



"Canadian-Australasian Randomised Trial for Screening Kidney Transplant Recipients for Coronary Artery Disease."

NH|M|R|C

Investigators' Meeting Canadian Society of Transplantation
Banff, October 16, 2019



CIHR IRSC

 Canadian Institutes of Health Research / Instituts de recherche en santé du Canada



Where to find CARSK

- www.carsk.org
- **Trial registration**
The trial is registered at ANZCTR and Clinicaltrials.gov.
ACTRN126160007364488 (WWW.ANZCTR.ORG.AU)
NCT03674307 (CLINICALTRIALS.GOV)
- **Trial funding**
NHMRC Funded Clinical Trial Project Grant #1084454
CIHR Grant #389992



CARSK Publications

- *CJASN* – How I treat series Jan/2019
 - <https://cjasn.asnjournals.org/content/14/1/112>
- Trial Protocol - *The American Heart Journal Volume 214* August 2019, Pages 175-183
- Trial Economic model – AJKD in press



Hypothesis

- After screening for wait list entry, non use of cardiac screening tests is non-inferior versus the current standard care, which is screening all asymptomatic wait-listed patients for coronary artery disease (CAD) at regular intervals
- Centres were not willing to forgo screening prior to wait-listing



Inclusion Criteria:
At least 18 years of Age
No symptoms of active cardiac disease
Actively Wait-listed For Kidney Only Transplant
No previous extra-renal transplant
Anticipated date of transplantation > 12 months from date of enrollment
Anticipated to require cardiac screening before transplantation*

Informed Consent

Randomization

Regular Screening
During Wait-listing

No Screening after
Wait-listing

Note patients in both groups may be investigated for symptoms

Annual from date
of last test
-Diabetes
Angiographic
CAD not
revascularized
-PTCA
Incomplete CABG
CABG > 3 yrs ago

Every 24 months
for all others

Management of a positive non-invasive test irrespective of whether it was done for screening or symptoms will be managed as per center protocol

Patient eligibility

- Newly wait-listed and prevalent wait-list patients
- Patient must require a screening test before anticipated date of transplantation by your site's standard of care
- Suggested screening frequency
 - Diabetes, known coronary disease – yearly
 - All others 2 years
- In general patients expected to undergo transplantation in < 12 months should not be enrolled

NOTE

- CARSK is testing the intention to screen
- Use the date of the last completed screening test to guide your determination of patient eligibility
- If the date of the next screening test by SOC (based on the last available screening test) is < than anticipated date of transplantation the patient is eligible to participate

Example -The following patient is eligible

- Actively wait-listed
- 55 year old Diabetic (mature onset)
- Blood group A, 0% cPRA
- On list for 1.3 years – expected to receive an offer in next 10 months
- Asymptomatic
- Last MIBI 2017 Sept (i.e. 24 months ago)
- Even though the patient will undergo transplant within next 10-12 months, he is past due for a MIBI test by SOC
- If you are happy for him to remain on your from a clinical perspective he can be enrolled and randomized (i.e. you have to be happy with him potentially being randomized to no-screening)
- Caveat if he is randomized to regular screening the MIBI must be ordered right away and completed before the anticipated date of transplantation

Example -The following patient is eligible

- Actively wait-listed
- 50 year old male
- Blood group O, 40% cPRA
- CABG 33 months ago
- On list for 2.5 years – expected to receive an offer in next 12-15 months
- Asymptomatic, swimming 30 min 3x/ week
- Last MIBI – none since CABG, had echo 1 year post CABG which showed preserved LV function
- Even though the patient will undergo transplant within next 12 months, he will be due for a MIBI test by SOC in 3 months (i.e. 36 months post CABG)
- If you are happy for him to remain on your from a clinical perspective he can be enrolled and randomized
- Caveat if he is randomized to regular screening the MIBI must be ordered to take place in 3 months so that it is done well before the anticipated date of transplantation

Example – This patient is not eligible

- 48 year male PKD – blood group A, cPRA 0, started dialysis 18 months ago, not yet wait-listed, will likely be transplanted in next 4-6 mo
- Last MIBI – 28 months ago, normal
- Asymptomatic, active
- If you are happy for him to be randomized without further testing, he could be enrolled...
- If randomized to regular screening – he would need a MIBI right away
- But - He lives in Northern community and it may be difficult to get MIBI in next 4 mo

Site	PI	REB	Contract	Target
1. Halifax	Amanda Vinson	Approved	Approved	100 (33/yr; 3/month)
2. UM Maisonneuve-Rosemont	Duy Tran	Conditional provincial approval	Approved	50 (16/yr; ~1-2/month)
3. UM CHUM	Heloise Cardinal	Conditional provincial approval	Approved	100 (33/yr; 3/month)
4. McGill	Marcelo Cantarovich	Approved	Awaiting MCG signature	100 (33/yr; 3/month)
5. Laval	Sacha DeSerres	Conditional provincial approval	In progress	50 (16/yr; ~1-2/month)
6. UHN	Joe Kim	Conditional approval	Awaiting UHN signature	250 (83/yr; 7/month)
7. St Mike's	Ramesh Prasad	Close to final?	Awaiting STM review	200 (66/yr; 5-6/month)
8. Ottawa	Greg Knoll	Approved	Approved	200 (66/yr; 5-6/month)
9. St Joe's	Christine Ribic	Approved	Approved	150 (50/yr; 4/month)
10. London	Tony Jevnikar/ Lakshman Gunaratnam	Approved	Approved	50 (16/yr; ~1-2/month)
11. Kingston	Khaled Shamseddin	In progress	Not started	50 (16/yr; ~1-2/month)
12. Saskatchewan	Rahul Mainra	Approved	Approved	50 (16/yr; ~1-2/month)
13. St Paul's Vancouver	Jag Gill/John Gill	Approved	Approved	350 (116/yr; 10/month) 62 randomised to date
14. Vancouver General	Olwyn Johnston	Approved	Approved	300 (100/yr; 8/month) 38 randomised to date
Potential International Sites				
15. Charite, Berlin, Germany	Klemens Budde	Potential		
16. Baylor Scott White, Austin, USA	Faiza Khan/ Bruce Kaplan	Potential		50 (16/yr; ~1-2/month)
17. George Wash U, DC, USA	Dominic Raj	Potential		
18. St George's, London, UK	Debu Bannerjee	Potential		
19. Singapore				
20. Taiwan				
ANZ & SPAIN Enrolling				
Australia	Steve Chadban & Tracey Ying et al		14 sites active	326 randomised to date
New Zealand	Helen Pilmore et al			224 randomised to date
Barcelona	Edoardo Melilli			46 randomised to date
Totals				
21 sites active with 6 more to come in Canada = 27 sites	6 more international potential sites		Potential for 33 sites globally	696 randomised worldwide

CARSK Canada Goal – end of 2019

- To have every Canadian Site Active
- All sites to have enrolled 10 patients

Team Ethos/ Culture

- Horizontal not vertical
- In it for the patients/science



The moral peril of meritocracy

Thank You / Merci !!!!