

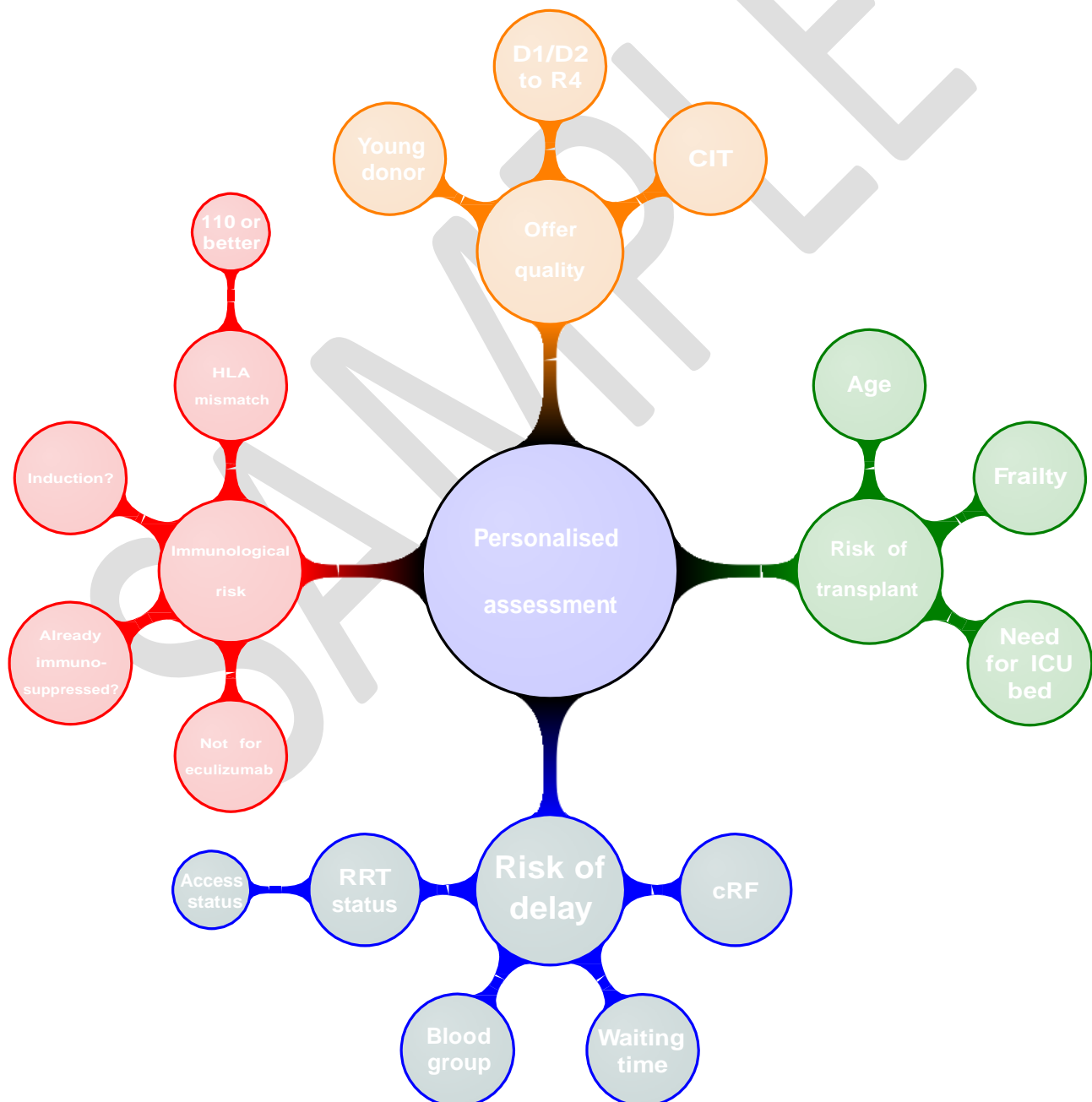
COVID-19 pandemic: kidney offer acceptance

Renal & Transplant Unit, Queen Elizabeth University Hospital, Glasgow

March 31, 2020

1 Synopsis

Kidney offer acceptance is based on a personalised multifactorial assessment of risks and benefits. Until more is known about SARS-CoV-2 in transplant patients vs dialysis patients, transplants should only proceed if the benefits are large enough to outweigh the risks.



