Chronic Kidney Disease

@ckd_ce on Twitter

Long-Term Response to Rituximab vs Tacrolimus in Children with Steroid-Dependent Nephrotic Syndrome

Long-Term Response to Rituximab vs Tacrolimus in Children with Steroid-Dependent Nephro...

https://ckd-ce.com/foundations23/

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⏰Tweetorial Alert ⏰

1) Hey #NephTwitter!

Welcome to a 🆕#accredited #tweetorial brought to you by the collaboration of @ckd_ce & @KIReports.

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2) Our returning guest author is Melvin Chan @MChanMD from @CUPedsNeph.

Our topic for 🆓CE/#CME : Early Rituximab as an Add-On Therapy in Children with the Initial Episode of Nephrotic Syndrome

#MedTwitter #nephtwitter @ISNkidneycare

6:06 AM · Apr 15, 2024   ⓘ

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3) There are no conflicts of interest and there is no industry funding for this program.
Please also check out, for more 🆓credit, the #blogposts led by @sophia_kidney at kireportscommunity.org.
FOLLOW US at @ckd_ce & at @KIReports for more expert #MedEd in #kidneydisease....

> kireportscommunity.org
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4) Let's begin with a quiz: How many pediatric patients with steroid-sensitive #nephrotic syndrome relapse within

with steroid-sensitive #Nephrotic syndrome relapse within the first year after initial steroid therapy?

a. 10%	0%
b. 20%	0%
c. 30%	**66.3%**
d. 40%	33.7%

300 votes · Final results

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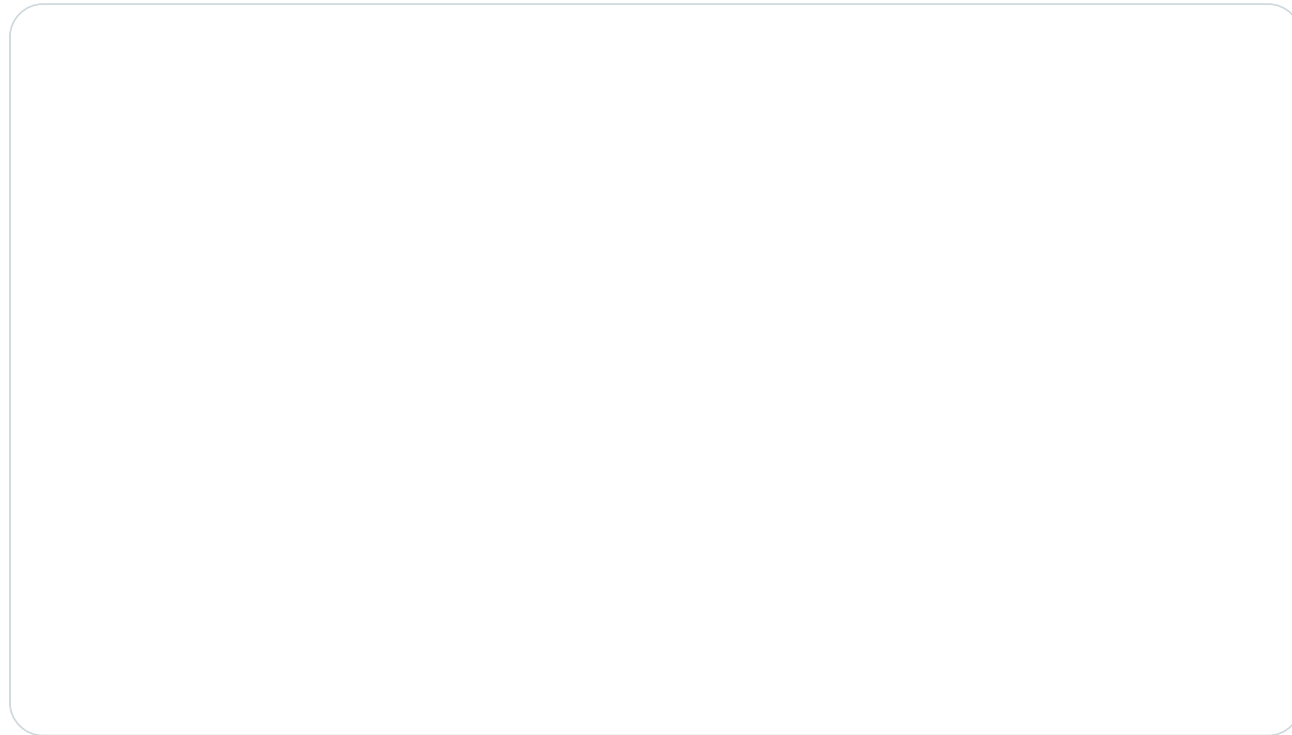**@CKD_ce** ✔ · Apr 15, 2024   𝕏
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5) The answer is 30%.
⚡Almost half of these end up #FRNS/#SDNS
⚡Relapse frequency during the first 12 months predicts adulthood relapses
⚡#Rituximab (RTX) seems to be superior to #tacrolimus for SDNS in 🔽relapses as demonstrated in the @KIReports article below

by @deniise_am

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6) One question is whether #RTX infusion, after obtaining remission with steroids, can decrease remission during the first year

