

The American Society of Transplantation (AST) responded to 12 items the OPTN released public comment on January 19, 2023. The responses below were entered on the OPTN website on March 14, 2023, after seeking input from the AST's communities of practice, OPTN/ UNOS Policy Committee, and Board of Directors.

### **1. Establish Member System Access, Security Framework, and Incident Management and Reporting Requirements**

The American Society of Transplantation (AST) generally opposes the proposal, "Establish Member System Access, Security Framework, and Incident Management and Reporting Requirements," and offers the following comments for consideration:

- The AST supports the issues raised in the proposal, standards are critical and necessary to establish adequate safety measures across the system; however, as proposed, the AST has significant concerns about the potential that this policy will yield significant unintended consequences given an aggressive implementation timeline.
- Information from efforts underway to pilot the information gathering process and to gain a better understanding of what risks and improvement opportunities exist with the security frameworks and controls OPTN members currently have in place should be gathered first and inform the next steps rather than move to change requirements in parallel.
- The AST recommends identifying critical IT contacts for members impacted by this proposal to better evaluate what measures are commonly in place among OPTN members, where deficiencies exist, and what requirements are necessary to satisfactorily mitigate those system vulnerabilities.

### **2. Expand Required Simultaneous Liver-Kidney Allocation**

The American Society of Transplantation (AST) offers the following comments for consideration in response to the public comment proposal, "Expand Required Simultaneous Liver-Kidney Allocation:"

- Although there is general support for appropriately aligning all multi-organ allocation policies, including simultaneous liver-kidney allocation, significant concerns were identified with this proposal as outlined below.
- There are concerns that the proposal does not sufficiently address potential impacts on single-organ transplant candidates and has the potential to further increase the number of multi-organ transplants that are performed in the setting of inconsistent practices; SLK utilization has already increased since the last policy was implemented. Any policy that increases mandated multi-organ allocation necessarily impacts single-organ transplant access. Specific items that warrant further consideration in the creation of a revised proposal include the following:
  - Identify local single-organ candidates who should be prioritized for transplant above multi-organ candidates at distances from 251-500nm. For example, pediatric kidney-only candidates, 0 ABDR mm, or those with CPRA 99%+ that are within 250nm of the donor hospital might be prioritized for these organs before they are allocated to liver-kidney candidates 251-500nm away.
  - Identify a stratum of organ quality within which organs might be allocated to local candidates before multi-organ candidates at distances from 251-500nm. For example, KDPI top 20% kidneys might be prioritized for local allocation before they are allocated to liver-kidney candidates 251-500nm away. Most of the kidneys going to multiorgan allocation have KDPI < 25.

- A clearer rationale for why the first allocation sequence for multi-organ transplants should be extended for 500nm for multi-organ allocation but remain at 250nm for single-organ allocation.
- There are concerns that the MELD >29 threshold will exclude patients listed with MELD exception (i.e., MMaT-3) from broad sharing policies.
- There are concerns that these proposed changes will perpetuate the allocation of low KDPI kidneys to high EPTS candidates to the detriment of pediatric kidney candidates.

### **3. Update on Continuous Distribution of Livers and Intestines**

The American Society of Transplantation (AST) offers the following comments for consideration in response to the request for feedback, "Update on Continuous Distribution of Livers and Intestines:"

