OPTN/UNOS Vascularized Composite Allograft (VCA) Transplantation Committee
Meeting Minutes
April 7, 2017
Chicago, IL

L. Scott Levin, M.D., FACS, Chair
Linda C. Cendales, M.D., Vice Chair

Introduction

The VCA Committee met in Chicago, IL on April 7, 2017 to discuss the following agenda items:

1. Policy Oversight Committee Update
2. Latest VCA Data
3. Update on OPO Guidance Project
4. Board Nominations
5. Project Discussions
6. Uterus Transplantation
7. Consensus Conference
8. Scientific Discussion
9. Member Recognition

The following is a summary of the Committee's discussions.

1. Policy Oversight Committee (POC) Update

The Vice Chair provided an overview of recent POC actions from the last two months.

Summary of discussion:

The POC serves three central roles for the OPTN. These include:

1. New project consideration
2. Readiness for public comment
3. Annual review of project portfolio

With the above mentioned roles in mind, the POC recently reviewed and approved nine new projects in January and February 2017 (VCA Committee project in italics):

Project	Goal Assignment
Education To Reduce Unnecessary Discard of Kidneys with Small RCC Found Pre-Transplant (DTAC)	#1 (Increase number of transplants)
Assessment of Transplant Programs Conducting A2/A2B Deceased Donor Kidney Transplants to Blood Type B Recipients (MAC)	#2 (Equity in access to transplants)
Expediting Organ Placement (OPO Committee)	#1 (Increase number of transplants)
Tracking Pediatric Transplant Outcomes Following Transition to Adult Transplant Programs (Pediatric Committee)	#3 (Improve outcomes)
Guidance on Optimizing VCA Recovery from Deceased Donors (VCA Committee)	*#1 (Increase number of transplants)*
Pancreas Program Functional Inactivity (Pancreas Committee)	#3 (Improve outcomes)
Lung allocation score (LAS) Refinements and clean-up (Thoracic Committee)	#3 (Improve outcomes)

Project	Goal Assignment
Modification of the Lung TRF to include CLAD (Thoracic Committee)	#3 (Improve outcomes)
White Paper Addressing the Escalation of Treatment for the Purpose of Advancing a Patient's Status on the Waitlist (Ethics Committee)	#2 (Provide equity in access)

The Vice Chair also profiled the resource allocation across the OPTN strategic goals, and the distribution of all OPTN committee projects for each strategic goal.

The Chair thanked the Vice Chair for the update and opened the floor for discussion. One member commented that the Strategic Goal that appears most relevant for the field of VCA transplantation is Goal I (Increasing Transplants). To-date, the Committee was not aware of VCA access or safety issues (Goals II and IV respectively). Additionally, it may be premature to examine VCA outcomes (Goal III), as data collection on VCA transplants is under way with UNOS staff facilitating a reach back on transplants prior to July 3, 2014. Thus, it seemed that future VCA projects should be aligned with Goal I. The Chair commented that he was pleased with the past Committee projects that have integrated VCA into the OPTN, and he is optimistic for the future.

UNOS staff also shared an update on the current Committee projects and linkages with the Strategic Goals.

Next steps:

-The Vice Chair will continue to serve as a representative to the POC and keep the Committee informed of discussions.

2. Latest VCA Data

UNOS staff shared a profile of the latest VCA candidate registration and transplant activity.

Summary of discussion:

The OPTN has been collecting data on VCA candidates since July 3, 2014. Data on VCA transplants and recipient follow-up have occurred since September 1, 2015. UNOS staff have provided updates on VCA activity to the Committee every six months since this time.

UNOS staff profiled:

- VCA Data Collection (to-date)
    - UNOS staff reminded the Committee of the three types of data and intervals these data are submitted to the OPTN. This include the candidate registration, at transplant, six months post-transplant, and annually from the date of transplant. UNOS staff also clarified the data collection forms used, recipient and follow-up, these forms are approved at the level of the federal government. (U.S. Office of Management and Budget).
- VCA Programs
    - There are 61 approved VCA transplant programs in the U.S. Of which, seven transplant programs have active VCA candidates.
- VCA Waiting List
    - 40 VCA candidates have been registered with the OPTN between July 3, 2014 and March 24, 2017.
    - There are currently 12 VCA candidates registered with the OPTN.

