

North East
London
(Barts Health / RLH)

- How did we prepare
- What happened next and why
- How did we adapt as we reached CRRT capacity
- How did the patients do

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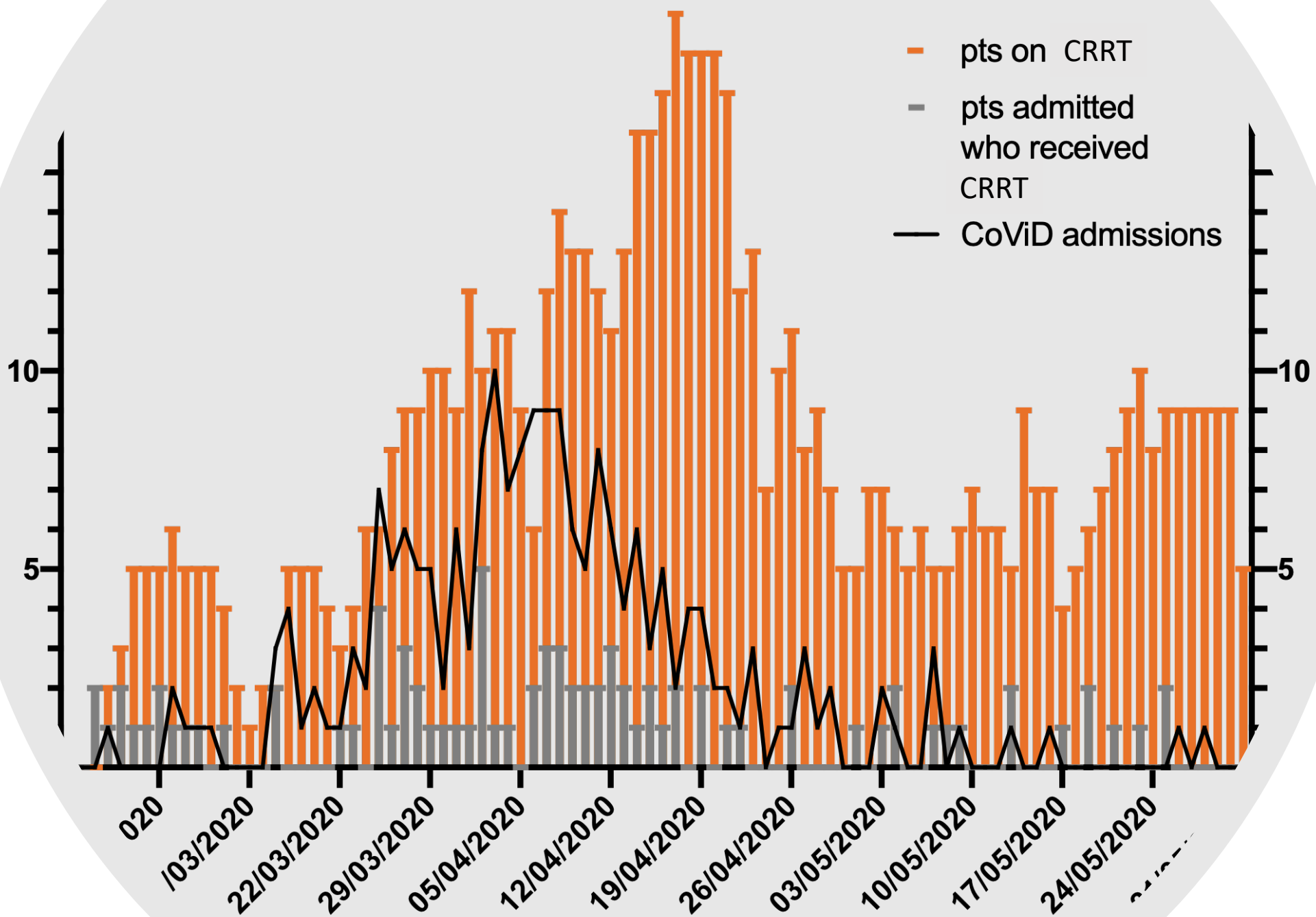
- Consultant Nephrologists from RLH re-deployed to support the medical teams at NUH, WXUH and RLH
 - Offering additional ‘on the ground’ advice and support in critical care as required
 - Increased support via dialysis unit at SBH

- Dialysis consultants pre-emptively considered patients’ ‘likelihood of survival’ if intubated for COVID related respiratory failure
 - Encouraged Renal Consultant to ICU Consultant referral for this complex group

- Critical care bed capacity was quickly overwhelmed at WXUH, NUH
 - Patients transferred to SBH and RLH