We will review the recent article in @KIReports: Early RTX as an Add-On Therapy in Children With the Initial Episode

of NS

🔓

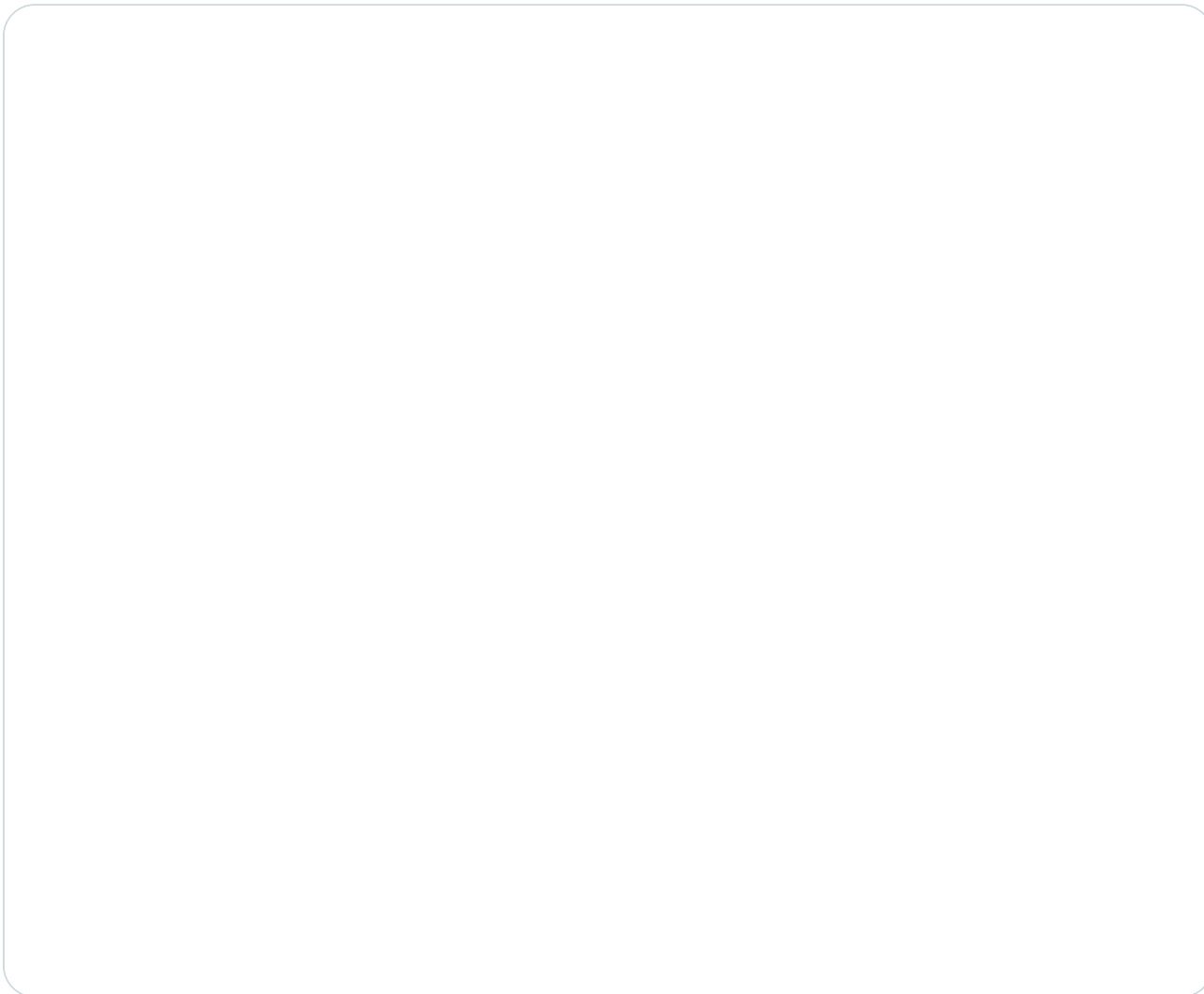**@CKD_ce** ✓ · Apr 15, 2024   𝕏

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7) Here are frequently used definitions in nephrotic syndrome (NS):
🚩Remission
🚩Relapse
🚩Steroid-sensitive (SSNS)
🚩Non-relapsing (NRNS)
🚩Frequently relapsing (FRNS)

