

# CRMS Data Management Tools

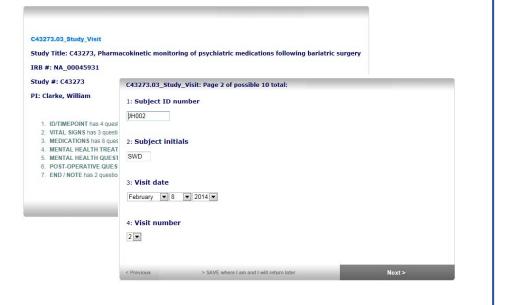
CASE REPORT FORMS STUDY SCHEDULE TRACKING COORDINATING CENTER FUNCTIONS

Data Manager Interest Group April 14, 2015

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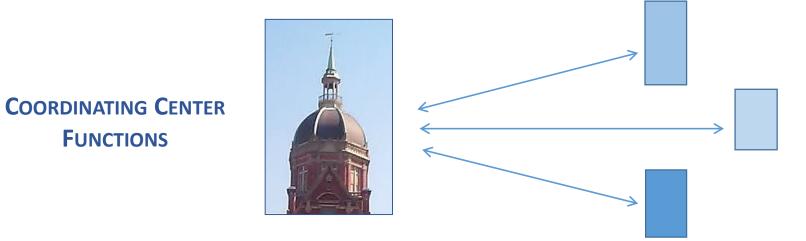
Clinical Research Office, Sidney Kimmel Comprehensive Cancer Center

#### CASE REPORT FORMS / DATABASE DEVELOPMENT



#### **STUDY SCHEDULE TRACKING**





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J1414.02_Onstudy
Study Title: Neoadjuvant Anti-Programmed Death-1 Antibody, Nivolumab, in Resectable Non-Small-Cell Lung Cancer
IRB #: NA_00092076
Study #: J1414
PI: Brahmer
<ol> <li>ID/TIMEPOINT has 2 questions.</li> <li>DEMOGRAPHICS has 6 questions.</li> <li>ENROLLMENT has 4 questions.</li> <li>DIAGNOSIS/STAGING has 4 questions.</li> <li>MEDICAL HISTORY has 1 questions.</li> <li>ONSTUDY EVALUATIONS has 8 questions.</li> <li>END/COMMENT has 2 questions.</li> </ol>
Next >
J1414.02_Onstudy: Page 2 of possible 9 total:

	y: Page 2 of possible 9 total:	
1: Subject ID numb	er	
JH001		
2. Cubicct Initials		
2: Subject initials		
AJB		

- Q1. Subject ID # has been populated directly from CRMS. The field is grayed-out and may not be edited.
- Q2. Subject initials are normally entered only on the Onstudy form. This field is auto-populated on all of the subject's remaining forms.

J1414.02_Onstudy: Page 3 of possible 9 total:	
3: Date of birth	
February 💌 9 💌 1932 💌	
4: Gender	
M	
5: If female, does subject have childbearing potential?	
🔘 Yes 🔘 No 🔘 Unk	
6: Race	
Asian	
7: Ethnicity	
Non-Hispanic	
8: Zipcode	
21205	
< Previous > SAVE where I am and I will return later	Next >

#### Demographic fields are pulled from CRMS and may not be edited.

Q5. This question has been skipped (disabled) because the subject is male.

1414.02_Onstudy: Page 4 of possible 9 total:	5 J1414.02_Onstudy: Page 5 of possible 9 total:
): Date of consent	13: Date of initial diagnosis
October 💌 6 💌 2014 💌	September 💌 13 💌 2014 💌
0: Is the subject eligible?	14: Site of primary tumor
Yes	Left Upper Lobe
1: Date eligible	•
October   6   2014   2008	
2009 2010	15: Histology
2: Reason why not 2011 e 2012 2012	Adenocarcinoma
2013	
2014 2015 2016	16: Histologic grade
2017	Well Differentiated
2018 2019	
2020 2021	
Previous 2022 E where I am and I will return later 2023	Next > < Previous > SAVE where I am and I will return later Next >

#### J1414.02\_Onstudy: Page 6 of possible 9 total:

6

.

17: MEDICAL HISTORY Currently active medical history items should be added to the adverse events log

Body system	Specific condition	Start date	Stop date	Grade	Action
03 Cardiovascular	cardiac arrhythmia	May 💌 24 💌 2017	▼ June ▼ 4 ▼ 2011 ▼	1	Ū
02 Eyes	elevated pressure - right eye	January 💌 4 💌 1999	▼ August ▼ 15 ▼ 2000 ▼	] n/a	Ō
•	III			1	4
+ Add					
< Previous > SAVE v	where I am and I will return later		_	Next >	

This is a Tabular Field. It may contain a variable number of rows of data.



