BLUE CROSS BLUE SHIELD OF MICHIGAN
ADVANCED CARDIOVASCULAR IMAGING CONSORTIUM CORONARY CT ANGIOGRAPHY COLLABORATIVE QUALITY INITIATIVE

To be a provider in the BCBSM Advanced Cardiovascular Imaging Consortium (ACIC) Coronary CT Angiography Collaborative Quality Initiative (CQI), the hospital or physician group must be in the TRUST and Traditional networks and also comply with the additional standards listed below.

Program applicants and current network providers will be required to meet and continue to comply with the following standards. BCBSM has sole discretion to determine whether a hospital or physician group meets the following criteria.

Note: Headings in this document are for illustrative purposes only. Standards are not limited to the heading under which they appear. Most standards are applicable to multiple headings.

I. Standards for Maintaining Quality Health Care

A) Hospital must at the time of application and thereafter:

1. Own or lease a 64-slice (or greater) CT machine.
2. Use post-processing software capable of providing cardiac reconstructions and high quality images of coronary anatomy and left ventricular function.
3. Demonstrate to BCBSM's satisfaction that it has an organized, active and supervised continuous quality assurance program pertaining to coronary CTA services with active participation in direction and management of a qualified medical physicist and a level 2 trained cardiologist or radiologist with training as recommended in the *ACR Practice Guideline for the Performance and Interpretation of Cardiac Computed Tomography (CT),* 2006 or the *ACCF/AHA Clinical Competence Statement on Cardiac Imaging with Computed Tomography and Magnetic Resonance*, 2006 (Attachment 1)[1].

B) Hospital must agree to allow BCBSM to audit compliance with the ACIC Coronary CT Angiography CQI Standards at BCBSM's discretion.

C) Hospital must have the following personnel with appropriate certification to perform and interpret coronary CT scans as recommended in the "Qualifications and Responsibilities of Personnel section" of the *ACR Practice Guideline for the Performance and Interpretation of Cardiac Computed Tomography (CT),* 2006 (Attachment 1) and the *ACCF/AHA*

[1] BCBSM will automatically adopt any changes to guidelines as they are update by the ACR.

Clinical Competence Statement on Cardiac Imaging with Computed Tomography and Magnetic Resonance, 2005 (Attachment 2)[2]:

1. At least two physicians on staff who are involved in the CCTA program, interpret the images, and have training consistent with current ACC or ACR standards specific to coronary CTA services:
    - If both physicians are cardiologists – both must have a minimum of level 2 clinical competence training and ongoing CME completion, with both having clinical competence training in contrast and non-contrast studies in accordance with the attached ACC standards.
    - If both physicians are radiologists – each must have prior qualifications in general and/or thoracic CT interpretation or have had extensive training and experience in CT scanning with an emphasis on the thorax and specific experience in cardiac CT scanning, and have supervised experience interpreting cardiac CT studies at the volume recommended in the current, relevant ACR standards.
    - If one physician is a cardiologist and one is a radiologist—the cardiologist must have a minimum of level 2 competence as described in the attached ACC standards and the radiologist must be fully trained in accordance with the attached ACR standards.
    - All studies must be interpreted by physicians with the training referenced above.
2. Technicians providing imaging services are graduates of an American Medical Association accredited program in radiology technology with a minimum of an Associates degree and have current American Registry of Radiologic Technologists (AART) and/or Certified Radiologic Technician registration/license.
3. Clinical staff on site is ACLS certified and available for drug administration and resuscitation services.

D) Hospital must commit to active participation in the ACIC coronary CT Angiography CQI, including development and implementation of consortium-determined clinical guidelines, systematic approach for provision of consultation on optimal imaging strategy to referring physicians, and systematic approach to assuring complete, accurate and timely data gathering, submission and validation.

II. Standards for Controlling Health Care Costs

A) Hospital must at the time of application and thereafter:

[2] BCBSM will automatically adopt any changes to guidelines as they are update by the ACR.

1. Provide coronary CT angiography services in a cost efficient manner, as defined by BCBSM.

2. Comply with standards for controlling health care costs as required in the TRUST Hospital Participation Agreement.

III. Standards for Assuring Appropriate Utilization of Cardiac Care Services

A) Hospital must at the time of application and thereafter:

1. Demonstrate to BCBSM's satisfaction that it applies appropriateness criteria to case selection and that a quality/appropriateness review process exists for all cases.