- VCA Transplants
    - 22 VCA transplants have been performed in the U.S. between July 3, 2014 and March 24, 2017.
    - These transplant have occurred at 14 of the 61 approved VCA transplant programs.
- VCA Donors
    - There have been 16 VCA donors in the U.S. between July 3, 2014 and March 24, 2017.
    - These 16 donors also donated 90 solid organs for transplant.
    - These donors have been coordinated by 10 of the 58 OPOs in the U.S.
- VCA Data Collection (future efforts)
    - UNOS staff are working with VCA transplant programs that have performed cases that pre-date the OPTN's involvement. The Committee feels these data are essential to understanding VCA transplant outcomes. However, submitting these data to the OPTN are *optional* for VCA transplant programs.

      UNOS staff are also working through data collection challenges posed by the interim solution. Staff are reviewing the data collection process to address these challenges, and will also be reaching out to VCA programs to facilitate collection.

The Chair thanked UNOS staff for the very informative data presentation and opened the floor for questions. Over the course of the discussion, members were pleased that VCA specific data is available from the OPTN, both in identifying individual VCA transplant programs and aggregate VCA transplant data. UNOS staff stated the availability of VCA data on the OPTN website will expand in the near future once Board-approved projects are implemented.

The Committee briefly discussed the difference between the number of approved VCA programs and the low number of VCA programs that have actually performed VCA transplants. One member verbalized that the number of VCA programs (61) was encouraging and demonstrated growing momentum in the field. Another member shared his opinion that some programs may have come on-line if a unique patient was identified and stimulated conversations within the hospital. Another member expressed caution about the number of approved programs. It was likely that within this group, there were programs in different stages of operation; those that were in early development and had protocols available, those that were ready to register an initial patient, and those that have demonstrated success in VCA transplant.

Following the presentation of data on VCA donor information, the Committee held a brief discussion on donor-centric concerns. This included discussion on the timing of VCA procurement related to solid organ procurement. Members shared their respective experiences at donor hospitals; some VCAs were procured prior to solid organs, and some were procured after solid organs. Though, the vast majority of VCAs are procured *prior* to solid organ and tissue procurement. The OPO Guidance Subcommittee Chair shared that these experiences will be included in the guidance document currently under development. At the conclusion of the discussion, members of the Committee felt there was an opportunity to draft a journal paper to address questions on VCA donation.

The Committee also held a short discussion on the challenges for submitted data to the OPTN through the interim solution. One member asked, are VCA transplant programs *required* to submit data, much like their solid organ counterparts? UNOS staff responded that VCA programs are required to submit data to the OPTN for transplants that have occurred after September 1, 2015. The Chair then asked the Committee, would there be support to have VCA data collection integrated into the OPTN's electronic systems? UNOS staff cautioned the Committee about an ambitious project to integrate data collection; this would require the normal

project development process, Board approval, and IT programming. One Committee member made suggestions for small changes that could be made for an interim solution to enhance function and safety. A motion was made and seconded to add a VCA candidate's name to the VCA Candidate List located in Secure Enterprise (Yes-11, No-0, Abstain-0). One member then commented that data collection efforts should be targeted to individuals at transplant hospitals that were most familiar with OPTN forms and could facilitate reporting. One such individual would be the transplant administrator of the hospital.

