OPTN

Notice of OPTN Policy and Data Collection Changes

Modify Graft Failure Definition for VCA

Sponsoring Committee:	**OPTN Vascularized Composite Allograft Transplantation Committee**
Policies Affected:	***1.2: Definitions***
	12.1: Waiting Time
	18.1: Data Submission Requirements
Data Instruments Affected:	***VCA Transplant Recipient Registration (TRR) Form***
	VCA Transplant Recipient Follow-up (TRF) Form
Public Comment:	**January 27, 2022 – March 23, 2022**
Board Approved:	**June 27, 2022**
Effective Date:	**Pending implementation and notice to OPTN members**

Purpose of Policy and Data Collection Changes

Due to some unique aspects of vascularized composite allograft (VCA) transplant, the definition of VCA graft failure and associated data collection is modified to capture outcomes more accurately. This includes updating the policy definition of graft failure, adding a policy definition for planned removal of a uterus, and revising the associated data collection on VCA Transplant Recipient Registration (TRR) and Transplant Recipient Follow-up (TRF) data collection instruments. The changes also revise policy related to waiting time accrual to reflect the most recently approved covered VCA types.

Proposal History

The previous OPTN definition of graft failure did not appropriately characterize graft failure for all VCAs, particularly for uterus. The definition outlined that graft failure occurs when "… an organ is removed, a recipient dies, or a recipient is placed on a chronic allograft support system."[1] The first two criteria were relevant to VCA broadly, but the last criterion is not applicable, as there are no chronic allograft support systems available for VCAs. Additionally, there may be instances in which a candidate is re-registered for a covered VCA, which is a marker for graft failure because the graft may no longer be suitable.

Furthermore, for uterus transplantation, the graft may be removed intentionally following a successful transplant outcome (birth of a child) when the graft is still functioning properly, so that the recipient does not require continuous immunosuppression.[2] Under the previous OPTN definition and associated required data collection, these graft removals must be reported as graft failures, even though the transplant resulted in a successful outcome. As more uterus transplants are performed in the U.S. and the overall volume of uterus transplantation continues to grow, it is important to accurately document uterus graft removal when it indicates a successful transplant outcome separately from all current reports of graft failure.

[1] OPTN Policy 1.2 Definitions (April 11, 2022).
[2] Jones, BP, Saso, S, Yazbek, J, Thum, M-Y, Quiroga, I, Ghaem-Maghami, S, Smith, JR, on behalf of the Royal College of Obstetricians and Gynaecologists. Uterine Transplantation. Scientific Impact Paper No. 65. BJOG. 2021; 128: e51– e66.

Initially, the VCA Committee proposed allowing for planned removal to be utilized by all covered VCAs since the VCA Committee acknowledged there is potential for other VCAs being removed after a successful outcome (i.e. abdominal walls after providing temporary coverage). However, during the public comment period the VCA Committee reviewed and ultimately agreed with the feedback that planned removal should be limited to uterus only since that is the only covered VCA that is currently being removed after a successful outcome.

The OPTN Board of Directors approved the policy and data collection changes at the June 2022 meeting.

Summary of Changes

The policy changes include:

- Defining graft failure for VCA transplantation separately from the current OPTN definition of graft failure as:
    - a recipient re-registers for the same covered VCA
    - the recipient dies
    - or an unplanned removal of a covered VCA
- Modifying policy to reflect the ability to accrue waiting time for the recently approved three covered genitourinary VCA organ types which includes uterus
- Modifying policy to stop the generation of VCA Transplant Recipient Follow-up (TRF) forms after a planned uterus removal

The revisions to OPTN data collection include:

- Modifying data collection on graft failure for covered VCAs to improve data quality
- Modifying data collection on hysterectomies performed for uterus transplants to improve data quality
- Modifying data collection on causes of VCA graft failure to eliminate redundancy and add clarity
- Modifying “Primary Cause of Death” to eliminate redundancy and add a new option for maternal and obstetric mortality

Implementation

Transplant hospitals that perform covered VCA transplants would need to modify data collection and reporting practices to implement this proposal, but this proposal is not anticipated to affect the operations of organ procurement organizations or histocompatibility laboratories.

This proposal will not change current routine monitoring of OPTN members. The OPTN may review any data entered in the OPTN Computer System, and members must provide documentation as requested.

The proposed data collection changes will be submitted for OMB approval under the Paperwork Reduction Act of 1995. This will require a revision of the OMB-approved data collection instruments, which may impact the implementation timeline.

