

Program Overview – July 2015

Approved Therapeutic Area Standards Projects

Therapeutic Area	Coordinating Organization/PM	Stage 0 Scoping	Stage 1 Concept Modeling	Stage 2 Standards Development	Stage 3a Internal Review	*Stage 3b Public Review	**Stage 3c **Projected Publication
Traumatic Brain Injury v1	CDISC Rhonda Facile	Dec	Jan	Feb	July	Sept	2015
Breast Cancer v1	TCB John Owen	Aug	Dec	Jan	July	Sept	2015
COPD v1	TCB John Glover	Aug	Dec	Apr	Aug	Oct	2015
ADaM Supplement to Diabetes v1	TCB Rachael Zirkle	NA	NA	Jan	July	Sept	2015
Virology v2	C-Path Laura Butte	Mar	Apr	May	July	Aug	2015
Diabetic Kidney Disease v1	TCB Rachael Zirkle	May	July	Sept			Q116
Tuberculosis v2	C-Path Laura Butte	Apr	Jun	Aug	Oct		Q116
Rheumatoid Arthritis v1	TCB Trisha Simpson	Jun	July				Q116
CV Imaging v1	CDISC/DCRI Amy Palmer	Apr	July	Aug			Q216
Prostate Cancer v1	CDISC John Owen	July	Oct				Q216
Major Depressive Disorder	CDISC Amy Palmer						Q316

Key | ■ Stage completed | ■ Stage ongoing | All months reflect when stage is, or is projected to be, completed.

*The Stage3b concludes at the end of the 30-day review period and Stage 3c concludes when all tasks have been completed and the standard is publically available.
 ** Specific projected publication dates to be added to the notes section at the conclusion of Stage 3b.

Alzheimer's Disease

FDA Review Division: DNP

Approved: January 2013

CFAST is currently engaged in creating v1.1 of the Alzheimer's Disease (AD) Therapeutic Area Data Standard. The goal of this project is to expand upon the work done in v1.0, increasing its utility for clinical trials and observational studies, with an emphasis on early AD and Mild Cognitive Impairment (MCI). The standardization effort focuses on three major areas of content: clinical scales of cognition and function, cerebrospinal fluid (CSF) sampling and biomarkers, and imaging biomarkers. The workgroup has identified ~10 clinical scales which are in the process for developing controlled terminology and supplemental guide documentation. Through ongoing webinars with imaging subject-matter experts, we have nearly completed elucidating the inter-related concepts of image acquisition, analysis, and derivation of both functional and morphological metrics of the brain that are relevant to this disease. Similarly, we have almost finished a parallel task to understand the relationships between the quantitative CSF protein biomarker measurements of interest in AD, and the various procedures of lumbar puncture, CSF sampling, handling, processing and storage of the specimen that help put those quantitative results in context for the researcher. We are on track to finish the concept maps this month, and to begin vetting these within the CDISC user community so we can begin drafting the user guide documentation.

Asthma

FDA Review Division: DPARP

Approved: November 2012

CFAST is proposing the development of the CDISC Asthma User Guide v1.0 (TAUG -- Asthma) Therapeutic Area Data Standard. Descriptions addressed in this TAUG-- Asthma v 1.0 will include the clinical situations from which the data arise, and the reasons these data are relevant for asthma. This standard would build on the existing CDISC Virology TA standards to facilitate the collection and use of data relevant to Hepatitis C clinical trials. The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to Asthma: pulmonary function tests, exacerbations of asthma, biomarkers, symptom assessment, QoL measures and composite outcomes, medical history, health care resource utilization, AEs of special interest and CMs of special interest.

Breast Cancer

FDA Review Division: DDOP

Approved: November 2013

CFAST is proposing development of v1.0 of the CDISC Breast Cancer (BC) Therapeutic Area Data Standard. This standard would build on the existing SDTM standards and related CDASH standards to facilitate the collection and use of data relevant to BC clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology.

