

Notice of OPTN Guidance Changes

National Liver Review Board (NLRB) Guidance for Multivisceral Transplant Candidates

Sponsoring Committee:	OPTN Liver & Intestinal Organ Transplantation
Guidance Affected:	<i>Guidance to Liver Transplant Programs and the National Liver Review Board for Adult MELD Exception Review</i>
Public Comment:	January 19, 2023 – March 18, 2023
Board Approved:	June 26, 2023
Effective Date:	July 27, 2023

Purpose of Guidance Changes

The purpose of the National Liver Review Board (NLRB), implemented on May 14, 2019, is to provide equitable access to transplant for liver candidates whose calculated model for end-stage liver disease (MELD) score or pediatric end-stage liver disease (PELD) score does not accurately reflect the candidate's medical urgency for transplant.¹ Since implementation, the OPTN Liver and Intestinal Organ Transplantation Committee (the Committee) has regularly evaluated the NLRB to identify opportunities for improvement. The purpose of this proposal is to make improvements to adult NLRB guidance for multivisceral transplant (MVT) candidates. This proposal seeks to improve the NLRB guidance document for adult MELD exceptions by creating a section specific for MVT candidates to improve access to transplant and decrease waitlist mortality. MVT candidates are those candidates listed for any of the following organ combinations:

- Liver-intestine
- Liver-intestine-pancreas
- Liver-intestine-pancreas-kidney
- Liver-intestine-kidney

Proposal History

Prior to the NLRB implementation, MELD and PELD exception requests were reviewed by regional review boards (RRBs). The NLRB implementation was a significant process change in reviewing MELD or PELD exception requests. Because of the significance and complexity of the change, the Committee has continued to receive feedback on areas for improvement to NLRB guidance. This guidance addition represents the Committee's commitment to continuous improvement by creating a section specific to MVT candidates. These candidates have experienced worse outcomes in the post-acuity circle era,

¹ Proposal to Establish a National Liver Review Board, OPTN Liver and Intestinal Organ Transplantation Committee, June 2017, Available at <https://optn.transplant.hrsa.gov>.

require access to a specific segment of the donor population, and have not typically received MELD scores reflecting their true medical urgency.²

Summary of Changes

The *Guidance to Liver Transplant Programs and the NLRB for: Adult MELD Exception Review* will be updated to include guidance for MVT candidates to receive a non-standard exception. The new guidance recommends that MVT candidates meeting criteria for an exception be provided a score of median MELD at transplant (MMA_T) plus six with an additional three point increase every 90-days.

Implementation

Liver transplant programs and NLRB reviewers will need to be familiar with the changes when submitting and reviewing MELD or PELD exception requests.

The OPTN will update the guidance documents on the OPTN website and provide communications to the liver transplant community.

Affected Guidance Language

New language is underlined (example) and language that is deleted is struck through (example).

Guidance to Liver Transplant Programs and the National Liver Review Board for: Adult MELD Exception Review

Multivisceral Transplant Candidates

Multivisceral transplant (MVT) candidates are typically listed for the following organ combinations:

- Liver-intestine-pancreas
- Liver-intestine
- Liver-intestine-pancreas-kidney
- Liver-intestine-kidney

Because MVT candidates require multiple organs from the same donor, these candidates require access to a selective segment of the donor pool. Specifically, for intestine grafts, donors must typically meet the following criteria:

- Donor age less than 40 years old
- Donor should not be on high dose or multiple vasopressors, as this could cause intestine ischemia and dysfunction

For pancreas grafts, donors must typically meet the following criteria:

- Donor body mass index (BMI) should not be high (ideally less than 30)

² Tommy Ivanics et al. "Impact of the Acuity Circle Model for Liver Allocation on Multivisceral Transplant Candidates," *American Journal of Transplantation* 22, no. 2 (2021): pp. 464-473, <https://doi.org/10.1111/ajt.16803>.

- Donor should not have pancreatitis or a history of diabetes.

The liver grafts from donors meeting these criteria are often allocated to liver-alone candidates with high MELD or PELD scores before being allocated to MVT candidates. It should be acknowledged that the MELD exception for MVT candidates is not well established. However, candidates listed for a multivisceral transplant should be considered for an initial MELD exception equal to MMaT+6, in order to provide access to suitable donors and avoid waitlist mortality.

Candidates being listed for any liver and kidney multivisceral combination will have already met simultaneous liver-kidney criteria as outlined in OPTN Policy.

Further, MVT candidates should be considered for an additional 3 point increase (e.g. MMaT+9, MMaT+12), every 90 days they remain on the waitlist.

Transplant programs submitting exception requests for MVT candidates should include information on prior exception requests, if applicable. In addition, transplant programs must indicate in the exception narrative the reason the candidate requires a liver and intestine graft with or without a pancreas/kidney. A candidate should not be considered for a MELD exception if the reason he or she requires a liver transplant is solely for immunological reasons.

The following diagnoses are typical indications for multivisceral transplant. This list should be referenced by transplant programs when submitting exceptions for MVT candidates. However, the list should not be considered when determining a candidate's eligibility for a MELD exception. Indications for multivisceral transplant include but are not limited to:

- Intestine failure with liver dysfunction
- Diffuse portomesenteric thrombosis
- Neuroendocrine tumor with liver metastasis
- Unresectable intra-abdominal low-grade malignant tumors involving the liver or hepatic hilum, celiac/SMA trunk
- Catastrophic adhesive disease "Frozen abdomen"