of anti-HLA-A2.1 antibody in highly sensitized mice model	Xianying Fang The Catholic University of Korea, Korea
OC04-S2	Impact of sensitization and ABO blood group on access to deceased donor kidney transplantation with a long waiting time	Jinhyeog Lee Yonsei University College of Medicine, Korea
OC04-S3	Pre-donation obesity and kidney function in living kidney donors	Chanokporn Puchongmart Banpheao General Hospital, United States
OC04-S4	Association of serum activin level with progression of chronic kidney disease in patients with kidney transplantation: Results from the KNOW-KT	Hui-Yun Jung Severance Hospital, Korea
OC04-S5	Prediction tool of renal adaptation after living kidney donation using interpretable machine learning	Junseok Jeon Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea
OC04-S6	Impact of the longitudinal changes of left ventricular geometry on KT outcomes	Tai Yeon Koo Korea University Anam Hospital, Korea
OC04-S7	The alteration of monocyte subsets and the early acute rejection after kidney transplantation	Jeongin Song Seoul National University Hospital, Korea
OC04-S8	Clinical trial of allogeneic mesenchymal stem cell therapy for chronic active antibody-mediated rejection in kidney transplant recipients	Hyung Duk Kim The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
OC04-S9	Comparisons of clinical outcomes between hypertensive and normotensive living kidney donors: a nationwide prospective cohort study	Jong Ho Kim Kyung Hee University Medical Center, Korea
OC04-S10	5-HT2 and 5-HT2B receptor antagonism abrogates fibrotic potential of human renal allograft fibroblasts by targeting STAT3 pathway	Akhilesh Jaiswal Sanjay Gandhi Post Graduate Institute of Medical Sciences, India
OC04-S11	Early outcomes of tocilizumab (Anti-IL-6R monoclonal) treatment for chronic active antibody-mediated rejection in kidney transplant recipients	Haeun Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea

Oral Communication List

Day 2 April 28 (Fri)

14:50 - 16:50 **Oral Communications 5**
Diabetic Nephrology / Metabolic Abnormality
ENG **Room 2**

Presentation No.	Title	Presenting Author
OC05-S1	SIRT3 activation with viniferin treatment ameliorates features of diabetes induced tubular injury through restoration of mitochondrial function	Jae Young Kim National Health Insurance Service Ilsan Hospital, Korea
OC05-S2	RIPK3 promotes mitochondrial fission and dysfunction in diabetic podocyte injury	Jeong Suk Kang Soonchunhyang University Cheonan Hospital, Korea
OC05-S3	Periostin deficiency attenuates kidney fibrosis in diabetic nephropathy via improving pancreatic β-cell dysfunction	Ara Cho Seoul National University Hospital, Korea
OC05-S4	Diabetic nephropathy drives oxidative phosphorylation of kidney-resident macrophages	Peong Gang Park Seoul National University Hospital, Korea
OC05-S5	Effect of KS101 on albuminuria in a diabetic mouse model (db/db mice)	Eun-Jeong Kwon Seoul National University Bundang Hospital, Korea
OC05-S6	Depot-specific characteristics of visceral adipose-derived mesenchymal stem cells (ADMSCs) from patients with chronic kidney disease (CKD): A single-cell RNA sequencing study	Hyoungnae Kim Soonchunhyang University Seoul Hospital, Korea
OC05-S7	CT-derived radiomics analysis of diabetic nephropathy by machine learning models	Eun Ji Lee Soonchunhyang University Seoul Hospital, Korea
OC05-S8	Tertiary lymphoid tissues are associated with kidney function decline in patients with advanced diabetic kidney disease	Yu Ho Lee Bundang CHA General Hospital, Korea
OC05-S9	Insulin resistance is associated with incident chronic kidney disease in population with normal renal function	Su Hyun Song Chonnam National University Hospital, Korea
OC05-S10	Type 2 diabetes mellitus modifies the relationship between coronary artery calcification and adverse kidney outcome in patients with chronic kidney disease	Hae-ryong Yun Yongin Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC05-S11	The renal adverse effect of PM 2.5 and NO2 after adjusting medication usage in diabetic kidney disease patients	Soie Kwon Chung-Ang University Hospital, Korea
OC05-S12	Pharmacologic pyruvate kinase M2 activation maintains mitochondrial metabolism by regulating the interaction between HIF-1α and PGC-1α in diabetic kidney disease	Young Su Joo Yongin Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea

Oral Communication List

Day 2 April 28 (Fri)

17:00 - 18:40	**Oral Communications 6** *Pediatric / Genetics*	ENG	**Room 1**

Presentation No.	Title	Presenting Author
OC06-S1	Relationships between BSA-adjusted total kidney volume and estimated glomerular filtration rate in pediatric chronic kidney disease: Data from the KNOW-Ped CKD study	Ji Hyun Kim Seoul National University Bundang Hospital, Korea
OC06-S2	Improving autophagy flux by TFEB activation via GSK3ß signaling pathway with PEG-CZNPs attenuated chronic kidney injury in cellular and animal models of fabry disease	Se-Hee Yoon Konyang University Hospital, Korea
OC06-S3	Biomarkers for predicting progression to chronic kidney disease after acute kidney injury	NAYE CHOI Seoul National University Hospital, Korea
OC06-S4	Efficacy of nafamostat mesilate in pediatric continuous renal replacement therapy: A 5 year follow-up study	Jinwoon Joung Samsung Medical Center, Korea
OC06-S5	Impact of COVID-19 on the clinical course of nephrotic syndrome in children: A single-center study	Minji Park Kyungpook National University Hospital, Korea
OC06-S6	Hyperparathyroidism after kidney transplantation in children	Peong Gang Park Seoul National University Hospital, Korea
OC06-S7	Posterior urethral valve in Thai boys: 30-year experience in a single center	Prayong Vachvanichsanong Prince of Songkla University, Thailand
OC06-S8	Baseline characteristics of the Korean genetic cohort of inherited cystic kidney disease	Jeong Min Cho Seoul National University Hospital, Korea

Oral Communication List

Day 2 April 28 (Fri)

17:00 - 18:40	**Oral Communications 7** *Big Data / Geriatric*	ENG	**Room 2**

Presentation No.	Title	Presenting Author
OC07-S1	The effect of air pollution on kidney function in primary glomerulonephritis patients	Jinyeong Yi Seoul National University, Korea
OC07-S2	Native arteriovenous fistula is the best permanent vascular access in elderly Korean population based on National Health Insurance Service database	Seung Yun Chae Korea Advanced Institute of Science and Technology (KAIST), Korea
OC07-S3	Risk of hyponatremia after tramadol/acetaminophen single-pill combination therapy: A real-world study based on the OMOP-CDM database	Ye Ji Lee Pusan National University Hospital, Korea
OC07-S4	Development of available prediction model for in-hospital acute kidney injury	InYong Jeong Korea University College of Medicine, Korea
OC07-S5	Association between body mass index, waist circumference and clinical outcomes in Korean advanced chronic kidney disease patients	Ji Hye Kim Chungbuk National University Hospital, Korea
OC07-S6	Prediction of early-stage chronic kidney disease using machine learning algorithms	Jakir Hossain Bhuiyan Masud Public Health Informatics Foundation, Bangladesh
OC07-S7	Single cell transcriptome of proximal tubular cells showed dynamic aging trajectory in human and mouse	Su Woong Jung Kyung Hee University Hospital at Gangdong, Korea
OC07-S8	Association between statin treatment and mortality in older Korean hemodialysis patients by sex: Data from a Korean society of geriatric nephrology retrospective cohort	Jinsuk Bae Dongkang Medical Center, Korea
OC07-S9	Aging-related renal fibrosis was alleviated via conserving mitochondrial function in NLRP3 KO mice	Yang Gyun Kim Kyung Hee University Hospital at Gangdong, Korea
OC07-S10	Protective potential of 17β-estradiol on oxidative stress and renal metabolism in aged female rats	Pardeep Kumar F H M College and Hospital, India

Oral Communication List

Day 3 April 29 (Sat)

08:30 - 10:30	**Oral Communications 8** *Chronic Kidney Disease*	ENG	**Room 2**

Presentation No.	Title	Presenting Author
OC08-S1	Nocturnal systolic blood pressure dipping and progression of chronic kidney disease	Cheol Ho Park Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC08-S2	Upregulation of Adipose Tissue (AT) Fatty Acid-Binding Protein 4 (FABP4) in Chronic Kidney Disease (CKD) patients: Implications for dysfunctional vascular cells	Hyunjin Noh Soon Chun Hyang University Seoul Hospital, Korea
OC08-S3	Use of aspirin and risk of initial cardiovascular events and bleeding in CKD G3-G4 patients: A nationwide cohort study in South Korea	Jae Young Kim National Health Insurance Service Ilsan Hospital, Korea
OC08-S4	Therapeutic role of colostrum-derived exosome in chronic kidney disease	Suk Min Chung Korea University Anam Hospital, Korea
OC08-S5	Association of plant protein intake and risk of incident chronic kidney disease: The UK Biobank study	Ga Young Heo Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC08-S6	PTEN-induced kinase 1 has association with renal aging process through cGAS -STING pathway	Min Heui Ha CHA University, Korea
OC08-S7	Effect of pharmacological enhancement of circadian clock in chronic kidney disease	Myung-Gyu Kim Korea University Anam Hospital, Korea
OC08-S8	Cause-specific biomarker of chronic kidney disease by integrating genomics and metabolomics in Korean population	Min Woo Kang Seoul National University Hospital, Korea
OC08-S9	The association between potassium intake and risk of chronic kidney diseases	Hyo Jeong Kim Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC08-S10	The role of resident renal fibroblast on renal fibrosis and crosstalk with tubular epithelial cells	Sunhwa Lee Kangwon National University Hospital, Korea
OC08-S11	Bioinformatics investigation of potential natural bioactive compounds targeting TGF-β1 receptor to treat kidney fibrosis	Reny Rosalina Faculty of Mathematics and Natural Sciences, Universitas Palangka Raya, Indonesia
OC08-S12	Efficacy and safety of oral difelikefalin in stage 3-5 chronic kidney disease patients with moderate-to-severe pruritus: a response analysis from a randomised, placebo-controlled, phase 2 trial	Warren Wen Cara Therapeutics, United States

Oral Communication List

Day 3 April 29 (Sat)

15:30 - 17:30	**Oral Communications 9** *Dialysis*	ENG	**Room 2**

Presentation No.	Title	Presenting Author
OC09-S1	Increased right ventricular pressure as a predictor of acute decompensated heart failure in end-stage renal disease patients on maintenance hemodialysis	Byung Hwa Park Kosin University Gospel Hospital, Korea
OC09-S2	Dialysis adequacy and incident atrial fibrillation in hemodialysis patients	Ga Young Heo Yonsei University College of Medicine / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Kroea
OC09-S3	Loss of cutibacterium is responsible for CKD-associated pruritus in patients undergoing dialysis	Jeong Geon Lee Soonchunhyang University College of Medicine, Korea
OC09-S4	The impact of severe depression on the survival of older patients with end-stage kidney disease	Young Hwan Lee Kyungpook National University School of Medicine, Korea
OC09-S5	The comparison of humoral response between third and forth doses of COVID-19 vaccines in end-stage renal disease on hemodialysis	Seong Wook Lee Kyungpook National University School of Medicine, Korea
OC09-S6	Association of insomnia with the risk of cardiovascular disease and all-cause mortality in patients with incident ESKD	Hyung Woo Kim Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
OC09-S7	Association between circulating ECM-associated molecules and cardiovascular outcomes in hemodialysis patients	Jihyun Baek Bundang CHA General Hospital, Korea
OC09-S8	Survival study of dialysis patients with concomitant cardiovascular diseases	Olimkhon Sharapov Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Uzbekistan
OC09-S9	Blocking Plasminogen activator inhibitor-1 (PAI-1) ameliorates the functional and structural deterioration of peritoneum in animal model of peritoneal dialysis (PD)	Dal-Ah Kim Ewha Womans University Medical Center, Korea
OC09-S10	The perception of end stage renal disease patients regarding peritoneal dialysis: The initial phase for an information package development	Annie Rose Ammar Zamboanga City Medical Center, Philippines
OC09-S11	Relationship between high-density lipoprotein cholesterol and mortality in elderly hemodialysis patients: data from the korean society of geriatric nephrology retrospective cohort	Seung Hye Chu Soonchunhyang University Seoul Hospital, Korea
OC09-S12	Patient acuity and cardiovascular outcome in hemodialysis patients: a korean nationwide cohort study	Hyo Jeong Kim Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Kroea

Best Poster Presentation List

April 28 (Fri) – 29 (Sat)

KOR **205, 2F**

Presentation No.	Topic	Title	Presenting Author
BPP1-S1	Glomerular and Tubulointerstitial Disorders	Glutamyl-prolyl-tRNA-synthetase 1 regulates kidney fibrosis by controlling STAT3 and mitochondrial dysfunction	Seung Seob Son Soonchunhyang University College of Medicine, Korea
BPP1-S2	Dialysis (Hemodialysis + Peritoneal Dialysis)	Preferences on Mobile Monitoring App for Peritoneal Dialysis Patients and Healthcare Professionals in South Korea: A Choice-Based Conjoint Analysis	KyungYi Kim Yonsei University College of Medicine, Korea
BPP1-S3	Geriatric + Sarcopenia	Cancer Status and Mortality in Older Hemodialysis Patients: Data from a Korean Society of Geriatric Nephrology Retrospective Cohort	Hyunjeong Cho Chungbuk National University Hospital, Korea
BPP1-S4	Non-dialysis CKD	Untargeted approach for breath markers of chronic kidney disease through TD-GC/MS (Thermal Desorption Gas chromatography Mass-spectrometry)	Jieun Oh Kangdong Sacred Heart Hospital, Korea
BPP1-S5	Fluid, Electrolyte and Acid-Base disorder	Shortening of the primary cilia length involves urine concentration in the kidneys	Min Jung Kong Kyungpook National University School of Medicine, Korea

The Best Poster Presentation will take place on April 29 (Sat) from 14:50-15:30, and the exhibit will be on display on April 28 (Fri) - 29(Sat) in 205, 2F.

Poster Presentation List

April 28 (Fri)

Acute Kidney Injury — 201, 2F

Presentation No.	Title	Presenting Author
PAK001	Urinary extracellular vesicle mirna profiling for detecting cardiac surgery-associated acute kidney injury	Pei Chun Fan Linkou Chang Gung Memorial Hospital, Taiwan
PAK002	Acute kidney injury induced by beta lactam antibiotics in children: a scoping review	Astalitha Lorel Tania Universitas Islam Indonesia, Indonesia
PAK003	Incidence of acute kidney injury among admitted adult patients with coronavirus disease (COVID-19) in a tertiary private hospital from July 2020 to July 2022	Mark Gilben Silao Remedios Trinidad Romualdez Hospital, Philippines
PAK004	The relationship between serum creatinine and plasma malondialdehyde levels on rats (Rattus norvegicus) induced by high purine diets after intervention of non-decaffeinated coffee and decaffeinated coffee	Alfian Novanda Yosanto Universitas Islam Indonesia, Indonesia
PAK005	B-hydroxybutyrate attenuates cisplatin-induced acute kidney injury through the regulation of cellular senescence	Il Young Kim Pusan National University Yangsan Hospital, Korea
PAK006	Metabolic profiles predict acute kidney injury in patients undergoing percutaneous coronary intervention	Miyeun Han National Medical Center, Korea
PAK007	Impact of NAMPT on acute kidney injury following regeneration in adult zebrafish model	Hye-jin Park Korea University Ansan Hospital, Korea
PAK008	Modified charlson comorbidity index considering sarcopenia on mortality of patients with acute kidney injury requiring continuous renal replacement therapy	Jangwook Lee Dongguk University Ilsan Hospital, Korea
PAK009	Surface-engineered PLGA nanocapsules of crocetin nano-renal protective with improved biopharmaceutical attributes against acute kidney injury via PI3K/Akt/Nrf2 singling pathway	Deepika Singh SHUATS, India
PAK010	Skeletal muscle mass is independently associated with survival and renal recovery from dialysis in critically ill patients with sepsis-induced acute kidney injury receiving continuous renal replacement therapy	Il Young Kim Pusan National University Yangsan Hospital, Korea
PAK011	Diagnostic and prognostic roles of CRP, procalcitonin, and presepsin in acute kidney injury patients initiating CRRT	Suyeon Han Chungnam National University Hospital, Korea
PAK012	Curcumin-pyrazole prevents sepsis-induced acute kidney injury via inhibition of NF-κB pathway in a rat sepsis model	Vijeta Jha Waycool Chennai, India

Poster Presentation List

PAK013	Effect of early versus late referral on the recovery of hospital acquired-acute kidney injury (HA-AKI) in non-critically ill adult patients in a tertiary hospital	Maria Corazon Manlulu St Lukes Medical Center Global City, Philippines
PAK014	Safety and clinical efficacy of plasma-saving membrane-based therapeutic plasma exchange in critically ill patients undergoing continuous kidney replacement therapy	Jae Sung Ahn Asan Medical Center, University of Ulsan College of Medicine, Korea
PAK015	Study of urinary NGAL as an early predictive biomarker for contrast induced nephropathy in patients with normal creatinine undergoing coronary angiography	Ambar Khalwadekar AIIMS Jodhpur, India
PAK016	A case of acute kidney injury caused by dapsone-induced methomoglobinemia in a patient with chronic kidney disease	Ayoung Cho Presbyterian Medical Center, Korea

April 29 (Sat)

Acute Kidney Injury — 201, 2F

Presentation No.	Title	Presenting Author
PAK017	Prediction and management of acute kidney injury with explainable artificial intelligence (prime): a study protocol for a randomized controlled trial	Giae Yun Seoul National University Bundang Hospital, Korea
PAK018	Importance of nephrology consultation on clinical outcome in patients with acute kidney injury	Harin Rhee Pusan National University Hospital, Korea
PAK019	Renal function improvement effects of the extract kecombrang (etlingera elatior) fruit in mice model of sepsis	Evi Nurhayatun Sebelas Maret University, Indonesia
PAK020	Multicenter matched cohort for acute kidney injury linked to national health insurance database in Korea	Jeong Min Cho Seoul National University Hospital, Korea
PAK021	Association between nephrolithiasis and kidney disease progression in autosomal dominant polycystic kidney disease patients : a prospective cohort study	Hongran Moon Seoul National University Hospital, Korea
PAK022	Acute kidney injury induces disruption of cholangiocyte primary cilia via oxidative stress	Yong Kwon Han Kyungpook National University School of Medicine, Korea
PAK023	Frequency and risk factors of acute kidney injury following large volume paracentesis in cirrhotic patients with spontaneous bacterial peritonitis.	Hafiz Abdul Basit Siddiqui Aga Khan University Hospital., Pakistan
PAK024	Renal protective effect of umbelliferone on acute kidney injury in rats via alteration of PI3K/Akt/Nrf2 signaling pathway	V Kumar Thelansis Knowledge Partners, India

Poster Presentation List

PAK025	Rac1 inhibition protects kidney against ischemia/reperfusion through the inhibition of macrophage migration	You Ri Park Kyungpook National University School of Medicine, Korea
PAK026	Effect of renal artery calcification on the occurrence of acute kidney injury and mortality	Hae Eun Jeon Chung-Ang University Hospital, Korea
PAK027	Characteristics of puromycin-induced kidney injury following regeneration in adult zebrafish model	Hye Jin Park Korea University Ansan Hospital, Korea
PAK028	Role of increased neutrophil extracellular trap formation on acute kidney injury in COVID-19 patients	In Soo Kim Hallym University Sacred Heart Hospital, Korea
PAK030	Association between kidney disease and COVID-19 in diabetes mellitus patients: a meta-analysis of observational studies	Mohammad Adil SPER, Jamia Hamdard, New Delhi, India
PAK031	Resveratrol ameliorates ferroptosis in proximal tubular epithelial cells	Hyeongwan Kim Jeonbuk National University Hospital, Korea
PAK032	Development of a new treatment for acute kidney injury caused by contrast media	Koichiro Homma School of Medicine, Keio University, Japan
PAK033	Risk prediction for acute kidney injury among COVID-19-positive patients in Korea population	Hyeseung Lee Seoul National University Hospital, Korea
PAK034	Incidence, renal outcome, and prognosis of acute kidney injury in CKD patients with acute cholangitis	Tae Won Lee Gyeongsang National University Changwon Hospital, Korea
PAK035	Simple markers for severe acute kidney injury patient outcome	Ha Nee Jang Gyeongsang National University Hospital, Korea
PAK036	Klebsiella pneumonia induced rhabdomyolysis complicated with prostatic abscess and renal abscess	Seungwoo Heo Daejeon Eulji Medical Center, Eulji University School of Medicine, Korea
PAK037	A case of acute tubulointerstitial nephritis with ingestion of hibiscus sabdariffa	Youngmin Yoon Chosun University Hospital, Korea
PAK038	Rhabdomyolysis induced acute kidney injury in patient tAKIng low dose rosuvastatin	Soyoung Lee Daejeon Eulji Medical Center, Eulji University, Korea

Poster Presentation List

April 29 (Sat)

Acute Kidney Injury — 205, 2F

Presentation No.	Title	Presenting Author
CAK001	Two cases of type 1 renal hypouricemia with different clinical courses: a case report	Haeun Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
CAK002	Case study: peptide-based enteral feeding of 1.5 Kcal/mL density in critical acute kidney injury patients with gastrointestinal disorders	Yesi Herawati Hasan Sadikin Hospital, Indonesia
CAK003	Clinical course of patient with septic acute kidney injury complicated by disseminated emphysematous infection	Jong Hwan Jung Wonkwang University Hospital, Korea
CAK004	Hemoperfusion in pregnant patients with COVID 19 infection – a case series	Pamela Angulo St. Luke's Medical Center-QC, Philippines

April 28 (Fri)