Where possible, discuss kidney acceptance decision with a second consultant: transplant surgeon, transplant nephrologist or patient's nephrologist.

SAMPLE

2 Key considerations

2.1 Risk of transplant

- Age, comorbidity and frailty likely to predict prognosis if develops COVID-19 infection while immunosuppressed after transplant
- Caution accepting offers for patients over 70
- Avoid accepting offer or proceeding to transplant for recipients unlikely to pass the Watson Mark-One Eyeball test
- Avoid accepting offers for patients likely to need critical care admission post-operatively, e.g. patients likely to require transplant nephrectomy or native nephrectomy to make space

2.2 Risk of delay

2.2.1 Chances of transplant

Consider likelihood of another timely offer once pandemic concluded, based on cRF, matchability score, waiting time and blood group.

- cRF $\geq 90\%$ or matchability score ≥ 9 should be considered
- Blood group AB recipients should not normally be considered unless there is a clear urgency for transplant, such as impending loss of access
- Blood group B recipients should be considered. When offers from blood group O donors are received, group B recipients get a -1000 point penalty, so look out for these towards the middle and end of local match runs

2.2.2 RRT status

- Pre-dialysis patients should not normally be considered
- Home haemodialysis and peritoneal dialysis patients can generally self-isolate so should not generally be considered
- Hospital haemodialysis patients are at risk of acquiring COVID-19 infection during dialysis sessions and transport to dialysis sessions, which should be considered in risk assessment
- Patients with failing transplants and currently on immunosuppression *might* be safer with a transplant than potentially starting hospital haemodialysis while still immunosuppressed

2.2.3 Access status

- Patients with stable AV fistula at lower risk from delay to transplant
- Patients requiring frequent hospital admissions for interventions to maintain access patency have additional risk of COVID-19 infection on top of risks from regular dialysis, and risk of loss of availability of interventions to maintain access if staff shortages among transplant surgeons, vascular surgeons or interventional radiologists across the region

2.3 Immunological risk

- Good HLA mismatch may allow avoidance of induction agents, especially 000 mismatches, but could also consider level 2 mismatches (100, 010, 200, 210)
- Recipients who will need ATG or Campath should only be transplanted in exceptional circumstances
- Recipients likely to need ecuzilumab should only be transplanted in exceptional circumstances
- Consider well-matched kidneys in any recipient already on immunosuppression for a previous transplant

2.4 Offer quality

- Is this a very high quality kidney?
- Is this a better kidney than might normally be expected, eg. large negative donor-recipient age mismatch or D1/D2 donor for R4 recipient?
- Likely cold ischaemic time based on geography and vXM status
- Air transport less available while most scheduled flights grounded

3 Offer process

- Offers likely to be changed by NHSBT from named-patient to centre offers as number of centres open to transplant offers reduces
- Current matching algorithm prioritises D1/D2 kidneys to R1/R2 recipients but to maximise benefit from transplant (in order to outweigh risks), so it will often be necessary to deviate from match run to identify the recipient who will get the greatest benefit (e.g. D1 to R4), given the unusual current circumstances
- Ideally discuss offer with recipient at the time of calling recipient with potential offer
- Risks should be discussed with recipient on more than one occasion before operation, ideally before obtaining consent. The risks are also documented on the electronic consent form, but a separate discussion brings focus onto the COVID-19 specific risks and a delay before formal consent gives the recipient time for reflection
- Document all discussions in case notes
- Acceptance of a kidney offer **does not** create an obligation to proceed with the transplant if either the transplant surgeon or patient do not consider it to be in the patient's best interests

4 Evidence

The suggested cRF $\geq 90\%$ and matchability score ≥ 9 thresholds are based on the majority of our active waiting list patients with a waiting time over 5 years being over these thresholds (13/14 and 12/14 respectively) on the 30th March 2020. The other parts of the framework are based on an experience-based best guess rather than robust evidence. It is expected that more international evidence will emerge in the next few weeks and months.

5 Revision and updating

This framework is likely to be continually updated as better evidence on COVID-19 risks in renal transplant patients becomes available. Likely changes in the information known may include risk of donor transmission, risk of infection in transplant unit vs. dialysis unit and data on the different prognoses of COVID-19 infection in transplant patients compared patients with other modalities of RRT.