- Tried to concentrate RRT patients at RLH
 - Local 'expertise' in critical care and presence of renal unit

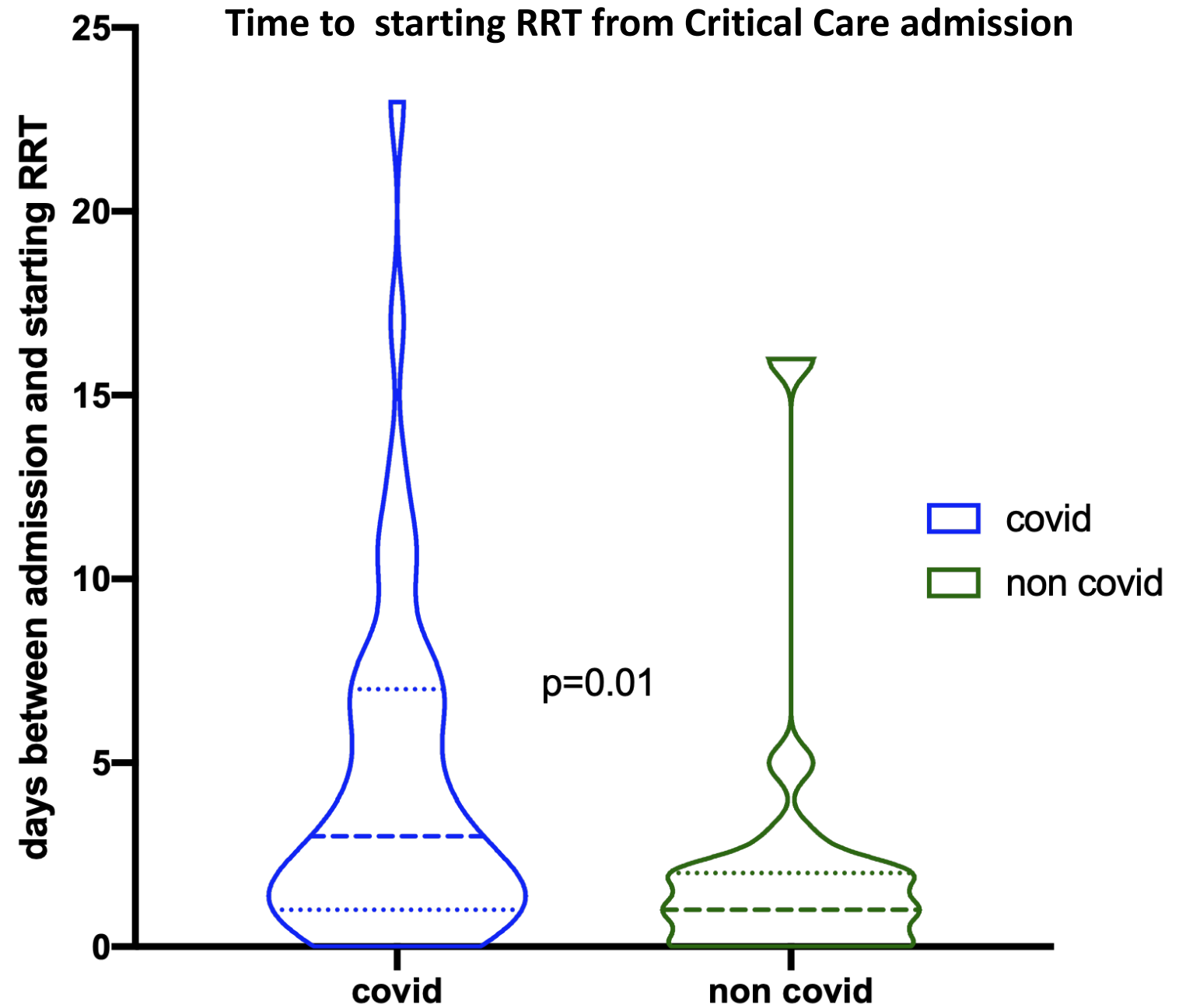
RLH



1/3/20 – 31/5/20
- 52 AKI III

Median time to starting RRT

- Covid 3 days
- Non Covid 1 day



1/3/20 – 31/5/20

70 Covid +ve patients
receiving RRT

- **Median time on RRT**

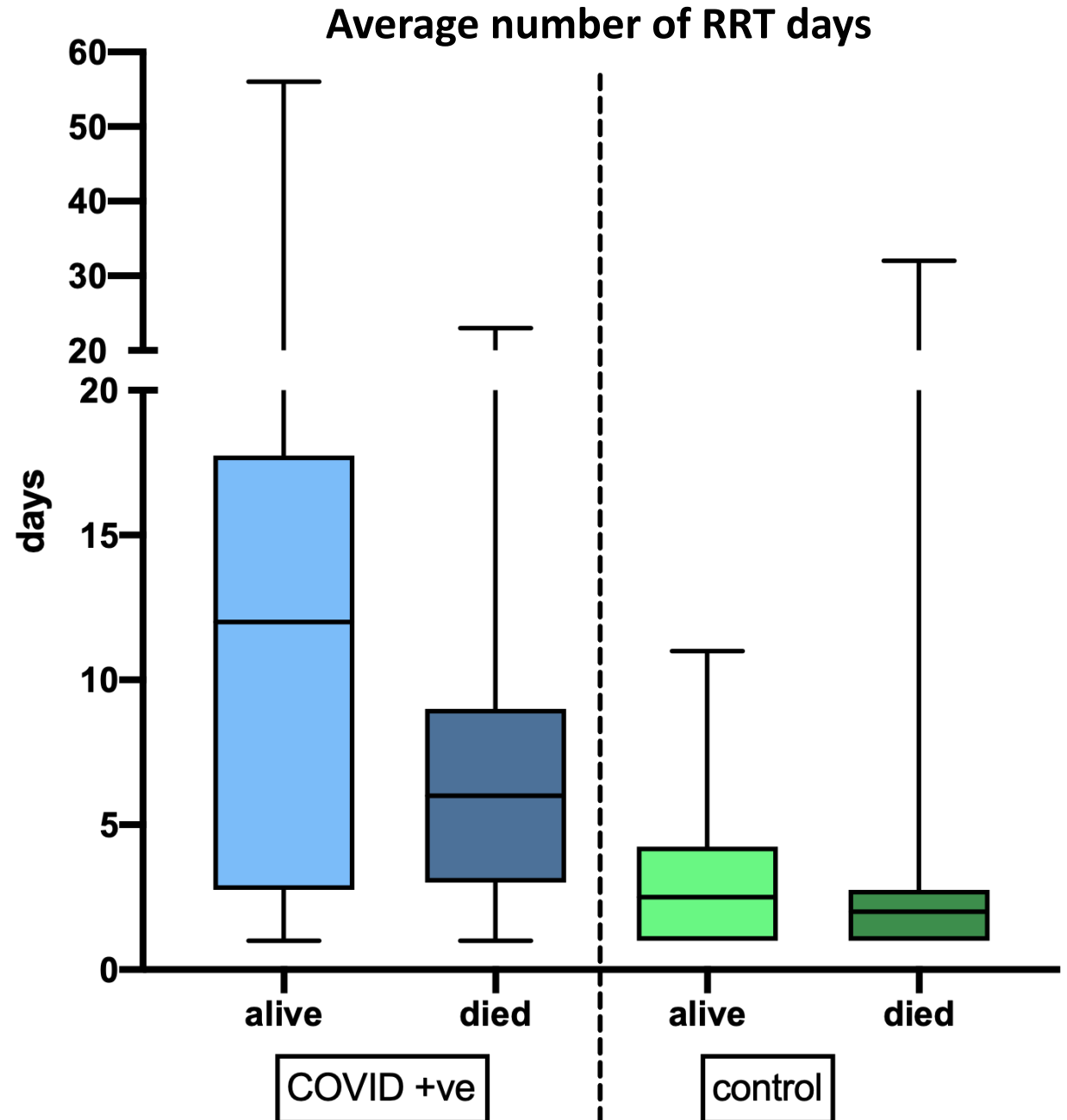
- Alive 12 days
- Died 6 days

1/9/19 – 31/11/19

50 patients receiving RRT

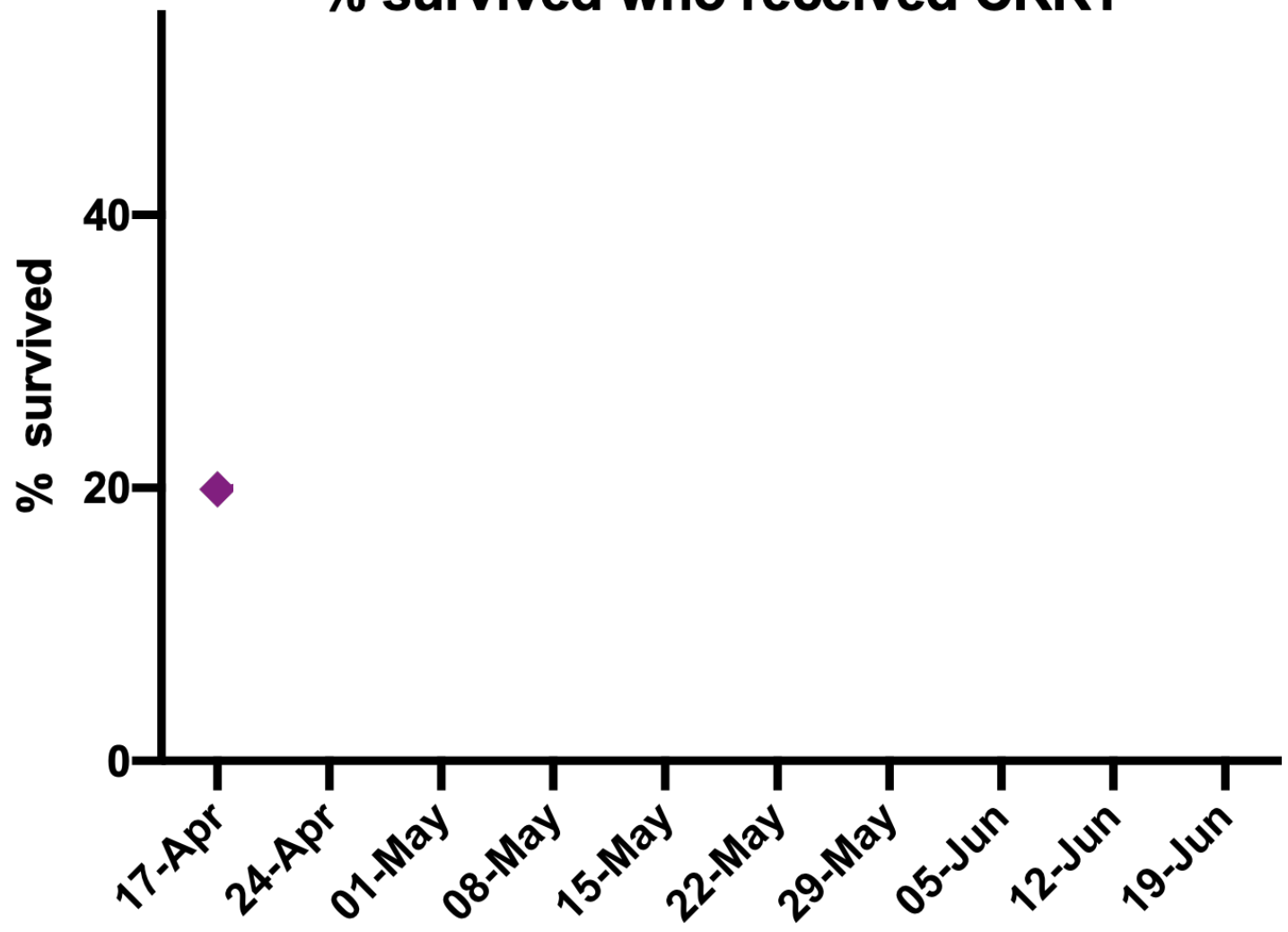
- median time on RRT

- Alive 3 days
- Died 2 days



Weekly ICNARC Reports

% survived who received CRRT