2. Demonstrate to BCBSM's satisfaction that established patient selection criteria, including indications and contraindications for the procedure, are utilized and are consistent with current medical standards, such as guidelines established by the American College of Cardiology or American College of Radiology.

IV. Standards for Assuring Reasonable Levels of Access to Health Care Services

A) Hospital must at the time of application and thereafter:

1. Demonstrate to BCBSM's satisfaction that it has appropriate cardiac care equipment and qualified physicians available for immediate management of unstable patients and a minimum of two advanced cardiac life support certified staff.

V. Other Standards

Hospital must at the time of application and thereafter:

1. Recognize that BCBSM will consider any other matters that materially affect the hospital's performance in the selection process.

2. Recognize that customer preference is considered in the selection process.

3. Recognize that BCBSM has the right to exercise business judgment in the selection process.

4. Demonstrate to BCBSM's satisfaction that it has the ability to cooperate with BCBSM, BCBSM members, customer groups and the provider community.

5. Agree that BCBSM and its customers have the right to delegate certain administrative duties, e.g., preauthorization, audits, etc., to third parties.

6. Comply with all applicable laws and with all professional and ethical standards.

7. Agree that BCBSM retains the right to determine customer groups and members eligible to use this panel.

8. Be free of conflicts of interest relative to BCBSM, its customer groups and members during the term of the Advanced Cardiovascular Imaging Consortium Coronary Ct Agreement.

Program Standards for Physician Groups:

In addition to meeting the above stated program standards Sections I to IV for hospitals, cardiology or radiology professional provider groups may be privileged to participate in this consortium and provide cardiac CTA services and to be so privileged must meet the following criteria pertaining to quality of and access to health care services:

I. Standards for Maintaining Quality Health Care

1) The group must use post-processing software capable of providing cardiac reconstructions and high quality images of coronary anatomy and left ventricular function.

2) The group must have at least two physicians on staff who are involved in the CCTA program, interpret the images, and have training consistent with current ACC or ACR standards specific to coronary CTA services:

- If both physicians are cardiologists – both must have a minimum of level 2 clinical competence training and ongoing CME completion, with both having clinical competence training in contrast and non-contrast studies in accordance with the attached ACC standards.
- If both physicians are radiologists – each must have prior qualifications in general and/or thoracic CT interpretation or have had extensive training and experience in CT scanning with an emphasis on the thorax and specific experience in cardiac CT scanning, and have supervised experience interpreting cardiac CT studies at the volume recommended in the current, relevant ACR standards.
- If one physician is a cardiologist and one is a radiologist—the cardiologist must have a minimum of level 2 competence as described in the attached ACC standards and the radiologist must be fully trained in accordance with the attached ACR standards.
- All studies must be interpreted by physicians with the training referenced above.

3) Technicians employed or contracted by the group to provide imaging services are graduates of an AMA accredited program in radiologic technology with a minimum of an Associates degree and current American Registry of Radiologic Technologists (ARRT) and/or Certified Radiologic Technologist registration/license.

4) The group must have ACLS certified staff on site for drug administration and resuscitation services when necessary.

5) The group must commit to active participation in the cardiac CTA consortium, including development and implementation of consortium-determined clinical guidelines, systematic approach for provision of consultation on optimal imaging strategy to referring physicians, and systematic approach to complete, accurate and timely data gathering, submission and validation.

6) If the group is a cardiology group, it must provide a full range of cardiac care services including clinical cardiology, non-invasive imaging, invasive diagnostic imaging, interventional procedures and electrophysiology services.

7) The group must have an explicit agreement with a Physician Organization which is a full, active participant in the BCBSM Physician Group Incentive Program to collaborate on population management of patients with potential cardiac illness and assure judicious use of imaging services, including but not limited to cardiac CT angiography services.

8) The group's practice pattern must reflect judicious and appropriate use of health care resources in comparison to that of its peers.

ATTACHMENT 1: Excerpt from the *ACR Practice Guideline for the Performance and Interpretation of Cardiac Computed Tomography (CT),* 2006

CARDIAC CT ANGIOGRAPHY

QUALIFICATIONS AND RESPONSIBILITIES OF PERSONNEL

A. Physician

The physician shall have the responsibility for all aspects of the study including, but not limited to, reviewing all indications for the examination, specifying the imaging sequences to be performed, specifying the methods of image reconstruction, specifying the use and dosage of contrast and pharmacologic agents, interpreting images, generating an official interpretation[3], and assuring the quality of the images and the interpretation.