Big Data — 205, 2F

Presentation No.	Title	Presenting Author
PBD001	The relationship between smoking cessation and atherosclerotic cardiovascular disease and mortality among patients with chronic kidney disease: the findings from KNOW-CKD	Young Su Joo Yongin Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
PBD002	Effect of long-term use of metformin on patients with type 2 diabetes: a multicentric, comparative cohort study using common data model	YongJin Yi Dankook University Hospital, Korea
PBD003	Association of COVID-19 vaccination with risk of COVID-19 infection, ICU admission, and death in dialysis patients with ESRD: a nationwide cohort study in South Korea	Jae Young Kim National Health Insurance Service Ilsan Hospital, Korea
PBD004	Transcriptome analysis in healing stage of ischemic reperfusion injury (IRI) mice model	Min Jee Jo Korea University Guro Hospital, Korea
PBD005	Rheumatoid arthritis and the risk of end-stage renal disease: a nation-wide, population-based study	Sang Heon Suh Chonnam National University Medical School, Korea
PBD006	Machine-learning enhancement of urine dipstick tests for chronic kidney disease detection	Hyae Min Lee Bundang CHA General Hospital, Korea
PBD007	Impact of severe anemia on new-onset cardiovascular events and mortality after continuous renal replacement therapy – a nationwide cohort study	Junseok Jeon Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Poster Presentation List

PBD008	Effect of sleep on bone mineral density and its clinical significance in CKD	Junha Ryu Gyeongsang National University Changwon Hospital, Korea
PBD009	Predicting kidney disease using artificial intelligence	Jakir Hossain Bhuiyan Masud Public Health Informatics Foundation, Bangladesh
PBD010	The difference between cystatin C- and creatinine-based estimated glomerular filtration rate and incident atrial fibrillation in the UK biobank	Ga Young Heo Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
PBD011	Hyperfiltration, metabolic syndrome and risk of adverse clinical outcomes	Dae Kyu Kim Kyung Hee University Hospital at Gangdong, Korea
PBD012	Association between fatty liver index and the risk of end stage renal disease stratified by baseline kidney function in patients with type 2 diabetes: a nationwide population-based study	Namju Heo Seoul National University Hospital, Korea
PBD013	Polygenic risk score for CKD: association between dyslipidemia and the risk of incident CKD affected by genetic susceptibility	Boram Weon Seoul National University Hospital, Korea
PBD014	Association between family history of CKD and incidence and progression of CKD: a nationwide family cohort study in South Korea	Jae Young Kim National Health Insurance Service Ilsan Hospital, Korea
PBD015	Association between plasma uric acid levels and mortality and cardiovascular outcomes according to kidney function	Young Eun Kwon Korea University Guro Hospital, Korea
PBD016	Feasibility assessment of peritoneal dialysis complications using a common data model	Soo Jeong Choi Soonchunhyang University Bucheon Hospital, Korea
PBD017	An indonesian study discovered an association between groundwater use and the occurrence of chronic renal illness brought on by glomerulonephritis	Nazala Safira Universitas Islam Indonesia, Indonesia

April 29 (Sat)

Big Data — 205, 2F

Presentation No.	Title	Presenting Author
PBD018	Plant based diet for nutrition therapy in chronic kidney disease (CKD)	Kinanthi Pratiwi Safitriani Hospital, Indonesia

Poster Presentation List

April 28 (Fri)

Diabetic Nephropathy + Metabolic Abnormality — 201, 2F

Presentation No.	Title	Presenting Author
PDM001	αKlotho protects podocyte injury by upregulated calcium channels in diabetic nephropathy	Ji-Hee Kim Soonchunhyang University College of Medicine, Korea
PDM002	Evaluation of embelin alone and its combination with metformin on diabetic nephropathy	Sourabh Jain Arihant School of Pharmacy and BRI, India
PDM003	Placental growth factor deficiency aggravates diabetic nephropathy through AMP-activated protein kinase-dependent pathway	Yaeni Kim The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
PDM004	Novel 1,3,5-triazine-thiazole (TT-31) derivative exert protective action against diabetes induced nephropathy in rat via inhibition of DPP-4	Udaya Pratap Singh Sam Higgibottom University of Agriculture, Technology and Scienes, India
PDM005	Prognostic impact of estimated glomerular filtration rate on all-cause death and progression to end-stage renal disease in elderly diabetic patients	Kyungho Lee Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea
PDM006	MicroRNA-5010-5p ameliorates high-glucose induced inflammation of renal tubular epithelial cells by modulating expression of PPP2R2D	Hyoungnae Kim Soonchunhyang University Seoul Hospital, Korea
PDM007	Nephroprotective potential of Gallic acid metformin against Streptozotocin induced diabetic nephropathy in Wistar rats via inhibition of DPP-4 and TGF-β	Vikas Kumar Sam Higginbottom University of Agriculture, Technology & Sciences, India
PDM008	Effects of SGLT2 inhibitors on renal outcomes in patients with diabetes mellitus and normal or low body mass index	Yun Soo Lee Samsung Medical Center, Korea
PDM009	Higher employment rates and years of education correlate with the prevalence of chronic kidney disease due to diabetes mellitus in indonesia.	Zulfania Rahmah Universitas Islam Indonesia, Indonesia
PDM010	Renoprotective along with antioxidant effect of dipeptidyl peptidase–IV inhibitors from flavonoids rich fraction of terminalia arjuna in diabetic nephropathy rats model	Anand Krishna Singh Shri Vaishnav Vidyapeeth Vishwavidyalaya, India
PDM011	Type IV collagen as a biomarker for the early detection of diabetic nephropathy: a meta-analysis	Raphael Enrique Tiongco College of Allied Medical Professions, Angeles University Foundation, Philippines
PDM012	Effect of probiotic supplement on metabolic parameters in patients with diabetic nephropathy : a systematic review	Shinta Retno Wulandari Hospital of Indonesian Police Education and Training Institution / Sebelas Maret University, Indonesia

Poster Presentation List

PDM013	Effects of probiotic supplementation on markers of renal function and oxidative stress in subjects with metabolic syndrome	Senthil Kumar Subramani Tropilite Foods Pvt. Ltd, India

April 29 (Sat)

Diabetic Nephropathy + Metabolic Abnormality — 201, 2F

Presentation No.	Title	Presenting Author
PDM014	Orai1 channel inhibition protects podocyte injury in BTBR ob/ob diabetic mouse Kidneys	Yooujin Kwak Yonsei University Wonju College of Medicine, Korea
PDM015	Role of inulin-type fructans on serum and levels of triglycerides and cholesterol in alloxan-induced diabetic nephropathy rats	Rahul Kumar Jagannath Kishore College (J K College), India
PDM016	Effects of atrasentan on markers of liver function in patients with type 2 diabetes and chronic kidney disease	Hiddo L. Heerspink University Medical Center Groningen, The Netherlands
PDM017	Preclinical evaluation of an ayurvedic preparation, pramehari ark in type-2 diabetic nephropathy and cardiomyopathy	Varun Jhaveri Saurashtra University, India
PDM018	Usefulness of continuous glucose monitoring of blood glucose control in patients with diabetes undergoing hemodialysis: a prospective cohort study	Sua Lee Eulji University School of Medicine, Korea
PDM019	Association between urinary albumin creatinine ratio and cardiovascular disease	Dong Hui Shin Yonsei University Wonju College of Medicine, Korea
PDM020	Protective role of silymarin in type 2 diabetic nephropathy and cardiomyopathy in combination with metformin in streptozotocin-high fat induced diabetic rats	Riddhi Shukla Saurashtra University, India
PDM021	Solid lipid nano-particles of quercetin to abrogate renal dysfunction in experimentally induced type ii diabetic rats: an anti-inflammatory therapy	Deeksha Chauhan Rajkamal Science Management College, India
PDM022	Evaluation of the antioxidant potential of ethanolic extract of manjishtha against oxidative stress and renal damage in diabetic rats	Shweta Katiyar SBN Govt PG College, Barwani, India
PDM023	Progression to chronic kidney disease according to albuminuria in diabetic nephropathy patients with preserved renal function	Jae Wan Jeon Chungnam National University Sejong Hospital, Korea
PDM024	Relationships of insulin resistance and high-sensitivity c-reactive protein with metabolic abnormalities in patients with type 2 diabetes mellitus	Minjoon Lee Inje University Ilsan Paik Hospital, Korea

Poster Presentation List

PDM025	Nephroprotective effect of thaliporphine against streptozotocin induced diabetes mellitus via alteration of gut microbiota	Vikas Kumar SHUATS, India
PDM026	The evaluation of integrated guidance post (POSBINDU) program to control blood sugar in kendal regency : is it effective?	Zavia Putri Salsabila Universitas Islam Indonesia, Indonesia
PDM027	A case of muscle necrosis caused by simultaneous use of SGLT2i and statin in a kidney transplant patient	Jeong-myung Ahn Bon seng Hospital, Korea

April 28 (Fri)

Dialysis (Hemodialysis + Peritoneal Dialysis) 201, 2F

Presentation No.	Title	Presenting Author
PDL001	The comparison of humoral response between third and forth doses of COVID-19 vaccines in end-stage renal disease on hemodialysis	Dae Kyu Kim Kyung Hee University Hospital at Gangdong, Korea
PDL002	Automatic detection of intradialytic paroxysmal atrial fibrillation and flutter in single-lead ECG	Donghwan Yun Seoul National University Hospital, Korea
PDL003	Early weight change and subsequent mortality in critically ill patients with continuous renal replacement therapy according to disease groups	Sung Bin Yoon Samsung Medical Center, Korea
PDL004	The impact of quality of life on the survival in the elderly end-stage renal disease patients : a prospective multicenter cohort study in Korea	Yu Kyung Chung Kyungpook National University School of Medicine, Korea
PDL005	Impact of divalent cation abnormalities on elderly incident hemodialysis patients	Da Woon Kim Pusan National University Hospital, Korea
PDL006	Metabolomic profiling of overnight peritoneal dialysis effluents predicts the peritoneal equilibration test type	Hyo Jin Kim Pusan National University Hospital, Korea
PDL007	Factors associated with maturation of hemodialysis arteriovenous fistula: a single center cohort study	Eunghyun Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
PDL008	To compare the safety and outcomes of ultrasound guided tunneled dialysis catheters insertions with or without flouroscopy	Manish Rathi Post Graduate Institute of Medical Education and Research, India
PDL009	Mortality and bioimpedance spectroscopy based dry weight measurement error in elderly hemodialysis patients	Hae Ri Kim Chungnam National University Sejong Hospital, Korea
PDL010	Effect of pilot project of home management in peritoneal dialysis patients; national wide cohort study on Korea	Joo Yeon Yoon Kangnam Sacred Heart Hospital, Korea
PDL011	Swine model for arteriovenous access intervention training and simulation	In Sung Park Dongguk University Ilsan Hospital, Korea

Poster Presentation List

PDL012	Comparison of short and long-term survival of PD and HD: 10-year Experience from a Single Center	Jee Young Lee Konkuk University Medical Center, Korea
PDL013	A comparative study of early versus late initiation of hemodialysis in patients with acute kidney injury due to snake envenomation and its impact on the outcome of the kidney function	Abhishek Mukherji Nil Ratan Sircar Medical College and Hospital, India
PDL014	Comparison of early mortality in incident elderly hemodialysis patients according to the number of patients per dialysis specialist by region in Korea	Yohan Park Konyang University Hospital, Korea
PDL015	A single center study on the time of chest X-ray in hemodialysis patients	Jeong-myung Ahn Bon seng Hospital, Korea
PDL016	Efficacy of virtual reality contents for cannulation anxiety of hemodialysis patients	Jiwon Ryu Seoul National University Bundang Hospital, Korea
PDL017	The association between arterial stiffness and increased medial thickness in hemodialysis patients	Seok-hyung Kim Chuncheon Sacred Heart Hospital, Korea
PDL018	Cardiovascular comorbidity and survival in dialysis patients: a cohort study of the rural population of Uzbekistan	Olimkhon Sharapov Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Uzbekistan
PDL019	Correlation between transient hemodialysis and bleeding complications before peritoneal dialysis catheterization	A Young Kim Yeungnam University Medical Center, Korea
PDL020	Radiation exposure levels in vascular access interventions by interventional nephrologists	Woon Heo Lifeline Vascular Clinic, Korea
PDL021	Erythropoietin responsiveness is associated with nutritional, hydration status in hemodialysis patients undergoing darbepoetin-alfa treatment	Jung Sun Lee Hanyang University Medical Center, Korea
PDL022	Correlation between dyskalemia and mortality during CRRT in patients with chronic kidney disease undergoing maintenance hemodialysis	Chan Young Heo Yeungnam University Medical Center, Korea
PDL023	COVID-19 in peritoneal dialysis patients in Indian patients	Sukrat Sinha NGBDU, India
PDL024	Changes of medical costs and number of uses for continuous renal replacement therapy until recent six years in South Korea	Hyung Jong Kim Bundang CHA General Hospital, Korea
PDL025	Clinical implications of high Qa/CO in hemodialysis patients	Sun Ryoung Choi Sahmyook Medical Center, Korea
PDL026	PIVKA II is a biomarker for predicting coronary calcification in hemodialysis patients with diabetes	Kyung Ho Lee Soonchunhyang University Bucheon Hospital, Korea
PDL027	Effectiveness and safety of hemodialysis vascular access procedures performed by interventional nephrology fellows	Dong Hee Lee Hallym University Sacred Heart Hospital, Korea

Poster Presentation List

PDL028	Optimal time to start hemodialysis according to underlying kidney disease	Geo Neul Park Soonchunhyang University Bucheon Hospital, Korea
PDL029	Long-term Safety of High-Volume HDF using CDDS through Inflammatory Markers : comparative study with conventional hemodialysis	Yoosun Joo Konkuk University Medical Center, Korea
PDL030	Dialysis staff's perceptions of central concentrate delivery system: a questionnaire survey	Bo Sun Park Eulji University Hospital, Korea
PDL031	Poor appetite affects maintenance hemodialysis patients' dietary intake and nutritional status: a cross-sectional study	Amalia Sarah Sholikhati Universitas Gadjah Mada (UGM), Indonesia
PDL032	Comparing the clinical outcomes of incremental and conventional peritoneal dialysis over six months: retrospective study	Tran Tuan Tu Taipei Medical University, Vietnam
PDL033	Long-term safety of high-volume HDF using CDDS through inflammatory markers : comparative study with conventional hemodialysis	Li Hsiu Lan Yunghe Cardinal Tien Hospital, Taiwan
PDL034	Transhepatic hemodialysis access insertion in a patient with exhausted vasculature	Lovelynx Bayating Baguio General Hospital and Medical Center, Philippines
PDL035	Effects of the life of one person households on hemodialysis treatment	Hee Yeoun Kim Bon seng Hospital, Korea
PDL036	Cardiovascular parameters and biomarkers for predicting mortality in dialysis dependent CKD patients	Gita Bipin Chandra AIIMS Jodhpur, India
PDL037	Nutritional assessment on pediatric hemodialysis outpatients in Indonesia's Tertiary Hospital	Ariek Ratnawati RSUPN Cipto Mangunkusumo, Indonesia
PDL038	Study of the age-gender composition of dialysis patients	Olimkhon Sharapov Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Uzbekistan

April 29 (Sat)

Dialysis (Hemodialysis + Peritoneal Dialysis) — 201, 2F

Presentation No.	Title	Presenting Author
PDL039	Board struggle does it equip dialysis patients for life struggle? -a pilot study	Manish Lalwani Park hospital Delhi, India
PDL040	Geriatric nutritional risk index and early mortality in incident hemodialysis patients	Eunji Kim Kangnam Sacred Heart Hospital, Korea

Poster Presentation List

PDL041	The association between obesity and mortality is attenuated in elderly patients with hemodialysis: a nationwide cohort study in Korea	You Hyun Jeon Kyungpook National University School of Medicine, Korea
PDL042	Safety and durable patency of tunneled hemodialysis catheter inserted without fluoroscopy	Injoon Hwang The Catholic University of Korea, Eunpyeong St. Mary's Hospital, Korea
PDL043	Effect of hemodialysis on changes in cerebral blood flow in patients with end-stage renal disease: a functional near-infrared spectroscopy study	Yeongrok Oh Inje University Haeundae Paik Hospital, Korea
PDL044	Short- and long-term survival and technical outcomes of immediately-start PD: 10-year experience from a single center	Jee Young Lee Konkuk University Medical Center, Korea
PDL045	Heart rate variability according to electrolyte changes during hemodialysis in ESKD patients	Byung Hwa Park Kosin University Gospel Hospital, Korea
PDL046	Warfarin usage in patients with atrial fibrillation undergoing hemodialysis	Mega Febrianora Hasan Sadikin General Hospital, Indonesia
PDL047	Risk of all-cause mortality with aortic arch calcification in dialysis patients	Mohammad Salman Hussain Jamia Hamdard, India
PDL048	Functional connectivity in end-stage renal disease patients with restless legs syndrome: a near-infrared spectroscopy study	Jiyae Yi Inje University Haeundae Paik Hospital, Korea
PDL049	Catastrophic health expenditure for households with kidney disability in urban and rural area in Korea	Sun Mi Shin Joongbu University, Korea
PDL050	Clinical value of measuring central blood pressure in hemodialysis patients	Seok-hyung Kim Chuncheon Sacred Heart Hospital, Korea
PDL051	Fabrication, characterization and anti-fibrotic effect of surface engineered nano-formulation of revesterol against peritoneal fibrosis via alteration of TGF-β1	D Chauhan Rajkamal Science Management College, India
PDL052	Association between early allograft dysfunction and requirement of renal replacement therapy in liver transplant recipients	Heejin Cho Chung-Ang University Hospital, Korea
PDL053	Dialysis staff's perceptions of central concentrate delivery system: a questionnaire survey	Kyeong Min Kim Eulji University Hospital, Korea
PDL054	Mortality and risk factors in very elderly patients who start hemodialysis	Kyung Jun Shon Kangnam Sacred Heart Hospital, Korea
PDL055	A study on the prognostic differences between planned and unplanned hemodialysis and related factors	Yu Ah Hong The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea
PDL056	Increased adiposity, ferritin levels, and mortality among prevalent peritoneal dialysis patients	Ji Hwan Kim Hallym University Sacred Heart Hospital, Korea

Poster Presentation List

PDL057	Travel dialysis between Korea and Japan for 6 years	Dong Hyung Lee Beomil Yonsei Clinic, Korea
PDL058	Current understanding of erythropoietin stimulating agent hyporesponsiveness	Sihyung Park Inje University Haeundae Paik Hospital, Korea
PDL059	Proton pump inhibitors versus Histamine-2 receptor antagonist in patients with continuous renal replacement therapy	Ohyun Kwon Daegu hospital, Korea
PDL060	Antibody response to COVID-19 vaccination in patients on chronic hemodialysis	Hee Jung Choi Ajou University Hospital, Korea
PDL061	Correlation between nerve conduction changes and BETA-2 microglobulin concentration in chronic kidney disease patients on hemodialysis combined with hemodiafiltration online	Tan Mai Huynh Ngoc Can Tho University of Medicine and Pharmacy, Vietnam
PDL062	Retrospective analysis of spectrum of infections and antibiotic resistance pattern in chronic kidney disease patients on maintenance hemodialysis in a tertiary care centre in north India	Malsawmkima Chhakchhuak All India Institute of Medical Sciences, Jodhpur, India
PDL063	Gram classification of positive blood cultures was associated with mortality outcomes in septic acute kidney injury requiring continuous renal replacement therapy	Jeongin Song Seoul National University Hospital, Korea
PDL064	Survival results of patients from the transition from multiple to single use of dialyzers in Uzbekistan	Olimkhon Sharapov Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Uzbekistan
PDL065	Intradialytic hypotension and worse outcomes in patients with acute kidney injury requiring intermittent hemodialysis	Yeong-Won Park Seoul National University College of Medicine, Korea
PDL066	Hemodialyzed adolescents and their nutritional status in Mongolia	Bulganzaya Munkhbat National Center for Maternal and Child Health of Mongolia, Mongolia
PDL067	B-vitamin supplementation in patients with end-stage chronic kidney disease on hemodialysis: a review of randomized controlled trials using recent data	Atika Anif Prameswari Universitas Gadjah Mada, Indonesia
PDL068	Effect of intravenous iron supplementation on hospitalization for heart failure in hemodialysis patients	Ye Na Kim Kosin University Gospel Hospital, Korea
PDL069	The effect of peritoneal dialysis fluid to overhydration and body composition parameters in capd patients	Elizabeth Yasmine Wardoyo Fatmawati General Hospital, Indonesia
PDL070	Studying the causes of death in dialysis patients	Olimkhon Sharapov Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Uzbekistan

Poster Presentation List

PDL071	Effect of granulocyte colony stimulating factor and erythropoietin combination therapy in erythropoietin hyporesponsive anemia in chronic kidney disease patients on hemodialysis	Malsawmkima Chhakchhuak All India Institute of Medical Sciences, Jodhpur, India

April 29 (Sat)

Dialysis (Hemodialysis + Peritoneal Dialysis) — 205, 2F

Presentation No.	Title	Presenting Author
CDL001	Posterior approach and needle enhancement technique for central venous catheter insertion	Gwangho Choi Chuncheon Sacred Heart Hospital, Korea
CDL002	Central vein ultrasonography during preoperative vessel mapping for arteriovenous access creation	Hyun Woong Cho Hallym University Sacred Heart Hospital, Korea
CDL003	A case of simultaneous percutaneous transluminal angioplasty for both arm AV access stenosis	Heeryong Lee Leesin Hemodialysis and Intervention Clinic, Korea
CDL004	Venous hypertension of arteriovenous graft resolved by stent-graft placement by an interventional nephrologist: a case report	Joo Yeon Yoon Hallym University Kangnam Sacred Heart Hospital, Korea
CDL005	Management of diaphragmatic defects using icg fluorescence imaging system in peritoneal dialysis patients with pleuro-peritoneal communications: two case reports	Soung Eun Kim The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
CDL006	Point of care ultrasound diagnosis of lymphocele of an upper extremity arteriovenous dialysis graft	Jun Mo Ahn Hallym University Dongtan Sacred Heart Hospital, Korea