#### J1414.02\_Onstudy: Page 7 of possible 9 total:

#### 18: Height cm

172.5

19: Was a pregnancy test performed?

Yes

O No

20: Pregnancy test date

Month 💌 Day 💌 Year 💌

21: Pregnancy test outcome

Positive Negative

#### 22: Was an EKG performed?

● Yes ◎ No ◎ NA

#### 23: EKG date

October 💌 9 💌 2014 💌

#### 24: EKG result

Normal Abnormal Unknown

25: Was the abnormality clinically significant?

Yes, describe

O No

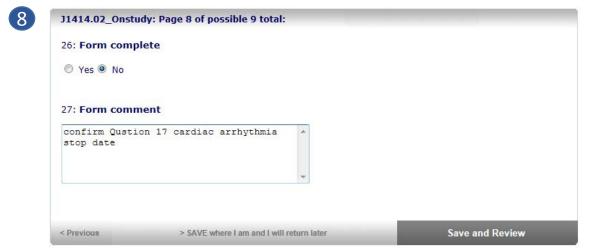
O Unkown, explain

Please specify:

sinus bradycardia

< Previous	> SAVE where I am and I will return later
------------	---

Next >



On the last screen of the form, Save and Review appears as an option. Selecting this displays data in a more consolidated form. It also moves you to the screen where Finalize is an option.

After Save and Review has been selected, data items appear in summary format.

Until the form is **Finalized**, any item may be edited by selecting **Change**.

-	Number: JH001 Idated on: April 09, 2015		
	check the answers to your questions. re comfortable with the responses, then please click the	finalize button at the bottom of the screen	
	v complete audit log		iendly version
#	QUESTION	RESPONSE	EDIT
1	Subject ID number	JH001	Change
2	Subject initials	AJB	Change
3	Date of birth	February 9, 1932	Change
4	Gender	м	Change
6	Race	Asian	Change
7	Ethnicity	Non-Hispanic	Change
8	Zipcode	21205	Change
9	Date of consent	October 6, 2014	Change
10	Is the subject eligible?	Yes	Change
	Date eligible	October 6, 2014	Change

Form: J1	1414.02_Onstudy	
	Number: JH001 dated on: April 09, 2015	
Show co	omplete audit log	
1	Subject ID number	JH001
2	Subject initials	AJB
3	Date of birth Gender Print Version	February 9, 1932
4	Gender	м
6	Race	Asian
7	Ethnicity	Non-Hispanic
8	Zipcode	21205
9	Date of consent	October 6, 2014
10	Is the subject eligible?	Yes
11	Date eligible	October 6, 2014
13	Date of initial diagnosis	September 13, 2014
14	Site of primary tumor	Left Upper Lobe
15	Histology	Adenocarcinoma
16	Histologic grade	Well Differentiated
17	MEDICAL HISTORY Currently active medical history items should be added to the adverse events log	2 rows (hide)
	Body system         Specific condition         Start date         Stop date         Grade           03 Cardiovascular cardiac arrhythmia         May 24, 2011         June 2011         1           02 Eyes         elevated pressure - right eye January 4, 1999         August 15, 2000         2	
18	Height cm	172.5
22	Was an EKG performed?	Yes
23	EKG date	October 9, 2014
24	EKG result	Abnormal
25	Was the abnormality clinically significant?	Yes, describe: sinus bradycardia
26	Form complete	No
27	Form comment	confirm Qustion 17 cardiac arrhythmia stop date

#### **Features**

Text, string, integer, float, option-select one, option-select multi, visual scale, date, time tabular (matrix)	
Fields can be autopopulated with system values, text and responses from another form	
The appearance of a field can be customized – special characters can be automatically inserted. ########	
Validate range, data type, date.	
Has both warning and error (hard stop) preventing invalid data	
Provide skip (disable) rules using standard operators. Questions modified by disable rules only accept data if condition is met. Web forms also provides a jump rule, allowing bypass of an entire section of a form	
Onscreen display of audit trail for fields, either as a summary or on roll-over of individual fields. Log of all status changes to a subject's form	
Allows locking/unlocking by anyone with locking permission.	
Online design systems that create two types of forms: a form with questions listed vertically and a form that can be formatted to have any appearance.	
A data dictionary is created in CRMS as a form is developed.	