The standardization effort is expected to focus on the following areas of specific interest to BC: Data to substantiate diagnosis, including H&E, ER/PR/Her2 status, as well as other key biomarkers (e.g., Ki-67, luminal A, luminal B, Oncotype DX or other gene profile assays); Medical and relevant family history (oncologic, gynecologic, and general); RECIST 1.1 tumor lesion burden and response measurements; Bone lesion assessments; Imaging modality; Key time to event analysis endpoints, including overall, progression, and disease free survival; Treatment history type (systemic, radiological, surgical) and intent (neo/adjuvant, curative, palliative); Post-study treatment therapies type (systemic, radiological, surgical) and intent (curative, palliative); Historical/preexisting and treatment emergent adverse events using CTCAE/MedDRA terms and severity criteria; Treatment and study disposition, including reasons for discontinuation of study treatment and study participation; Cardiac function assessment; Concomitant medications; Health care resource utilization (related to both disease and supportive care) including hospitalization, intensive care, emergency visits, and hospice care.

COPD

FDA Review Division: DPARP

Approved: November 2013

CFAST is proposing development of v1.0 of the CDISC COPD Therapeutic Area Data Standard. This standard would build on the existing SDTM Asthma TA standards, Cardiovascular TA standards, and related CDASH standards to facilitate the collection and use of data relevant to COPD clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to COPD: data to substantiate diagnosis, medical history of special interest, pulmonary function tests, symptom assessment, COPD exacerbations, AEs of special interest (e.g. MACE), CMs of special interest (e.g. rescue medication), patient reported outcomes (e.g. Saint George's Respiratory Questionnaire (SGRQ), Transition Dyspnea Index (TDI)), and health care resource utilization including hospitalization, intensive care, and emergency visits.

CV Endpoints

FDA Review Division: DCRP

Approved: June 2013

Version 1.0 of the Cardiovascular Therapeutic Area Data Standard and User Guide (CV-- UG) will incorporate cardiovascular endpoints developed by subject matter experts at FDA and Duke Clinical Research Institute (DCRI) with grant support from FDA. Cardiovascular endpoints are defined as an objective morbid condition or cause of death linked to cardiovascular disease, and is of particular interest for multiple clinical trials. Obesity and diabetes mellitus are often linked to cardiovascular disease as are a history of chronic kidney disease and hypercholesterolemia.

The standardization of the cardiovascular endpoints is focused on the following: percutaneous coronary intervention (PCI), peripheral vascular intervention (PVI), heart failure, myocardial infarction (MI), stent thrombosis, transient ischemic attack (TIA), stroke, hospitalization for unstable angina, and cardiovascular death and undetermined cause of death. Additional data elements are included for CV anatomical locations, severity and symptoms of the events, as well as complications of the interventions. There are roughly 110 data elements currently under development for cardiovascular and stroke endpoints. This UG will also incorporate additional CDEs relevant to acute coronary care which may be commonly collected during cardiovascular trials. Future versions of the CV--UG will include additional CV data standards, such as CV Imaging, when developed. The target completion date for the v1 CV data standard and UG is the end of the first quarter 2014.

CV Imaging

FDA Review Division: DCRP

Approved: December 2013

CFAST is proposing development of Version 2.0 of the CDISC Cardiovascular Therapeutic Area Data Standard. The v 2.0 standard will build upon v1.0, which incorporated CDEs relevant to acute coronary care and cardiovascular endpoints, and include SDTM standards and related CDASH standards to facilitate the collection and use of data relevant to CV Images for clinical trials.

Version 2.0 of the Cardiovascular Therapeutic Area Data Standard and User Guide (CV TAUG) will incorporate common data elements (CDEs) related to transthoracic echocardiography (TTE) in clinical and research reporting. These CDEs and definitions were developed by subject matter experts at Duke Clinical Research Institute (DCRI) with involvement from the following professional

societies: American Society of Echocardiography (ASE), American College of Cardiology (ACC), American Heart Association (AHA), American Society of Nuclear Cardiology (ASNC), Society of Cardiovascular Computed Tomography (SCCT), Society of Cardiovascular Magnetic Resonance (SCMR), and American College of Radiology (ACR), the US Food and Drug Agency, industry and Duke Clinical Research Institute (DCRI).