April 28 (Fri)

Fluid, Electrolyte and Acid-Base disorder — 205, 2F

Presentation No.	Title	Presenting Author
PFL001	Mice lacking p300/CBP-associated factor have a resistance to salt-induced hypertension probably through dysregulation of NKCC2 and aquaporin 2	So Young Lee School of Medicine, The Catholic University of Korea, Korea
PFL002	The inventive study on sodium intake estimation in hospital patient using photographs based on artificial intelligence	Jiwon Ryu Seoul National University Bundang Hospital, Korea
PFL003	Abnormal electrocardiogram incidence and risk factors in hypokalemic salt-losing tubulopathy.	Seong Ryeong Kang Seoul National University Hospital, Korea

Poster Presentation List

PFL004	Rapid detection of diuretics in human urine: prominent antihypertensives in clinical applications and key regulators of extracellular fluid & kidney disorders	Awanish Kumar Upadhyay National Dope Testing Laboratory, India

April 29 (Sat)

Fluid, Electrolyte and Acid-Base disorder — 205, 2F

Presentation No.	Title	Presenting Author
PFL005	Trends in serum phosphate, calcium, and parathyroid hormone levels with denosumab treatment according to renal function	Jin Hyeog Lee Yongin Severance Hospital, Korea
CFL001	A case of severe lactic acidosis caused by broflanilide insecticide poisoning treated by continous renal replacement therapy	Ju Hwan Oh Presbyterian Medical Center, Korea
CFL002	Osmotic demyelination syndrome in hypernatremia secondary to central diabetes insipidus in an immunocompromised host: a case report	Kristel Tanhui St. Luke's Medical Center, Quezon City, Philippines
CFL003	Hyponatremia as the initial presentation of disseminated cryptococcosis with hydrocephalus in an 81-year-old male patient	Sung-Lin Hsieh China Medical University Hospital, Taiwan
CFL004	A case of severe hypokalemia due to methamphetamine intoxication combined with diabetic ketoacidosis	Somin Lee Chosun University Hospital, Korea

April 28 (Fri)

Geriatric + Sarcopenia — 201, 2F

Presentation No.	Title	Presenting Author
PGS001	Effect of dyslipidemia on mortality in older incident statin-naïve hemodialysis patients: data from a Korean society of geriatric nephrology retrospective cohort	Eun Hee Park Ulsan University Hospital, Korea
PGS002	Polypharmacy and peripheral edema in Korean elderly patients with chronic kidney disease (CKD)	Jung Hwa Ryu Ewha Womans University School of Medicine, Korea
PGS003	Prognostic impact of prognostic nutrition index and controlling nutritional status score on long-term outcomes in older patients with incident hemodialysis	Yu Ah Hong The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea
PGS004	The effect of dementia screening tests on subsequent kidney function in the elderly	Sungjin Chung The Catholic University of Korea, College of Medicine, Korea

Poster Presentation List

PGS005	Association between alcohol intake and measure of incident chronic kidney disease in the elderly: a korean nationwide population-based cohort study	In O Sun Presbyterian Medical Center, Korea
PGS006	Baseline characteristics of the gait of the patients of chronic kidney disease: report from gait analysis using artificial intelligence for digital therapeutics of patients with chronic kidney disease (GAIT-CKD)	Hyun Suk Kim Chuncheon Sacred Heart Hospital, Korea
PGS007	Association between bioelectrical impedance phase angle and muscle health in patients receiving chronic hemodialysis	Jungho Shin Chung-Ang University Hospital, Korea
PGS008	The impact of all-cause mortality of visceral fat and nutritional status in initial dialysis patient	Won Jung Choi The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea
PGS009	Utilization of community-based health centers (puskesmas) to improve accessibility of health services and early detection of kidney disease	Rosinta Hotmaida Pebrianti Purba The Ministry of National Development Planning, Indonesia
PGS010	Depression level among elderly with kidney function decrease and hypertension status	Rosinta Hotmaida Pebrianti Purba The Ministry of National Development Planning, Indonesia

April 29 (Sat)

Geriatric + Sarcopenia — 201, 2F

Presentation No.	Title	Presenting Author
PGS011	The association between oral frailty and muscle strength in patients with chronic kidney disease	Kyuwon Jang Pusan National University Yangsan Hospital, Korea
PGS012	Clinical impacts of sarcopenia on mortality based on psoas muscle mass in critically ill patients undergoing continuous renal replacement therapy	BeongWoo Kim Inje University Busan Paik Hospital, Korea
PGS013	PTEN-induced kinase 1 has association with renal aging process through cGAS-STING pathway	Hyeyeon Lee Bundang CHA General Hospital, Korea
PGS014	Mortality of elderly patients with acute kidney injury undergoing continuous renal replacement therapy; is age a risk factor?	Ji Hye Kim The Catholic University of Korea, Incheon St. Mary's Hospital, Korea
PGS015	The effect of exercise intervention on sarcopenia-related variables in adult patients undergoing peritoneal dialysis: a systematic review of randomized controlled trials	Bianda Aulia Universitas Gadjah Mada, Indonesia
PGS016	Clinical impact of low BMD in elderly incident ESRD patients	Seolje Lee Gyeongsang National University Changwon Hospital, Korea

Poster Presentation List

PGS017	Effects of nursing facility admission on mortality in incident HD patients	Gwangho Choi Chuncheon Sacred Heart Hospital, Korea
PGS018	Effects of hospitalization events before starting hemodialysis on mortality in dialysis patients	Gwangeon Sim Chuncheon Sacred Heart Hospital, Korea
PGS019	GAIT-CKD (gait analysis using artificial intelligence for digital therapeutics of patients with chronic kidney disease): design and methods	Hyun Suk Kim Chuncheon Sacred Heart Hospital, Korea

April 28 (Fri)

Glomerular and Tubulointerstitial Disorders — 201, 2F

Presentation No.	Title	Presenting Author
PGN001	Integrin, fibronectin, and upar in podocyte-glomerular basement membrane interaction under fluid shear stress	Jae Seok Kim Wonju Severance Christian Hospital, Korea
PGN002	Does epigenetic regulation plays role in steroid non-responsiveness in lupus nephritis patients	Ashish Srivastav AIIMS, Gorakhpur, India, India
PGN003	Real-time 2-photon intravital kidney imaging of chronic kidney disease mouse model	Hee Seul Jeong Soonchunhyang University, Korea
PGN004	Proximal tubule-specific deletion of SIRT1 aggravates renal fibrosis in unilateral ureteral obstruction model	Jihyun Yeom Jeonbuk National University Hospital, Korea
PGN005	Clinical outcomes of IgA nephropathy with or without proteinuria	Chungjoh Shin The Catholic University of Korea, Bucheon St. Mary's Hospital, Korea
PGN006	Hormetic effects of phosphate in calcium-regulated podocyte filter function: two sides of the same coin	Thi Ngoc Bao Dang Wonju Severance Christian Hospital, Korea
PGN007	Cinnamic acid one of the major phenolic acids derived from the bark of trees from the genus cinnamomum, reduces renal tubulointerstitial fibrosis	Gireesh Dayma Rama Medical College, India
PGN008	Renal tubular cell death induced by the novel MCL-1 inhibitor, S63845	Gyu Tae Shin Ajou University Hospital, Korea
PGN009	Comparison of hydroxychloroquine concentration among whole blood, serum and plasma samples in indian patients with lupus nephritis	Arunkumar Subbiah AIIMS, India
PGN010	Effect of conventional versus electronic cIgArettes use on renal histology of rats induced by high fat diet	Zavia Putri Salsabila Universitas Islam Indonesia, Indonesia
PGN011	Gross hematuria and kidney consequences after COVID-19 vaccination	Dal Sik Sin Soonchunhyang University Cheonan Hospital, Korea

Poster Presentation List

PGN012	Lower extremity arterial thromboembolism in a patient with membranous nephropathy	Eujin Lee Chungnam National University Hospital, Korea
PGN013	A case of immune checkpoint inhibitors-related acute tubular necrosis treated without withdrawing immune checkpoint inhibitors	Da Seul Huh Kangbuk Samsung Hospital, Korea

April 29 (Sat)

Glomerular and Tubulointerstitial Disorders — 201, 2F

Presentation No.	Title	Presenting Author
PGN014	High P-glycoprotein expression and increased IL-12 and IL-23 levels are responsible for the transition of Th17 cells to pathogenic IFN- γ producing Th17 cells in refractory nephrotic syndrome	Akhilesh Jaiswal Sanjay Gandhi Post Graduate Institute of Medical Sciences, India
PGN015	Clinical and histopathologic characteristics of adult-onset minimal change disease in elderly patients	Mi Ryung Pyo School of Medicine, The Catholic University of Korea, Korea
PGN016	Upregulated C1QA signaling antagonizes glomerular health in aged kidneys	Min Hyeok Song Kyung Hee University Hospital at Gangdong, Korea
PGN017	Ferroptosis regulates renal aging from glomerular endothelial autophagy deficiency	Jinwon Kim School of Medicine, The Catholic University of Korea, Korea
PGN018	Static magnetic fields (SMFs) dynamics application for the exacerbated DNA damage-induced apoptosis in renal tubule injury	Seongmin Lee Seoul National University College of Medicine, Korea
PGN019	Machine learning based 2-year risk prediction tool in IgA nephropathy	Jong Hyun Jhee Gangnam Severance Hospital, Korea
PGN020	Quantitative CT-based radiomics texture features for identifying histological phenotypes in kidney biopsy	Ji-Eun Kim Inha University School of Medicine, Korea
PGN021	The role of podocyte-specific NOX5 in chronic kidney disease	Dong Hyeong Lee Soonchunhyang University, Korea
PGN022	Role of immunosuppressive therapy in IgAN nephropathy and predictors of effectiveness	Youngmin Yoon Chosun University Hospital, Korea
PGN023	A phase 3, randomized, double-blind, placebo-controlled study of atrasentan in patients with IgA nephropaty- the align study	Hiddo L. Heerspink University Medical Center Groningen, The Netherlands
PGN024	Atrasentan in patients with proteinuric glomerular diseases – the affinity study	Seung Hyeok Han Yonsei University College of Medicine / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea

Poster Presentation List

PGN025	Experience for complications after kidney biopsies for seven years in a single center	Sehyun Jung Gyeongsang National University Hospital, Korea
PGN026	Indolent course of alport syndrome in 74 years old male	Jin Seon Jeong Seoul Veterans Hospital, Korea
PGN027	Phase 1 study in healthy adults of the safety, tolerability, pharmacokinetics, and pharmacodynamics of povetacicept (ALPN-303)), a dual Dual BAFF/APRIL antagonist for the treatment of autoimmune glomerulonephritides	Jiahua Li Alpine Immune Sciences, United States

April 29 (Sat)

Glomerular and Tubulointerstitial Disorders — 205, 2F

Presentation No.	Title	Presenting Author
CGN001	Narsoplimab treatment for recurrent IgA nephropathy stabilized eGFR and proteinuria	Amar Sethi Omeros Corporation, United States
CGN002	A case report on podocyte infolding glomerulopathy in a kidney transplant patient	Saeyoung Jeong Hanyang University Guri Hospital, Korea
CGN003	Spontaneous remission of minimal change nephrotic syndrome in a colon cancer patient: a case report	Hyejin Jeon Gyeongsang National University Hospital, Korea
CGN004	Not everything is as it seems - a case of proliferative GN associated with connective tissue disease	Carolina Ferreira CHTV, Portugal

April 28 (Fri)

Hypertension and Vascular Biology — 201, 2F

Presentation No.	Title	Presenting Author
PHV001	Angiotensin II induces podocyte injury by mitochondrial oxidative stress	Tae-Sun Ha Chungbuk National University College of Medicine, Korea
PHV002	Association of polygenic risk scores for blood pressure with incident hypertension	Soyeon Kim Soonchunhyang University Seoul Hospital, Korea
PHV003	The impact of transglutaminase 2 inhibition on hypertension-induced fibrosis in hypertensive nephropathy	Mi Yeon Yu Hanyang University College of Medicine, Korea

Poster Presentation List

PHV004	The association between nutritional status and blood pressure among pediatric patients with dengue hemorrhagic fever in indonesia	Nisrina Nabila Universitas Islam Indonesia, Indonesia

April 29 (Sat)

Hypertension and Vascular Biology — 201, 2F

Presentation No.	Title	Presenting Author
PHV005	AMP-activated protein kinase stimulates ADAM10 activity in human aortic endothelial cells by triggering its translocation to the cell surface	Chung Hee Baek Asan Medical Center, University of Ulsan College of Medicine, Korea
PHV006	Nocturnal hypertension, not morning hypertension is associated with kidney outcome in patients with hypertension: findings from the cardiovascular and metabolic disease etiology research center-high risk (CMERC-HI) study	Jong Hyun Jhee Gangnam Severance Hospital, Korea
PHV007	Trends in hypertension prevalence for korean adolescents aged 10 to 18 years, 2007 to 2020	Peong Gang Park Seoul National University Hospital, Korea
PHV008	Protective effects of berberine on kidney fibrosis and lipid alterations in L-NAME-induced hypertensive rats	Ankush Kumar SHAKUNTLA HOSPITAL AND RESEARCH CENTER, India
PHV010	An increase in blood pressure after the pandemic observed among the elderly in indonesia	Zulfania Rahmah Universitas Islam Indonesia, Indonesia

April 28 (Fri)

Non-dialysis CKD — 201, 2F

Presentation No.	Title	Presenting Author
PNC001	Proteinuria modifies the relationship between urinary sodium excretion and adverse kidney outcomes: findings from KNOW-CKD	Hyo Jeong Kim Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
PNC002	Risk factors and transitional probability of clinical events in korean CKD patients using the multi-state model: from the KNOW-CKD study	Ji Hye Kim Chungbuk National University Hospital, Korea
PNC003	Genome-wide association study and fine-mapping based on korean biobank study to discover glomerular filtration rate associated variants	Dong-Jin Lee Soonchunhyang University College of Medicine, Korea
PNC004	Urine-derived stem cell attenuated renal fibrosis via klotho activation in mice	Heyrim Park Chungnam National University School of Medicine, Korea

Poster Presentation List

PNC005	Long-term exposure to low perceived temperature in winter increases the risk of death in CKD patients	Ara Ko Seoul National University Hospital, Korea
PNC006	PM2.5 induced phenotype transition of renal tubular kidney cells via oxidative stress	Dal-Ah Kim Ewha Womans University School of Medicine, Korea
PNC007	Procedural success of left atrial appendage occlusion device in patients with chronic kidney disease: meta-analysis of real-world data	Ambrish Singh University of Tasmania, India
PNC008	Non-indicated initiation of proton pump inhibitor and risk of adverse outcomes in patients with underlying chronic kidney disease	Seong Geun Kim Inje University Sanggye Paik Hospital, Korea
PNC009	Polyunsaturated fatty acids and risk of adverse kidney outcomes	Hee Byung Koh Severance Hospital, Korea
PNC010	Longitudinal progression trajectory of estimated GFR in children with chronic kidney disease: Results from the KNOW-Ped CKD	Eun Mi Yang Chonnam National University Hospital, Korea
PNC011	Association between tyg index and progression of chronic kidney disease in metabolic dysfunction-associated fatty liver disease	Janghee Cho Gangnam Severance Hospital, Korea
PNC012	Association between dietary magnesium intake and incident chronic kidney disease	Hee Byung Koh Catholic Kwandong University International St. Mary's Hospital, Korea
PNC013	Rapid decline in kidney function is associated with higher hemoglobin variability in chronic kidney disease	Hyo Jin Kim Pusan National University Hospital, Korea
PNC014	Cognitive dysfunction is independently associated with decreased kidney function and increased mortality: NHANES 2011-2014	Jeonghwan Lee SMG-SNU Boramae Medical Center, Korea
PNC015	Association between the degree of LDL-cholesterol reduction and survival according to the use of statins in CKD patients	Jeong Min Cho Seoul National University Hospital, Korea
PNC016	Decreased of ring finger protein 20 induces abnormal lipid metabolism in renal injury model with obesity.	You-Jin Kim Kyungpook National University School of Medicine, Korea
PNC017	Ultrasound renal score to predict the renal disease prognosis in patients with diabetic kidney disease	Young Rok Ham Chungnam National University Hospital, Korea
PNC018	Prolonged high fat diet induces kidney injury by decreased hydrogen sulfide and increased oxidative stress in mice	Gibong Jang Kyungpook National University School of Medicine, Korea
PNC019	The interaction effect of phase angle and age on femoral neck bone mineral density in patients with non-dialysis chronic kidney disease stage 5	Byoung Geun Han Yonsei University Wonju College of Medicine, Korea

Poster Presentation List

PNC020	The beneficial effect of vitamin A for all-cause mortality according to the baseline kidney function: results from the national health and nutrition examination, 1999-2017	Yaerim Kim Keimyung University School of Medicine, Korea
PNC021	Association between the serum creatinine-to-cystatin-c ratio and rapid progression of chronic kidney disease	Jiwon Lee Hanyang University Guri Hospital, Korea
PNC022	Particulate matter and mortality risk in patients with autosomal dominant polycystic kidney disease	Dha Woon Im Seoul National University Hospital, Korea
PNC023	Urine amphiregulin is associated with kidney damages and kidney function deterioration	Nam-Jun Cho Soonchunhyang University Cheonan Hospital, Korea
PNC024	Correlation of abdominal fat using bioimpedance analysis and 3D-CT volumetry	Jin Eop Kim Chuncheon Sacred Heart Hospital, Korea
PNC025	Applying share decision making program to reduce emergent dialysis using temporary catheter	Hsin-I Huang National Taiwan University Hospital, Taiwan
PNC026	Impact of nutritional index on long-term kidney function	In Ho Park Samsung Changwon Hospital, Korea
PNC027	The association between transferrin saturation and all-cause mortality in chronic kidney disease	Eunmi Jo Pusan National University Hospital, Korea
PNC028	Dietary behavior of CKD patients before and after COVID-19 pandemic period	Seong Min Son Kangwon National University Hospital, Korea
PNC029	Association of a low protein diet with depressive symptoms and poor health-related quality of life in CKD	Dong-Young Lee Seoul Veterans Hospital, Korea
PNC030	Erythropoiesis stimulating agent recommendation model using artificial intelligence in patients with chronic kidney disease	Byeongo Choi Inje University Haeundae Paik Hospital, Korea
PNC031	Different effects of dietary selenium on all-cause mortality according to the baseline characteristics based on the nation-wide population study: results from the national health and nutrition examination, 1999-2017	Yaerim Kim Keimyung University School of Medicine, Korea
PNC032	The association between serum irisin, vitamin d biomarkers, and body composition indices in chronic kidney disease	Seunghye Lee Gyeongsang National University Hospital, Korea
PNC033	Establishment of murine CKD-MBD model using adenine-rich diet	Kyung Pyo Kang Jeonbuk National University Medical School, Korea
PNC034	Effect of omega-3 fatty acid on mitochondrial membrane and erythrocyte membrane fatty acid in adenine induced uremic rats	Dong Wook Kim Dong-A University Hospital, Korea

Poster Presentation List

PNC035	Dapagliflozin reduces kidney injury markers in patients with chronic kidney disease	Jung Hyun Cho Soonchunhyang University College of Medicine, Korea

April 29 (Sat)

Non-dialysis CKD — 201, 2F

Presentation No.	Title	Presenting Author
PNC036	Association between changes in blood, urine and stool-derived bacterial extracellular vesicles and CKD progression	Ji Eun Kim Korea University Guro Hospital, Korea
PNC037	Safety and efficacy assessment of 3D printed autologous omentum patch to delay renal fibrosis	Boyoung Choi ROKIT Healthcare Inc., Korea
PNC038	Association of dietary plant protein intake and cardiovascular outcome in those with chronic kidney disease: a UK biobank study	Ga Young Heo Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
PNC039	Association of fiber intake and risk of incident chronic kidney disease: the UK biobank study	Ga Young Heo Severance Hospital / College of Medicine, Institute of Kidney Disease Research, Yonsei University, Korea
PNC040	Cardiovascular and mortality risks in young health screening examinees with marginal estimated glomerular filtration rate	Minsang Kim Seoul National University Hospital, Korea
PNC041	The role of nuclear receptors and aquaporin 2 as a mechanism for renal water regulation by abnormal lipid metabolism	Se-hyun Oh Kyungpook National University School of Medicine, Korea
PNC042	Omega-3 fatty acid activates PGC-1α mediated mitochondrial biogenesis and PINK1-dependent mitophagy pathway in kidney and heart of adenine induced uremic rats	Jung Min Hong Dong-A University Hospital, Korea
PNC043	The protective effect of interleUKin-1 receptor antagonist on kidney function: a mendelian randomization study	Jeong Min Cho Seoul National University Hospital, Korea
PNC044	Mediation effects of anemia on the impact of hypoalbuminemia in patients with chronic kidney disease	Yaerim Kim Keimyung University School of Medicine, Korea
PNC045	Deletion of PTP4A1 ameliorate renal fibrosis induced by UUO in mice	Dae Eun Choi Chungnam National University School of Medicine, Korea
PNC046	Longitudinal changes of cardiac structure and function in pediatric chronic kidney disease - results from the korean cohort study for outcomes in patients with pediatric chronic kidney disease (KNOW-PedCKD)	Jeong Yeon Kim Chungnam National University Hospital, Korea