The Chair then segued to a discussion to identify the need for VCA transplants. He acknowledged that gathering this needs assessment data was clearly not the role of the OPTN. Though, it was likely there were organizations that did have data that could demonstrate the potential need for VCA transplantation. One member verbalized his support for the Chair's comments, noting that understanding the denominator is an important question. The Chair then asked representatives from the Department of Defense (DoD) about the prevalence of conditions in combat wounded that could lead to considering VCA transplant. These individuals responded that there is good data on some types of injuries e.g.: unilateral and bilateral amputees, but there was less awareness of specific data on severe facial injuries. What is not known in this population is the number of individuals who have been evaluated for VCA transplant. Similarly, there is not a good understanding of "negatives screening"; criteria that rule out VCA transplant candidates.

The Chair thanked members for their insight, noting there could be a future need for a "Research Subcommittee" to look at the prevalence of conditions that could lead to VCA transplantation, and answer key questions for policy development.

Next steps:

-The Committee will continue to receive regular data updates at in-person meetings.

-The Chair asked the Committee to consider available data on PHS Increased Risk donors at a future call or meeting.

-UNOS staff will keep the Committee informed on discussions to integrate VCA into OPTN electronic systems.

-UNOS staff will contact leadership of VCA programs with outstanding required data (post July 3, 2014) and request historical data (pre July 3, 2014).

3. Update on OPO Guidance Project

The Chair of the OPO Guidance Subcommittee shared an update of the group's recent work.

Summary of discussion:

The Subcommittee Chair provided an update on this project, noting the alignment is with Goal I of the OPTN Strategic Plan (Increase the Number of Transplants). In general, guidance documents:

- Designed to inform medical professionals about concepts or processes related to transplantation.
- May include recommendations, strategies, or information that helps make decisions about appropriate care.
- These documents do not carry the monitoring or enforcement implications of policy or bylaws.

The OPO Guidance Subcommittee met by conference call on March 24, 2017. During this call, the group discussed:

- Acknowledged VCA programs have historically driven the donation process.
- Noted that interference with solid-organ procurement has not been seen.
- The intended audience – OPOs "on the fence" or without protocols/SOPs.
- Discussed *how* to identify potential contributors.
- Commitment from AOPO to support this project.
- Need to inform AST, ASTS, AOPO, NATCO, and ASRT of the efforts.

The Subcommittee also discussed a draft outline for the guidance document. To gather effective practices from around the U.S., the Subcommittee felt it was appropriate to seek input from those OPOs who have successfully recovered VCAs from deceased donors. Specifically, subject matter experts (SMEs) in hospital development, family support, clinical operations, and public relations would be sought. A collaborative process of developing this guidance will yield a robust and valuable tool.

The Subcommittee Chair then provided an overview of the timeline for the project with the following tentative dates:

- Committee review draft guidance document and assess readiness for public comment in November 2017
- Public comment in January 2018 (tentative)
- Post public comment review in April 2018 (tentative)
- Board consideration in June 2018 (tentative)

The Subcommittee Chair shared his opinion that seeking public comment on this guidance document would be positive. This public review would allow an opportunity to raise awareness and receive feedback about VCA donation and transplantation. In support of this concept, he cited the nearly 300 registrations for a webinar on Increased Risk Donor Organs that occurred in April 2017. UNOS staff commented that a guidance document that meets a need of the transplant community is only one part of this project. A second part that will be created later is an educational resource that will be available on the OPTN and TransplantPro websites.

The Chair thanked the Subcommittee Chair for the insightful update and opened the floor for discussion. One member asked, with 50 VCA transplants in the U.S. is there a mechanism for supporting the donor and recipient families? The Subcommittee Chair responded that every OPO has staff who are responsible for support of donor families. These families and recipients often do meet and this is a powerful moment. One member that shared her perspective that <u>any</u> recognition of a donor's gift would be very meaningful to a donor's family. The Chair thanked them for their insight and asked the Committee to keep this consideration in mind with future project discussions.

<u>Next steps:</u>

- Full Committee conference calls will be scaled back to every other month to allow the OPO Guidance Subcommittee the time to move forward with this project.

-The Subcommittee Chair will provide routine updates to the Committee on the progress.

4. Board Nominations

UNOS staff shared a presentation on upcoming vacancies on the OPTN/UNOS Board of Directors.