1. Physician with prior qualifications in general and/or thoracic CT interpretation.

The radiologist or other physician who meets the qualifications of the ACR Practice Guideline for Performing and Interpreting Diagnostic Computed Tomography (CT) has substantial knowledge of radiation biology, the physics of CT scanning, the principles of CT image acquisition and post processing including use of diagnostic workstations, and the design of CT protocols including rate and timing of contrast administration. The physician also will have substantial experience in CT interpretation, including CT of extracardiac thoracic structures that will be included on the cardiac CT examination, and experience with CT angiography of other regions of the body. Some of these physicians will also have substantial experience in other methods of cardiac imaging, assessment of cardiac function, and/or experience specifically in cardiac CT. These physicians are qualified to interpret coronary artery calcium scoring based on their prior experience. However, in order to achieve competency in all aspects of cardiac CT imaging, many physicians will require additional education in cardiac anatomy, physiology, pathology, and/or cardiac CT imaging.

The supervising and interpreting physician with prior qualifications in general and/or thoracic CT interpretation should also meet one of the following requirements:

[3] The ACR Medical Legal Committee defines official interpretation as that written report (and any supplements or amendments thereto) that attach to the patient's permanent record. In healthcare facilities with a privilege delineation system, such a written report is prepared only by a qualified physician who has been granted specific delineated clinical privileges for that purpose by the facilities governing body upon the recommendation of the medical staff.

a. Training in cardiac CT in an Accreditation Council for Graduate Medical Education (ACGME) or an American Osteopathic Association (AOA) approved training program to include:

   i. Education in cardiac anatomy, physiology, pathology, and cardiac CT imaging for a time equivalent to at least 30 hours of CME; and

   ii. The interpretation, reporting, and/or supervised review of at least 50 cardiac CT examinations in the last 36 months. Coronary artery calcium scoring does not qualify as meeting these requirements.

OR

b. Completion of at least 30 hours of Category I CME in cardiac imaging, including:

   i. Cardiac CT, anatomy, physiology, and/or pathology, or documented equivalent supervised experience[4] in a center actively performing cardiac CT; and

   ii. The interpretation, reporting, and/or supervised review of at least 50 cardiac CT examinations in the last 36 months. Coronary artery calcium scoring does not qualify as meeting these requirements.

2. Physician who does not have prior qualifications in general and/or thoracic CT interpretation.

The radiologist or other physician who does not meet the qualifications of the ACR Practice Guideline for Performing and Interpreting Diagnostic Computed Tomography (CT) or who meets these qualifications only for a specific anatomic area outside of the thorax requires more extensive training and experience in CT scanning with an emphasis on the thorax and specific experience in cardiac CT scanning. In addition to specific training in imaging interpretation, this training must include knowledge of the principles of CT image acquisition and post processing including use of diagnostic workstations and the design of CT protocols including rate and timing of contrast administration. The physician must also meet the same requirements, or document equivalent training, as those delineated in the ACR Practice Guideline for Performing and Interpreting Diagnostic Computed Tomography (CT) with regard to knowledge of the physics of CT scanning and radiation biology. Documented equivalent supervised experience is defined as supervision at a center where the proctoring physician meets these criteria to independently interpret cardiac CT. ACR PRACTICE

[4] Documented equivalent supervised experience is defined as supervision at a center where the proctoring physician meets these criteria to independently interpret cardiac CT.

GUIDELINE Cardiac CT / 293 will also require additional education in cardiac anatomy, physiology, and pathology.

The supervising and interpreting physician without prior qualifications in general and/or thoracic CT interpretation should meet the following requirements:

a. Completion of sufficient training and experience to meet the qualifications of the ACR Practice Guideline for Performing and Interpreting Diagnostic Computed Tomography (CT). For a physician who assumes responsibilities for CT imaging exclusively in a specific anatomical area such as cardiac CT, this includes:

    i. Completion of an ACGME approved training program in the specialty practiced plus 200 hours of Category I CME in the performance and interpretation of CT in the subspecialty where CT reading occurs; and

    ii. Supervision, interpretation, and reporting of 500 cases, at least 100 of which must be a combination of thoracic CT or thoracic CT angiography during the past 36 months in a supervised situation. Coronary artery calcium scoring does not qualify as meeting these requirements.