#### **Features**

Code book / Data dictionary	A data dictionary is created in CRMS as a form is developed.	
Ability to copy and modify forms and variables		
Form Library	A library of standard CRMS forms is available to use.	
ViewPrint case report forms		
Pre-activation form testing	Forms can be fully tested before switching to production mode.	
Versioning	Form and field versioning is supported	
Data export	Exports to CSV file	
Configurable user rights	Individual user rights are programmed by a system administrator.	
Support for multi-site studies	Full Coordinating Center functions are in place, giving outside sites study-level access to only their subjects.	
File repository	Store documents and other files with the project/study	

#### **Features: Audit Log**

Form: J1414.0	z_onstudy		
Subject Number: JH00 .ast Updated on: April			
	•		
Please check the answ	ers to your questions. with the responses, then please click the final	ize butten at the bettern of the core on	
Hide complete au			friendly version
Subject ID numbe	er	RESPONSE	EDIT
Subject initials		AND	Citatige
Date of birth		February 9, 1932	Change
Gender		М	Change
		Asian	Change ≡
lf female, does su	ibject have childbearing	Non-Hispanic	Change
Race		21205	Change
Ethnicity		October 6, 2014	Change
Zipcode		Yes	Change
Date of consent		October 6, 2014	Change
Is the subject elig	jible?	September 13, 2014	Change
Date eligible		Lei Gober Love	¢
Reason why not	eligible	<b>P</b>	- P +
Date of initial dia		FIN	alize >
	-		Version: 0.2.0
Site of primary tu	mor		
Histology			
Item Value		ns Medical Institutions	
Squamous cell	04/09/2015 14:10 sbooker2@jc		
	14.10		

#### J1414.02\_Onstudy: Page 5 of possible 9 total: 13: Date of initial diagnosis ▼ 2014 ▼ September 💌 13 14: Site of primary tumor Left Upper Lobe . 15: Histology Squamous cell Item Value Date User 04/09/2015 sbooker2@johnshopkins.edu 16: Histologic gra Squamous cell Well Differentiated Adenocarcinoma 04/09/2015 13:27 sbooker2@johnshopkins.edu Save and Review < Previous > SAVE where I am and I will return later

#### **Features: Validation**

7: <b>MEDIC</b> g	CAL HISTORY (	Currently active medica	l history items should be added to	the adverse events	
		Start date	Stop date	Grade A	Action
	Мау	▼ 24 ▼ 2011 ▼	June 💌 Day 💌 2011 💌	] 1	Ū
				Q5: The value entered was not a number	
	January	▼ 4 ▼ 1999 ▼	August 💌 15 💌 2000 💌	] n/a	Ū
				1	•

#### **Requesting and Creating Case Report Forms**

- 1. Contact the Development Team at <u>CRMSHelp@jhmi.edu</u>, noting that you are requesting CRFs and providing the study ID number.
- 2. Initial Review and Planning The Development Team will respond shortly after that to review the request, help define required forms, if necessary, and complete the CRMS CRF Request Summary.
- **3.** Data Definition The Study Team then defines all data items to be included in the forms by modifying available standard form templates, modifying forms from previous or current studies, providing an existing database structure, or by defining new forms using CRMS CRF Request Forms.
- **4.** Form Creation and First Sign-off After the Development Team has created the CRFs in CRMS, the Study Team reviews them for completeness and signs off on this stage of development.
- **5.** Data Test and Final Sign-off The Development Team then runs a data test on the forms and provides the results to the Study Team. After review, both teams give their final sign-off.
- **6.** Form Activation The Development Team activates the forms and moves them to the live system.

CRFs and Study Calendars are created for all departments by the Development Team in the SKCCC Clinical Research Office.

#### **CRF Request Summary**

While this list represents the most commonly used CRFs in Oncology studies, many of the forms are relevant to non-Onc studies.

- 1. Standard forms serve as templates, to be modified to meet the needs of any study.
- 2. Studies are not required to use any of the standard forms. CRFs may be created using previously defined forms, forms that are currently in use on other studies, existing database structure, or newly designed using the CRMS **CRF Request Form.**
- 3. Most importantly, the entire Study Team, including the PI and Statistician, should have input at this stage of f development. This is an opportunity for everyone to become familiar with study structure and goals and to ensure that nothing is overlooked, avoiding form changes mid-study to correct errors that could have been caught before the forms went into use.