🚩Steroid-dependent (SDNS)
🚩Steroid resistant (SRNS)
👉 🔓 pubmed.ncbi.nlm.nih.gov/27940460/

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8) We discuss here a
🔬Prospective, multicenter, open-label, single-arm clinical trial conducted at 8 🇨🇳🏥
🚩Control Group: Historical pts who rec'd 8wks or 12-14wks steroid therapy depending on remission time
🚩Treatment Group: See inclusion/exclusion; followed this protocol:

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9)
Inclusion
👉Patients aged 1-18 years old with #SSNS
👉Underwent steroid therapy during a 1 month run-in period and achieved remission
👉#CD20 >= 1% total lymphocytes

Exclusion:
⛔Secondary forms of NS
⛔Active infection
⛔Live vaccination a month before enrollment

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10) Primary Outcome: 1 year relapse-free rates
Secondary Outcomes:

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11) Clinical characteristics
📍 33 in control and 43 in treatment groups
🚫difference in gender, age at diagnosis, days to remission, renal function

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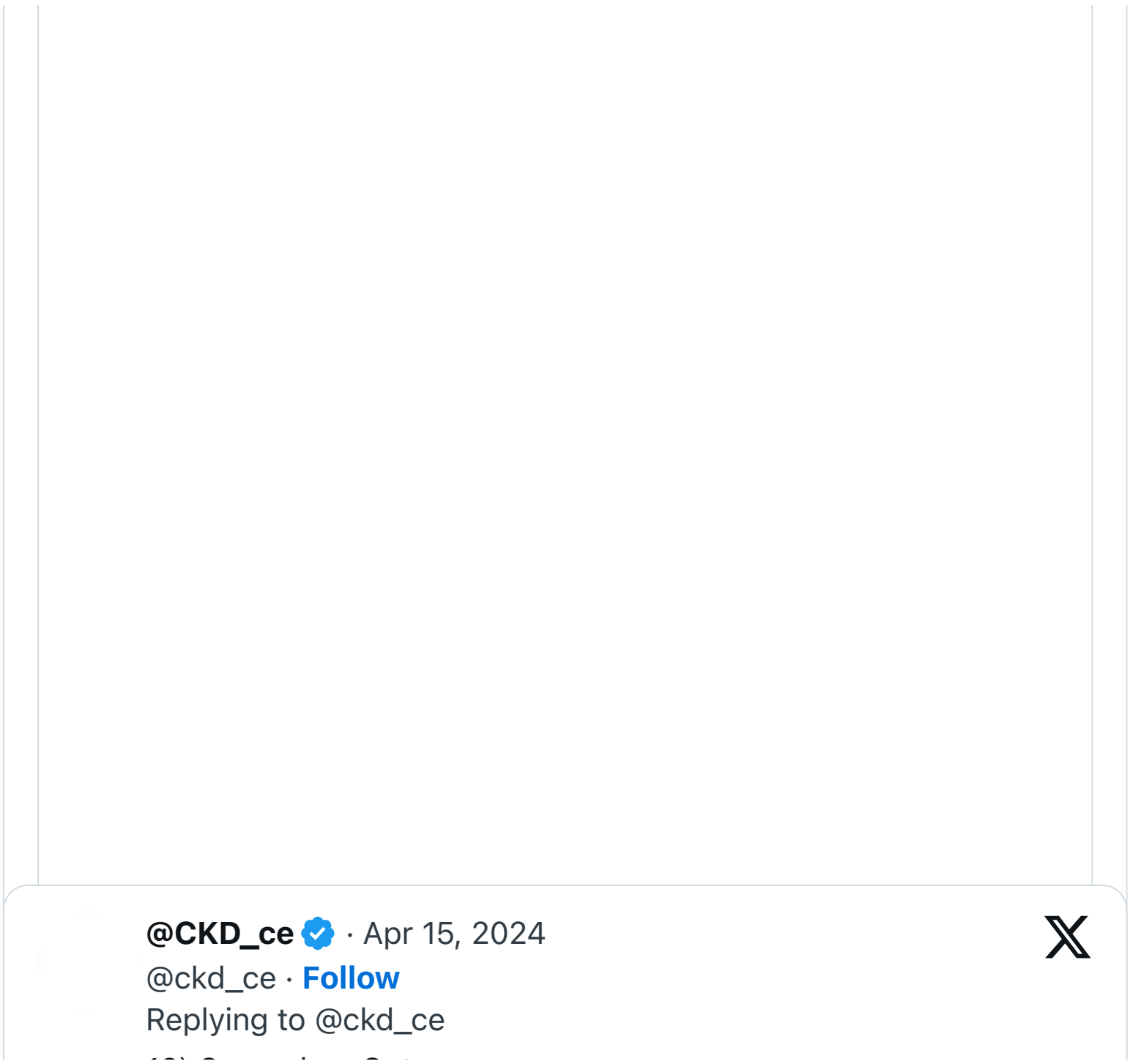
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12) Primary Outcome
🔍74% of patients remained in remission
🚫differences in response based on sex, age at onset (>= 4 years or < 4 years), or days to remission (>= 10 days or 10 < days).