The TTE data elements largely reflect structural and functional characteristics of each of the cardiac chambers (left and right ventricles, left and right atria) and the four cardiac valves and their supporting structures (cusps/leaflets, papillary muscles, chordae). Additionally, some data elements characterize the great vessels (aorta, inferior and superior vena cava, pulmonary arteries and pulmonary veins), and other data elements characterize congenital anomalies of the heart and great vessels that can be seen during a TTE study. There are a mix of quantitative data elements (for example, right atrial volume reported in mL, effective orifice area reported in cm²) and qualitative data elements (for example, right atrial size: normal, reduced, mildly enlarged, etc.). Also included are key data elements regarding the TTE procedure (indication, contrast agent type), the method or technique used to obtain the value, and the imaging clinician's interpretation of etiology or severity of disease based on the TTE findings. There are roughly 250 data elements that will be developed for TTE.

Diabetes

FDA Review Division: DMEP

Approved: April 2013

CFAST is proposing development of v1.0 of the CDISC Diabetes Therapeutic Area Data Standard. This standard would build on the existing CDISC domains standards to facilitate the collection and use of data relevant to diabetes clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide that includes key lab assessments (including, but not limited to A1c, fasting glucose, C-- peptide), patient self--monitoring blood glucose (SMBG) profiles, antihyperglycemic agents, hypoglycemia (additional module included AE domain), CV events/outcomes, diabetes history, complication history, patient reported outcomes (questionnaires or patient completed scales) that are used in many diabetes studies. Second priority endpoints will include glucose tolerance testing and dietary information (e.g. daily caloric intake, carbohydrate intake). Project deliverables will include concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on areas of specific interest to diabetes: medical history, health care resource utilization, patient reported outcomes, AEs of special interest and CMs of special interest.

Diabetic Kidney Disease

FDA Review Division: DCRP

Approved: May 2014

CFAST, in coordination with the Kidney Health Initiative (a public--private partnership founded by FDA and the American Society of Nephrology) is proposing development of v1.0 of the CDISC Diabetic Kidney Disease Therapeutic Area Data Standard. This standard would build on the existing SDTM standards and related CDASH standards to facilitate the collection and use of data relevant to clinical trials of therapies intended to treat Diabetic Kidney Disease. The standard would also build on the previous work of the CFAST/CDISC Diabetes Therapeutic Area Data Standard.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, SHARE metadata, SDTM--IG type examples, controlled terminology, CDASH annotated CRF examples, and CDASH metadata examples. ADaM is not currently in scope for this version, but the ADaM diabetes sub--team may develop ADaM for Diabetic Kidney Disease at a later time.

Hepatitis C

FDA Review Division: DCRP

Approved: November 2013

CFAST is proposing development of v1.0 of the CDISC Hepatitis C Therapeutic Area Data Standard. This standard would build on the existing CDISC Virology TA standards to facilitate the collection and use of data relevant to Hepatitis C clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to Hepatitis C: medical history, health care resource utilization, patient reported outcomes, cirrhosis, progression of liver disease, AEs of special interest, CMs of special interest and HCV viral load testing.

For more information on Hep-C, see: <http://www.who.int/mediacentre/factsheets/fs164/en/>

General Anxiety Disorder

FDA Review Division:

Approved: May 2015

- CFAST is proposing development of v1.0 of the CDISC Generalized Anxiety Disorder Therapeutic-area Data Standard, building on existing SDTM and related CDASH standards to facilitate the collection and use of data relevant to this disease area.
- Generalized Anxiety Disorder is a mental disorder characterized by excessive anxiety and worry about a number of events or activities. The intensity, duration, or frequency of the anxiety and worry is out of proportion to the actual likelihood or impact of the anticipated event.
- The workgroup proposes developing a CDISC therapeutic area User Guide, including concept maps, metadata, CDASH, SDTM and ADaM examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to Generalized Anxiety Disorder:
- Data to substantiate diagnosis, such as:
 - Psychiatric history, esp. with regard to depression or other anxiety disorders
 - History of substance use (including alcohol, caffeine, nicotine, illegal drugs)
 - Medical history, esp. with regard to medical conditions that can cause anxiety symptoms; relevant family history
 - Psychotropic drug treatment history
 - Relevant previous medication history
- During the trial:
 - Assessment of anxiety symptoms using validated rating scales
 - Assessment of additional variables of interest with appropriate scales (e.g. global clinical impression, functional status)
- Routine data: adverse events, esp. those of special interest (using MedDRA terms); treatment and study disposition (including reasons), lab data, concomitant medications, vital signs