×	Form Title * Standard form available	0 or fee	If using any form, standard or otherwise, as a template, include form name and version.	Frequency : Standard or Potential Contents : Notes Except demographic data, Standard form contents may be deleted or modified and new fields may be added
				One per subject : Study Eligibility checklist from protocol
	Eligibility			
				One per subject : Demographics, medical and tx history, pre-study evaluations
	Onstudy*			
	·			One per subject : Drug name, start date, stop date
	Concomitant Meds*			
				Multi per subject : Visit date, vitals, PE
	Visit*			
	Treatment*			One or multi per subject : Treatment date, modality, dose/amount
	Clinical Lab Results / Blood Tests*			Multi/subject : Collection date, values, units, normal limits, auto-calculated grade
				Multi/subject : Collection date, values, units, normal limits, auto-calculated grade
	Urinalysis*			
	Research Specimens PK/PD, tiss, blood, etc.			One or multi/subject : Collection date, collection method, sample type
	Clinical Specimens for clinical use only			One or multi/subject : Collection date, collection method, sample type
	Procedure			One or multi/subject : Procedure date, procedure type, result
	RECIST - Baseline*			One/subject If using RECIST measurements, all three forms are required
				Multi/subject
	RECIST - Follow Up*			
				One/subject
	RECIST - New Lesions*			
	Response Evaluation not RECIST			One or multi/subject : Evaluation date, evaluation type, result, disease response
	-			One/subject : Site, term, grade, attribution, sequelae
	Adverse Events Log*			
				One/subject
	Off Study*			
	Follow Up*			Multi/subject
	'X' in the box next to the forms you want to use. Add other			Copies of all Standard forms are available to view on our website - link is at the top of this form.
	i form title denotes a Standard form. These forms are gener : study needs.	ic and will	be modified 4.	. Forms created for other studies may also be used as templates. 5. If a form is copyrighted or requires a fee for use, check that box and provide details.

#### **New CRF – Completing the CRF Request Form**

If a new form is being created ,start with the CRF Request Form.

This is similar to the REDCap data definition form, but it doesn't automatically generate a CRF.

For CRMS purposes, this form is used for documentation and for communication within the Study Team and with CRF developers.

When complete, this form will serve as a data dictionary to be shared with Statisticians and others involved in data analysis.

	Case Report Form R	lequest	Johns Hopkins Medical Ir	ment System				95/13 11:32 AM CRF Request Form v.5 BLANK TEMPLATE.xltm <u>CRMS Help</u>						
Study Title:									Instr	uctions		version 5.0		
IRB #:											e CRFon this form.			
Study #:	J####										n the order in which they should a multiple codes or response option			
Contact:									3		reate a list in a single cell.	ns, separate each item with		
Email: Phone:									4.	Place the curse	tion Title or other text or in the row above the row in whi			
Form #:	01											er the section title in the new row.		
									5.	A filename for t	aving this form this form is automatically created			
	form title										he left. The first time you save this give it this filename, located in the			
ile name:														
ltern #	Text	Data Tupe	Field Name	Data Format	Data Units	Field Length	Response Format	Response Response Codes Choices		Code List <i>CRC1 use</i> anly	Validation Rule syntax: warninglerror <i>if dummy field &lt;</i> 1	<b>Disable Rule</b> syntax: disable if <i>dummy field != 1</i>		
Headen	Text	туре	Field Name	Mask	Units	Lengin	Format	Codes Choices		287.037	n dunin <u>iji</u> neid (†	ir ounin <u>is neio i</u> i		
Section	ID													
A	Subject ID number	CRMS	subject_id_CRMS											
в	Subject initials replace missing initial with '-'	String	subject_initials_J#####	×××		3								
Headen' Section														
1														
2														
3														
4														
5														
6														
U			+											