Sparked a flurry of National concern about the appropriate use of CRRT in critically ill COVID patients

April 17th

National
shortage of
CRRT capacity

ICNARC published first
outcome data of pts
requiring CRRT

- Showed very poor outcomes

Decision support tool

- Judicious approach to patient selection
- late versus early RRT paper

THE LANCET

24/4/20

Delayed versus early initiation of renal replacement therapy for severe acute kidney injury: a systematic review and individual patient data meta-analysis of randomised clinical trials

Stéphane Gaudry, David Hajage*, Nicolas Benichou†, Khalil Chaibit, Saber Barbar, Alexander Zarbock, Nuttha Lumlertgul, Ron Wald, Sean M Bagshaw, Nattachai Srisawat, Alain Combes, Guillaume Geri, Tukaram Jamale, Agnès Dechartres, Jean-Pierre Quenot‡, Didier Dreyfuss‡*

April 17th

National shortage of CRRT capacity

Increased filter clotting

- On CRRT:
- VTE prophylaxis
 - 40mg enoxaparin if D-Dimer >3
 - Renal dose LMWH therapy
 - 125u/kg tinzaparin if filter clotted <10hrs

ICNARC published first outcome data of pts requiring CRRT

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Twice weekly MDT case review with Nephrology and Critical Care