Influenza

FDA Review Division: DAVP

Approved: February 2014

CFAST is proposing development of a CDISC Therapeutic Area User Guide for Influenza. This standard would build on an FDA TA standards requirements model, existing related CDISC SDTM and TA standards, such as the CDISC Virology Therapeutic Area Data Standard, and facilitate review of data relevant to prevention, monitoring and treatment of influenza.

The workgroup proposes developing a CDISC Therapeutic Area User Guide for Influenza, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to evaluate the following areas of specific interest to influenza to determine where new SDTM development is needed: Data and methods to substantiate diagnosis and confirmation of influenza virus infection, dosing and treatment regimens, onset and duration of general symptoms (e.g. fever, cough, nasal congestion, runny nose, myalgia, headache and fatigue), medical history of special interest (e.g. chronic underlying diseases such as COPD, asthma, heart disease, diabetes, renal or hepatic disease), AEs of special interest (e.g. injection site reactions and immunogenicity for biologics), CMs of special interest (e.g. related to treatment of chronic underlying diseases and as part of antiviral treatment regimens), collected data to support determination of endpoints (e.g. time to resolution of symptoms, rates of virus--clearance (i.e. time to undetected virus in nasal swabs by RT--PCR or culture), time to detection of antiviral drug resistant virus), and biomarkers (e.g. antibody responses to influenza vaccines, other infection--related biomarkers such as Interleukin--6 and blood and urine biomarkers in case of secondary bacterial infection).

Deliverables will consist of the following: CDISC Therapeutic Area User Guide for Influenza

CDISC controlled terminology update for influenza, as submitted to NCI--EVS CDISC SDTM annotated sample case report form

Dyslipidemia

FDA Review Division: DMEP

Approved: December 2013

CFAST is proposing development of v1.0 of the CDISC Dyslipidemia (Lipid Lowering) Therapeutic Area Data Standard. This standard would build on an FDA TA standards requirements model and existing related SDTM standards, TA standards, and CDASH standards to facilitate the collection and use of data relevant to Lipid Lowering clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to lipid lowering:

- Data to substantiate diagnosis (e.g. lipid lab data, cardiovascular disease condition, genetic type)
- Treatment history and intolerance of other lipid lowering agents
- Medical history of special interest (e.g., diabetes, chronic kidney failure)
- Family history (e.g. Hypercholesterolemia, cardiovascular conditions)
- Lipid data of special interest (e.g. primary lipid of interest, LDL, HDL, apolipoproteins, total cholesterol, triglycerides) including Lipid calculation and measurement methods (e.g. Friedewald equation, ultracentrifugation, direct), fasting status and (possibly) particle sizes for LDL and HDL
- Capture of adjudicated CV events
- AEs of special interest (e.g. delivery system specific AE, cognitive effects, immune response, rhabdomyolysis)
- CMs of special interest (e.g. statins, lipid lowering agents)
- Other lab data of interest (e.g. vitamin levels, cortisol, hsCRP, biomarkers)
- Imaging data of interest (e.g. imaging of arteries)
- Patient reported outcomes (e.g. cognitive scales)
- Health care resource utilization including hospitalization, intensive care, and emergency visits
- Dietary data of special interest (e.g. diet information, dietary instructions) – possibly for future consideration for this standard
- Physical activity, exercise – possibly for future consideration for this standard.

Major Depressive Disorder (MDD)

FDA Review Division: DPP

Approved: July 2013

CFAST is proposing development of v1.0 of the CDISC MDD (Adult and Pediatric) Therapeutic Area Data Standard. This standard will build on the existing SDTM and related CDASH standards to facilitate the collection and use of data relevant to MDD clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples, and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to MDD: data to substantiate diagnosis, medical history (psychiatric and neurologic, including course of illness), symptom rating scales, patient reported outcomes, suicidality, treatment history (drug and non--drug), medication side effects, and health care resource utilization, including psychiatric hospitalizations and emergency visits.