ltem #	Text	Data Type	Field Name	Data Format/ Mask	Data Units	Field Length	Respon se	Response Codes	Response Choices	Code List Name	Validation Rule syntax: warning/error if <i>dumm<u>u</u>, lield &lt; 1</i>	Skip Rule syntax: skip if <i>dommy Kell</i> /= /
	ID / TIMEPOINT											
1	Subject ID number	CRMS	subject_number_crms_SKCCC									
2	Subject initials replace missing initial with '-'	String	subject_initials_J1414	xxx		3						
	DEMOGRAPHICS											
3	Date of birth	CRMS	date_of_birth_crms_SKCCC									
4	Gender	CRMS	gender_crms_SKCCC				Radio button		Female Male Not reported Undifferentiated			
5	If female, does subject have childbearing potential?	Select	child_bearing_potential_SKCC C				Radio button	Y N U	Yes No Unk	yes/na/unk		gender != F
6	Race select all that apply	CRMS	race_crms_SKCCC				Radio button		Am Indian or AK Native Asian Black or African American Native HI /Pacific Islander Other Unknown White Two or more Baces Declined to Answer			
-			statistic and CKCCC				Radio		Hispanic Non-Hispanic Unknown Pt Refused			
7	Ethnicity	CRMS	ethnicity_crms_SKCCC zipcode_crms_SKCCC				button		Pt Herused			
8	Zipcode ELIGIBILITY / CONSENT	CRMS										
9	Consent date	CRMS	consent_date_CRMS_SKCCC									
10	Is the subject eligible?	Select	eligible_SKCCC				Drop down	Y N	Yes No			
11	Date eligibility determined	Date	date_subject_eligible_SKCCC									
12	Reason why not eligible	Text	reason_not_eligible_SKCCC									
13	Arm Assignment	Select	patient_cohort_J1414				Drop down	A B	A B	patient_cohort_ alva		
	DIAGNOSIS / STAGING											

#### Defining a Variable using the CRF Request Form

			Data		Data Format	Data	Field	Response	Response	Response	Code List	Validation Rule syntax: warning/error	<b>Disable Rule</b> syntax: disable
Iten	n #	Text	Туре	Field Name	Mask	Units	Length	Format	Codes	Choices	CRO use only	if dummy_field < 1	if dummy_field != 1
	1	Height											

Item #	Text	Data Type Field	Name	Data Format Mask	Field Length		Response Choices	Code List CRO use only	Validation Rule syntax: warning/error <i>if dummy_field &lt; 1</i>	<b>Disable Rule</b> syntax: disable if <i>dummy_field != 1</i>
1	Height	(	-							
		CRMS Date Float (dec) Integer String Text Select one Select multi	* III *							

Item #	Text	Data Type	Field Name		Response Format		Code List CRO use only	Validation Rule syntax: warning/error if dummy field < 1	<b>Disable Rule</b> syntax: disable if <i>dummy field</i> != 1
1	Height	Float							

		Data						Response	Response	Code List	Validation Rule syntax: warning/error	<b>Disable Rule</b> syntax: disable
Item #	Text	Туре	Field Name	Mask	Units	Length	Format	Codes	Choices	CRO use only	if dummy_field < 1	if dummy_field != 1
1	Height	Float	height_cm_J1414	###.##								

Item #	Text	Data Type	Field Name			Field Length		Response Choices	Code List	Validation Rule syntax: warning/error if dummy_field < 1	Disable Rule syntax: disable if dummy_field != 1
1	Height	Float	height_cm_J1414	###.##	cm						

				Data						Validation Rule	Disable Rule
		Data		Format	Data	Field	Response	Response Response	nse Code List	syntax: warning/error	syntax: disable
Item #	Text	Туре	Field Name	Mask	Units	Length	Format	Codes Choice	S CRO use only	if dummy_field < 1	if dummy_field != 1
1	Height	Float	height_cm_J1414	###.##	cm	6					

				Data							Validation Rule	Disable Rule
		Data		Format	Data	Field	Response	Response	Response	Code List	syntax: warning/error	syntax: disable
Item #	Text	Туре	Field Name	Mask	Units	Length	Format	Codes	Choices	CRO use only	if dummy_field < 1	if dummy_field != 1
1	Height	Float	height_cm_J1414	###.##	cm	6					Warn if height > 243	

#### Defining an Option Variable

ltern #	Text	Data Type	Field Name	Data Format/ Mask	Data Units	Field	Response Format	Response Codes	Response Choices	Code List Name	Validation Rule syntax: warning/error if <i>dummy, field د 1</i>	Skip Rule syntax: skip if <i>dummy, field != 1</i>
	Best response	Select one	prior_chemotherapy_best_resp onse_SKCCC				Drop down	CR PR SD PD	Complete response Partial response Stable disease Progressive disease Unknown	prior_chemothe rapy_best_resp onse_SKCCC		
					******		orop down Radio butte		•••••••••••••••••••••••••••••••••••••••			,

#### **Creating a New CRF from a Standard Template**

If a Standard Template is close to your needs, make any modifications on the form's CRF Request Form that was supplied .