Poster Presentation List

PNC047	Association of ketone bodies with adverse cardiorenal outcomes and death : a UK biobank cohort study	Chan-Young Jung Severance Hospital, Korea
PNC048	Establishment of sonographic findings and reference values for normal and fibrotic experimental mouse kidney	Myoung Seok Lee SMG-SNU Boramae Medical Center, Korea
PNC049	Phthalates and alternative plasticizers exposure according to risk perception among chronic kidney disease patients after COVID-19 pandemic	Jeonghwan Lee SMG-SNU Boramae Medical Center, Korea
PNC050	Effects of renin-angiotensin system blockers on renal adaptation following unilateral nephrectomy in patients with hypertension	Sehun Lee Samsung Medical Center, Korea
PNC051	Protective effects of anti-fibrotic gene administration on unilateral ureteral obstruction-induced kidney fibrosis in mice	Ha Nee Jang Gyeongsang National University Hospital, Korea
PNC052	Impact of oral spherical carbon adsorbent in pre-dialysis chronic kidney disease on cardiovascular outcomes and mineral-bone disorder after dialysis therapy	Hee Jung Jeon Kangdong Sacred Heart Hospital, Korea
PNC053	National trends in the prevalence of chronic kidney disease in korea, 2007-2020, including the COVID-19 pandemic	Soo-Young Yoon Kyung Hee University Hospital, Korea
PNC054	Age-adapted CKD definition and mortality risk: results from the knhanes linked cause of death data	Donghwan Oh Gangnam Severance Hospital, Korea
PNC055	Prognostic role of the neutrophil-to-lymphocyte ratio in patients with chronic kidney disease	Jin Kim Chonnam National University Hospital, Korea
PNC056	Associations of metabolic variabilities and cardiovascular outcomes according to eGFR in CKD: a nationwide observational cohort study	Jeong Min Cho Seoul National University Hospital, Korea
PNC057	Comparison of creatinine and cystatin C in predicting hyperphosphatemia and hyperparathyroidism in patients with chronic kidney disease	Yohan Park Konyang University Hospital, Korea
PNC058	Lactobacillus acidophilus KBL409 protects against kidney injury via improving mitochondrial function with chronic kidney disease	Ki Heon Nam Yonsei University College of Medicine, Korea
PNC059	Association factors for changing in urinary phthalate metabolites in patients with chronic kidney disease during COVID-19 pandemic: sketch trial	Yaerim Kim Keimyung University School of Medicine, Korea
PNC061	Scoping review of ambient particulate matter exposure and chronic kidney disease	Chinakorn Sujimongkol Loei Provincial Public Health Office, Thailand
PNC062	Application of CKD epi 2021 equation for estimation of glomerular filtration rate (eGFR) into an elderly korean cohort to predict clinical outcomes	Julee You Seoul National University Bundang Hospital, Korea

Poster Presentation List

PNC063	Role of tau protein in chronic kidney disease	Seong Woo Lee Soonchunhyang University College of Medicine, Korea
PNC064	Changes of URAT-1 in a unilateral ureteral obstruction renal injury model	Soon-Kil Kwon Chungbuk National University Hospital, Korea
PNC065	Omega-3 fatty acid attenuates renal fibrosis via ampk mediated autophagy flux activation	Yoon Kyung Chang The Catholic University of Korea, Daejeon St. Mary's Hospital, Korea
PNC066	Comparison of predictive performance between spot urine albuminuria and proteinuria for kidney failure risk in patients with chronic kidney disease	Hyoungnae Kim Soonchunhyang University Seoul Hospital, Korea
PNC067	Pre-end-stage kidney disease multidisciplinary health education programs improve comprehension about information of living donor kidney transplants in taiwan: a single medical center experience	Hsin-Yi Lai Department of Internal Medicine, National Taiwan University Hospital, Taiwan
PNC068	Effectiveness of vitamin D supplementation on proteinuria in patients with chronic kidney disease : a systematic review	Ariesta Irbah Khairiah Universitas Islam Indonesia, Indonesia

April 29 (Sat)

Non-dialysis CKD — 205, 2F

Presentation No.	Title	Presenting Author
CNC001	LMX1B mutation cause hereditary focal segmental glomerulosclerosis without extrarenal manifestation	Sojin Lim Kyung Hee University Medical Center, Korea

April 28 (Fri)

Others — 205, 2F

Presentation No.	Title	Presenting Author
POT001	Effects of non-decaffeinated coffee and decaffeinated coffee after intervention of high purine diets on serum creatinine levels on rats (rattus norvegicus) : a pre-post-test randomized control group design	Hilmi Ardian Sudiarto Faculty of Medicine, Universitas Islam Indonesia, Indonesia
POT002	Enteral food hospitalized product plant dominan for chronic kidney disease patient	Dhi Ajeng kusuma wicitra RSUPN Dr. Cipto Mangunkusumo, Indonesia
POT003	An analysis of development of nephropathy in ovarian cancer	Harshita Dubey All India Institute of Medical Sciences(AIIMS), New Delhi, India

Poster Presentation List

POT004	Post renal biopsy complications and their predictors– an observational study	Shruti Bhattacharya Kasturba Medical College, India
POT005	COVID-19 clinical results of hemodialysis patients affiliated with a medical foundation (Yeolin Medical Foundation, 28 hemodialysis centers)	Sungmin Ko Yeolin Medical Foundation(열린의료재단), Korea
POT006	Native kidney biopsy in older adults are not at an increased risk of complications – a single center study in a multi-ethnic southeast asian cohort	Chelsea Chia NUH, Singapore
POT007	A case of renal infarction that recurred after transient resolution in short period proven by computed tomography	In Hong Choi Chonnam National University Hospital, Korea
POT008	A case of coronary-pulmonary artery fistula presenting with dyspnea in patient on hemodialysis	Moo Jun Kim Chungnam National University Hospital, Korea
POT009	Production optimization of β-cyclodextrin: orphan molecule for renal diseases treatment	Preetibala Solanki Barkatullah Univeristy Bhopal 462026, Madhya-Pradesh India, India
POT010	Impact of total serum bilirubin on all-cause mortality and AKI requiring dialysis in patients with COVID-19 in Korea	Yae Hyun Kim Seoul National University Hospital, Korea
POT011	The effect of the todac todac, a mobile app program-based cognitive behavioral therapy, in dialysis patients	Dong Seop Kim Soonchunhyang University Cheonan Hospital, Korea
POT012	Nephrotoxicity of Jerusalem artichoke	Jin Ho Hwang Chung-Ang University Hospital, Korea
POT013	Variation in time to institutional board review approval in a national multicenter clinical trial: experience from the pride trial	Sungjin Chung The Catholic University of Korea, College of Medicine, Korea
POT014	Clinical characteristics and longterm outcomes of urolithiasis according to different stone composition	Young Eun Choi Korea University Anam Hospital, Korea
POT015	Spontaneous bilateral subcapsular renal hematoma in a 30-year-old woman	Young Hee Kim Dong-A University Hospital, Korea
POT016	Effectiveness of custom-made under-table shield in a C-Arm fluoroscopy unit	Jin Ha Jang Hallym University Sacred Heart Hospital, Korea

Poster Presentation List

April 29 (Sat)

Others — 205, 2F

Presentation No.	Title	Presenting Author
COT001	A novel custom-made renal biopsy training model for nephrology fellows	Ji Hwan Kim Hallym University Sacred Heart Hospital, Korea

April 28 (Fri)

Pediatric Nephrology + Inherited Kidney Disease — 205, 2F

Presentation No.	Title	Presenting Author
PPI001	Hospital malnutrition of pediatric patients with atypical progressive acute kidney injury (APAKI) in pediatric intensive care unit (PICU) at Dr. Cipto Mangunkusumo Hospital, Indonesia	Siti Istiqomah Cipto Mangunkusumo Hospital Jakarta, Indonesia
PPI002	Long-term outcome of pediatric nutcracker syndrome: a single-center retrospective study	JiHye Yoon Seoul National University Hospital, Korea
PPI003	Evaluation of thyroid function in chronic kidney disease in children	Jatinkumar Dhanani GMERS Medical College, Navsari, India
PPI004	Clinical characteristics and treatment outcomes of nephrotic syndrome: a retrospective review in malaysia tertiary hospital	Jian An Boo Hospital Sultanah Bahiyah Alor Setar, Malaysia
PPI005	Prevalence of hypertension in children with steroid sensitive nephrotic syndrome	Fayaz Ahmed Gauhati Medical College and Hospital, India
PPI006	Prevalence of genetic kidney diseases in the korean cohort study	Jin-Soon Suh The Catholic University of Korea, Bucheon St. Mary's Hospital, Korea
PPI007	Evaluation of the effectiveness of induction therapy in various morphological variants of lupus nephritis	Nauryzgul Zhanabai National Research Center for Maternal & Child Health, Kazakhstan
PPI008	Serum uric acid levels in children with chronic kidney disease: data from KNOW-PedCKD	Myung Hyun Cho Hallym University Sacred Heart Hospital, Korea

Poster Presentation List

April 29 (Sat)

Pediatric Nephrology + Inherited Kidney Disease — 205, 2F

Presentation No.	Title	Presenting Author
CPI001	XPO5 gene mutation: a rare cause of monogenic steroid-resistant nephrotic syndrome	Malsawmkima Chhakchhuak All India Institute of Medical Sciences, Jodhpur, India
CPI002	A case of vacterl association with autosomal dominant polycystic kidney disease in children	Yeonhee Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
CPI003	Crescentic glomerulonephritis following COVID-19 infection: a report of pediatric case	Minji Park Kyungpook National University Hospital, Korea
CPI004	Genetic counseling for families with autosomal dominant polycystic kidney disease (ADPKD) related end-stage renal disease (ESRD) : a case report	Sang Hyuk Kwak Kwak Clinic, Korea
CPI005	Rare congenital nephrotic syndrome case	Rakhat Rysbek National Research Center for Maternal and Child Health, Kazakhstan
CPI006	Acute dural venous sinus thrombosis in a child with idiopathic steroid-dependent nephrotic syndrome	Se Jin Park Eulji University Hospital, Korea

April 28 (Fri)

Transplantation — 201, 2F

Presentation No.	Title	Presenting Author
PTR001	Nutritional management of kidney transplant recipient	Abhishek Mukherji Nephrocare India Pvt Ltd, India
PTR002	Contrast-enhanced ultrasound for non-invasive evaluation of subclinical rejection in renal transplantation	Soo Yeon Choi Wonju Severance Christian Hospital, Korea
PTR003	Survival benefit of kidney transplantation among patients with end-stage renal disease and acute myocardial infarction history: a national population-based study	Soo Yeon Choi Wonju Severance Christian Hospital, Korea
PTR004	Laparoscopic nephrectomy in patients with autosomal dominant polycystic kidney disease	Olimkhon Sharapov Republican Specialized Scientific Practical Medical Center of Nephrology and Kidney transplantation, Uzbekistan

Poster Presentation List

PTR005	A study to determine the efficiency of glomerular filtration rate as a predictor of subclinical viral infection in patients with allograft renal transplantation	Aashal Shah GMERS medical college and civil hospital, India
PTR006	Economical analysis of the routine use of thromboelastography (TEG) to analyze blood component needed in bleeding cases of post-operative renal transplant	Ninda Devita Faculty of Medicine Public Health and Nursing, Universitas Gadjah Mada, Indonesia
PTR007	Appropriate tacrolimus level for preventing malignancy and graft failure in kidney transplant patients	Young Rong Lee Severance Hospital, Korea
PTR008	Stat3 and NF-kB activation through the il-6 amplifier loop in chronic antibody-mediated rejection from renal allograft transplantation	Mantabya Singh Sanjay Gandhi Post Graduate Institute of Medical Sciences, India
PTR009	High IPV / a low nadir of tacrolimus concentration were associated with poor graft survival in KTRs with high HLA class II Eplet incompatibility	Dong Ryeol Lee Maryknoll Medical Center, Korea
PTR010	Association between pretransplant dialysis modality and long-term graft outcomes	Tae Hee Kim Inje University Busan Paik Hospital, Korea
PTR011	Silent gallbladder stone in KT recipients: should it be treated?	Yunyoung Jang Seoul National University Hospital, Korea
PTR012	The effect of induction therapy in kidney transplantation: a network meta-analysis using recent data	Jaeho Kim Inha University Hospital, Korea
PTR013	The performance of urinary albumin to creatinine ratio to predict renal transplantation outcomes: a meta-analysis	Adika Zhulhi Arjana Faculty of Medicine Public Health and Nursing, Universitas Gadjah Mada, Indonesia
PTR014	The effects of lifestyle modification on fracture in kidney transplant recipients in South Korea : based on korean national health insurance service data	Sung Mi Kim Samsung Medical Center, Korea
PTR015	Poor health-related quality of life in the postmenopausal women receiving kidney transplantation during long-term followup	Jung Hwa Ryu Ewha Womans University School of Medicine, Korea
PTR016	Differential impact of acute rejection & BKVAN on kidney transplant patients	Suyeon Hong The Catholic University of Korea, Uijeongbu St. Mary's Hospital, Korea
PTR018	Prevalence of polypharmacy and associated adverse outcomes in kidney transplant recipients	Sungyeon Kim Korea University Anam Hospital, Korea
PTR019	A comparison of the metabolic profile of chronic vs acute renal allograft rejection determined using a nmr-based serum metabolomics approach	Mantabya Singh Sanjay Gandhi Post Graduate Institute of Medical Sciences, India
PTR020	Impact of deceased donor's acute kidney injury on graft survival: KONOS cohort	Gongmyung Lee Severance Hospital, Korea

Poster Presentation List

PTR021	Time-varying risk factors for incident fractures in kidney transplant recipients: a nationwide cohort study from South Korea	Sang Hun Eum The Catholic University of Korea, Incheon St. Mary's Hospital, Korea
PTR022	Predictive factors of persistent hypercalcemia with tertiary hyperparathyroidism after parathyroidectomy in kidney transplantation patients	Won Woong Kim Asan Medical Center, University of Ulsan College of Medicine, Korea
PTR023	Post-operative recurrence of focal segmental glomerulosclerosis according to pre-transplant treatment after kidney transplantation	Hyunwook Kwon University of Ulsan College of Medicine, Korea
PTR024	Clinical relevance and characteristics of pre-transplant donor specific anti HLA-DQ antibodies in kidney transplantation	Han Bi Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea

April 29 (Sat)

Transplantation — 201, 2F

Presentation No.	Title	Presenting Author
PTR017	Association of metformin with cardiovascular and graft outcomes in kidney transplant recipients with post-transplantation diabetes mellitus	Dong Yeon Lee Asan Medical Center, University of Ulsan College of Medicine, Korea
PTR025	Using of a retrograde reperfusion technique to reduce ischemic-reperfusion injury of kidney graft: a single center experience	Gani Kuttymuratov "University Medical Center" Corporate Fund, Kazakhstan
PTR026	Hemoglobin level as a predictor of delayed graft function in renal transplant patient	Byung Min Ye Pusan National University Yangsan Hospital, Korea
PTR027	Outcomes of spousal donor kidney transplantation regarding donor-recipient sex mismatch	Seunghyeok Choi The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
PTR028	Improvement of left ventricular diastolic function after kidney transplantation	Eun Hee Park Ulsan University Hospital, Korea
PTR029	Clinical usefulness of exercise stress echocardiography in patients with end-stage kidney disease who are planning kidney transplantation	Min Suk Seo Samsung Medical Center, Korea
PTR030	Association of metformin with rejection and graft survival in kidney transplant recipients tAKIng tacrolimus with post-transplantation diabetes mellitus	Jae Yun Lee Asan Medical Center, University of Ulsan College of Medicine, Korea
PTR031	A prospective cohort study of sodium/glucose cotransporter 2 inhibitor-treated diabetic kidney transplant patients	YoungChan Park Hanseo Hospital, Korea

Poster Presentation List

PTR032	Clinical usefulness of bortezomib-based desensitization in highly sensitized living and deceased donor kidney transplantation	Hye-Ran Park The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
PTR033	Once daily tacrolimus lowers intra-individual variability in blood glucose in kidney transplantation	Min Joon Lee Inje University Ilsan Paik Hospital, Korea
PTR034	Higher serum granzyme-B level and intragraft granzyme-B, Phospho-Smad3 cells are associated with inflammatory interstitial fibrosis and tubular atrophy	Brijesh Yadav Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India
PTR035	Cardiovascular benefits of steroid avoidance and early steroid withdrawal in renal transplantation: an updated meta-analysis	Pratik Lamichhane Maharagunj Medical Campus, Kathmandu, Nepal
PTR036	Recipient obesity on deceased donor kidney transplantation outcomes: overlooked threats to allograft dysfunction and DGF	Suyeon Hong The Catholic University of Korea, Uijeongbu St. Mary's Hospital, Korea
PTR037	Chronic high-fat feeding promotes abnormal lipid metabolism and tissue damage in a single kidney	You-Jin Kim School of Medicine, Kyungpook National University, Korea
PTR038	Impact of nonspecific allograft biopsy findings in symptomatic kidney transplant recipients	Seo Rin Kim Pusan National University Yangsan Hospital, Korea
PTR039	Targeted lipidomic and kidney podocyte-specific analysis identifies dysregulated renal lipid metabolism in a mouse model of chronic kidney disease	Se-hyun Oh Kyungpook National University School of Medicine, Korea
PTR040	Analysis of utility and fairness of kidney allocation using K-KDPI and K-EPTS systems in Korea	Suk Min Chung Korea University Anam Hospital, Korea
PTR041	Prospective study to evaluate the effectiveness of donor-derived cell-free dna for the prediction of biopsy proven rejection in renal transplant recipients	Hyung Duk Kim The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
PTR042	Clinical features of De novo cancer at early period after kidney transplantation in Korea	Tae Hyun Ban The Catholic University of Korea, Eunpyeong St. Mary's Hospital, Korea
PTR043	Current safety and outcomes of kidney allograft biopsy	Jin Hyuk Paek Keimyung University School of Medicine, Korea

Poster Presentation List

April 29 (Sat)

Transplantation — 205, 2F

Presentation No.	Title	Presenting Author
CTR001	Severity of post COVID-19 organizing pneumonia in kidney transplant recipients according to SARS-CoV-2 vaccination	Seunghyeok Choi The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
CTR002	Diagnosis of atypical hemolytic uremic syndrome in post-transplant end-stage kidney disease patient via identification of CFH-22 deletion: a case report	Haeun Lee The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
CTR003	Cryptococcal infection in kidney transplant recipients – a three-decade experience	Arunkumar Subbiah AIIMS, New Delhi, India
CTR004	Outcomes of kidney transplantation in patients with severe aplastic anemia	Seunghyeok Choi The Catholic University of Korea, Seoul St. Mary's Hospital, Korea
CTR005	Enlarged lymph node infilling retroperitoneal space and infiltrating the psoas muscle causes ureteric compression and hydronephrosis of graft kidney in renal transplantation recipient after COVID-19 mRNA vaccine booster	Tae Hyun Ryu Bong Seng Memorial Hospital, Korea
CTR006	Hypertriglyceridemia-induced acute necrotizing pancreatitis in kidney transplant patient	Somin Lee Chosun University Hospital, Korea
CTR007	Prolonged hypokalemia and metabolic alkalosis by hypomagnesemia in a patient with kidney transplantation	Eujin Lee Chungnam National University Hospital, Korea
CTR008	Miliary tuberculosis involving kidney allograft in a kidney transplantation recipient: a case report	Joohee Jeon Asan Medical Center, University of Ulsan College of Medicine, Korea
CTR009	A case of renal transplantation with CAAMR revealed by a novel HLA antibody approach	Miyuki Furusawa Tokyo Women's Medical University, Japan

Sponsors

PLATINUM

FRESENIUS MEDICAL CARE

Baxter

JW Pharmaceutical

Daewon 대원제약

Otsuka

GOLD

HANDOK

inno.N innovate New & Next

Kyowa Kirin

YUHAN

BORYUNG

SK chemicals

AstraZeneca

astellas

Bayer

Chong Kun Dang Pharm. Seoul, Korea

SILVER

CHINOOK THERAPEUTICS

Jardiance (empagliflozin)

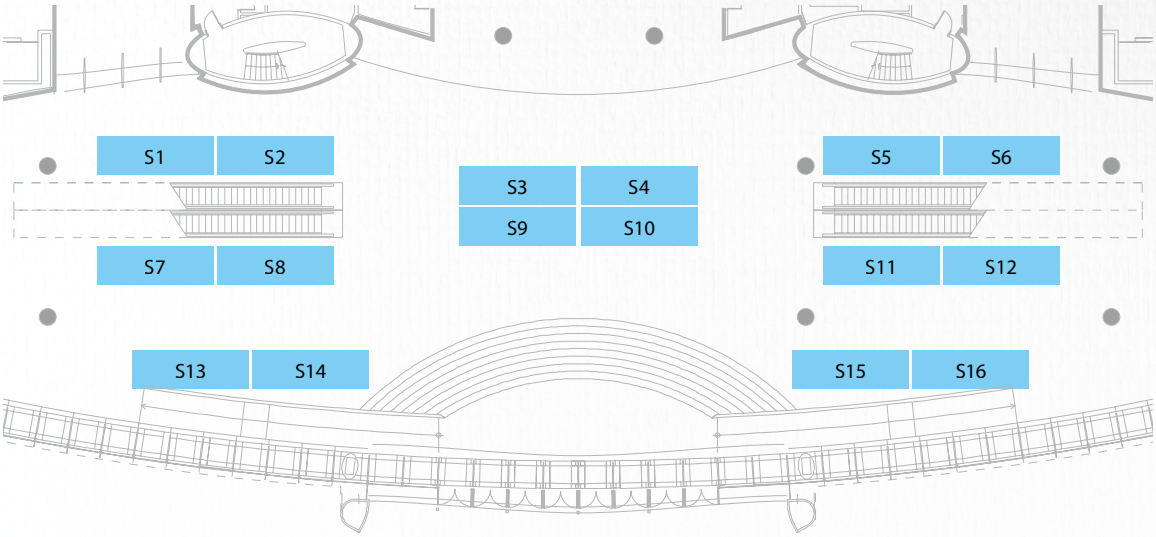
Alvogen

ORGANON

sanofi

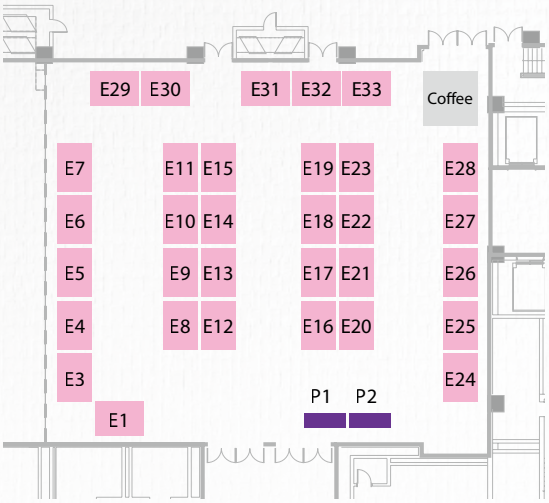
Exhibition

Grand Ballroom Lobby, 1F



EXHIBITORS	
S1	Kyowa Kirin Korea
S2	Boryung Pharmaceutical
S3	JW Pharmaceutical
S4	Baxter
S5	Astrazeneca
S6	SK Chemicals
S7	HK inno.N
S8	Yuhan
S9	Fresenius Medical Care Korea
S10	Daewon Pharmaceutical
S11	Korea Otsuka Pharmaceutical Co., Ltd.
S12	HANDOK Inc
S13	Bayer Korea
S14	Astellas Pharma Inc.
S15	ChongKunDang Pharm.
S16	Chinook Therapeutics