Multiple Sclerosis v1.0

FDA Review Division: DNP

Approved: June 2013

The Multiple Sclerosis Outcomes Assessment Consortium (MSOAC) was created in December 2012 with a CDISC Therapeutic Area User Guide for MS being a key deliverable. This User Guide will be based on Common Data Elements (CDEs) developed by the National Institute of Neurological Disorders and Stroke (NINDS). The MSOAC will hold its first annual meeting on April 1st and 2nd of 2013 where the newly formed data work group will begin to assess which CDEs would be appropriate to include in a version 1.0 of the standard. Project deliverables will include: concept maps as needed, an SDTM v1.0 TA User Guide for Multiple Sclerosis, new SDTM Domains as needed, and QS implementation supplements with statements of copyright permission for the clinical scales modeled in SDTM.

Multiple Sclerosis v2.0

FDA Review Division: DNP

Approved: October 2014

The Critical Path Institute's Multiple Sclerosis Outcomes Assessment Consortium (MSOAC) created in December, 2012 had as one of its key deliverables a CDISC Therapeutic Area User Guide (TAUG) for MS. In May, 2014 v1.0 of the CDISC MS TAUG was released. Through the CFAST program MSOAC is proposing development of a v2.0 CDISC TAUG for Multiple Sclerosis. This standard would build on the v1.0 MS standard to facilitate the collection and use of data relevant to MS clinical trials.

The workgroup proposes developing v2.0 of the CDISC TAUG for Multiple Sclerosis including identification of a minimum and meaningful set of clinical Multiple Sclerosis data elements needed to augment the CDISC Therapeutic Area Standard for MS v1.0, with an emphasis on imaging and characterization of multiple sclerosis lesions and other imaging endpoints. Additionally this effort proposes to make updates to existing examples in MS v1.0 to reflect recent modeling changes proposed by the SDS leadership. This includes handling of diagnosis and symptoms dates and making use of the disease milestones approach for MS relapses.

The scope of work also includes management of the MS v2.0 project deliverables through the CDISC therapeutic area standards development process in a timely manner to support the targeted publication date of Q3 2015.

Osteoporosis

FDA Review Division: DBRUP

Approved: May 2014

CFAST is proposing development of v1.0 of the CDISC Osteoporosis Therapeutic Area Data Standard. This standard would build on the existing SDTM standards and related CDASH standards to facilitate the collection and use of data relevant to Osteoporosis clinical trials for post--menopausal osteoporosis, osteoporosis in men, glucocorticoid--induced osteoporosis.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to Osteoporosis:

- Data to substantiate diagnosis
- Medical history of special interest (e.g. fracture history, social history, family history)
- Bone Mineral Density (BMD) as measured by dual energy x--ray absorptiometry (DXA)
- Vertebral and non--vertebral fracture data
- Iliac crest bone biopsies
- Bone biomarkers of anabolic activity (bone formation and bone resorption) such as Bone--specific alkaline phosphate(se) (BSAP), Osteocalcin, Serum N--terminal extension propeptide of type I collagen (P1NP), C--terminal telopeptide (CTx)
- AEs of special interest (e.g. injection site reactions and immunogenicity for biologics, neoplasm, vascular events, atypical fracture, jaw osteonecrosis, hypocalcemia)
- CMs of special interest (e.g. glucocorticoid therapy, calcium/vitamin D)
- Patient reported outcomes (e.g. Back Pain NRS (numeric rating scale), Osteoporosis Patient Assessment Questionnaire – Physical Function (OPAQ--PF), EuroQol EQ--5D, Ambulatory Status Assessment and Health Care Resource Use (ASA--HCRU))

Plaque Psoriasis [Ps]