In this example, changes appear in red.

ltem #	Text	Data Type	Field Name	Data Format/ Mask	Data Units	Field Leng th	Respons Format	Response Codes	Response Choices	Code List Name	syntax: warning/error if <i>dummy_field &lt; 1</i>	syntax: skip if dummy_field != 1
MEDICAL HIS	STORY											
21	Medical history	Tabular	medical_history_J1414									
	Body system	Select one	history_body_system_ <b>J1414</b>				Drop down	01 ENMT 02 Eye 03 Cardio 04 Resp 05 GI 06 GU 07 MS 08 Skin 09 Neuro 10 Psych 11 Endo 12 Heme/Lym 13 Al/Imm 14 Con 15 Oth	01 Ear / Nose / Mouth / Throat 02 Eyes 03 Cardiovascular 04 Respiratory 05 Gastrointestinal 06 Genitourinary 07 Musculoskeletal 08 Skin / Breasts 09 Neurologic 10 Psychiatric 11 Endocrine 12 Hematologic / Lymphatic 13 Allergy / Immunologic 14 Constitutional 15 Other, specify	body_system_co de_J1414		
	Specific condition	Text	history_condition_SKCCC			50						
	Start date	Date	history_start_date_SKCCC									
	Stop date	Date	history_stop_date_SKCCC									
	Grade	Integer	history_grade_SKCCC			1						
ONSTUDY EV	ALUATIONS											
22	Height	Float (dec)	height_cm_SKCCC	###.#	cm	5					Wann if <122.0 or >243.0	
23	Was a pregnancy test performed?	Select one	pregnancy_test_done_SKCCC				Radio button	YN	Yes No	yes_no_na		gender_crms_SKCCC != "Femal
24	Pregnancy test date	Date	pregnancy_test_date_SKCCC									pregnancy_test_done_ != "Y"

#### **Accessing Forms**

History Number: Subject No:

Study Menu J1414 Lay Abstract Study Consents Eligibility Criteria Schedules Enrollment Create New Patient Calendars Regulatory Logs Medicare Coverage Analysis	Forms for an individual subject can be accessed by selecting the <b>Enrollment</b> tab.		
Documents		Then by se	electing <b>CRFs</b> on the subject's
Case Report Forms	<b>—</b>	enrollmen	
Budgets	ڬ J1414 TEST STUDY: Neoadjuvant Anti-Programmed Death-1 Antibody, Nivolumab, in Resectable Non-Small-Cell Lung Cancer.	enionnen	
Preferences	Status: Active     PI: Brahmer, Julie       IRB Number:     Lead Study Coordinator: Miller-Hart, Anita	1	
	Department/Division: Oncology       Lead Research Nurse: Tsottles, Nancy         General       Study Team       Regulatory       Sponsors       Sites       Drug/Device       Enrollment		
	Find Participant on Enrollment List: (First Name, Last Name, Subject Number, History Number)  Search		Display Enrollment Status: all; Current Site: all; Schedule: all; Ordered By Consent Date
	Add Participant Not candidate Consent Eligibility Enroll Follow Up Off study Delete Lock	4	1 Participant
	J1414, Test 1 - Enrolled Hopkins - X0001 - J1414 Treatment ver 0.2	CRFs Docs	[Enter Subject Progress]

Consent:

On Study:

JH001

10/06/2014

10/06/2014

Scr. Failure:

Evaluable:

[Add]

[Add]

Start Int:

Last Int:

End Int:

Off Study:

[Add]

[Add]

#### **Accessing Forms and Entering Data**

Forms may be grouped by study time point on the CRFs page. CRFs that have been finalized give the option to View only.

Baseline > Screening (09/01/2014)	Scheduled	Event Status	Due	Updated	Finalized	Data Available	$\frown$
View Screening > J1414.02_Onstudy	09/01/2014	Projected	09/01/2014	04/09/2015 14:17	04/09/2015 14:16	· 04/09/2015 14:17	Reopen Lock Print History
Resume Screening > J1414.03_Study_Visit	09/01/2014	Projected	09/01/2014	04/13/2015 07:57	-	© 04/13/2015 07:57	Reset Print History
Start Screening > J1414.05_Treatment	09/01/2014	Projected	09/01/2014	-		-	_
Start Screening > J1414.08_Research_Specimens	09/01/2014	Projected	09/01/2014	-		-	_
Start Screening > J1414.09_Procedures	09/01/2014	Projected	09/01/2014	-		-	-
Baseline > Ongoing Forms (09/07/2014)							
	Scheduled	Event Status	Due	Updated	Finalized	Data Available	
Start Ongoing Forms > J1414.04_Concomitant_Medications	09/07/2014	Projected	09/07/2014	-		_	-
Baseline > Pre Op Day -28 (09/08/2014)							
	Scheduled	Event Status	Due	Updated	Finalized	Data Available	