Grand Ballroom 104-105, 1F

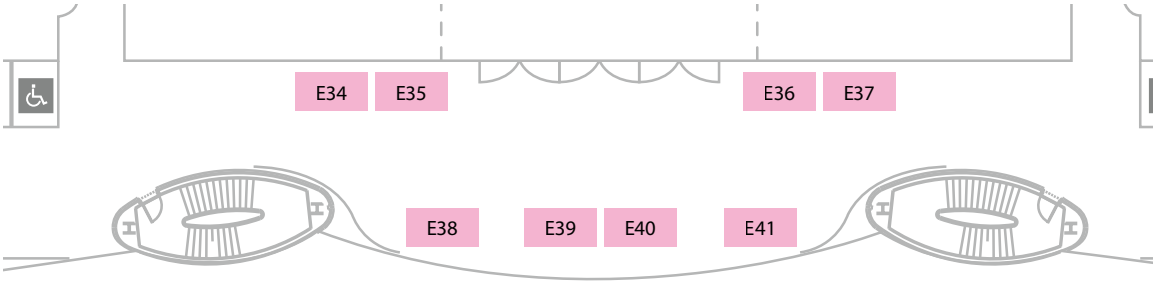


E1	Firson
E3	GSK
E4	MS Medical
E5	BnB Healthcare
E6	LG Chem
E7	VUNO
E8	Hanmi Pharm.Co.,Ltd.
E9	MYOUNG POOM MEDICAL
E10	BMVITEK
E11	Daiichi-Sankyo Korea

E12-E13	SANOFI KOREA
E14-E15	SANOFI KOREA
E16–E17	Boehringer Ingelheim Korea
E18	Korea United Pharm
E19	Rio Medical
E20	NOVARTIS KOREA
E21	Pfizer Korea
E22	DONG-A ST
E23	HAJOO Corp.
E24	JEIL PHARMACEUTICAL CO.,LTD.

E25	Bukwang Pharm. CO.,LTD
E26	B. Braun Korea
E27-E28	NIPRO Dongduk medical
E29-E30	ORGANON
E31-E32	Alvogen Korea
E33	AY Trading Co., Ltd.
P1	Korean Academy of Medical Sciences
P2	Koonja Publishing

Conference Room Lobby, 2F



E34	Omeros
E35	Alpine Immune Sciences
E36	Taiwan Society of Nephrology
E37	George Clinical

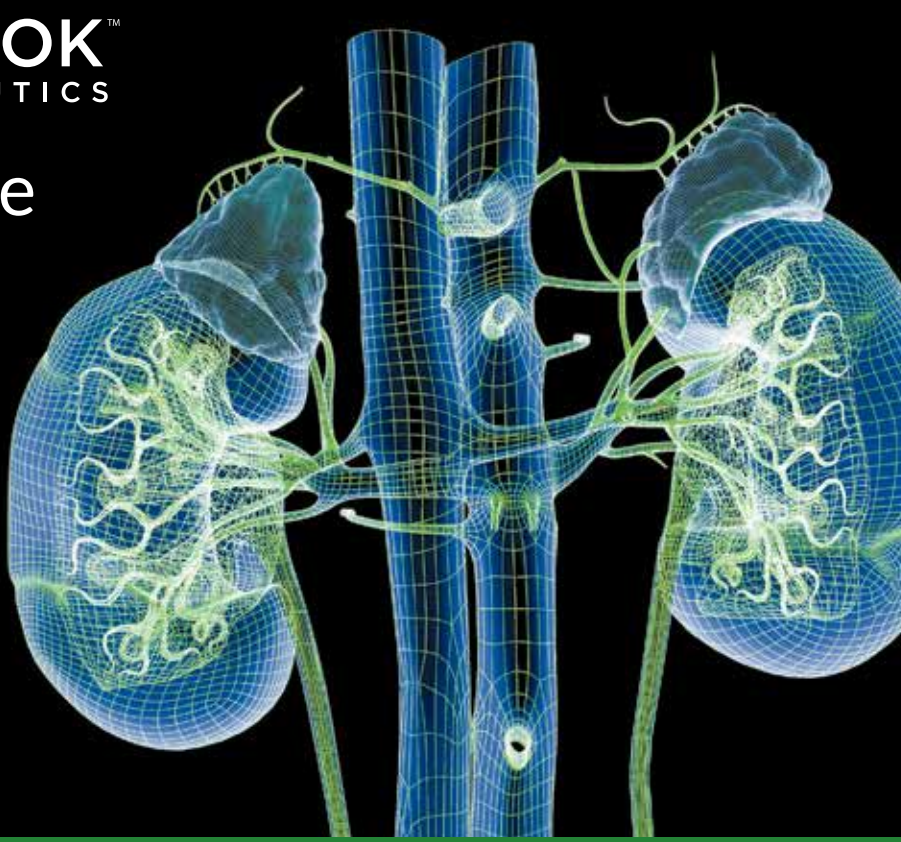
E38	AvChain, Inc.
E39, 40	SYNOPEX INC.
E41	mDoc

Did you know . . .

Blockade of the ETA receptor with potent and selective ETA antagonism represents a potential approach to treat IgAN patients at high risk of progression.

CHINOOK™ THERAPEUTICS

Changing the Course of Kidney Care™



www.chinooktx.com

Advancing a Diversified Pipeline of Best-in-Class Programs

Program	Indication	Target Validation	Lead Optimization	IND-Enabling	Phase 1	Phase 2	Phase 3
Atrasentan (ALIGN)	IgA Nephropathy	*Phase 3 ongoing with topline data expected in H2 2023*					
Atrasentan (AFFINITY)	Basket of glomerular diseases	*Phase 2 ongoing*					
BION-1301	IgA Nephropathy	*Phase 1/2 ongoing with phase 3 planned to start in mid-2023*					
CHK-336	Primary & Idiopathic Hyperoxalurias	*Phase 1 HV study ongoing*					
Research & Discovery Programs	Rare, severe chronic kidney diseases	*Multiple programs*					

Atrasentan, BION-1301, and CHK-336 are investigational agents and have not been approved for any uses in patients.

Jardiance® (empagliflozin)

JardianceDuo® (empagliflozin/ metformin HCl)

Glucose control & CV Event reduction in type 2 diabetes patients.*

TYPE 2 DM HAS A NEW OPPONENT

- **38%** RRR in CV death[1†]
- Superior HbA_{1c} reduction[2-5]

The presence of type 2 diabetes patients* with established CV disease continues to be a significant risk factor for CV death despite the use of evidence-based therapies in anti-diabetic agents.[6‡]

* Adult patients with type 2 diabetes and coronary artery disease, peripheral artery disease, or history of myocardial infarction or stroke.[1]
† CV death decreased, but nonfatal MI, nonfatal stroke, or 4P-MACE showed negative results.
Relative risk of 3P-MACE reduced by 14% versus placebo (Hazard ratio, 0.86 [95.02% CI, 0.74–0.99]; P=0.04 for superiority).
3P-MACE (primary outcome): cardiovascular death, nonfatal MI, or nonfatal stroke.
4P-MACE (key secondary outcome): cardiovascular death, nonfatal MI, nonfatal stroke, or hospitalization for unstable angina.
‡ Anti-diabetic agents: RAAS blocker and other anti-hypertensives, statins, and aspirin.

The oral antidiabetic drug approved for its effect on CV events in patients with type 2 diabetes and established CV disease[7]

3P-MACE, 3-point major adverse cardiovascular events; **4P-MACE**, 4-point major adverse cardiovascular events; **CI**, confidence interval; **CV**, cardiovascular; **DM**, diabetes mellitus; **HbA_{1c}**, glycosylated haemoglobin; **RAAS**, renin-angiotensin-aldosterone system; **RRR**, relative risk reduction.

References **1.** Zinman B, et al. N Engl J Med. 2015;373:2117. **2.** Roden M, et al. Lancet Diabetes Endocrinol. 2013;1:208. **3.** Roden M, et al. Cardiovas Diabetol. 2015;14:154. **4.** Ridderstrale M, et al. Diabetes Obes Metab. 2018;20(12):2768. **5.** Hadjadj S, et al. Diabetes Care. 2016;39(10):1718. **6.** Cavender MA, et al. Circulation. 2015;132:923. **7.** JARDIANCE® product information.

JARDIANCE® (empagliflozin) 10mg

[QUALITATIVE AND QUANTITATIVE COMPOSITION] JARDIANCE® (empagliflozin) 1 tablets (257.0mg): Empagliflozin 10mg **[INDICATION AND USAGE]** 1. Type 2 diabetes mellitus : This drug is indicated as an adjunct to diet and exercise to improve glycaemic control with type 2 diabetes mellitus. - monotherapy - combination therapy For effects on cardiovascular events in patients with insufficient glycaemic control with type 2 diabetes mellitus and established cardiovascular disease, see 'Cautions in Use, 10. Information for experts 2) Clinical trials'. 2. Chronic heart failure : To reduce the risk of cardiovascular death and hospitalization for chronic heart failure (NYHA class II-IV) with reduced left ventricular ejection fraction. This drug is used in in combination with other standard therapies of heart failure. **[DOSAGE AND ADMINISTRATION]** Type 2 diabetes mellitus The recommended dose is 10 mg empagliflozin once daily for monotherapy and add-on combination therapy with other glucose-lowering medicinal products including insulin. In patients tolerating empagliflozin 10 mg once daily who need tighter glycaemic control, the dose can be increased to 25 mg once daily. Chronic heart failure The recommended dose is 10 mg empagliflozin once daily. Type 2 diabetes mellitus and chronic heart failure When empagliflozin is used in combination with a sulphonylurea or with insulin, a lower dose of the sulphonylurea or insulin may be considered to reduce the risk of hypoglycaemia. The tablets can be taken with or without food, swallowed whole with water. If a dose is missed, it should be taken as soon as the patient remembers. A double dose should not be taken on the same day. **[CAUTIONS IN USE]** 1. Contraindication. 1) Hypersensitivity to the empagliflozin or any of the excipients. 2) Patients with type 1 diabetes or diabetic ketoacidosis. 3) Patients with an eGFR < 20 ml/min/1.73 m², or in patients with ESRD or in patients on dialysis This product contains lactose. Therefore, this product should not be administered to patients with the rare hereditary conditions of galactose intolerance the Lapp lactase deficiency or glucose-galactose malabsoption. **[STORAGE AND HANDLING]** 1) Store in a safe place out of the reach of children. 2) All medication must be stored in its original container with its cap on. Storing the medicine in any container other than the original may cause medicine misuse and even medical deterioration. **[Imported by]** Boehringer Ingelheim Korea Ltd. 16th Yonsei Foundation Severance Building, 10 Tongil-ro, Jung-gu, Seoul, Korea (04527)

JARDIANCE® (empagliflozin) 25mg

[QUALITATIVE AND QUANTITATIVE COMPOSITION] JARDIANCE® 25mg (empagliflozin) 1 tablets (206.0mg): Empagliflozin 25mg **[INDICATION AND USAGE]** JARDIANCE is indicated as an adjunct to diet and exercise to improve glycaemic control in adults with type 2 diabetes mellitus. - As monotherapy. - As add-on therapy: For effects on cardiovascular events in patients with insufficient glycaemic control with type 2 diabetes mellitus and established cardiovascular disease, see 'Caution in Use, 10. Information for experts 2) Clinical trials'. **[DOSAGE AND ADMINISTRATION]** The recommended dose is 10mg empagliflozin once daily for monotherapy and add-on combination therapy with other glucose lowering medicinal products including insulin. In patients tolerating empagliflozin 10mg once daily who need tighter glycaemic control, the dose can be increased to 25mg once daily. When empagliflozin is used in combination with a sulphonylurea or with insulin, a lower dose of the sulphonylurea or insulin may be considered to reduce the risk of hypoglycaemia. The tablets can be taken with or without food, swallowed whole with water. If a dose is missed, it should be taken as soon as the patient remembers. A double dose should not be taken on the same day. **[CAUTIONS IN USE]** 1. Contraindication. 1) Hypersensitivity to the empagliflozin or any of the excipients. 2) Patients with type 1 diabetes or diabetic ketoacidosis. 3) Patients with an eGFR < 20 ml/min/1.73 m², or in patients with ESRD or in patients on dialysis This product contains lactose. Therefore, this product should not be administered to patients with the rare hereditary conditions of galactose intolerance the Lapp lactase deficiency or glucose-galactose malabsoption. **[STORAGE AND HANDLING]** 1) Store in a safe place out of the reach of children. 2) All medication must be stored in its original container with its cap on. Storing the medicine in any container other than the original may cause medicine misuse and even medical deterioration. **[Imported by]** Boehringer Ingelheim Korea Ltd. 16th Yonsei Foundation Severance Building, 10 Tongil-ro, Jung-gu, Seoul, Korea (04527)

JARDIANCE DUO® (Empagliflozin, Metformin hydrochloride) 5/500mg, 5/850mg, 5/1000mg, 12.5/500mg, 12.5/850mg, 12.5/1000mg

[QUALITATIVE AND QUANTITATIVE COMPOSITION] 5/500mg – Empagliflozin 5mg, Metformin hydrochloride(EP) 500mg, 5/850mg – Empagliflozin 5mg, Metformin hydrochloride(EP) 850mg, 5/1000mg – Empagliflozin 5mg, Metformin hydrochloride(EP) 1000mg, 12.5/500mg – Empagliflozin 12.5mg, Metformin hydrochloride(EP) 500mg, 12.5/850mg – Empagliflozin 12.5mg, Metformin hydrochloride(EP) 850mg, 12.5/1000mg – Empagliflozin 12.5mg, Metformin hydrochloride(EP) 1000mg **[INDICATION AND USAGE]** JARDIANCE DUO is indicated as an adjunct to diet and exercise to improve glycaemic control in adult patients with type 2 diabetes mellitus who are appropriate to take a combination of empagliflozin and metformin, effects on cardiovascular events in patients with insufficient glycaemic control with type 2 diabetes mellitus and established cardiovascular disease, see 'Caution in Use, 12. Information for experts 2) Clinical trials'. **[DOSAGE AND ADMINISTRATION]** The recommended dose is one tablet twice daily. The dosage should be individualised on the basis of the patient's current regimen, effectiveness, and tolerability while not exceeding the maximum recommended daily dose of 25mg of empagliflozin and 2000mg of metformin. In patients not adequately controlled on metformin alone or in combination with other products, including insulin, the recommended starting dose of JARDIANCE DUO should provide empagliflozin 5mg twice daily (10mg total daily dose) and the dose of metformin similar to the dose already being taken. In patients tolerating a total daily dose of empagliflozin 10mg and requiring additional glycaemic control, the dose can be increased to a total daily dose of empagliflozin 25mg. Patients switching from separate tablets of empagliflozin (10mg or 25mg total daily dose) and metformin to JARDIANCE DUO should receive the same daily dose of empagliflozin and metformin already being taken. When JARDIANCE DUO is used in combination with a sulphonylurea and/or insulin, a lower dose of sulphonylurea and/or insulin may be required to reduce the risk of hypoglycaemia. JARDIANCE DUO should be given with meals to reduce the gastrointestinal undesirable effects associated with metformin. If a dose is missed, it should be taken as soon as the patient remembers. However, a double dose should not be taken at the same time. In that case, the missed dose should be skipped. **[CAUTIONS IN USE]** 1. Warnings - Metformin hydrochloride 1) Severe lactic acidosis could occur. Fatal cases of lactic acidosis have been reported. 2) Caution is advised, as severe hypoglycaemia could rarely occur when it is used in combination with other glucose-lowering agents such as insulin, sulphonylureas etc. 2. Contraindication 1) Hypersensitivity to active ingredients empagliflozin and/or metformin or to any of the excipients. 2) Moderate (stage 3b) and severe renal failure (CrCl < 45ml/min or eGFR < 45ml/min/1.73m²). 3) Acute conditions with the potential to alter renal function such as: dehydration, severe infection, cardiovascular collapse (shock), acute myocardial infarction, sepsis. 4) Type 1 diabetes, lactic acidosis, acute or chronic metabolic acidosis, including diabetic ketoacidosis with or without coma, history of a ketoacidosis (type 1 diabetes and diabetic ketoacidosis should be treated with insulin). 5) Diabetic pre-coma 6) Congestive heart failure requiring pharmacologic management, in particular those with unstable or acute congestive heart failure. 7) Radiologic studies involving the use of intravascular iodinated contrast materials (for example, intravenous urogram, intravenous cholangiography, angiography, and computed tomography (CT) scans with intravascular contrast materials) - Intravascular administration of iodinated contrast media may lead to acute renal failure and has been associated with lactic acidosis in patients receiving metformin. Therefore, in patients with eGFR > 60ml/min/1.73m², JARDIANCE DUO must be discontinued prior to, or at the time of the test and not be reinstituted until 48 hours afterwards, and only after renal function has been re-evaluated and has not deteriorated further. In patients with moderate renal impairment (eGFR 45-60 ml/min/1.73m²), JARDIANCE DUO must be discontinued 48 hours before administration of iodinated contrast media and not be reinstituted until at least 48 hours afterwards, and only after renal function has been re-evaluated and has not deteriorated further. 8) In patients with severe infections or severe traumatic systemic disorders, JARDIANCE DUO should be temporarily suspended, and should not be restarted until the patient's oral intake has resumed and renal function has been evaluated as normal. 9) JARDIANCE DUO should be temporarily suspended for any surgical procedure (except minor procedures not associated with restricted intake of food and fluids) before 48 hours, and not be reinstituted until 48 hours afterwards, after renal function has been evaluated as normal. 10) Patients with malnutrition, starvation, hyposthenium pituitary or adrenal insufficiency. 11) Impaired hepatic function (since impaired hepatic function has been associated with some cases of lactic acidosis, JARDIANCE DUO should generally be avoided in patients with clinical or laboratory evidence of hepatic disease), pulmonary infarction, severe respiratory impairment, any condition associated with hypoxemia, excessive alcohol intake, GI disorders such as dehydration, diarrhoea or vomiting. 12) Pregnant women, women who may be pregnant, nursing women. 13) Disease which may cause tissue hypoxia (especially acute disease, or worsening of chronic disease) such as: decompensated heart failure, respiratory failure, recent myocardial infarction, shock. **[STORAGE AND HANDLING]** 1) Store in a safe place out of the reach of children. 2) All medication must be stored in its original container with its cap on. Storing the medicine in any container other than the original may cause medicine misuse and even medical deterioration. **[Imported by]** Boehringer Ingelheim Korea Ltd. 16th Yonsei Foundation Severance Building, 10 Tongil-ro, Jung-gu, Seoul, Korea (04527)

*** Please refer to the detailed prescribing information.**

RC-JAR-102657

Boehringer Ingelheim
Boehringer Ingelheim Korea Ltd.
16th Yonsei Foundation Severance Building, 10 Tongil-ro, Jung-gu, Seoul, Korea (04527)
www.bik.co.kr TEL : 080-222-0110

YUHAN
Yuhan
74, Noryangjin Road, Donggang-gu, Seoul, Korea
www.yuhan.co.kr

Lilly
Eli Lilly and Company, KOREA.
4th floor LG Seoul Station Building, 98 Hoam Road, Jung-gu, Seoul, Korea
www.lilly.co.kr

012024-KMT-22-112402

KALIMATE®

Calcium polystyrene sulfonate
Powder / Granule / Suspension

The 1st released Calcium polystyrene sulfonate agent in Korea[1,*]

The most prescribed treatment agent for Hyperkalemia in Korea[2]

Various formulations developed in consideration of taking convenience (Powder/Granule/Suspension)[1,3]

Treatment agent for Hyperkalemia

KALIMATE

Powder / Granule / Suspension

REFERENCES

1. KALIMATE Powder, Granule, Suspension - Product information from Ministry of Food and Drug Safety. Available at https://nedrug.mfds.go.kr/seachDrug - Drug search - KALIMATE Accessed on 06-Jan-2022.
2. 2021. 3Q MAT, IQVIA Data 기준 (Sales data of Calcium polystyrene sulfonate in Korea)
3. Data on file. Alvogen Korea

* KALIMATE powder is the 1st released calcium polystyrene sulfonate agent in 1984 in Korea, through the licensing with the originator, Nikken(now Kowa) from Japan.