- At present, the liver value prioritization exercise submitted for response included the following subsets of patients for inclusion in the Analytical Hierarchy Process: pediatric recipients, difficult to match recipients, high medical acuity (i.e., high MELD) recipients, geographically local recipients, prolonged duration of listing recipients, and prior living donors. Additional factors should be considered in the model to improve equity of access. Of particular note, is the need to prioritize livers for patients who are underserved by current policy, including short stature patients. Additional comment was made about potential consideration of risk factors such high cardiometabolic risk and severe obesity, but many felt that these risk factors should be assessed and optimized at the center level rather than prioritized on national allocation strategies.
- Frailty assessments should not be considered as inclusion criteria in national waitlist prioritization. Earlier transplant would potentially benefit certain frail patients, such as those with severe ascites requiring multiple paracentesis; however, frailty has been closely linked with both pre- and post-transplant morbidity and mortality. Frailty measures are often subjective and may vary significantly based on operator characteristics, resulting in introduction of bias into what should be an objective stratification of waitlist mortality. It would be dangerous to include such a measure into candidate prioritization and could potentially serve to limit access to transplant for certain vulnerable populations. If frailty assessments are included, it is essential that objective measurements, e.g., Liver Frailty Index, are factor in to avoid misrepresentation.
- Prioritization of long duration of listing should not be considered as a priority for patients awaiting liver transplant alone, but perhaps should be considered in patients who are dual listed for kidney transplant.
- Transition to OPOM could potentially improve some known inequities with the current MELD/PELD system; however, there are concerns about implementing this change concurrently with continuous allocation and without fully evaluating the impact of implementing MELD 3.0. If inequities persist after implementation of continuous distribution, staged implementation was supported with additional modeling to ensure best estimation of effect. Further as OPOM has only been used for adults a plan to expand its use in pediatrics would also be needed. Were there enough adolescents in the OPOM studies to justify their inclusion?
- There are some concerns with the inclusion of post-transplant survival in the model. While inclusion of post-transplant survival in organ allocation would address the precept of "avoiding futility," it risks introducing additional inequity. At present, all clinical methods of estimating post-transplant survival from pre-transplant metrics are inadequate, especially in the absence of donor metrics (which are not known while a candidate is on the waitlist). AUC analysis on multiple studies has shown most have c-statistic ~0.6, which is barely over

the flip of a coin. In addition, inclusion of survival might increase inequity in advanced age liver transplant candidates. Perhaps alternatives of estimated life-years gained or an age-adjusted survival benefit could be considered, but inclusion of this metric in organ allocation remains concerning in the absence of strong evidence regarding its potential effect.

- Living donors should be prioritized like they are with kidney as the number of living donors is increasing.
- The AST suggests further subdividing the hard-to-match group by reason for difficulty to better determine when these patients should receive priority.
- Location of donor recovery should be considered in the proximity metric rather than the donor hospital as the purpose of proximity points is to increase efficiency so the location of recovery is going to determine travel distance, time, and mechanism.
- With this and the other proposals for continuous distribution, it would be important and beneficial to conceptualize evaluation criteria (i.e., objective and measurable criteria by which we can determine the implementation of these new protocols are successful) ahead of their implementation.

#### **4. National Liver Review Board (NLRB) Guidance for Multivisceral Transplant Candidates**

The American Society of Transplantation (AST) offers the following comments for consideration in response to the public comment proposal, “National Liver Review Board (NLRB) Guidance for Multivisceral Transplant Candidates:”

- There is support for appropriately prioritizing multivisceral transplant candidates, acknowledging that donors are often difficult to find for these patients.
- The analysis supporting the initial Median MELD +6 adjustment appears sound; however, the rationale for the additional +3 points upon exception extension is not adequately justified. As increasing the MELD influences access for liver alone candidates, an unwarranted increase could be a concern for equity in allocation. Did the OPTN Liver and Intestinal Organ Transplantation Committee review data regarding the forecasted waiting list mortality for patients listed at MMaT+6 versus a lower threshold, such as MMaT of +5, 4, 3, especially with additional of the MELD elevator after 90 days? It was noted that MMaT of +6 would potentially prioritize MVT patients immediately in very high MMaT regions above a high MELD liver transplant alone patients (e.g., MMaT of 29+6=35). Further modeling might be necessary to assure comparative waitlist mortality between the two groups.
- The AST recommends liver programs must provide specific justification that addresses the need for a kidney when requesting an exception for multivisceral candidates including a kidney. Additionally, the guidelines should outline a mechanism by which a nephrologist from the OPTN Kidney Transplantation Committee can comment on the exception request and its medical appropriateness.

#### **5. Ethical Evaluation of Multiple Listing**

The American Society of Transplantation (AST) appreciates the analysis in, “Ethical Evaluation of Multiple Listing.” Although the data reviewed by the committee suggests there is inequity in access to multiple listing it is notable that the analyses do not demonstrate that multiple listing leads to reduced waiting time. Therefore, the AST is not in favor of limiting multiple listing to address this potential disparity as it is the most restrictive approach possible, rather than maximizing everyone’s possible capacity (i.e., multiple listing) for gaining access to organs. While not all patients have the means to travel, we should respect everyone’s autonomy to choose a transplant program(s) and not be paternalistic. AST suggests that the committee provide additional recommendations for how to provide the financial and logistical support

needed to ensure that those who will benefit the most from transplant have appropriate access to listing, including access to multiple listing for difficult to match candidates who could potentially benefit.