Summary of discussion:

UNOS staff are approaching all OPTN committees to solicit interest in the OPTN/UNOS Board of Directors. The speaker profiled the composition of the Board (areas of representation, responsibilities of members, role of regional counselor, needed backgrounds/skill sets, and term length). Qualifications for Board positions were also reviewed. These included:

- OPTN committee experience for Board positions,
- MPSC, POC or prior Board experience for the President and Vice President positions.

Interested Committee members are encouraged to email UNOS staff by August 2017 to highlight their interest in a Board position. Thereafter, the OPTN/UNOS Nominating Committee will review interest forms to develop a slate of nominees. Board elections will be held in the early spring of 2018.

Next steps:

-Committee members who are interested in a Board vacancy are encouraged to contact UNOS staff for a link for an on-line bio form.

5. Project Discussions

UNOS staff coordinated a discussion on future projects and potential priority of work.

Summary of discussion:

UNOS staff profiled the cataloged project ideas that have been collected over the past two years. These include:

- Data Collection on VCAs from Deceased Donors
- Uterus Transplantation
- Genitourinary Transplantation
- Increase Public Awareness of VCA Donation & Transplantation
- Revisions to VCA Allocation
- Guidance for Pediatric VCA Donation & Transplantation
- Clinical Criteria for Deceased VCA Donors
- VCA Graft Failure Definition
- Informed Consent for Living VCA Donors

This list of projects has changed recently with the development of two projects; *Guidance to OPO to Optimize VCA Authorization* (POC-approved) and *Recovery* and *Align VCA Membership Requirement with Requirements for Solid Organ* (pending POC consideration in late-April 2017). As a result, UNOS staff asked the Committee to revisit the list of projects and decide on the future sequence of work.

UNOS staff asked the Committee to carefully consider the primary purpose of each project before them; what is the primary purpose to the OPTN? There certainly may be uses for some projects outside the OPTN. However, Committee projects need to be diligent in scope and in alignment with the OPTN Strategic Plan.

The Chair thanked UNOS staff for their remarks and opened the floor for discussion. Members of the Committee widely agreed that increasing awareness of VCA donation and transplantation was the most important project. UNOS staff advised the Committee that such an effort could be

accomplished with UNOS staff and OPTN resources (with Committee members acting as advisors), and that such a project did not need to consume resources allocated to the Committee. One member of the Committee indicated that a project on "graft failure" may be the wrong angle. Rather, he proposed to approach the project from the perspective of functional outcomes for VCA transplantation. This data would be very compelling to referring physicians and surgeons. Several members verbalized their support for this project. Another member felt it was important to understand the prevalence of conditions that may result in referral for VCA transplant evaluation. This may include women with uterine factor infertility, service members injured in combat, burn patients, penectomy patients, or amputees due to sepsis or trauma. Another member shared that the OPTN likely does not have a good understanding of the VCA donor potential. The current interim solution for VCA allocation does not uniformly capture all VCA allocation attempts, or whether a deceased donor was evaluated for VCA donation. At the conclusion of the discussions, the Committee felt the following five projects were a prudent sequence of work:

1. Increase Public Awareness of VCA Donation and Transplant
2. Functional outcomes (graft and patient survival)
3. Needs assessment of conditions that may lead to VCA transplant evaluation
4. Data collection on VCA donors and potential VCA donors
5. VCA Allocation Revisions

Next steps:

-UNOS staff will maintain the revised list of project priorities for future work.

6. Uterus Transplantation

Representatives from two uterus transplant programs were invited to present to the Committee regarding their respective programs and clinical experiences. Additionally, a representative from the American Society for Reproductive Medicine was invited to participate.

Summary of discussion:

An emerging area of VCA transplantation in the U.S. is uterus transplantation. Committee leaders participated in a uterus transplantation roundtable discussion in April 2016. Since that time, uterus transplant activity has increased at two OPTN approved uterus transplant programs involving both deceased and living donors. The leaders of the respective programs were invited to present an overview of their experience.