카리메트 산/과립

[효능 · 효과] 고칼륨혈증 **[용법 · 용량]** 1. 경구투여 성인: 폴리스티렌설폰산칼슘으로서 1일 15~30g을 2~3회로 분할하고 1회량을 물 30~ 50mL에 현탁하여 경구투여한다. 2. 직장투여 성인: 1회 30g(산) 또는 30.15g(과립)을 물 또는 2% 메틸셀룰로오스용액 100mL에 현탁하여 직장에 투여한다. 현탁액을 체온정도로 가온하고 30분~1시간 장관내 방치한다. 액이 누출되는 경우에는 베개로 둔부를 올려주거나 잠시동안 슬흉위 사이를 잡아준다. 물 또는 2% 메틸셀룰로오스 대신 5% 포도당용액을 사용할 수 있다. 연령, 증상에 따라 적절히 증감한다. **[사용상의 주의사항]** 1. 다음 환자에는 투여하지말 것 : 1) 고칼슘혈증 환자 2) 부갑상선기능항진증 환자 (이온교환으로 혈중칼슘농도가 상승할 수 있다) 3) 다발성 골수종 환자 (이온교환으로 혈중칼슘농도가 상승할 수 있다) 4) 사르코이드증 또는 전이성 암종 환자 5) 폐색성 장질환 환자(장관천공이 나타날 수 있다.) 6) 1개월 미만의 신생아 (경구투여에 한함) 7) 수술이나 약물 투여로 소화관 운동이 저하된 신생아 (직장투여에 한함) 2. 이상반응 : 이 약에 대한 임상시험 및 시판 후 안전성 조사결과, 총 1,182에 경구투여시 151명(12.8%)에서 159건의 이상반응이 보고되었다. 이 중 가장 많이 보고된 이상반응은 변비(109건, 9.2%), 식욕부진(18건, 1.5%), 구역(16건, 1.4%), 저칼륨혈증 (13건, 1.1%) 등이었다. 3. 적용상의 주의 • 경구투여 관련 1) 이 약의 소르비톨 현탁액 경구투여시 결장협착, 결장궤양 등이 보고되었다. 2) 이 약의 유사 약물(폴리스티렌설폰산나트륨)의 소르비톨 현탁액 경구투여시 소장내 천공, 장점막 괴사, 소장종양과 결장괴사 등이 보고되었다. 3) 이 약 경구투여시 소화관에서의 축적을 피하기 위해 변비가 발생하지 않도록 주의한다. • 직장투여 관련 4) 동물실험(랫트)에서 소르비톨의 직장투여에 의해 장벽괴사가 보고되었으며, 폴리스티렌설폰산형 양이온의 소르비톨 현탁액을 직장투여한 경우에도 결장괴사가 보고되었다. 따라서, 이 약을 직장투여하는 경우에는 소르비톨 용액을 사용하지 않도록 한다. 5) 이 약 투여 후 장관에 잔류되지 않도록 충분히 제거하여야 한다. 특히 정상적인 배설이 곤란한 환자인 경우 다른 적절한 방법을 이용하여 이 약을 장관에서 배설시킨다. [포장단위] 100포 **[저장방법 및 사용기간]** • 기밀용기, 실온(1~30℃)보관 • 사용기간: 산제/제조일로부터 60개월(5년), 과립제/제조일로부터 36개월(3년) ※ 자세한 내용은 제품설명서 전문을 참고하시기 바랍니다.

카리메트 현탁액

[효능 · 효과] 고칼륨혈증 **[용법 · 용량]** 성인: 1일 3~6포(폴리스티렌설폰산칼슘으로서 15~30g)을 2~3회로 나누어 경구 투여한다. **[사용상의 주의사항]** 1. 다음 환자에는 투여하지 말 것. 1) 고칼슘혈증 환자 2) 부갑상선기능항진증 환자(이온교환으로 혈중칼슘농도가 상승할 수 있다) 3) 다발성 골수종 환자(이온교환으로 혈중칼슘농도가 상승할 수 있다) 4) 사르코이드증 또는 전이성 암종 환자 5) 폐색성 장질환 환자(장관천공이 나타날 수 있다) 6) 1개월 미만의 신생아 (중략) 3. 이상반응 : 이 약에 대한 임상시험 및 시판 후 안전성 조사결과, 총 1,182에 경구투여시 151명(12.8%)에서 159건의 이상반응이 보고되었다. 이 중 가장 많이 보고된 이상반응은 변비(109건, 9.2%), 식욕부진(18건, 1.5%), 구역(16건, 1.4%), 저칼륨혈증 (13건, 1.1%) 등이었다. (중략) 9. 적용상의 주의 1) 이 약은 경구로만 투여한다. 2) 이 약의 유사 약물(폴리스티렌설폰산나트륨)의 소르비톨 현탁액 경구투여시 소장내 천공, 장점막 괴사, 소장종양과 결장괴사 등이 보고되었다. 3) 이 약 경구투여시 소화관에서의 축적을 피하기 위해 변비가 발생하지 않도록 주의한다. 4) 이 약과 알긴산나트륨과의 병용투여로 소화관 내 불용성 겔이 발생하였다는 보고가 있다. [포장단위] 100포 **[저장방법 및 사용기간]** 기밀용기, 실온(1~30℃)보관 제조일로부터 36개월(3년) ※ 자세한 내용은 제품설명서 전문을 참고하시기 바랍니다.

수입자 (카리메트현탁액)

Kowa

7th Floor, Yeongdongdae-ro 302, Gangnam-gu, Seoul, Korea, 06177
Tel :+82-80-851-4800

판매자 (카리메트산/과립/현탁액)

Alvogen

13rd Floor, Two IFC, Gukjegeumyung-ro 10, Yeongdeungpo-gu, Seoul, Korea, 07326
Tel : **+82-2-2047-7700**

제품 원료 관련 안내문

식품의약품안전처의 로사르탄 **아지도 불순물 지침**에 따라 제출된
코자®정, 코자®정 100밀리그램, 코자®플러스정, 코자®플러스프로정,
코자®플러스에프정의 완제 검사 결과 및 **코자®엑스큐정** 원료 검사 결과

아지도 불순물의 불검출이 확인되었습니다[1]

(2022년 05월 24일 기준)

오리지널 코자® Family로 다양한 환자의 고혈압을 관리해보세요![2-9,*]

COZAAR® losartan | COZAAR® PLUS losartan + HCTZ 50/12.5 | COZAAR® PLUS - F losartan + HCTZ 100/25 | COZAAR® PLUS - PRO losartan + HCTZ 100/12.5 | COZAAR® XQ losartan + amlodipine

*** 코자® Family: 코자® 정(로사르탄칼륨), 코자® 정 100 mg(로사르탄칼륨), 코자® 플러스정(로사르탄칼륨-히드로클로로티아지드), 코자® 플러스에프정(로사르탄칼륨-히드로클로로티아지드), 코자® 플러스프로정(로사르탄칼륨-히드로클로로티아지드), 코자® 엑스큐정 5/50 mg(로사르탄칼륨-암로디핀 캄실산염), 코자® 엑스큐정 5/100 mg(로사르탄칼륨-암로디핀 캄실산염), 코자® 엑스큐정 10/50 mg(로사르탄칼륨-암로디핀 캄실산염)**

References 1. 식품의약품안전처. 알림> 언론홍보자료> 보도자료> [부처합동] '로사르탄 아지도 불순물' 안전성 조사 결과 발표. Available at <https://www.mfds.go.kr/brd/m_99/view.do?seq=45987> Accessed Apr. 7, 2022. **2.** 코자 허가사항. 식품의약품안전처. 개정년월일 : 2021.10.16. **3.** 코자 100 mg 허가사항. 식품의약품안전처. 개정년월일 : 2021.10.16. **4.** 코자 엑스큐 5/50 mg 허가사항. 식품의약품안전처. 개정년월일 : 2021.03.04. **5.** 코자 엑스큐 5/100 mg 허가사항. 식품의약품안전처. 개정년월일 : 2021.03.04. **6.** 코자 엑스큐 10/50 mg 허가사항. 식품의약품안전처. 개정년월일 : 2021.03.04. **7.** 코자 플러스 허가사항. 식품의약품안전처. 개정년월일 : 2021.01.31. **8.** 코자 플러스에프 허가사항. 식품의약품안전처. 개정년월일 : 2021.01.31. **9.** 코자 플러스프로 허가사항. 식품의약품안전처. 개정년월일 : 2021.01.31.

Selected Safety Information 코자®정 (로사르탄칼륨) 50, 100 mg [경고] 임부에게 레닌-안지오텐신-알도스테론계 (RAAS)에 직접 작용하는 약물들의 투여 시, 태아 및 신생아에게 손상 및 사망까지도 일어날 수 있다. 양수과소증의 발생은 태아의 폐 형성 저하증 및 골격기형과 관련이 있을 수 있다. 신생아에게 나타날 가능성이 있는 부작용은 두개골 형성 저하증, 무뇨증, 저혈압, 신부전과 사망 등을 포함한다. 임신이 확인되면 가능한 빨리 이 약을 중단해야 한다. **[금기]** 1) 이 약 또는 이 약의 구성성분에 과민반응 환자 2) 임부 또는 임신하고 있을 가능성이 있는 여성 3) 중증의 간장애 환자 4) 유전성 혈관부종 환자, ACE 억제제 혹은 안지오텐신 II 수용체 차단제 치료 시 혈관부종의 병력이 있는 환자 5) 원발고알도스테론증 환자 6) 이 약은 유당을 함유하고 있으므로, 갈락토오스 불내성 (galactose intolerance), Lapp 유당분해효소 결핍증 (Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애 (glucose-galactose malabsorption) 등의 유전적인 문제가 있는 환자 7) 당뇨병이나 중등도~중증의 신장애 환자 (사구체여과율 <60 mL/min/1.73 m²)에서 알리스키렌 함유제제와의 병용 **[신중투여]** 1) 고령자 2) 고칼륨혈증 환자 혹은 혈청 칼륨치가 높아지기 쉬운 환자 3) 경증~중등도 간장애 환자 4) 대동맥판 및 승모판 협착증 환자 혹은 폐쇄비대심근병 환자 5) 허혈 심장병, 허혈 심장혈관 질환, 뇌혈관 장애 환자 (과도한 혈압강하는 심근경색이나 뇌혈류 부전으로 인한 뇌졸중을 일으킬 수 있다.) 6) 혈관 내 유효혈액량 감소환자 (예, 이뇨제 투여중인 환자, 엄격한 염분제한 환자, 혈액투석중인 환자, 설사 혹은 구토 환자) 7) 양측성 혹은 편측성 신동맥 협착증이 있는 환자 8) 중증의 신장애 환자 9) 레닌-안지오텐신-알도스테론계 (RAAS)의 이중차단 : 안지오텐신 수용체 차단제 (ARB), ACE 억제제, 또는 알리스키렌 등 레닌-안지오텐신-알도스테론계 (RAAS)에 영향을 미치는 다른 약제와의 병용은 권장되지 않는다. **[이상반응]** 1) 이 약은 본태고혈압 성인환자 3,300명 이상을 포함하여 전체 4,058명의 환자/피험자를 대상으로 안전성이 평가되었다. 1,200명 이상의 환자는 6개월 이상 투약 받았고, 800명 이상의 환자는 1년 이상 투약 받았다. 일반적으로 이 약은 내약성이 우수하였다. 전체적인 이상반응 발현율은 실험군과 대조군 사이에 큰 차이가 없었다. 대조임상시험에서 임상적 이상반응으로 인하여 투여를 중단한 경우는 로사르탄군의 경우 2.3%였으며, 위약군의 경우 3.7%였다. 2) 고혈압을 가진 제 2형 당뇨병 환자의 신장병. 안지오텐신 II 수용체 차단제인 이 약에 의한 인슐린-비의존성 당뇨병의 평가항목의 감소를 연구한 시험(Reduction of Endpoints in NIDDM with the Angiotensin II Receptor Antagonist Losartan, RENAAL study)에서 1,513 명의 환자가 이 약 혹은 위약을 투여 받았으며, 상기 임상시험에서 보고된 이상반응의 발생률은 두 군간 차이가 없었다. 이상반응으로 인하여 투여를 중단한 비율도 유사하여 (실험군 19 %, 위약군 24 %) 이 약은 일반적으로 내약성이 우수하였다. **[일반적 주의]** 1) 레닌-안지오텐신-알도스테론계에 대한 영향의 결과, 신부전을 포함한 신기능의 변화가 보고되었다. 이러한 신기능의 변화는 투여 중단 시 정상으로 회복되었다. 신기능이 레닌-안지오텐신-알도스테론계에 의존적인 환자의 경우(예, 중증의 울혈심부전 환자), ACE 억제제를 투여하였을 때, 빈뇨 및/혹은 진행성 질소혈증이 보고되었으며, (드물게) 급성 신부전 및/혹은 사망이 보고되었다. 유사한 결과가 이 약을 투여한 환자에서도 보고되었다. ACE 억제제가 양측성 혹은 편측성 신동맥 협착증을 갖는 환자들의 혈중 요소와 혈청 크레아티닌치를 상승시켰다는 보고가 있다. 이 약을 투여한 환자에서도 유사한 결과가 보고되었다. 이는 투여 중단 시 회복되었다. 또한 이들 환자군에서 신혈류량의 감소와 사구체 여과압의 저하에 의해 급속히 신기능을 악화시킬 우려가 있고, 저혈압을 일으킬 수 있다. 중증의 신장애환자에게 이 약 투여시 고칼륨혈증이 나타나기 쉽다. 또한 신기능의 악화가 일어날 우려가 있으므로 혈청크레아티닌이 2.5 mg/dL 이상의 경우에는 투여량을 줄이는 등 신중히 투여한다. 2) 고혈압과 단백뇨를 동반하는 2 형 당뇨병에서의 당뇨병 신증에 대해 이 약을 투여하는 경우, 혈청 크레아티닌이 이전 검사치와 비교하여 30 % (또는 1 mg/dL)이상 증가하는 경우 및 신기능장애의 진전속도가 가속되는 경우에는 감량 혹은 투여중지를 고려한다. 개정년월일 : 2021년 10월 16일
※ 처방하시기 전에 각 항목에 대한 자세한 사항은 제품설명서 전문을 참고하시기 바랍니다.

Selected Safety Information 코자®플러스정, 코자®플러스에프정, 코자®플러스프로정 (로사르탄칼륨-히드로클로로티아지드) [경고] 임부에게 레닌-안지오텐신-알도스테론계 (RAAS)에 직접 작용하는 약물들의 투여 시, 태아 및 신생아에게 손상 및 사망까지도 일어날 수 있다. 양수과소증의 발생은 태아의 폐 형성 저하증 및 골격 기형과 관련이 있을 수 있다. 신생아에게 나타날 가능성이 있는 부작용은 두개골 형성 저하증, 무뇨증, 저혈압, 신부전과 사망 등을 포함한다. 임신이 확인되면 가능한 빨리 이 약을 중단해야 한다. **[금기]** 1) 이 약 또는 이 약의 구성성분에 과민반응 환자 2) 무뇨증이 있거나 설폰아미드계 약물에 과민반응 또는 그 병력의 환자 3) 치료불응성 저칼륨혈증, 고칼슘혈증, 저나트륨혈증 또는 체액 중 나트륨·칼륨이 명백히 감소된 환자 4) 중증 간장애 환자, 담즙정체 및 담도폐쇄장애 환자 5) 증상이 있는 고요산혈증/통풍 환자 6) 임부 또는 임신하고 있을 가능성이 있는 여성 7) 중증 신장애 환자 (예, 크레아티닌청소율 30 mL/min 미만) 또는 급성신부전 환자 8) 투석중인 환자 9) 이 약은 유당을 함유하고 있으므로, 갈락토오스 불내성 (galactose intolerance), Lapp 유당분해효소 결핍증 (Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애 (glucose-galactosemalabsorption) 등의 유전적인 문제가 있는 환자에게는 투여하면 안 된다. 10) 당뇨병이나 중등도~중증의 신장애 환자 (사구체여과율 <60 mL/min/1.73 m²)에서 알리스키렌 함유제제와의 병용 **[신중투여]** 1) 저혈압-혈관내 유효 혈액량 감소 환자 2) 신장애 환자, 편측성 혹은 양측성 신동맥 협착증이 있는 환자 3) 간장애 환자 또는 간장애 병력 환자 4) 전신성 홍반성 루푸스 환자 5) 혈청 칼륨치 이상 환자 6) 뇌혈관장애 환자 7) 감염요법 중인 환자 8) 중증 관경화증 또는 뇌동맥경화증 환자 9) 본인에 당뇨병 또는 부모, 형제에 통풍, 당뇨병 또는 고요산혈증이 있는 환자 10) 설사, 구토 환자 11) 고칼슘혈증, 부갑상샘기능항진증 환자 12) 디기탈리스, 부신피질호르몬제 또는 ACTH를 투여 중인 환자 13) 교감신경절제 후 환자 14) 고령자 15) 레닌-안지오텐신-알도스테론계 (RAAS)의 이중차단 16) 비흑색종 피부암 (NMSC). 히드로클로로티아지드 노출 누적용량 증가에 따른 비흑색종 피부암(기저세포암, 편평세포암)의 증가 위험이 덴마크 국립 암 레지스트리에 근거한 두 건의 역학연구에서 보고되었다. 히드로클로로티아지드의 광과민 작용은 비흑색종 피부암 기전으로 작용할 수 있다. 히드로클로로티아지드를 복용하는 환자에게는 비흑색종 피부암 위험에 대한 정보를 제공해야 하고, 정기적으로 피부의 새로운 병변 발생 여부를 확인하고 의심스러운 피부 병변이 발견될 경우 보고하도록 권고해야 한다. 또한 환자에게 피부암 위험을 최소화하기 위해 햇빛이나 UV (자외선) 노출 제한 및 노출되는 경우 적절한 보호와 같은 가능한 예방 조치를 권고해야 한다. 의심되는 피부 병변은 조직 생검을 포함한 검사를 즉시 실시한다. 이전에 비흑색종 피부암 병력이 있는 환자에게는 히드로클로로티아지드의 사용을 재고할 필요가 있다. **[이상반응]** 로사르탄칼륨-히드로클로로티아지드 복합제인 이 약의 안전성은 858명의 본태고혈압 환자와 좌심실 비대가 있는 고혈압 환자 3,889명에서 평가되었다. 이 임상 시험에서 이 약에 특이적인 이상반응은 관찰되지 않았으며, 관찰된 이상반응은 로사르탄이나 히드로클로로티아지드 단일제제에서 보고되었던 것에 국한되었다. 이 약은 내약성이 우수하여 이 약 투여로 인한 전체적인 이상반응 발현율은 위약대조군과 유사하였다. 대부분의 이상반응은 경미하고 일시적이었으며 투약을 중단할 정도는 아니었다. 위약대조시험에서 이상반응으로 인한 투약중단은 투약군과 위약대조군의 각각 2.8%와 2.3%에서 나타났다. **[일반적 주의]** 1) 히드로클로로티아지드 (1) 진행성 신장애 환자에 대해서는 이뇨제 투여의 보류나, 중단을 고려하여야 한다. 2) 로사르탄 (1) 로사르탄은 레닌·안지오텐신·알도스테론계를 억제하므로 민감한 환자에서는 신기능의 변화가 일어날 수 있다. 일부 환자에서 이러한 신기능의 변화는 로사르탄의 복용을 중단한 후 곧 정상으로 회복되었다. 개정년월일 : 2021년 1월 31일
※ 처방하시기 전에 각 항목에 대한 자세한 사항은 제품설명서 전문을 참고하시기 바랍니다.