AND

b. Included in the above, completion of at least 30 hours of Category I CME in cardiac imaging, including

    i. Cardiac CT, anatomy, physiology, and/or pathology, or documented equivalent supervised experience[5] in a center actively performing cardiac CT; and
    ii. The interpretation, reporting, and/or supervised review of at least 50 cardiac CT examinations in the last 36 months. Coronary artery calcium scoring does not qualify as meeting these requirements.

3. Administration of pharmacologic agents

Physicians administering pharmacologic agents as part of cardiac CT imaging should be knowledgeable about the administration, risks, and contraindications of the pharmacologic agents used and should be capable of monitoring the patient throughout the procedure.

4. Maintenance of competence

[5] Documented equivalent supervised experience is defined as supervision at a center where the proctoring physician meets these criteria to independently interpret cardiac CT.

All physicians performing cardiac CT examinations should demonstrate evidence of continuing competence in the interpretation and reporting of those examinations. If competence is assured primarily on the basis of continuing experience, performance and interpretation of a minimum of 75 examinations every 3 years is recommended in order to maintain the physician's skills.

5. Continuing medical education

The physician's continuing medical education should be in accordance with the ACR Practice Guideline for Continuing Medical Education (CME) of 150 hours of approved education every 3 years, and should include CME in cardiac CT as is appropriate to the physician's practice needs.

B. Qualified Medical Physicist

A Qualified Medical Physicist is an individual who is competent to practice independently one or more of the subfields in medical physics. The ACR considers that certification and continuing education in the appropriate subfield(s) demonstrate that an individual is competent to practice one or more of the subfields in medical physics, and to be a Qualified Medical Physicist. The ACR recommends that the individual be certified in the appropriate subfield(s) by the American Board of Radiology (ABR) or for MRI, by the American Board of Medical Physics (ABMP) in magnetic resonance imaging physics.

The appropriate subfields of medical physics for this guideline are Therapeutic Radiological Physics, Diagnostic Radiological Physics, Medical Nuclear Physics, and Radiological Physics. The continuing education of a Qualified Medical Physicist should be in accordance with the ACR Practice Guideline for Continuing Medical Education (CME).2006 (Res. 16g).

C. Radiologist Assistant

A radiologist assistant is an advanced level radiographer who is certified and registered as a radiologist assistant by the American Registry of Radiologic Technologists (ARRT) after having successfully completed an advanced academic program encompassing an ACR/ASRT (American Society of Radiologic Technologists) radiologist assistant curriculum and a radiologist-directed clinical preceptorship. Under radiologist supervision, the radiologist assistant may perform patient assessment, patient management and selected examinations as delineated in the Joint Policy Statement of the ACR and the ASRT titled "Radiologist Assistant: Roles and 294 / Cardiac CT ACR PRACTICE GUIDELINE Responsibilities" and as allowed by state law. The radiologist assistant transmits to the supervising radiologists those observations that have a bearing on diagnosis. Performance of diagnostic interpretations remains outside the scope of practice of the radiologist assistant. 2006 (Res. 34)

D. Radiologic Technologist

The technologist should participate in assuring patient comfort and safety, in preparing and positioning the patient for the CT examination including proper positioning of the ECG leads, and in obtaining the CT data in a manner suitable for interpretation by the physician. The technologist's continuing education credits should include continuing education in cardiac CT performance as is appropriate to the technologist's practice needs. Basic life support (BLS) and automatic defibrillator (AED) training is recommended.