Goran Klintmalm, M.D. and Giuliano Testa, M.D. (Baylor University Medical Center) presented their institution's experience with uterus transplant involving living donors. The purpose of uterus transplantation was to allow pregnancy and delivery for women affected with Absolute Uterine Factor Infertility (AUFI). To accomplish this, the program drew substantial influence from their solid-organ colleagues, specifically by integrating the existing structure for living kidney and liver transplantation. Early collaboration was also sought with Mats Brannstrom, M.D., Liza Johannesson, M.D., Ph.D., and Michael Olausson, M.D. from the uterus transplant team at the University of Gothenburg (Sweden). The speakers then shared a high level development timeline with the Committee:

- November 2015 – Started with ethics talk in Chicago
- December 2015 – (Institutional Review Board) IRB approved
- January 2016 – Announcement
- September 2016 – Transplants

Key to the aforementioned timeline was approval by the institution's Ethics Committee before approaching the IRB. The intent of this was to demonstrate support from both the institution and

the Ethics Committee to the IRB. Then Dr. Klintmalm recommended any institution considering uterus transplantation should follow this approach. Dr. Testa then commented their living donor evaluation for uterus donation was mirrored from the process for living kidney donors. This included the use of a thorough evaluation process, consideration by a multidisciplinary committee, integration with specialist colleagues (psychology, transplant surgery, obstetrics/gynecology, and fertility) and a Living Donor Advocate.

Dr. Testa then provided a synopsis of the organization applied to the donation and transplant. This included immediate pre-donation, transplant, post-surgical, and post-discharge organization. Both speakers felt this planning and early collaboration with Swedish colleagues lead to a good experience to-date. Dr. Klintmalm then shared the role of the pathologist in this team is very important. There are no markers for rejection in uterus transplant, thus accurate interpretation of biopsy results is critical.

Dr. Testa then concluded by saying that technical success at this stage is defined as a viable uterus. Thereafter, onset of menses, implantation of embryos, and pregnancy are monitored. To-date, five living donor transplants have occurred at Baylor. Their IRB has approved 10 procedures.

The Chair and members of the Committee congratulated Drs. Klintmalm and Testa for their leadership in this emerging area of transplantation and for the eye opening presentation. The Chair then opened the floor for questions. Several individuals shared clinically based questions for the speakers; the rationale for pre-implantation genetic screening of embryos, role of cadaver rehearsals, vascular monitoring of the grafts, any surgical complications encountered, the role/if any of microsurgical expertise in these types of transplants, and post-transplant following of living donors. The speakers candidly responded to all questions [to protect patient heath information, the specific questions and answers are excluded from these minutes].

Andreas Tzakis, M.D. (The Cleveland Clinic Foundation) presented his institution's experience with uterus transplant involving deceased donors. Similar to colleagues at Baylor, his institution's team sought the insight of their Ethics Committee very early in the process. However, the source of donors for uterus transplants at The Cleveland Clinic was only approved for deceased donors. IRB approved was received in September 2015. Dr. Tzakis commented that 460 individuals had contacted his institution expressing interest in undergoing candidate evaluation for uterus transplant. Of this number, 16 patients completed the medical evaluation. To-date, his team has performed one uterus transplant and one candidate is currently on the VCA candidate list. Dr. Tzakis then shared a brief profile of the deceased donor case, transplant surgical approach, immunosuppression regimen for the recipient, and post-transplant care [to protect patient heath information, specific content are excluded from these minutes].

Dr. Tzakis then shared data on the global experience with uterus transplant. The largest experience to-date is in Gothenberg, Sweden:

- Total uterus transplants performed – 9
- Successful transplants – 7
- Complications – 2 (1 infection, 1 thrombosis)
- Births – 6 births to 5 mothers
- Currently pregnant – 2
- Miscarriages – 1

Uterus transplants have also been performed in Prague, Czech Republic. These cases involved three living donors (all recipients are stable) and 3 deceased donors (2 recipients stable, 1 complication). Two cases have been reported in China (both involving living donors) with one

post-transplant hysterectomy due to thrombosis; the remaining recipient is stable. One uterus transplant each has been performed in Germany, Serbia, and Brazil; each recipient is stable.