FDA Review Division: DDDP

Approved: January 2014

CFAST is proposing development of the CDISC Psoriasis Therapeutic Area Data Standard. This standard would build on the existing SDTM standards and related CDASH standards to facilitate the collection and use of data specifically expected to be collected during studies of plaque psoriasis.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest in Psoriasis (Ps) clinical trials: medical history, including duration of Ps and specific types (e.g., plaque psoriasis) and locations of psoriatic involvement; past, baseline and concomitant medication use for Ps; and clinical assessments of Ps, including the percentage of body surface area involved, the overall plaque characteristics of induration, scaling and erythema, the psoriasis area and severity index (PASI) score with its components, and the investigator's static global assessment. Additional clinical assessments of Ps such as Nail Psoriasis Severity Index (NAPSI), Psoriasis Scalp Severity Index (PSSI) and Palmoplantar Psoriasis Severity Index (PPASI) may be considered.

In addition, adverse events and laboratory abnormalities of special interest, such as infections (e.g., serious and opportunistic infections and tuberculosis), malignancies (e.g., lymphoproliferative disorders), administration site reactions, systemic hypersensitivity reactions (e.g., anaphylaxis), and drug--induced liver injury, will be included. These pieces of information are especially important for Ps systemic therapies. For drug--device combinations, device malfunction will be incorporated. Patient--reported outcomes and health--care resource utilization will be considered for future versions of the standard.

This is intended to guide the organization, structure, and format of standard Ps clinical trial tabulation datasets submitted to a regulatory authority.

Prostate Cancer

FDA Review Division:

Approved: October 2014

CFAST is proposing development of v1.0 of the CDISC Prostate Cancer (PrC) Therapeutic-area Data Standard. This standard would build on the existing SDTM standards and related CDASH standards to facilitate the collection and use of data relevant to PrC clinical trials.

The workgroup proposes developing a CDISC therapeutic area User Guide, including concept maps, metadata, examples and controlled terminology.

The standardization effort is expected to focus on the following areas of specific interest to PrC:

- Data obtained at diagnosis: biopsy(ies) and final surgery specimen: histology (H&E), Gleason score; key biomarkers (e.g., Ki-67, Prostate-specific membrane antigen (PSMA), Androgen receptor (AR), serum testosterone, other gene profile assays such as AR splice variants, CYP17 variations), liquid biopsy(ies) (e.g., Circulating Tumor Cell blood test (CTC), cell-free DNA), TNM stage, PSA at diagnosis;
- Tumor burden assessment and evolution: RECIST 1.1 tumor lesion burden and response measurements, bone lesion assessments, PSA level, free PSA, (derived variables: PSA doubling time, PSA/PSMA ratio, and PSA response), and liquid biopsy evolution (CTC, cell-free DNA), type metastases (bone, soft tissue (include location), visceral);
- Key time to event analysis endpoints: Overall, progression-free, metastases-free and disease-free survival, based on objective imaging, clinically relevant events (skeletal), PSA, CTC;
- Historical and post-study treatment types: surgical or radiotherapeutic; systemic hormonal, cytotoxic, radiopharmaceutical, immunological, transfusions, opiates and for each the Intent (neo/adjuvant, curative, palliative) and start/stop dates; procedures related to local progression (eg, nephrostomy tube placement, ureteral stents, suprapubic catheters);
- Type and length of initial hormonal therapy
 - Start/stop of hormonal therapy (ADT) [specify drug(s)] or date of surgical castration
 - Date of “castration resistance” (PSA rising or new metastases while on hormone therapy)
- Health care resource utilization (related to both disease and supportive care) including transfusions, hospitalization, intensive care, emergency visits, and hospice care
- Routine data: Medical and relevant family history (oncologic, urologic, and general); adverse events, treatment and study disposition (including reason), concomitant medications.
- COA/PRO endpoints: Pain, time to opiate use, time to pain progression, Prostate Cancer System Indexes and Symptom Distress Scales (PCSISDS).

QT Studies

FDA Review Division: DAIOP

Approved: August 2013

CFAST is proposing development of a CDISC QTc Therapeutic Area Data Standard. This standard would build on the existing CDISC ECG [EG] standards, and related CDASH standards, to facilitate the collection and use of data specifically expected to be collected during so called 'thorough QTc studies [Guidance for Industry E14 Clinical Evaluation of QT/QTc Interval Prolongation and Proarrhythmic Potential for Non-- Antiarrhythmic Drugs].