Attachment 2: Excerpt from the *ACCF/AHA Clinical Competence Statement on Cardiac Imaging with Computed Tomography and Magnetic Resonance*, 2005

CARDIAC IMAGING WITH COMPUTED TOMOGRAPHY CLINCIAL COMPETENCE AND TRAINING

Cognitive skills required to demonstrate competence in CCT are summarized in Table 1. Candidates for competence in CCT shall have completed a formal residency in general radiology or nuclear medicine or will have completed an Accreditation Council for Graduate Medical Education (ACGME)-approved cardiovascular fellowship. A thorough knowledge and understanding of cardiac and vascular anatomy is required. Because cardiology, nuclear medicine, and radiology training is very much involved with anatomic definition, this requirement should be met or would have been met by individuals completing an ACGME-approved cardiovascular fellowship, nuclear medicine residency, or general radiology residency. Likewise, characteristics of the heart in health and disease by traditional cardiac imaging methods (echocardiography, nuclear medicine, and angiography) will provide a significant background for application to CCT. These dynamic tomographic or projection imaging techniques of the heart are commonplace in formal cardiology training, so little additional instruction is required when interpreting dynamic CCT sequences of the heart for cardiologists (e.g., evaluating ventricular function by watching the wall motion throughout a cardiac cycle). Cardiac physiology is also vital for CCT and CMR, and basic training should be part of both formal cardiology fellowship and radiology residency.

Table 1.Cognitive Skills Required for Competence in CCT

General:

- Knowledge of the physics of CT and radiation generation and exposure
- Knowledge of scanning principles and scanning modes for non-contrast and contrast-enhanced cardiac imaging using multi-detector and/or electron beam methods
- Knowledge of the principles of intravenous iodinated contrast administration for safe and optimal cardiac imaging
- Knowledge of recognition and treatment of adverse reactions to iodinated contrast
- Knowledge of the principles of image post-processing and appropriate applications

Cardiac:

- Clinical knowledge of coronary heart disease and other cardiovascular diseases
- Knowledge of normal cardiac, coronary artery, and coronary venous anatomy, including associated pulmonary arterial and venous structures
- Knowledge of pathologic changes in cardiac and coronary artery anatomy due to acquired and congenital heart disease
- Basic knowledge in ECG to recognize artifacts and arrhythmias

Aorta:

- Knowledge of normal thoracic arterial anatomy
- Knowledge of pathologic changes in central arterial anatomy due to acquired and congenital vascular disease

Training to achieve clinical competence in CCT (Table2)

The recommendations for all levels of training in the following text represent a cumulative experience, and it is expected that for many practicing clinicians the training will not be continuous. A summary of the training requirements is given in Table 2. Time spent at didactic continuing medical education courses specifically targeting CCT can contribute to the total time. Due to the advancement in the sophistication and widespread availability of electronic training medias, the committee felt that some training can now be obtained outside the laboratory setting. However, for all Level 2 and 3 requirements, minimum time in a CCT laboratory is half of the time listed, with the other half garnered by supervised time, CT exposure and other courses, case studies, CD/DVD training, time at major medical meetings devoted to performance of CCT, or other relevant educational training activities, as a few examples. Several aspects of CCT can be learned from the general CT expert, including use of the workstation, tomographic imaging, and radiation physics, among others. The caseload recommendations may include studies from an established teaching file, previous CCT cases, and electronic/on-line experience or courses.

Table 2. Requirements for CCT Study Performance and Interpretation to Achieve Level 1, 2, and 3 Clinical Competence

	Cumulative Duration Of Training	Minimum # of Mentored ExaminationsPerformed	Minimum # of Mentored ExaminationsInterpreted
Level 1	4 weeks*	—	50†
Level 2—non-contrast	4 weeks*	50	150†
Level 2—contrast	8 weeks*	50	150†
Level 3	6 months*	100	300†

*This represents cumulative time spent interpreting, performing, and learning about CCT, and need not be a consecutive block of time, but at least 50% of the time should represent supervised laboratory experience. In-lab training time is defined as a minimum of 35 h/week.

†The case load recommendations may include studies from an established teaching file, previous CCT cases, journals and/or textbooks, or electronic/on-line courses/CME.

For all levels of competence, it is expected that the candidate will attend lectures on the basic concepts of CCT and include parallel self-study reading material. A basic understanding of CCT should be achieved, including the physics of CCT imaging, the basics of CCT scan performance, safety issues in CCT performance, post-processing methods, and the basics of CCT interpretation as compared with other cardiovascular imaging modalities, which include echocardiography, nuclear medicine, CMR, and invasive cardiac and peripheral X-ray angiography.