The Chair thanked Dr. Testa for his insightful presentation and open the floor discussions. One member asked, does uterus transplantation have substantial potential? There appears to be a large number of potential uterus transplant patients. Additionally, there are challenges with the payer landscape for more prevalently practiced VCA transplants. Dr. Tzakis shared there is strong institutional support for uterus transplant. With regard to the potential need for uterus transplant, he estimated there are 64,000 females in the U.S. with AUFI. While surrogacy and adoption are options for some women, there are legal issues in some states. Additionally, in-vitro fertilization and adoption are not financially supported. Dr. Klintmalm acknowledged the sensitivity for the challenges the payer landscape for VCA transplant. He commented that there will need to be demonstrated case volume in uterus transplant before a consensus conference can be considered to address funding questions.

One member asked, what type of living donor follow-up is being conducted? Dr. Klintmalm responded that they are following all living donor follow-up guidelines from the OPTN and CMS (post-operation, six months, one year, and two years from donation). Another member asked, does the protocol include relisting a patient following graft loss? Dr. Testa responded their level of experience has not allowed this question to be addressed at this time. One member shared his opinion that all VCA transplants are not life-saving. Rather VCA transplants are life giving and uterus transplantations are in this same light. Members and invited guests verbalized their support for this sentiment.

The Committee then segued to a conversation on payer issues in VCA transplantation. One speaker commented that getting uterus transplants approved by payers was a non-OPTN issue. Others commented that it may be overly optimistic that a high volume of uterus transplants would be helpful for the payer landscape for all VCA transplants. One member did comment that an improvement would be to consider covering VCA transplants on a case-by-case basis. Another speaker shared a concern, Traditional VCAs could become “orphan” procedures when looking at the potential for uterus transplant. One member noted that uterus transplant does not have the life-long burden of immunosuppression.

Next steps:

- The Committee will continue to monitor uterus transplant activity in the U.S.

- The Committee will continue to engage the ASRM on future uterus transplant discussions.

7. Consensus Conference

The Chair provided an update on recent discussions related to a VCA Donation and Transplantation Consensus Conference.

Summary of discussion:

Members on the Committee shared comments on a previous conference regarding challenges in the payer landscape for VCA transplant. Colleagues from HRSA shared their understanding of these concerns, but advised that resolving payer issues was outside the scope for the Committee and OPTN. Under this counsel the Chair approached the leadership of the American Society for Transplant Surgeons (ASTS), the American Society for Transplantation (AST), and the American Society for Reconstructive Transplantation (ASRT). There is interest in aligning efforts of the Committee and these societies in a VCA “super committee” moving forward. The driving entity for addressing the funding issues would be one of these societies.

One member indicated his institution would be willing to host a VCA Donation and Transplantation Consensus Conference later in 2017. This may be done in conjunction with a

bioethics meeting on VCA in Baltimore, M.D. Invitations to this event would be widely circulated and invited the Committee to participate in the event. A motion was made and seconded to support this event, and the committee unanimously supported it.

8. Scientific Discussion

The scientific discussion portion of each meeting is designed to inform the Committee of emerging areas in VCA transplantation and areas where translational knowledge from solid organ transplant can be shared. The Committee invited colleagues from Massachusetts General Hospital to present their programs experience in penis transplantation.