#### **Retrieving Data**

- Data from a single form or from all forms within a study may be exported to a csv file.
- No filters or other qualifiers can be applied.
- Data from Tabular fields may be exported to separate tables, displaying data by row rather than horizontally
- Reporting functions are being developed which, initially, will require submitting a report request to the Oncology CRO.
- Future development will include a more flexible reporting system.

subject_number_crms_SKCCC	subject_initials_J1414	date_of_birth_crms_SKCCC	gender_crms_SKCCC	child_bearing_potential_J1414
JH001	AJB	2/9/1932	М	null:-666

race_crms_SKCCC	ethnicity_crms_SKCCC	zipcode_crms_SKCCC	consent_date_crms_SKCCC	eligible_SKCCC
Asian	Non-Hispanic	21205	10/6/2014	Y

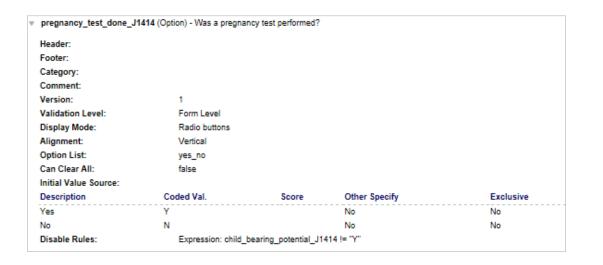
date_subject_ eligible_SKCCC	reason_not_eligible_SKCCC	date_initial_diagnosis_SKCCC
10/6/2014	null:-666	9/13/2014

site_tumor_SKCCC	histology_SKCCC	histologic_grade_SKCCC
Left Upper Lobe	Squamous cell	WD

New Form Data Report						
Select Protocol:	J1414					
Select Form:	J1414.02_Onstudy					
Select Format:	.csv (comma separated values)					
Select Option:	Remove empty info columns					
Export tabular responses in a separate file.						
Notify me by email when this report is complete.						
Enable Export						

Submit Cancel

#### Neat Things - Internal Data Dictionary and Emails Triggered by Form Responses

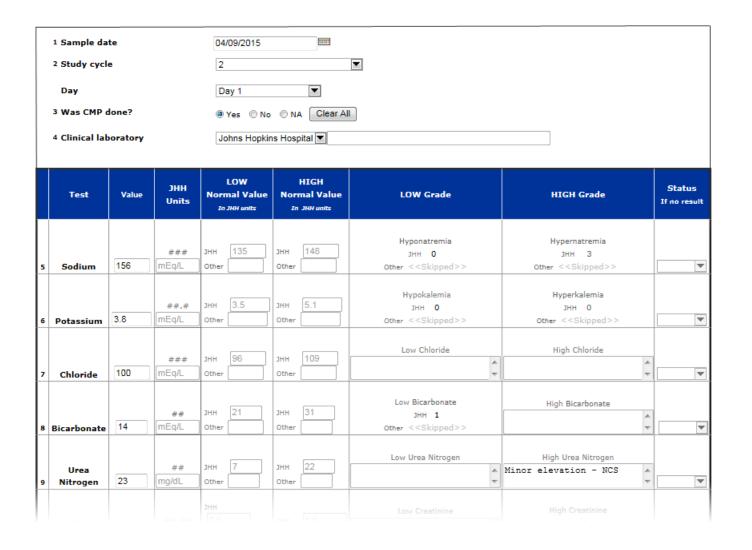


w height_cm_J1414 (Float) - H	Height cm	
Header:		
Footer:		
Category:		
Comment:		
Version:	1	
Validation Level:	Form Level	
Field Size:	5	
Max Length:	5	
Input Mask:	###.#	
Initial Value Source:		

w	Grading S	Scale: sodium_mEq_L_hyper_scale_JHH
	Version: Inputs: s	1 odium_mEq_L_JHH, sodium_mEq_L_high_JHH
	Grade	Expression
	4	sodium_mEq_L_JHH>160
	3	sodium_mEq_L_JHH>155
	2	sodium_mEq_L_JHH>150
	1	(sodium_mEq_L_JHH>sodium_mEq_L_high_JHH)
	0	(sodium_mEq_L_JHH<≔sodium_mEq_L_high_JHH)