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to QTc studies: ECG--related variables [e.g., morphology, intervals] whether from Standard 12--Lead ECGs or Ambulatory ECG Monitoring, AEs, dosing, pharmacokinetics & relevant pharmacogenomics data.

Note: in particular, this project is not intended to cover cardiovascular endpoints, cardiovascular imaging which are being covered via other data standards development projects, but will be developed in a manner consistent with the forthcoming CDISC CV [cardiovascular] Therapeutic Area data standard.

Rheumatoid Arthritis (RA)

FDA Review Division: DPARP

Approved: July 2013

CFAST is proposing development of the CDISC RA Therapeutic Area Data Standard. This standard will build on the existing SDTM and related CDASH standards to facilitate the collection and use of data specifically expected to be collected during adult and juvenile RA studies.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to rheumatoid arthritis (RA): medical history, duration of RA disease, past and baseline medication use for RA, screening procedures (such as screening for tuberculosis), clinical assessments (such as joint assessments), patient reported outcomes, radiographic assessments, health care resource utilization (such as ER visits, in-home health care visits), concomitant medication for RA, surgical procedures for RA, AEs of special interest (such as infections, including serious and opportunistic infections and tuberculosis, malignancies, including lymphoproliferative disorders, injection site reactions, systemic hypersensitivity reactions, including anaphylaxis, drug-induced liver injury), laboratory tests of special interest, device malfunction (for drug-device combination products).

Schizophrenia

FDA Review Division: DAVP

Approved: November 2013

CFAST is proposing development of v1.0 of the CDISC Schizophrenia Therapeutic Area Data Standard, building on existing SDTM and related CDASH standards to facilitate the collection and use of data relevant to this disease area.

Schizophrenia is a mental disorder characterized by delusions, hallucinations, and disorganized speech, with the onset of symptoms usually appearing in young adulthood. The Clinical Data Elements (CDEs) to be used in developing v1.0 of the standard are being defined and developed by Duke Clinical Research Institute (DCRI) through HL7 with input from subject matter experts in government, academia, and industry under grant support from the FDA.

The Schizophrenia CDEs focus on the following data categories or domains areas: diagnosis, course of illness, family psychiatric history, psychiatric hospitalizations, AEs of special interest (e.g., tardive dyskinesia, akathisia, and hyperprolactinemia), and rating scales/questionnaires measuring multiple areas, including psychotic symptoms, functionality, neurocognition, and quality of life. This User Guide (UG) will be based on approximately 75 CDEs and will also include examples from several of the 135 applicable questionnaires.

Solid Organ Transplant

FDA Review Division: DSPTP

Approved: May 2014

CFAST is proposing development of v1.0 of the CDISC Solid Organ Transplant Therapeutic Area Data Standard. This standard would build on the existing SDTM standards and related CDASH standards to facilitate the collection and use of data relevant to Solid Organ Transplant clinical trials.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, examples and controlled terminology. The standardization effort is expected to focus on the following areas of specific interest to Solid Organ Transplant: organ data (e.g. PRA and HLA matching), diagnosis data, donor demographics/characteristics, surgery information, concomitant immunosuppressive therapy, biopsy data, AEs (rejection, Cytomegalovirus, Epstein Barr Virus, BK Virus, Post--transplant Lymphoproliferative Disorder), new onset of diabetes after transplant (NODAT), graft status, dialysis data (for kidney transplant), blood samples for calcineurin inhibitor (CNI) medication levels, anti--HLA antibodies, viral serology and load data.

Traumatic Brain Injury

FDA Review Division: DNP

Approved: October 2013

CFAST is proposing development of v1.0 of the CDISC Traumatic Brain Injury (TBI) Therapeutic Area Data Standard.