Summary of discussion:

Curt Cetrulo, M.D. (Massachusetts General Hospital) provided an overview of his institution's experience with penis transplantation. The goals of this type of VCA transplant are:

- Restore natural appearance of external genitalia
- Reconstruct urinary function
- Potentially re-establish sexual function

World-wide, two prior cases of penis transplant have occurred. The first occurred in China in 2005 and the graft was removed at the request of the patient a short time later. A second case was performed in South Africa in 2014 with full restorative function achieved. Indications for penis transplant may include partial or total penile loss. This occurs most often in the setting of malignancy or trauma. Literature documents the impact to the patients with depression, hopelessness, quantifiable mental illness, and suicide. In short, loss of sexual and urinary function is devastating. Dr. Cetrulo then shared data on genitourinary trauma from combat. Despite reconstructive approaches to managing this type of trauma, sometimes the results are not good. In these cases, VCA transplantation or regenerative medicine can offer more to patients.

Dr. Cetrulo described the anatomical considerations for this type of transplant and the challenges that could be encountered. He then shared a profile of the first patient registered from his program, the transplant event, and outcome [to protect patient heath information, specific content are excluded from these minutes].

The Chair thanked Dr. Cetrulo for the very informative presentation and opened the floor for questions. One member asked, is there an understanding of the number patients in the U.S. that may benefit from penis transplants. Dr. Cetrulo responded that efforts are underway to identify this number, though a "ballpark" figure is in the thousands. The Chair asked Dr. Cetrulo to keep the Committee informed of this new information. Another member asked, how are the psychological considerations being addressed pre/post-transplant? Dr. Cetrulo responded that they are thoroughly evaluating patient's motivation, support system, history, etc… One member commented that his program's entry in this type of VCA transplant also includes evaluations and counseling for the patient's spouse/partner.

Dr. Cetrulo spoke briefly on the procurement experience. The donor penectomy was the first donor procedure performed and lasted just over two hours. He spoke highly of the collaboration with the OPO and integration into the donation process.

Next steps:

-- The Committee will continue to monitor penis transplant activity in the U.S.

9. Member Recognition

The Chair recognized the following out-going Committee members for their contributions:

- James Rodrigue, Ph.D.
- Christina Kaufman, Ph.D.
- Monica James, RN
- Kimberly Mackenzie, RN
- Kenneth Newell, MD, Ph.D.
- Sue McDiarmid, M.D.

With no further business to discuss, the meeting was adjourned.

Upcoming Meetings

- May 12, 2017 (OPO Guidance Subcommittee call)
- June 9, 2017 (full committee call)

Attendance

- **Committee Members**
  - L. Scott Levin, M.D. - Chair
  - Linda C. Cendales, M.D. – Vice Chair
  - Christopher C. Curran, CPTC, CTBS, CTOP
  - Stacy L. Doll, M.P.A.
  - Monica D. James, RN, B.S.N. (phone)
  - Christina Kaufman, Ph.D.
  - W.P. Andrew Lee, M.D.
  - Mary Pappas, RN, B.S.N., CCRN, TNCC
  - Bohdan Pomahac, M.D.
  - James Rodrigue, Ph.D.
  - Matthew D. Scott (phone)
  - LCDR. Scott Tintle, M.D.
  - Andreas Tzakis, M.D. (phone)
- **HRSA Representatives**
  - James Bowman, M.D.
  - Shannon Dunne, J.D.
- **SRTR Staff**
  - Jessica Zeglin, M.P.H.
  - Bryn Thompson
- **OPTN/UNOS Staff**
  - Christopher L. Wholley, M.S.A.
  - Jennifer Wainright, Ph.D.
  - James Alcorn, J.D.
  - Elizabeth Miller, J.D.
  - Charles Bradshaw
  - Liz Robbins-Callahan, J.D.
  - Gena Boyle, M.P.A.
- **Other Attendees**
  - Wendy Dean, M.D. (Department of Defense)
  - Owen Davis, M.D. (President, Amer. Society for Reproductive Medicine)
  - Goran Klintmalm, M.D. (Baylor Univ. Medical Center)
  - Giuliano Testa, M.D. (Baylor Univ. Medical Center)
  - Linda Irwin, RN, M.A., ANP, CCTC (Massachusetts General Hospital)
  - Curt Cetrulo, M.D. (Massachusetts General Hospital)