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𝕏

13) Secondary Outcomes

🔍For treatment group, the median time to relapse was 123 days.

🔍🔍6 month relapse-free survival rate was higher in treatment than control (HR, 3.37; 95% CI, 1.44–7.86)

🔍🔍🔍No significant predictors for relapse in treatment group

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14) Exploratory Outcomes
🔍Lower incidence of frequently relapsing or steroid dependent #nephrotic syndrome at 12-month follow-up compared to controls (11.6% vs 42.4%, p=0.002)
🔍🔍Improved 2 year relapse-free survival

16) Learning Points for Using #Rituximab at time of NS Onset

💡Improved rates of remission at 1 year follow-up

💡Decreased rates of FRNS/SDNS

💡Well tolerated

— @CKD_ce (@ckd_ce) [April 15, 2024](#)

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17) Strengths of this study
💪Largest clinical trial on rituximab at onset of NS
💪Standardized protocols
Limitations
😢Single arm design
😢Use of post-hoc analysis in the exploratory outcomes

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18) Future Directions
🧫A trial enrolling patients with higher risk of FRNS/SDNS
🧫A randomized control trial involving pediatric patients. (There is one underway but only includes adults: clinicaltrials.gov/study/NCT03970...)

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19a) Now, let's see if you learned something!
How many patients in the control compared to treatment group experienced relapse during the first year?

=	0%
2 times	**50.5%**
3 times	24.5%
4 times	25%

396 votes · Final results

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19b) The answer is 2 times
What were the other conclusions from this study?
a. 🔽 2 year relapses
b. 🔽 rates of FRNS/SDNS

c. RTX was safe
d. All of the above

a	16.3%
b	16.8%
c	16.4%
d	**50.5%**

596 votes · Final results

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c	16.4%
d	**50.5%**

596 votes · Final results

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20) The answer is D. You just earned 0.5hr CE/CME!
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and share this #tweetorial with your followers and friends!

Claim your 0.5h CE/CME Credit Here

Name *

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What best describes your title? *

○ MD/DO

○ RN/NP

○ PA

○

○ PharmD/RPh

○ Respiratory Therapist

○ Non-Clinician Research Coordinator

○ Other

If MD/DO

○ nephrologist

○ endocrinologist

○ cardiologist (heart failure)

○ cardiologist (lipid/vascular)

○ cardiologist (interventional)

○ cardiologist (general)

○ emergency medicine specialist

○ critical care specialist

○ hospitalist

○ other internist

○ primary care provider

○ industry

○ Other

If RN/NP

○ NPP

○ ICU

○ cath lab

○ ward

○ clinic

○ academic

○ industry

○ Other

If PharmD

○ hospital/health system-based

○ community

○ academic

○ industry

○ Other

Where are you based?

○ EU/GB

○ Canada

○ USA

○ Latin America

○ Australia/NZ

○ Asia

How did you FIRST hear about our tweetorials?

☐ found it on Twitter searching in subject area

☐ found it on twitter searching for CE/CME

☐ found it on Twitter by following individual influencer

☐ found it on Twitter by following institutional influencer

☐ from LinkedIn

How many years have you been in practice?

How many patients per month do you typically see with the disease addressed in this tweetorial?

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1. In the reviewed article, how many patients in the control compared to treatment group experienced relapse of nephrotic syndrome during the first year? *

○ a. roughly the same

○ b. 2x

○ c. 3x

○ d. 4x

2. Did you follow the entire tweetorial? *

○ Yes

○ No

3. Did you find this to be an effective learning tool? *

○ Yes

○ No

4. On a scale of 1 to 5, how applicable to your clinical practice was the material in this tweetorial? *

(1)   (2)   (3)   (4)   (5)

Not At All
Pertinent

Extremely
Pertinent

5. How will this program change your practice? *

◯ Not pertinent to my practice

◯ Reinforces my practice

◯ Makes me want additional education

◯ Will change my practice

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