This policy will be formally evaluated approximately at 1 year and 2 years post-implementation. The following metrics, and any others subsequently requested by the Committee, will be evaluated as data become available, and as sample size permits, to compare before and after the implementation of this policy.

Affected Policy Language

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

1.2 Definitions

The definitions that follow are used to define terms specific to the OPTN Policies.

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Graft failure
For all organs except pancreas and covered VCAs, graft failure occurs when *any* of the following occurs:

- A recipient's transplanted organ is removed
- A recipient dies
- A recipient is placed on a chronic allograft support system

Pancreas graft failure occurs when any of the following occurs:

- A recipient's transplanted pancreas is removed
- A recipient re-registers for a pancreas
- A recipient registers for an islet transplant after receiving a pancreas transplant
- A recipient's total insulin use is greater than or equal to 0.5 units/kg/day for a consecutive 90 days
- A recipient dies

Covered VCA graft failure occurs when any of the following occurs:

- A recipient re-registers for the same covered VCA
- A recipient dies
- An unplanned removal of a covered VCA

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[…]

Planned Removal of a Uterus
A planned removal of a uterus occurs when the graft is removed with the intent of removal recorded either pre-transplant or at time of transplant.

12.1 Waiting Time

Waiting time for candidates registered for a covered VCA begins when the candidate is registered on the waiting list. Candidates are registered by covered VCA type: upper limb, head and neck, abdominal wall,

~~genitourinary organ~~ uterus, external male genitalia, other genitourinary organ, vascularized gland, lower limb, musculoskeletal composite graft segment, or spleen.

18.1 Data Submission Requirements

Table 18-1: Data Submission Requirements

The following member:	*Must submit the following instruments to the OPTN:*	*Within:*	*For:*
Transplant hospitals	*Organ Specific Transplant Recipient Follow-up* (TRF)	*Either* of the following: • 90 days after the six-month and annual anniversary of the transplant date until the recipient's death, ~~or~~ graft failure, or planned graft removal of a uterus • 14 days from notification of the recipient's death or graft failure	Each recipient followed by the hospital

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Appendix 1: *Modifications to VCA TRR and TRF Data Collection*

Approved new language is underlined (<u>example</u>) and language that is approved for removal is struck through (~~example~~).

Data Element	Form	Current Data Collection	Removal(s) and Addition(s)
Graft Status	VCA TRR	Functioning Failed Causes of graft failure Acute rejection (Yes/No) If Yes, Banff score (0, I, II, III, IV) If Yes, Visual skin changes (Yes/No) Chronic rejection (Yes/No) If Yes, Visual skin changes (Yes/No) Sepsis/infection (Yes/No) Trauma (Yes/No) Patient requested removal (Yes/No) Other, Specify	Functioning Failed <u>Planned removal</u> <u>Date of removal</u> Causes of graft failure ~~Thrombosis (Yes/No)~~ Acute rejection (Yes/No) If Yes, Banff score (0, I, II, III, IV) If Yes, Visual skin changes (Yes/No) Chronic rejection (Yes/No) If Yes, Visual skin changes (Yes/No) ~~Ischemia (Yes/No)~~ <u>Vascular complications (Yes/No)</u> Sepsis/infection (Yes/No) Trauma (Yes/No) Patient requested removal (Yes/No) ~~Non-compliance: immunosuppression (Yes/No)~~ ~~Non-compliance: rehabilitation (Yes/No)~~ ~~Non-compliance: level of activity (Yes/No)~~ <u>Non-adherence (Yes/No)</u> Other, Specify
Graft status	VCA TRF	Functioning Failed Causes of graft failure Acute rejection (Yes/No) If Yes, Banff score (0, I, II, III, IV) If Yes, Visual skin changes (Yes/No) Chronic rejection (Yes/No) If Yes, Visual skin changes (Yes/No) Sepsis/infection (Yes/No) Trauma (Yes/No) Patient requested removal (Yes/No) Other, Specify	Functioning Failed <u>Planned removal</u> <u>Date of removal</u> Causes of graft failure ~~Thrombosis (Yes/No)~~ Acute rejection (Yes/No) If Yes, Banff score (0, I, II, III, IV) If Yes, Visual skin changes (Yes/No) Chronic rejection (Yes/No) If Yes, Visual skin changes (Yes/No) ~~Ischemia (Yes/No)~~ <u>Vascular complications (Yes/No)</u> Sepsis/infection (Yes/No) Trauma (Yes/No) Patient requested removal (Yes/No) ~~Non-compliance: immunosuppression (Yes/No)~~ ~~Non-compliance: rehabilitation (Yes/No)~~ ~~Non-compliance: level of activity (Yes/No)~~ <u>Non-adherence (Yes/No)</u> Other, Specify