In addition, as continuous distribution frameworks are implemented into allocation policies for each organ type (and include score components intended to reduce inequities in access to transplant), the considerations related to multiple listing and the impact on candidates will likely be substantially different. The AST strongly recommends that the OPTN defer consideration of any policy changes in this area until after the continuous distribution allocation has been implemented and the impact on the issue of multiple listing evaluated for all organs.

## **6. Identify Priority Shares in Kidney Multi-Organ Allocation**

The American Society of Transplantation (AST) generally supports what is outlined in the concept paper, “Identify Priority Shares in Kidney Multi-Organ Allocation,” and offers the following comments for consideration:

- This policy should be specific regarding the groups at highest-risk for waitlist mortality due to current policy inequity and there should be standard criteria for prioritization of kidney-alone candidates before multi-organ transplant (MOT) candidates. Considerations for kidney-alone prioritization should include highly sensitized patients, pediatric patients, medically urgent patients with exhausted access options, and previous living donors.
- Until all organs are allocated using continuous distribution systems and there are single, integrated match runs for each donor, OPOs will continue to struggle with simultaneous lists to guide allocation.
- The allocation of low KPDI organs in the context of MOT should be governed by policies that ensure access to these organs for pediatric patients. Kidney allocation should not preclude access for appropriate MOT candidates; however, access to these low KDPI organs should be restricted based upon MOT listing criteria as are currently used for SLK.
- Further evaluation of the actual impact experienced by kidney alone candidates resulting from the inequity of multiorgan allocation policies is recommended. If the actual disadvantage is significant, then dual listing criteria and safety net policies might need to be revisited. The concept of one kidney per donor going to an MOT mandates the other kidney goes to a kidney only candidate also deserves additional analysis and consideration.
- It is strongly recommended that the OPTN develop similar, medically appropriate chronic kidney disease (CKD) criteria (e.g., end stage renal disease (ESRD), estimated glomerular filtration rate (eGFR)  $\leq 30$ ) for all remaining MOT policies where a kidney is involved, including SPK, and “safety net” policies for single organ transplant recipients who develop progressive CKD/ESRD within a year of getting a transplant.
- The proposal does not include any discussion of how MOT recipient outcomes are not currently included in center performance data. We believe that this topic needs to be addressed and MOT outcomes should be better tracked. Centers should have some accountability for these outcomes and more robust data will help determine if MOT remains in a recipient's best interest and the best interest of the organ.
- Laterality choice should be specified by the center with highest allocation priority.

## **7. Modify Heart Policy for Intended Incompatible Blood Type (ABOi) Offers to Pediatric Candidates**

The American Society of Transplantation (AST) supports the proposal, “Modify Heart Policy for Intended Incompatible Blood Type (ABOi) Offers to Pediatric Candidates.” Increasing the age limit for ABOi eligibility from younger than 2 years to younger than 18 years at the time of listing

is expected to expand access to heart transplantation in the older pediatric age group; however, there is an opportunity to consider how the proposal will interact with primary and secondary blood group allocation. In particular, consider a patient who is blood type A who is listed as ABOi heart transplant prior to 1 year of age. Per the current allocation policy, an ABOi eligible candidate younger than 1 year old is a primary candidate for A and O hearts. Upon the candidate's first birthday, they are then classified as a primary candidate for A blood group donors and secondary for O blood group donors. While this is intended to balance the inequities for O blood group recipients, this change on the pediatric candidate's first birthday decreases the likelihood these one year and older pediatric heart candidates will receive an appropriate, timely donor heart offer. To address this issue, the AST recommends modifying this proposal to increase the upper age limit of primary blood type classification for intended ABOi candidates to at least 2 years old given the waiting list mortality and morbidity in the younger than 2 years old cohort.