Traumatic Brain Injury (TBI) is a form of acquired brain injury, which occurs when a sudden external force causes damage to the brain. TBI can be classified based on severity, mechanism (closed or penetrating head injury) or other features. TBI affects an estimated 10 million people worldwide and more than 3.4 million in the

U.S. every year. TBI is a silent epidemic----its symptoms are frequently invisible, thus difficult to diagnose and treat. TBI can lead to motor, cognitive, and social impairments that interfere with an individual's ability to be productive.

In collaboration with One Mind for Research, the workgroup proposes developing a Therapeutic Area User Guide to support clinical research and enable medical product development through the establishment and maintenance of data standards, tools and methods for conducting research in brain injury on a global scale. This project will build from the established NINDS CDEs for TBI to support SDTM (Study Data Tabulation Model) data models supplemented with guidelines to support CRFs consistent with CDASH (Clinical Data Acquisition Standards Harmonization).

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps to show critical information elements and their relationships, domain mappings, rules, controlled terminologies and examples for representing data using SDTM and CDASH.

The standardization effort is expected to focus on the following areas of specific interest to TBI:

1. Medical history of special interest
2. Key biomarkers
3. Physical and neurological assessments (functional assessments) of interest,
4. Clinical observations based on medical imaging
5. Patient reported outcomes and scales.

Tuberculosis v2.0

FDA Review Division: DNP

Approved: December 2014

CFAST is proposing the development of v2.0 of the CDISC Tuberculosis Therapeutic Area Data Standard. This standard would build on v1.0 of the TB standard and other existing CDISC standards to facilitate the collection and use of data relevant to tuberculosis clinical trials. The disease type is pulmonary tuberculosis.

The scope of the project will focus on extending the adult data standards to include pediatric populations. Additionally, content on rapid drug susceptibility testing will be added and the TAUG will be updated to reflect current formatting, which will include the addition of concept maps.

The workgroup proposes developing a CDISC Therapeutic Area User Guide, including concept maps, metadata, SDTM examples, and controlled terminology. Because significant effort is required to update this pre-CFAST v1.0 TA standard to the current format (including the addition of disease background and concept maps), and the potential for a significant amount of new clinical content, CDASH and ADaM will be considered out of scope for v2.0. In v1.0 several draft domains including MI, MO, DU, and SR were used in the SDTM modeling examples; these domains were released as final as part of the SDTMIG v3.2 and the SDTMIG-MD v1. Thus, content that was considered provisional in v1.0 will need to be harmonized with the published versions of these domains and controlled terminology. New clinical content will focus on pediatric TB and rapid drug susceptibility testing.

The standardization effort is expected to include new content on the following specific areas of interest to tuberculosis.

1. Drug susceptibility testing
2. Pediatric TB using data elements created by Duke Clinical Research Institute
3. Specimen handling

Deliverables will consist of the following:

1. CDISC Therapeutic Area User Guide v2.0 for tuberculosis
2. CDISC Controlled Terminology for tuberculosis

For more information on tuberculosis, see: <http://www.cdc.gov/tb/>.

Virology v2.0

FDA Review Divisions: OAP, DAVP, OVRR

Approved: February 2015

CFAST is proposing development of v2.0 of the CDISC Virology Therapeutic Area Data Standard. This standard would build on v1.0 of the Virology standard and existing CDISC standards to facilitate the collection and use of data relevant to clinical trials involving virology concepts and/or endpoints. There is a need to update the Virology guide in the context of multiple new virology related standards recently developed and based on lessons learned during those development efforts, with the goal of a harmonized virology supplement to SDTM.

This project will focus on several key items including updating document format and layout, harmonizing an approach to key endpoints (such as viral load and immune titers) and updating domain structures as necessary to accommodate diverse viral nomenclature that exceeds the current available variables of “species” and “strain”. Finally, any necessary terminology updates will also be addressed.

The workgroup proposes developing a CDISC Therapeutic Area User Guide including concept maps, examples and controlled terminology.

The standardization effort is expected to evaluate the following specific areas of interest.

1. Species/strain, taxonomy
2. Viral resistance domain
3. Commonalities in study endpoints and assessments across virological disease treatment and prophylaxis

Deliverables will consist of the following:

1. CDISC Virology Therapeutic Area Data Standard v2.0