Selected Safety Information 코자®엑스큐정 (로사르탄칼륨-암로디핀 캄실산염) 5/50 mg, 5/100 mg, 10/50 mg [경고] 1) 임부에게 레닌-안지오텐신-알도스테론계 (RAAS)에 직접 작용하는 약물들의 투여 시, 태아 및 신생아에게 손상 및 사망까지도 일어날 수 있다. 양수과소증의 발생은 태아의 폐 형성 저하증 및 골격 기형과 관련이 있을 수 있다. 신생아에게 나타날 가능성이 있는 부작용은 두개골 형성 저하증, 무뇨증, 저혈압, 신부전과 사망 등을 포함한다. 임신이 확인되면 가능한 빨리 이 약을 중단해야 한다. 2) 혈관 내 유효 혈액량 감소 환자. 로사르탄의 경우 혈관 내 유효 혈액량 감소 (intravascular volume depletion) 환자 (예를 들어, 이뇨제를 투여 받고 있는 환자)에 이 약을 처음 투여하였을 때 저혈압 증상이 나타날 수 있으므로, 이 약 투여 전에 이러한 증상들을 치료해야 한다. 만약, 로사르탄 1일 1회 25 mg 투여가 권장되는 경우, 이 약으로는 로사르탄 25 mg 투여가 가능하지 않으므로, 이러한 환자에 대하여 투여하지 않도록 한다. **[금기]** 1) 이 약의 주성분 및 디히드로피리딘계 유도체에 과민증이 있는 환자 2) 임부 또는 임신하고 있을 가능성이 있는 여성 3) 중증의 간기능 장애 환자 4) 중증 대동맥판협착증 환자 5) 속 환자 6) 당뇨병이나 중등도~중증의 신장애 환자 (사구체여과율 <60 mL/min/1.73 m²)에서 알리스키렌 함유제제와의 병용 **[신중투여]** 1) 혈관 내 유효 혈액량 감소 환자 (예, 이뇨제 투여 중인 환자) 2) 엄격한 염분제한 환자 3) 중등도~중증 신장애 환자 (예, creatinine clearance < 20 mL/min) 및 투석 환자 4) 고칼륨혈증 환자 5) 레닌-안지오텐신-알도스테론계 (RAAS)의 이중차단 : 안지오텐신 수용체 차단제 (ARB), ACE 억제제, 또는 알리스키렌 등 레닌-안지오텐신-알도스테론계 (RAAS)에 영향을 미치는 다른 약제와의 병용은 권장되지 않는다. **[이상반응]** 이 약 (암로디핀/로사르탄 복합제)에 대한 안전성은 본태고혈압 환자를 대상으로 8 주간 투여한 3 개의 임상시험 (임상시험 201, 임상시험 301 및 임상시험 302) 및 stage 2 고혈압 환자를 대상으로 8 주간 투여한 임상시험 303 을 통해, 총 794명의 고혈압 환자 중 암로디핀/로사르탄 복합제를 투여 받은 398명을 대상으로 평가되었다. 이상반응에 대한 발현빈도는 다음과 같다. [신경계] 어지러움, 두통, 졸음, 뇌경색 [전신 이상 및 투여부위 반응] 무력증, 흉부 불편감, 흉통, 조기포만감, 말초부종, 오목부종 [위장관 이상] 복부 불편감, 소화불량, 구역, 역류성 식도염, 변비 [피부 및 피하조직 이상] (전신성)가려움증, 전신성 두드러기 [심장이상] 심계항진 [혈관이상] 홍조, 기립성 저혈압, 안면홍조 [호흡기계, 흉부 및 종격 이상] 호흡곤란, 기침 [감각기관 이상] 어지러움, 안구충혈 [신장 및 방광 이상] 빈뇨. **[일반적 주의]** 1) 신장애 환자 : 레닌-안지오텐신-알도스테론계에 대한 영향의 결과, 신기능의 변화가 보고되었다. 이러한 신기능의 변화는 투여 중단 시 정상으로 회복되었다. 신기능이 레닌-안지오텐신-알도스테론계에 의존적인 환자의 경우(예, 중증의 울혈성 심부전 환자), ACE 억제제를 투여하였을 때, 빈뇨 및/혹은 진행성 질소혈증이 보고되었으며, (드물게) 급성 신부전 및/혹은 사망이 보고되었다. 유사한 결과가 로사르탄을 투여한 환자에서도 보고되었다. ACE 억제제가 양측성 혹은 편측성 신동맥 협착증을 갖는 환자들의 혈중 요소와 혈청 크레아티닌치를 상승시켰다는 보고가 있다. 로사르탄을 투여한 환자에서도 유사한 결과가 보고되었다.: 이는 투여 중단 시 회복되었다. 2) 로사르탄의 투여로 인해 일과성의 혈압저하(속증상, 의식상실, 호흡곤란 등을 동반)를 일으킬 수 있으므로 그러한 경우에는 투여를 중지하고 적절한 처치를 한다. 특히, 다음 환자에 투여 시 환자의 상태를 충분히 관찰하여야 하며, 만약, 로사르탄 1일 1회 25 mg 투여가 권장되는 경우, 이 약으로는 로사르탄 25 mg 투여가 가능하지 않으므로, 이러한 환자에 대해 투여하지 않도록 한다. - 혈관 내 유효 혈액량 감소 환자 (예, 이뇨제 투여중인 환자) - 엄격한 염분제한 환자 - 중등도 ~ 중증 신장애 환자(예, creatinine clearance : 20 mL/min 미만) 및 투석 환자. 개정년월일 : 2021년 3월 4일
※ 처방하시기 전에 각 항목에 대한 자세한 사항은 제품설명서 전문을 참고하시기 바랍니다.

코자정, 코자정 100밀리그램, 코자엑스큐정 10/50, 5/100, 5/50밀리그램의 품목허가권자는 한국오가논㈜이고, 코자플러스정, 코자플러스에프정, 코자플러스프로정의 수입자/품목허가권자는 한국엠에스디㈜입니다.

KR-LXQ-110025 12/2023

sanofi

Real Value Renvela®

- 투석 환자에서 **혈청 인 감소 효과**를 보여준 **렌벨라®**[1]
- **체내에 흡수 및 축적이 되지 않는 비칼슘계열 인결합제**로 심혈관계 사망률 감소 결과를 보여준 **렌벨라®**[2,3]
- 고인산혈증이 있는 혈액투석환자에서 칼슘계 인결합제 대비 **유의한 생존율 개선(P<0.001)**을 나타낸 **렌벨라®**[4]
- **국내에서 7년 이상의 Experience**와 **Calcium-free, Metal-free, 폴리머 제제**의 **렌벨라®**[3,5,6]

References 1. Moustafa M, et al. Int J Nephrol Renovasc Dis 2014;7:141-152. **2.** Renvela [package insert]. Cambridge, MA: Genzyme Corp. 2016 **3.** Rodriguez-Osorio L, et al. Nefrologia. 2015;35(2):207-217. **4.** Di Iorio B, et al. Am J Kidney Dis 2013;62:771-778. **5.** 식품의약품안전처, 렌벨라 허가정보, nedrug.mfds.go.kr Accessed 16 Mar 2020 **6.** Connor et al J Polym. Sci. Part A: Polym. Chem. 2017; 55, 3146-3157

렌벨라®정(세벨라머탄산염) 렌벨라®산0.8그램(세벨라머탄산염) [원료약품 및 그 분량] 렌벨라정 1정 중 세벨라머탄산염(별규) 800.0mg, 렌벨라산 1포 중 세벨라머탄산염 (별규) 800mg **[효능·효과]** 투석을 받고 있는 만성 신장질환 환자의 혈청인 조절 **[용법·용량]** 1일 3회 식사와 함께 복용. 산제복용시 이 약 1포는 최소 30mL의 물로 완전히 혼합하여 30분 이내에 복용하고, 복용 전에 재현탁한다. 1) 인산결합제를 복용하고 있지 않는 환자에 투여: 이 약의 권장초기용량은 0.8g 내지 1.6g 이며, 이 약 1~2정(포)을 다음과 같이 혈청 인 수치에 따라 매 식사와 함께 복용한다. 혈청 인 5.5 - 7.5 ㎎/dL의 경우 1회 1정(포), 1일 3회, 7.5 ㎎/dL이상의 경우 1회 2정(포), 1일 3회, 2) 세벨라머 염산염 정제를 복용하고 있는 환자에서 이 약을 대체 투여: 동일 용량을 투여한다. 투석을 받는 만성신장질환 환자에서 연구된 세벨라머 탄산염의 최대 1일 용량은 14g이었다. 3) 세벨라머 탄산염의 정제에서 산제로 또는 산제에서 정제로 대체투여: 동일 용량을 투여한다. 4) 초산칼슘제제를 복용하고 있는 환자에게 이 약을 대체 투여하는 경우 초산칼슘제제 (1정당 초산칼슘 667mg) 1회 1정, 1일 3회 시 이 약 1회 1정(포) 1일 3회, 초산칼슘제제 1회 2정,1일 3회 시 이 약 2정(포) 1회, 1일 3회, 초산칼슘제제 1회 3정, 1일 3회 시 이 약 1회 3정(포), 1일 3회 5) 이 약을 복용하고 있는 모든 환자에서의 용량 조절 목표 혈청 인 수치에 도달하기 위해 적절한 용량 조정이 필요할 수 있다. 필요 시 2주 간격을 두고 1일 3회 이 약의 용량을 0.8g씩 증량 또는 감량한다. **[사용상의 주의사항] [금기]** 이 약의 주성분 및 부형제에 과민한 환자, 저인산혈증 환자, 장폐색 환자 (이 약은 장관내에서 팽윤하여 장관천공을 일으킬 우려가 있다.) **[신중투여]** 장관협착 또는 변비가 있는 환자 **[이상반응]** - 혈액투석환자 대상으로 한 연구에서 세벨라머 탄산염 정제의 이상반응과 세벨라머 염산염에서 보고된 이상반응이 유사하였다. 혈액투석환자를 대상으로 한 또 다른 교차연구에서 세벨라머 탄산염 산제의 이상반응과 세벨라머 염산염에서 보고된 이상반응이 유사하였다. - 세벨라머 염산염 연구에서, 세벨라머 염산염으로 치료받은 환자(n=ij)의 5% 이상에서 발생한 이상반응 : 구토(22%), 구역(20%), 설사(19%), 소화불량(16%), 복통(9%), 고창(8%), 변비(8%) - 복막투석환자 대상으로 한 세벨라머 염산염 연구에서 대부분의 이상반응은 혈액투석 환자에서 관찰된 이상반응과 유사하였다. - 세벨라머 탄산염 및 세벨라머 염산염의 시판 후 확인된 이상반응 : 과민반응, 가려움증, 발진, 복통, 대변 막힘, 흔하지 않은 케이스로 장폐색증과 장폐쇄증, 장관천공, 변비증상이 나타나거나 기존의 변비증상이 심해진 환자는 중증의 합병증을 피하기 위해 적절한 의료처치가 필요하다.

※ 보다 자세한 내용은 홈페이지나 제품설명서를 참고하시기 바랍니다. [문안개정연월일] 2020.11.23

(주)사노피-아벤티스 코리아 서울특별시 서초구 반포대로 235 (반포동) TeL 02)2136-9000 Fax. 02)2136-9178

Renvela® sevelamer carbonate

MAT-kr-2003697-1.0-05-2022

Fabrazyme®
agalsidase beta

COUNT ON FABRAZYME

2주 1회 투여 1 mg/kg[1]

- **Lyso-GL-3**는 신장질환, 심근병증, 뇌혈관질환과 같은 파브리병의 합병증과 관련이 있어, 이를 **모니터링하는 것은 파브리병의 관리에 도움**이 됩니다.[2]
- 혈장 **Lyso-GL-3의 감소**는 파브리병 치료 반응에 대한 **생물학적 지표**가 될 수 있습니다.[3]
- **파브라자임 1 mg/kg은 혈장 Lyso-GL-3를 유의하게 감소**시킵니다.[3,4,*]

*ERT 치료 시작 1년 후 혈장 Lyso-GL-3 중앙값(nmol/L):
조기 치료군 24.4 vs. 지연된 치료군 27.7(P=0.04)[4]

ERT, Enzyme Replacement Therapy; **Lyso-GL-3,** Globotriaosylsphingosine.

References 1. 파브라자임®주35밀리그램 제품설명서(2022.08.17) 2. Nowak A, et al. Mol Genet Metab. 2018;123(2):148-153. 3. Goker-Alpan O, et al. JIMD Rep. 2016;25:95-106. 4. Arends M, et al. Mol Genet Metab. 2017;121(2):157-161.

파브라자임®주35밀리그램(아갈시다제베타) **[효능·효과]** 파브리병(α-galactosidase A 결핍)으로 확진된 환자의 장기간 효소대체요법 **[용법·용량]** 이 약의 권장량은 체중 Kg당 1mg을 정맥 주입으로 2주에 1회씩 투여. 환자는 약의 주입 전에 해열제를 투여받아야 함. 초기 주입속도는 0.25mg/min(15mg/hour) 이상을 넘어서는 안됨. 주입 반응이 나타날 경우 주입속도를 늦출 수 있음. 환자의 내약성이 생긴 후 주입속도는 점차로 증대될 수 있음. 각각의 차후 주입 시 0.05~0.08mg/min(3~5 mg/hr) 만큼씩 주입 속도를 증가시킬 수 있음. '용액 제조 방법'은 상세 제품정보를 참조한다. **[사용상의 주의사항] 경고** 1) 아나필락시스 반응 및 알러지 반응 : 이 약 주입 중 생명을 위협하는 중대한 알러지 반응과 아나필락시스 반응이 관찰되었음 2) 주입반응 : 이 약에 대한 임상시험에서 이 약으로 치료받은 환자 중 약 50-55%에서 주입반응이 나타났으며 일부 반응은 중증이었음. 3) 심장기능 손상 : 파브리병이 진행된 환자는 심장기능이 손상될 수 있으며, 이는 주입반응으로 인하여 환자를 위험성이 더 큰 중대한 합병증에 취약하게 만들 수 있음. 4) 면역원성과 재투여 : 이 약에 대한 임상시험에서 소수의 환자가 이 약에 특이적으로 반응이 나타나는 피부반응 또는 IgE 항체를 발현하였음. **금기** 주성분이나 부형제에 생명을 위협할만한 아나필락시스 반응(Anaphylactic reaction)을 나타내는 환자 **이상사례** 1) 임상시험 중 이상사례 : 임상시험 중 이 약의 치료와 관련하여 보고된 가장 중대한 이상사례는 아나필락시스 반응과 알러지반응이었음. 이 약의 가장 흔한 이상사례는 주입반응이었으며 이 중 일부는 중증반응이었음. 중대한 및/또는 빈번히 발생하는 (5% 이상의 발생률) 이상사례는 다음에 나열된 증상들이 한 가지 또는 그 이상 결합되어 나타남. : 오한, 발열, 냉열감, 호흡곤란, 구역, 홍조, 두통, 구토, 감각이상, 피로, 가려움증, 사지동통, 고혈압, 흉통, 인후경직, 복통, 어지러움, 빈맥, 비충혈, 설사, 말초부종, 근육통, 요통, 창백, 서맥, 두드러기, 저혈압, 얼굴부종, 발진, 졸음증. 졸음증은 이 시험이 항히스타민제로 전처치한 임상시험이기 때문에 나타날 수 있음. 중재가 필요한 대부분의 주입관련반응은 주입속도를 늦추거나 일시적으로 주입을 중지하거나/하고 해열제, 항히스타민제 또는 스테로이드제제를 투여함으로써 개선됨. 보고된 또 다른 중대한 이상사례에는 뇌졸중, 통증, 운동실조증, 서맥, 심장부정맥, 심장정지, 심박출감소, 현기증, 청각저하증과 신증후군이 있음. 2) 면역원성: 임상 시험 중 이 약으로 치료받은 121명의 성인환자 중 95명(79%), 16명의 소아 환자 중 11명(69%)에게서 젠자입파브라자임 IgG 항체가 발현되었음. IgG 항체가 발현된 대부분의 환자들은 노출 후 초기 3개월 이내에 나타난 것임. 이 약에 대한 억제항체 및/또는 결합항체의 임상적 유의성은 알려진 바 없음. 다른 모든 치료단백질과 마찬가지로 면역원성에 대한 잠재성이 있음. 3) 시판 후 조사: 임상시험 중 이상사례 항에 보고된 이상사례 이외에, 다음의 이상사례는 아갈시다제 베타의 시판 후 사용기간 동안 보고되었음. : 관절통, 무력증, 홍반, 다한증, 주입부위반응, 눈물흘림 증가, 백혈구 파괴성 맥관염, 림프절병, 감각저하, 구강 감각저하, 심계 항진, 콧물, 산소포화도 감소, 저산소증, 막사구체신염 ※ 보다 자세한 내용은 홈페이지(www.sanofi.co.kr)나 제품설명서를 참고하시기 바랍니다. **최종문안개정연월일** : 2022.08.17

MAT-KR-2300392-1.0-03/2022

(주)사노피-아벤티스 코리아 서울특별시 서초구 반포대로 235 (반포동, 반포동오피스빌딩1)
Tel: 02)2136-9000 I Fax: 02)2136-9588 I https://www.sanofi.co.kr

sanofi

B BRAUN
SHARING EXPERTISE

At B. Braun, we don't just develop products. We provide solution for life.

Diacap Pro

THE TRUSTED PERFORMER

Dialog+

THE POWER OF FLEXIBILITY

B. Braun Korea | 13Fl. West Wing 440 Teheran-ro | Gangnam-gu, Seoul | Korea

Tel. 02-3459-7800 | www. bbraun.co.kr

고혈압 치료의 시작은

아서틸®정
페린도프릴

아서틸® 플러스
아르기닌정
페린도프릴아르기닌 5 mg
인다파미드 1.25 mg

후루덱스® 서방정
인다파미드 1.5mg

목표혈압으로 조절하GO![1-4]

혈압을 24시간 조절하GO![3,4]

장기간 혈압 조절을 유지하GO![5,6]

1. Hodzic E et al. *Mater Sociomed*. 2020 Mar; 32(1):4-9;11. **2.** G. Tsoukas et al. *Am J Cardiovasc Drugs*. 2011; 11 (1): 45-55. **3.** Eugene Sobngwiet al. *J Clin Hypertens*. 2019;21:1002-1008. **4.** Nedogoda SV et al. *Clin Drug Investig*. 2013 Aug;33(8):553-61. **5.** Nigel S. Beckett et al. *N Engl J Med*. 2008;358:1887-98. **6.** Patel A, et al; ADVANCE Collaborative Group. *Lancet*. 2007 Sep 8;370(9590):829-40.

SERVIER
moved by you

※ 제품에 대한 보다 자세한 정보는 최신의 제품설명서를 참고하시기 바랍니다.
[수입판매자] **한국세르비에㈜** 서울시 영등포구 여의대로 24, 23층 (우) 07320 Tel. 02-3415-8500 (www.servier.co.kr) [제품 의학정보 문의] Tel. 02-3415-8500 e-mail: medinfo.korea@servier.com

SER-VAD-2310141K-1.0

The First

세계 최초의 Statin, Compactin[1)2)]으로부터 시작된 메바로친®

Compactin은
Sankyo Co., Ltd.(現, DAIICHISANKYO)에서
1976년 Akira Endo박사에 의해 발견된
전 세계 최초의 Statin이며,
메바로친®의 모체가 되었습니다.
30여 년간 입증되고 검증되어온 효과

이상지질혈증 치료의 첫 번째 선택으로
다시 주목해야 할 분명한 이유입니다.

Reappraise, **메바로친®**

[References] 1) Endo A. *Proc Jpn Acad Ser B Phys Biol Sci,* 2010;86:484-493. 2) *Yakugaku Zasshi,* 1991;111(9):469-487.

메바로친®정 5,10, 20, 40 mg [주성분] 프라바스타틴 나트륨 [효능 · 효과] 1. 원발성고지혈증: 고콜레스테롤혈증(IIa형), 고콜레스테롤혈증과 고트리글리세라이드혈증의 복합형(IIb형) 2. 고콜레스테롤혈증 또는 복합성 고콜레스테롤혈증을 갖고 있는 환자 중 다음의 고위험군 환자에서 심근경색의 초발, 관상동맥 심질환성 사망의 위험성 감소 3. 심근경색 또는 불안정성 협심증의 병력이 있는 환자에서 심근경색, 심혈관재관류술의 필요성, 허혈성 뇌졸중, 일과성 허혈 발작 질환의 위험성 감소 [용법 · 용량] 치료를 시작하기 전에, 환자는 저콜레스테롤 식이를 시작해야 하고, 치료 중에도 이를 지속하여야 한다. 통상의 개시용량은 10 mg, 20 mg 혹은 40 mg 단일 용량으로 1일 1회이다. 환자의 반응에 따라 최대 40 mg까지 증량할 수 있다. [사용상의 주의사항] 1. 다음 환자에는 투여하지 말것 1) 이 약에 과민증 또는 그 병력이 있는 환자 2) 활성 간질환 또는 원인이 밝혀지지 않는 트랜드아미나제의 지속적 상승이 있는 환자 3) 임부 또는 임신하고 있을 가능성이 있는 부인, 수유부 4) 소아 5) 중증의 간 · 신부전 환자 6) 근병증 환자 7) 담즙울체 환자 8) HDL 콜레스테롤 상승이 동반된 hyperalphalipoproteinaemia에 의한 고콜레스테롤혈증에는 투여하지 않는다. 9) 이 약은 유당을 함유하고 있으므로, 갈락토오스 불내성(galactose intolerance), Lapp 유당분해효소결핍증(Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애(glucose-galactose malabsorption)등의 유전적인 문제가 있는 환자에게는 투여하면 안됩니다. 2. 이상반응 1) 과민증: 발진, 아나필락시스, 혈소판감소, 백혈구 감소, 용혈성 빈혈, 항핵항체(ANA) 양성, 혈액침강속도 증가, 혈관염, 루푸스양증후군, 광과민증, 혈압강하, 혈관부종, 피부근염, 소양증. 2) 소화기계: 설사, 구역, 구토, 변비, 복통, 위부불쾌감, 구내염, 가슴쓰림, 복부팽만감, 식욕부진. 3) 간장: 간기능 이상. 4) 신장: BUN, 혈청 크레아티닌치의 상승. 5) 골격근: 횡문근융해증, 관절염, 관절통, 근육병변. 6) 정신신경계: 두통, 어지러움, 불면, 말초신경병증, 우울증, 권태감, 피로, 수면장애, 인지장애. 7) 기타: 요산상승, 혈뇨, 부종, 탈모, 발기부전 ※ 본 정보는 요약된 일부의 정보입니다. 따라서 최신 변경된 허가사항이나, 보다 자세한 내용은 한국다이이찌산쿄 홈페이지(www.daiichisankyo.co.kr)의 제품 설명서나 의약품통합정보시스템(nedrug.mfds.go.kr)을 참고하시기 바랍니다.