#### **8. Align OPTN KPD Blood Type Matching Policy and Establish Donor Re-Evaluation Requirements**

The American Society of Transplantation (AST) supports in concept the public comment proposal, "Align OPTN Kidney Paired Donation Blood Type Matching Policy and Establish Donor Re-Evaluation Requirements," and offers the following comments for consideration:

- The AST agrees with aligning blood type A, non-A1 and AB, non-A1B matching requirements.
- The suggested requirements for medical and psychosocial evaluation are appropriate; however, it is important to acknowledge that annual reevaluation requirements may add additional barriers to donation. The AST agrees with the underlying principle of this policy proposal but there is a need to balance donor readiness with the cost, time, energy, and inconvenience that comes with annual evaluations. We appreciate that the policy gives the program discretion regarding repeating anatomic assessments and 24-hour urine collection. We propose that flexibility for annual donor evaluations using telemedicine and home lab draws would increase ease and efficiency for donors and evaluating teams and translate into improved compliance.
- The infectious disease retesting at time of reevaluation should be limited to conditions that could potentially be treated prior to surgery, such as positive RPR or TB, and those that are relevant in matching, i.e., in some cases, CMV serostatus. Other serological testing can be updated at the time of pre-operative visit. Alternatively, the policy could require only testing for serologies that were previously negative as positive serologies are unlikely to change over time in an otherwise healthy individual.
- The proposed policy details that, "The donor's reevaluation deadline is based on donor's date of registration in the OPTN KPD program or the date of the donor's re-evaluation, whichever is most recent." The AST recommends modifying this detail of the policy to minimize any possible burden on donors registered in the OPTN KPDPP system. The policy should assure that no donor is required to be evaluated more than once a year, unless there is a medically supported reason that necessitates more frequent testing. Additionally, for greater consistency across programs and minimize confusion, the due date should be more specifically defined. The AST recommends that the anniversary of the date the donor is registered in the OPTN KPDPP system serve as the first reevaluation due date, and each subsequent due date should be one year from the date of the previous reevaluation.
- Notice 60 days prior to the donor re-evaluation date is adequate; however, extending this notice to 90 days would likely better accommodate donors' schedules and benefit those programs with fewer resources. All donor candidates should be informed about annual

reevaluation requirements in case a match is not identified within the first year. Providing 90 days between notification and the potential donor ineligibility date is sufficient to complete the donor's reevaluation.

- The AST does not support the proposed requirement that programs reobtain consent from potential donors annually, as evidenced by the donor's signature. Informed consent is an iterative and evolving process, and while there is agreement that programs should do their due diligence to ensure their donors understand and are actively participating in shared decision-making, we do not see the benefit of this additional administrative requirement. Documentation that the donor has been reeducated, remains engaged, and agrees to proceed with reevaluation in the electronic medical record should be sufficient. Further, it should be noted that this proposed requirement is not aligned with the current requirement in OPTN policy 14.3 which only requires obtaining the signature acknowledging informed consent prior to organ recovery, not prior to initiation of the evaluation process.
- The Committee should consider mirroring the National Kidney Registry's (NKR) requirements. By aligning the core requirements of system participation, the OPTN will reduce the burden on centers and the opportunity for unintentional non-compliance from members attempting to keep up with different requirements.

## **9. Optimizing Usage of Offer Filters**

The American Society of Transplantation (AST) is generally supportive of the public comment proposal, "Optimizing Usage of Kidney Offer Filters," as an important measure to create the efficiencies in the system needed to increase utilization of organs, particularly from older and more medically complex donors where the non-use rate has continued to be unacceptably high, and offers the following comments for consideration:

- Retaining the ability to opt out or modify the applicability of the offer filters at any time is essential given programs may adapt and change practices dependent on individual surgical provider's preferences, availability of resources, and the impact of certain events that may influence outcomes. Likewise, retaining the ability to create exceptions for certain candidates or a certain population of candidates is critically important to avoiding unintended consequences.
- The AST agrees with excluding programs that exclusively transplant pediatrics from this proposal. For those programs that transplant both adult and pediatric patients, the OPTN should monitor the impact of these changes to evaluate whether pediatric patients at these programs are disproportionately impacted by the proposed offer filters. The three-month reevaluation period may be too frequent, particularly when considering smaller or more rural transplant centers that are challenged by low volume. The AST suggests a quarterly report available to all centers denoting the current filters applied and summarizing both the observed acceptance practices and missed offer opportunities, and applying the adjusted filters no more frequently than biannually.
- With regards to the educational considerations that may be helpful for patients to understand processes related to offer filters, we agree that patient friendly education should be developed for programs to disseminate. A simple brochure or online guide should be sufficient, and it should be distributed broadly and directly by the OPTN (such as a resource always available on the website or handed to recipients during their visits).
- When a program modifies the default filters applied to specific candidates, it is critical that those modifications are not changed by subsequent generations of the model-identified filters. The changes in this proposal will create a significant administrative burden if programs are required to adjust the filters for those candidates every three months upon the generation of new model-identified filters.