- Cross site (WXUH, NUH, RLH)
Continue / Palliative care / Transfer to RLH

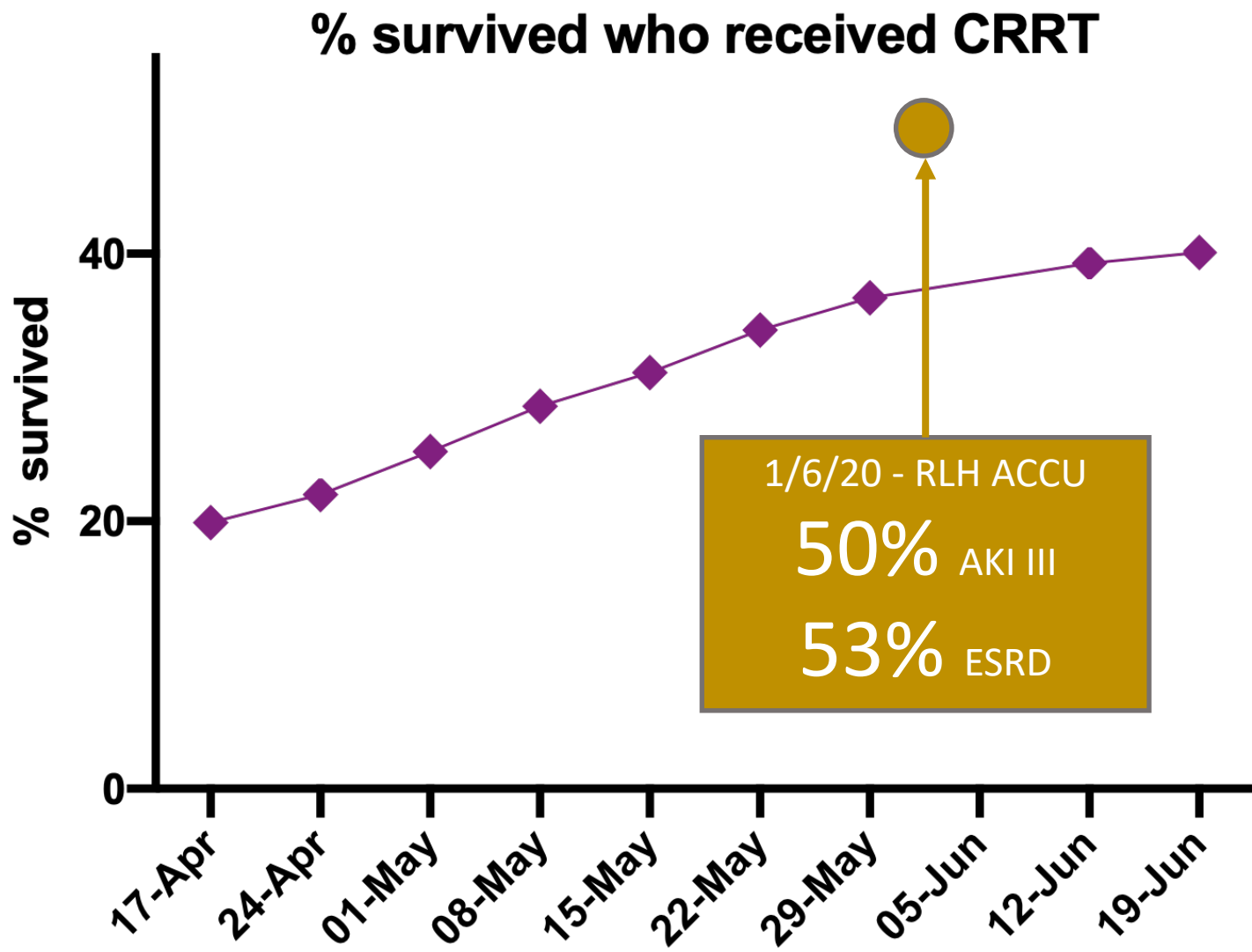
PIRRT on CRRT machines

- 10 patients

Set up 4 station IHD for ventilated patients in plumbed renal ward

- dialysis nurses redeployed to ICU
- Bespoke 'SLED' protocol
- Long wean patients

Weekly ICNARC Reports of COVID +ve patients



Conclusions

- The reason we accumulated patients requiring CRRT was 3-fold
 - Increase in patient volume
 - Time to CRRT was delayed
 - Length of time on CRRT prolonged (even in those that died)
 - Increased role for IHD
- Survival was better than expected
 - Both AKI III and ESRD
 - Referral and NIV bias
 - Need greater NIV capacity for ESRD patients
- AKI tends to recover in survivors