Level 1 Training

Level 1 is defined as the minimal introductory training for familiarity with CCT, but is not sufficient for independent interpretation of CCT images. The individual should have intensive exposure to the methods and the multiple applications of CCT for a period of at least four weeks. This should provide a basic background in CCT for the practice of adult cardiology or for general radiology. During this

cumulative four-week experience, individuals should have been actively involved in CCT interpretation under the direction of a qualified (Level 2-or Level 3-trained) physician-mentor. There should be a mentored interpretative experience of at least 50 cases for all studies in which other cardiovascular imaging methods are also available; correlation with CCT findings and interpretation is strongly encouraged and should be included if possible. As much as possible, studies should consist of procedures outlined in Table 1. Independent performance of CCT is not required for Level 1, and the mentored interpretive experience may include studies from an established teaching file or previous CCT cases and also the potential for CD/DVD and on-line training.

Level 2 Training

Level 2 is defined as the minimum recommended training for a physician to independently perform and interpret CCT. This is an extension of Level 1 training and is intended for individuals who wish to practice or be actively involved with CCT performance and interpretation.

A physician with Level 2 training should demonstrate clear understanding of the various types of CT scanners available for cardiovascular imaging (EBT and MDCT) and understand at a minimum the common issues related to imaging, post-processing, and scan interpretation, including:

- Important patient historical factors (indications and risk factors that might increase the likelihood of adverse reactions to contrast media, if applicable)
- Radiation exposure factors
- CT scan collimation (slice thickness)
- CT scan temporal resolution (scan time per slice)
- Table speed (pitch) Field of view
- Window and level view settings
- Algorithms used for reconstruction
- Contrast media
- Post-processing techniques and image manipulation on work stations
- Total radiation dose to the patient

Level 3 Training

Level 3 training represents the highest level of exposure/expertise that would enable an individual to serve as a director of an academic CCT section or director of an independent CCT facility or clinic. This individual would be directly responsible for QC and training of technologists and be a mentor to other physicians seeking such training. The minimum cumulative training period will be six months, to include all of the didactic requirements of Level 2 training as well as participation in CCT study interpretation under the direction of a qualified (Level 3-trained) physician-mentor. In-lab training time is defined as a minimum of 35 h/week. Level 3 candidates should be involved with interpretation of at least 100 non-contrast and 300 contrast CCT examinations. For at least 100 of these cases, the candidate must be physically present and be involved in the

acquisition and interpretation of the case. Cases should reflect a broad range of pathology.

In addition to the recommendations for Level 1 and Level 2 training, Level 3 training should include active and ongoing participation in a basic research laboratory, clinical research, or graduate medical teaching. This level also requires documented and continued clinical and educational experiences. Additionally, Level 3 CCT physicians should have appropriate knowledge of alternative imaging methods, including the use and indications for specialized procedures including echocardiography and vascular ultrasound, CMR, and nuclear medicine/positron emission tomography (PET) studies. A summary of the training requirements is given in Table 3.

Table 3. Requirements for Level 2 and Level 3 Clinical Competence in CCT

	Level2		**Level3**
Initial Experience	● NON-CONTRAST REQUIREMENTS ● Board certification or eligibility, valid medical license, and completion of 4 weeks of training (to include coursework, scientific meetings, and courses/on-line training) ● AND 150 non-contrast CCT examinations (for at least 50 of these cases, the candidate must be physically present, and be involved in interpretation of the case) ● AND completion of 20 h of courses/ lectures related to CT in general and/or CCT in particular	● FULL CCT REQUIREMENTS ● Board certification or eligibility, valid medical license, and completion of 8 weeks (cumulative) of training in CCT ● AND 150 contrast CCT examinations. For at least 50 of these cases, the candidate must be physically present, and be involved in the acquisition and interpretation of the case ● AND evaluation of 50 non-contrast studies ● AND completion of 20 h/lectures related to CT in general and/or CCT in particular	● Board certification or eligibility, valid medical license, and completion of 6 months (cumulative) of training in CCT, ● AND 300 contrast CCT examinations. For at least 100 of these cases, the candidate must be physically present, and be involved in the acquisition and interpretation of the case ● AND evaluation of 100 non-contrast studies ● AND completion of 40 h of courses/ lectures related to CT in general and/or CCT in particular
Continuing Experience	50 non-contrast CCT exams conducted and interpreted per year	50 contrast CCT exams conducted and interpreted per year	100 contrast CCT exams conducted and interpreted per year
Continuing Education	20 h Category I every 36 months of CCT		40 h Category I every 36 months of CCT