## **10. Continuous Distribution of Kidneys and Pancreata Committee Update**

The American Society of Transplantation (AST) offers the following comments for consideration in response to the committee update, "Continuous Distribution of Kidneys and Pancreata:"

- The AST fully supports the efforts towards a continuous distribution allocation system.
- There are concerns that these efforts are not appropriately considering pediatric candidates. Increasing availability to more kidney-pancreas recipients risk causing further inequity to pediatric patients.
- As the longevity attribute is associated with age and racial disparities in distribution, the AST encourages avoiding scenarios such as "all donor efficiency" and "increased longevity" that exacerbate socioeconomic disparities.
- The "increased placement efficiency" scenario should also be de-prioritized, as it can contribute to increased geographic disparities.
- With this and the other proposals for continuous distribution, it would be important and beneficial to conceptualize evaluation criteria (i.e., objective and measurable criteria by which we can determine the implementation of these new protocols are successful) ahead of their implementation.

## **11. Require Human Leukocyte Antigen (HLA) Confirmatory Typing for Deceased Donors**

The American Society of Transplantation (AST) opposes the proposal, "Require Human Leukocyte Antigen (HLA) Confirmatory Typing for Deceased Donors," and offers the following comments for consideration:

- The AST agrees that accurate HLA typing is critical for patient safety; however, the proposal does not present sufficient background on the nature of the problem this proposal is attempting to solve. It is not clear whether the current risks would be reduced through the changes proposed and therefore be justified by the increased expense and testing times that will result from the proposed changes.
- Performing parallel typing on a second sample would decrease - but not eliminate - the chance of mistyping due to sample mix-up or clerical error and would result in increased turnaround time, staffing requirements, cost, and risk of error. Parallel typings also may not impact the risk of typing errors due to misidentified or rare alleles as these tend to be interpretation errors pertinent to laboratory policy.
- The proposal is based on the premise that the donor center typing is the party in error when there are discordant results; however, it's reasonable to assume that there are situations when the donor typing is correct and the recipient center typing is flawed, which further minimizes the benefit of doubling the donor testing burden because the error is occurring at a different point in the process.
- We recommend reviewing the following questions before supporting the proposed requirements:
  - What factors are responsible for donor mistyping events?
  - Are donor mistypings localized to specific typing labs or geographic regions/OPOs? In other words, is this a systemic problem requiring a systemic solution or is this better addressed by process improvements by individual OPOs/labs?
  - Are donor mistypings concentrated within a specific technique or test platform (SSO vs RT-PCR), or reagent lots?

## **12. Improve Deceased Donor Evaluation for Endemic Diseases**

The American Society of Transplantation (AST) offers the following comments for consideration in response to the public comment proposal, “Improve Deceased Donor Evaluation for Endemic Diseases:”

- The AST opposes universal testing of all donors for *Strongyloides* and recommends targeted testing instead. There are concerns that universal *Strongyloides* testing is too broad of a solution considering the frequency of this disease in the deceased donor population and the increased costs and time to the process with very little improvement benefit.
- There are concerns that the testing requirements included in this proposal are not readily accessible in all areas of the country. The long turnaround time for *T. cruzi* testing and confirmatory testing could lead to critical delays, especially as the OPO community increasingly works to recover organs from rapid donors.
- Underscoring these concerns is the unintended consequence that false positives or misinterpreting the clinical significance of test results will lead to the underutilization of organs appropriate for transplant.
- The AST supports targeted deceased donor testing for *Strongyloides* and *T. cruzi*. To mitigate some of these concerns noted above, the AST suggests modifying the proposal to include donor residency, residency of donor’s mother, previous diagnosis of *Strongyloides* and *T. cruzi*, and previous receipt of ivermectin as new parameters in the Donor Risk Assessment Interview (DRAI); a thorough educational program, including just-in-time resources, focusing on prophylactic strategies for recipients of *Strongyloides* and *T. cruzi* Ab positive donors; recommendations for how recipient transplant centers can engage the CDC parasitic division for support; and future analyses of organ utilization from donors with positive tests results.