Balancing Efficacy and Safety
메바로친® 정
(Pravastatin sodium)

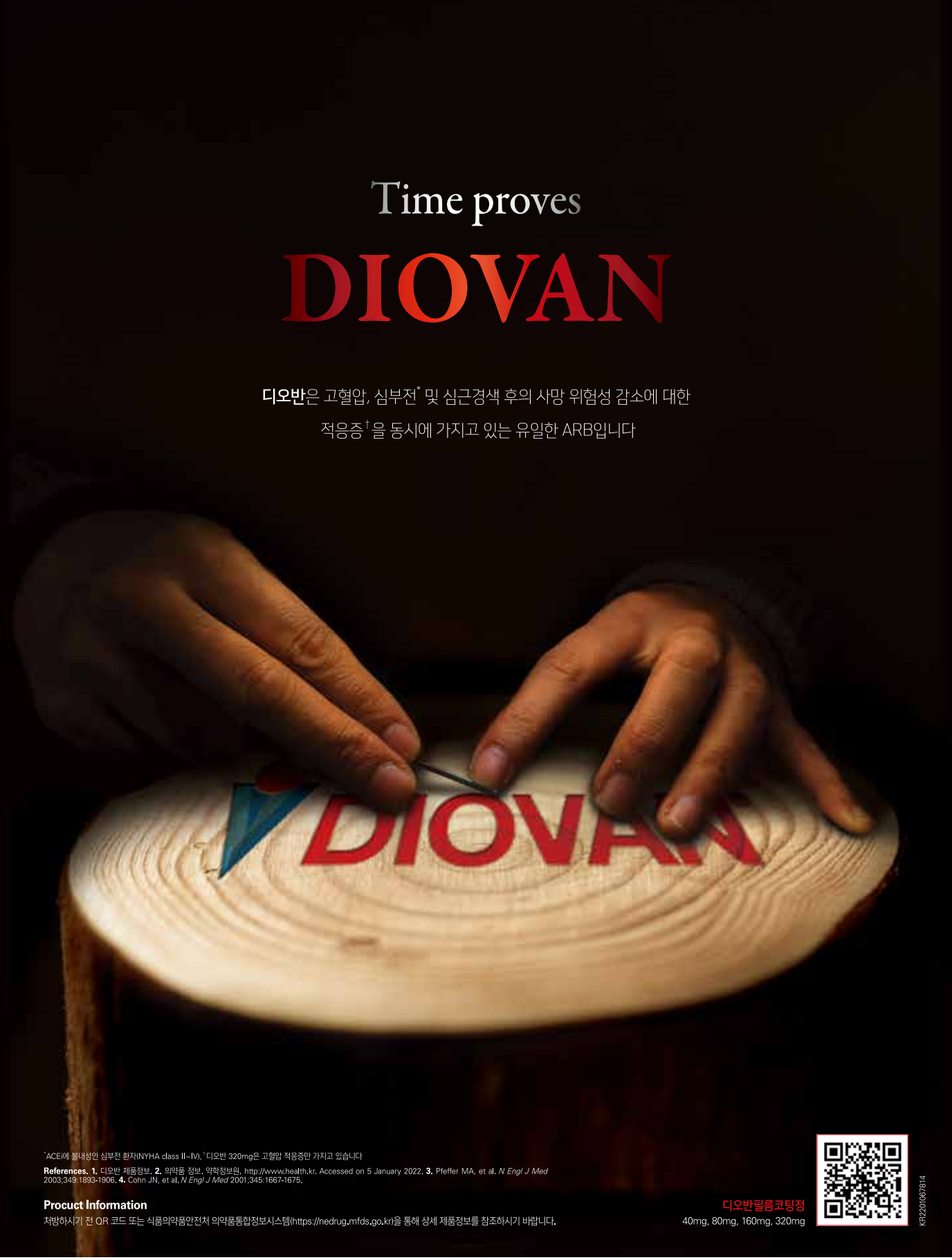
P19-071-2021.06-V1

Daiichi-Sankyo
한국다이이찌산쿄주식회사
서울시 중구 을지로5길 26 미래에셋 센터원빌딩 동관 15층
대표전화: **02-3453-3300**

Time proves

DIOVAN

디오반은 고혈압, 심부전* 및 심근경색 후의 사망 위험성 감소에 대한 적응증†을 동시에 가지고 있는 유일한 ARB입니다



*ACEI에 불내성인 심부전 환자(NYHA class II~IV), †디오반 320mg은 고혈압 적응증만 가지고 있습니다

References. 1. 디오반 제품정보. **2.** 의약품 정보, 약학정보원, http://www.health.kr. Accessed on 5 January 2022. **3.** Pfeffer MA, et al. *N Engl J Med* 2003;349:1893-1906. **4.** Cohn JN, et al. *N Engl J Med* 2001;345:1667-1675.

Procuct Information

처방하시기 전 QR 코드 또는 식품의약품안전처 의약품통합정보시스템(https://nedrug.mfds.go.kr)을 통해 상세 제품정보를 참조하시기 바랍니다.

디오반필름코팅정

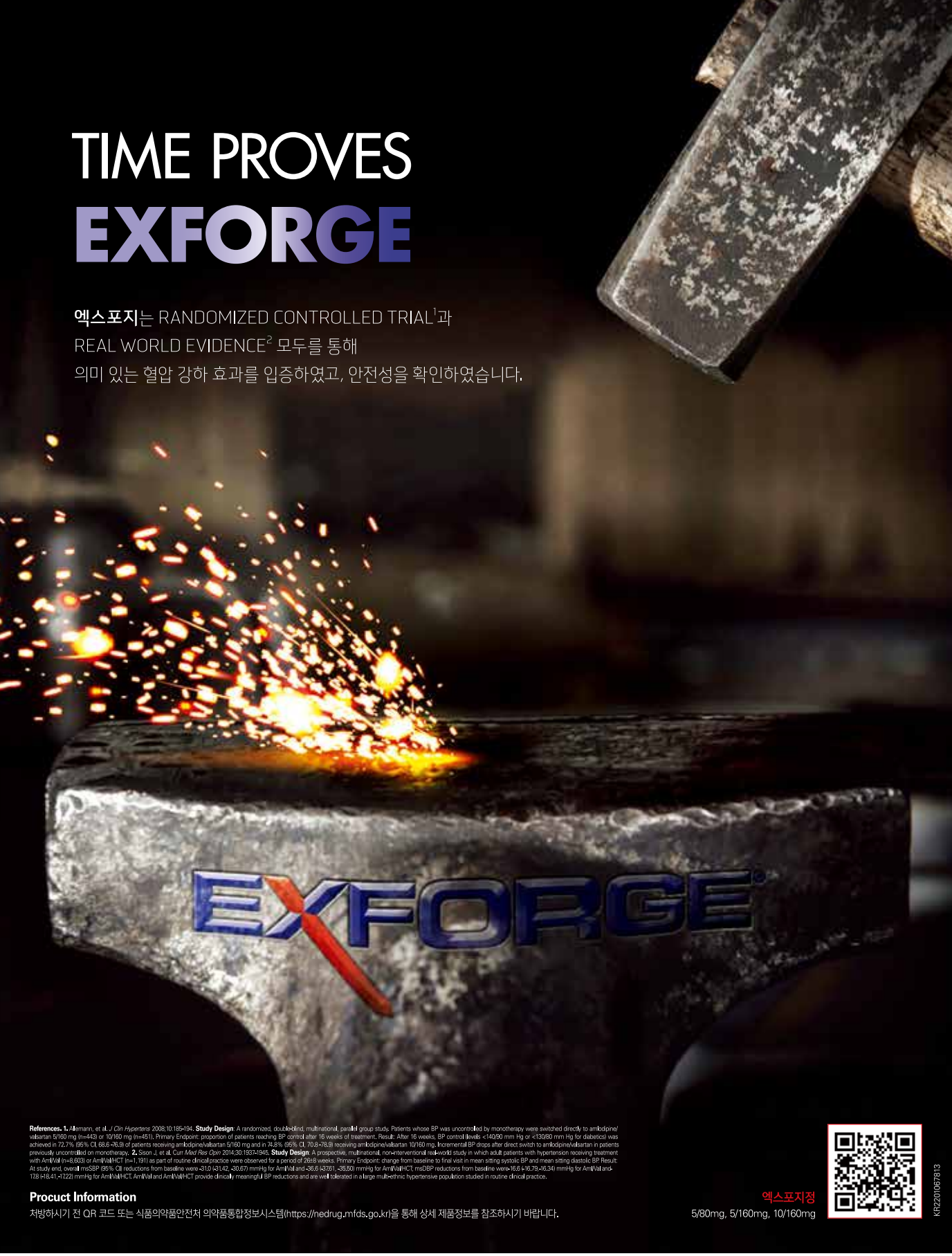
40mg, 80mg, 160mg, 320mg

KR2201067814

NOVARTIS

서울시 영등포구 국제금융로 10 Three IFC, 49층
Tel. 02) 768-9000 Fax. 02) 785-1939 www.novartis.co.kr www.novaMD.co.kr

DIOVAN



References. 1. Allemann, et al. *J Clin Hypertens* 2008;10:185-194. **Study Design**: A randomized, double-blind, multinational, parallel group study. Patients whose BP was uncontrolled by monotherapy were switched directly to amlodipine/valsartan 5/160 mg (n=443) or 10/160 mg (n=451). Primary Endpoint: proportion of patients reaching BP control after 16 weeks of treatment. Result: After 16 weeks, BP control (levels <140/90 mm Hg or <130/80 mm Hg for diabetics) was achieved in 72.7% (95% CI: 68.8–76.9) of patients receiving amlodipine/valsartan 5/160 mg and in 74.8% (95% CI: 70.8–78.9) receiving amlodipine/valsartan 10/160 mg. Incremental BP drops after direct switch to amlodipine/valsartan in patients previously uncontrolled on monotherapy. **2.** Seon J, et al. *Curr Med Res Opin* 2014;30:1937-1945. **Study Design**: A prospective, multinational, non-interventional real-world study in which adult patients with hypertension receiving treatment with AmVal (n=8,603) or AmVal/HCT (n=1,191) as part of routine clinical practice were observed for a period of 2618 weeks. Primary Endpoint: change from baseline to final visit in mean sitting systolic BP and mean sitting diastolic BP. Result: At study end, overall msSBP (95% CI) reductions from baseline were -31.0 (-31.42, -30.67) mmHg for AmVal and -36.6 (-37.61, -35.50) mmHg for AmVal/HCT; msDBP reductions from baseline were -16.6 (-16.79, -16.34) mmHg for AmVal and -17.8 (-18.41, -17.22) mmHg for AmVal/HCT. AmVal and AmVal/HCT provide clinically meaningful BP reductions and are well tolerated in a large multi-ethnic hypertensive population studied in routine clinical practice.

Procuct Information

처방하시기 전 QR 코드 또는 식품의약품안전처 의약품통합정보시스템(https://nedrug.mfds.go.kr)을 통해 상세 제품정보를 참조하시기 바랍니다.

엑스포지정
5/80mg, 5/160mg, 10/160mg

KR2201067813

NOVARTIS

서울시 영등포구 국제금융로 10 Three IFC, 49층
Tel. 02) 768-9000 Fax. 02) 785-1939 www.novartis.co.kr www.novaMD.co.kr

EXFORGE amlodipine besylate/valsartan

오마코는 _____ 입니다.

O3FA는 **심혈관보호혜택** 입증과 **알부민뇨** 진행을 약화하는 등 다면적인 약리 작용을 통해 인체 내 생리학적 효과를 나타냅니다. [1) 2)]

Benefits of Omega-3

- Reduce the risk of heart attacks and certain cancers
- Promote brain health during pregnancy and early life
- Reduce symptoms of metabolic syndrome
- Can fight inflammation and autoimmune diseases

오마코는 **의사의 처방**이 있어야 되는 **전문의약품**입니다.[4)]

※ 연질캡슐 외관에 OMACOR를 반드시 확인하십시오

- 순도 및 투여량 표준에 대해 식약처의 규제를 받음
- 분자 증류, 90% 이상의 오메가-3 함유
- 용량당 4g의 오메가-3 함유, 임상적 의미를 충족하기에 충분한 용량
- 활성 성분 EPA와 DHA, 필수 지방산의 독점 혼합을 함유하는 유일한 처방 오메가-3
- 매우 높은 중성 지방의 치료에 대해 FDA 승인

Original

Omega-3 Omacor®

Omega-3-acid Ethyl Esters 90 1,000mg

GISSI-Prevenzione trial
심근경색증 경험 환자 대상
오메가-3(1g), 평균 3.5년간 투여시
대조군 대비 All Fatal Events ▼21% [3)]

1) Mozaffarian and Wu., et al. JACC. 2011 Nov 8;58(20):2047-67.
2) Elajami and Alfaddagh., et al. J Am Heart Assoc. 2017 Jul 14;6:e004740.
3) Roberto Marchioli., et al. Lancet. 1999 Aug 7;354(9177):447-55.
4) "LOVAZA® vs. Fish-oil", lovaza.com, accessed Feb 13, 2023, https://lovaza.com/about/lovaza-vs-fish-oil/

Product Information

***오마코연질캡슐** Omega-3-Acid Ethyl Esters90 오메가-3-산에틸에스테르90…1000mg (EPA 에틸에스테르 460mg, DHA 에틸에스테르 380mg)
***용법.용량** 이 약은 투여하기 전에 적절한 지질저하 식이요법을 반드시 실시해야 하며 치료기간 중에도 계속되어야 한다. 이 약은 위장장해를 피하기 위하여 식사와 함께 복용한다. 고트리글리세라이드혈증 통상 **초회용량은 1일 2g(2캡슐)**이며, 필요시 1일 4g까지 증량할 수 있다. 1일 1회 또는 2회 투여한다.
※ 보다 자세한 내용은 제품설명서/홈페이지를 참조하십시오.

본 사 : 서울특별시 중구 정동길 14 오송빌딩 02)714-0091

KUHNIL 건일제약(주)

SYNOPEX

HEMODIALYSIS PRODUCTS

Quality Hemodialysis with SYNOPEX

SYNOPEX가 국산화를 준비 중인 혈액투석 제품들

« 이동형(가정용) 인공신장기

(Portable Hemodialysis Machine)

- 차세대 기술이 적용된 인공신장기
- 국책과제 의료기기 국산화 프로젝트 수행 중
- 가정 및 병원의 격리 장소에서 사용이 가능
- 이동형 정수기 병행 사용
- 네트워크를 통한 체계적인 관리시스템
- 사용이 편리한 인체공학적 설계

« 인공신장기용 혈액여과기

(Dialyzer for Hemodialysis Machine)

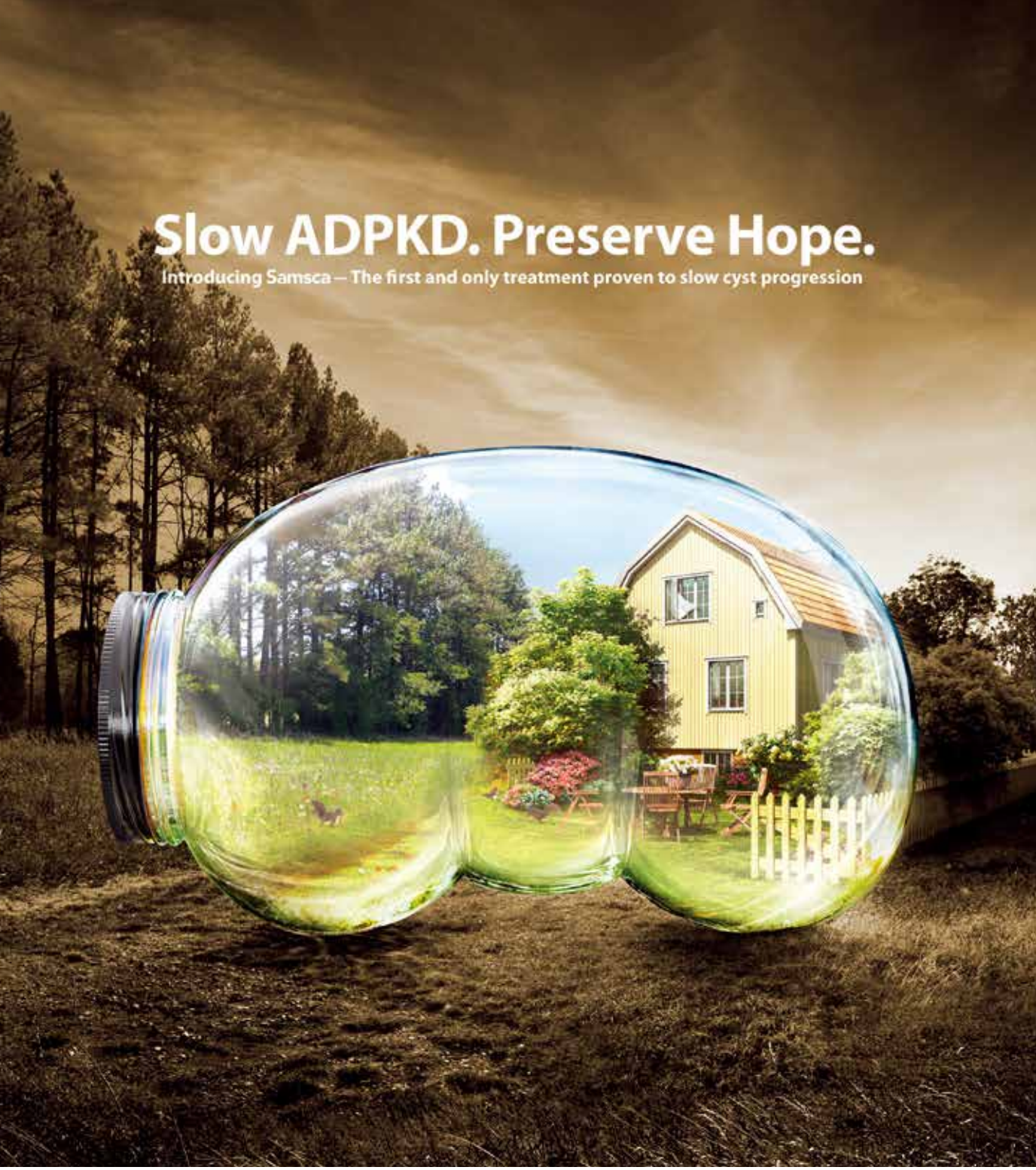
- 이동형(가정용) 인공신장기 및 CRRT 기기에 적합한 혈액여과기 개발 진행 중
- 새로운 기술이 적용된 생체 적합한 멤브레인 사용
- 국내 최초 자동화 생산설비 구축

« CRRT 기기(중환자용 인공신장기)

(CRRT Machine for Acute, Intensive Care)

- 지속적 신대체요법
  (Continuous Renal Replacement Therapy, CRRT)
- 국책과제 의료기기 국산화 프로젝트 수행 중
- 중환자, 응급환자를 위한 시스템
- 국내 최초 개발 (서울대 학술 및 임상 지원)

SYNOPEX INC.
(18487) 경기도 화성시 동탄산단7길 104
TEL 031 375 3194 **FAX** 031 378 3982 www.synopex.com



삼스카®정 ADPKD 허가사항 (저나트륨혈증 관련 허가사항은 제품설명서 참고 부탁드립니다.) [효능효과] 최초 투여시 만성신질환 1~4 단계에 해당되며, 빠르게 진행되고 있는 상염색체우성 다낭신장병(ADPKD, autosomal dominant polycystic kidney disease) 성인 환자에서의 낭종 생성 및 신기능 저하 진행의 지연 **[용법・용량] 상기 효능효과에 처방시, 이 약은 위해관리프로그램에 등록한 의사만이 처방할 수 있으며, 이 프로그램에서 정하고 있는 사항에 동의하고, 서명한 환자에 한하여 처방할 수 있다.** 환자들은 이 프로그램을 준수하여야 한다. 또한, 심각한 비가역적 간손상의 위험을 감소시키기 위하여 이 약의 최초 투여 개시 전에 ALT 및 AST 와 총빌리루빈에 대한 혈액검사가 필요하며, 투여기간 첫 18 개월 동안은 매월, 그 이후에는 3 개월에 한 번씩 간기능 검사를 반드시 실시한다. 초기용량은 1일 60mg으로 아침 식전 45mg, 8시간 이후 15mg으로 1일 2회 분할투여하도록 한다. 이후 내약성을 고려하면서 최소한 1주일 이상의 간격을 두고 1일 90mg(60mg+30mg)으로 증량하며, 이후 목표 투여용량인 1일 120mg(90mg+30mg)까지 증량한다. ※ 자세한 용법용량과 CYP3A 억제제 병용시 감량 및 주의사항은 제품설명서 참고부탁드립니다. ※삼스카®정은 저나트륨혈증에 관한 효능효과 또한 가지고 있습니다. 보다 자세한 정보는 최신의 제품설명서를 참고하시기 바라며, 홈페이지(www.otsuka.co.kr)를 통해 확인 하실 수 있습니다. ※삼스카 ADPKD 위해관리프로그램에 관한 문의는 한국오츠카제약 ADPKD 위해성 관리 계획 콜센터(02-3288-0123)로 문의 바랍니다. ※본 약제의 요양급여의 적용기준 및 방법에 관한 세부사항은 보건복지부 고시 제 2019-93호를 참고 바랍니다.

Otsuka
한국오츠카제약
Under license of Otsuka pharmaceutical Co., Ltd
06227 서울시 강남구 역삼로 226 오츠카비전빌딩
Tel 02-3287-9000 I Fax 02-3287-9069 I www.otsuka.co.kr

Samsca®
(tolvaptan)

SAM-19-007 Date of approval 2019년 7월 23일

대한신장학회
THE KOREAN SOCIETY OF NEPHROLOGY

국민 콩팥 건강 개선을 위한

KIDNEY HEALTH PLAN

KHP 2033

국민 콩팥 건강 개선안 2033

향후 10년, 2033년까지!

10% 감소 ↓
예상 만성콩팥병 환자 수

10% 감소 ↓
당뇨병 말기콩팥병 환자 비율

33% 증가 ↑
말기콩팥병의 재택치료 비율

함께 지킨 콩팥 건강, 우리가 만드는 건강한 미래!

Keeping Kidney Health Together, A Healthy Future We Make!

THE KOREAN SOCIETY OF NEPHROLOGY

KSN SEOUL, KOREA 2023

The 43rd Annual Meeting of the Korean Society of Nephrology

"SAVE KIDNEY, SAVE ALL"

KSN 2023 Secretariat

4Fl. 10, Yeoksam-ro 7-gil, Gangnam-Gu, Seoul, 06244, Korea

Tel +82-2-3452-7265 **Fax** +82-2-521-8683 **E-mail** office@ksnmeeting.kr