Data Element	Form	Current Data Collection	Removal(s) and Addition(s)
Patient Status: Primary Cause of Death	VCA TRF	MISC – acid/base disorder MISC – fluid/electrolyte disorder MISC – multiple system organ failure (MSOF) Trauma: motor vehicle	~~MISC – acid/base disorder~~ ~~MISC – fluid/electrolyte disorder~~ ~~MISC – multiple system organ failure (MSOF)~~ ~~Trauma: motor vehicle~~ Maternal and obstetric mortality: other specify
Hysterectomy	Uterus TRF	Functional Status – Uterus Hysterectomy performed following successful delivery or due to complications: has the recipient received a hysterectomy since transplant of uterus, either performed following successful delivery of neonate or due to complication(s). This field is required. Yes/No/Other – specify	Functional Status – Uterus Hysterectomy performed following successful delivery or due to complications: has the recipient received a hysterectomy since transplant of uterus, either performed following successful delivery of neonate or due to complication(s). This field is required. Yes/No~~/Other - specify~~ If yes then specify reason: Successful delivery of neonate Complication of graft Reproductive Failure Other: _____

Appendix 2: *Data Definitions*

Approved new language is underlined (example) and language that is approved for removal is struck through (~~example~~).

VCA TRR

Planned removal: has the recipient had a planned removal of a uterus with the intent of removal recorded either pre-transplant or at time of transplant.

Date of removal: If the recipient's graft status is "Planned removal", enter the date of removal using the standard 8-digit format of MM/DD/YYYY.

Vascular complications (Yes/No): has the graft failed due to vascular complication (not limited to thrombosis or ischemia).[3]

Non-adherence (Yes/No): has the graft failed due to recipient non-adherence to post-transplant treatment (i.e. immunosuppression, rehabilitation, level of activity).[4]

VCA TRF

Planned removal: has the recipient had a planned removal of a uterus with the intent of removal recorded either pre-transplant or at time of transplant.

Date of removal: If the recipient's graft status is "Planned removal", enter the date of removal using the standard 8-digit format of MM/DD/YYYY.

Vascular complications (Yes/No): has the graft failed due to vascular complication (not limited to thrombosis or ischemia).[5]

Non-adherence (Yes/No): has the graft failed due to recipient non-adherence to post-transplant treatment (i.e. immunosuppression, rehabilitation, level of activity).[6]

VCA TRF (Patient Status): Primary Cause of Death

Maternal and obstetric mortality: other specify: was the recipient's death related to pregnancy or obstetric causes. Specify the cause of death in the "Specify" field.

Uterus TRF

Hysterectomy (y/n) and date, performed following successful delivery or due to complication: has the recipient received a hysterectomy since transplant of uterus, either performed following successful delivery of neonate or due to complication(s). This field is required.

Yes/ No/ ~~Other- specify~~

[3] VCA Committee Meeting Summary, September 8, 2021, OPTN, accessed November 3, 2021, https://optn.transplant.hrsa.gov/media/g0hlxcgy/20210908_vca-committee-meeting-summary.pdf.
[4] VCA Committee Meeting Summary, May 12, 2021, OPTN, accessed November 3, 2021, https://optn.transplant.hrsa.gov/media/4661/20210512_vca-committee-meeting-summary_final.pdf.
[5] Ibid.
[6] Ibid.

~~If Other, specify the reason for the hysterectomy in the Specify field~~

If yes then specify reason:

- Successful delivery of neonate
- Due to complication(s)
- Reproductive Failure[7]
- Other:_____

[7] VCA Committee Meeting Summary, October 7, 2021, OPTN, accessed December 2, 2021, https://optn.transplant.hrsa.gov/media/g50hpn0s/optn_vca_summary_20211007_final.pdf.

Appendix 3: *Patient Status: Primary Cause of Death Selection Options* Changes

Section of TRF	Remove	Add
Patient Status: Primary Cause of Death	MISC – acid/base disorder MISC – fluid/electrolyte disorder MISC – multiple system organ failure (MSOF) Trauma: motor vehicle	Maternal and obstetric mortality: other specify