<pre>sodium_mEq_L_hypo_g</pre>	grade_JHH_v8 (Scoring) - Hyponatremia grade
Category:	
Comment:	
Version:	7
Validation Level:	Form Level
Scoring Expression:	grade("sodium_mEq_L_hypo_scale_JHH_v2",sodium_mEq_L_JHH,sodium_mEq_L_low_JHH)
Initial Value Source:	
	Expression: clinical_laboratory_site_GENERIC != "1" or cmp_done_JHH != "Y" or sodium_mEq_L_JHH=null or
Disable Rules:	sodium_mEq_L_JHH >=sodium_mEq_L_low_JHH and sodium_mEq_L_low_OTHER =null or sodium_mEq_L_JHH >=sodium_mEq_L_low_OTHER and sodium_mEq_L_low_JHH=null

#### Auto-Calculated Clinical Laboratory CTCAE Toxicity Grades



Johns Hopkins Laboratory normal values are populated and maintained by SKCCC CRO. If a lab other than Johns Hopkins is selected in Q4, the Hopkins normal values are removed.

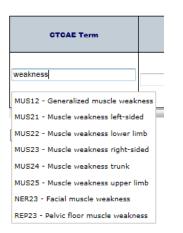
Since we do not support auto-population of Outside Laboratory (Other) normal values\*, normal values must be entered manually on every form that is completed for an Outside Lab.

\*Because subjects on Hopkins clinical trials live throughout the country and internationally, the number of outside normal values that would require monitoring and updating is very large, and the maintenance of these values would be prone to error.

#### **Adverse Events Log – Lookup Functions**

#### Look up CTCAE Term

- Subject reports feeling weakness in left leg.
- Locate the CTCAE term for leg weakness by entering 'weakness' or other key term in CTCAE Term field.
- Identify term as 'Muscle weakness lower limb' CRMS code MUS22.



#### Look up Grade

- Enter CRMS code 'MUS22' in Grade field
- Select grade

CTCAE Term	Grade	Describe Adverse Eve
MUS22 - Muscle weakness lower li	mus22	
٠ [	MUS22 Gr 0 MUS22 Gr 1 - Symptomatic; perceived by patient but	not evident on physical exam
+ Add	MUS22 Gr 2 - Symptomatic; evident on physical exam MUS22 Gr 3 - Limiting self care ADL; disabling	n; limiting instrumental ADL
	MUS22 Gr 4 MUS22 Gr 5	

CTCAE Term	Grade	Describe Adverse Event	Onset date	Stop date	Related to Study Product #1	Related to Study Product #2	Related to Study Product #3	Action Taken	Intervention		Dose Limiting Toxicity	AE	Action
MUS22 - Muscle weakness lower li	MUS22 Gr 2 - Symptomatic; evident on physical exam	sudden onset loss of strength 🔺 in left leg 👻	03/16/2015	04/06/2015	1 - Unrelated	2 - Unlikely 💌	4 - Probable 💌	3 - Regimen interrupted		3 - Resolved w/ intervention	Yes	© Yes ම No	Û

The CRMS Calendar is a **study-specific patient calendar** based on a protocol's schema and study table.

		April 2014 >			
Monday	TUESDAY	WEDNESDAY		THURSDAY	FRIDAY
		1	2	3	
	Cyc1 > D1	Cyc1 > D2			
	Eval and Mgmt[7]	Research Samples[1]			
	Assessments[1]	Case Report Forms[1]			
	EKG[1] Lab/Path Evaluations[6]				
	Drugs/Biologics[1]				
	Research Samples[3]				
	Case Report Forms[5]				
	Study Reminder[1]				
	7	8	9	10	
1	4	15	16	17	
	Cyc2 > D1				
	Eval and Mgmt[7] Assessments[1]				
	Lab/Path Evaluations[5]				
	Drugs/Biologics[1]				
	Research Samples[4]				
	Case Report Forms[5]				
2	1	22	23	24	
	8	29	30		
2	Cyc3 > D1	23	30		
	Eval and Mgmt[7]				
	Assessments[1]				
	Lab/Path Evaluations[5]				
	Drugs/Biologics[1]				
	Research Samples[1]				
<b>F</b>	Case Report Forms[5]				3
FEBRUARY	March	April		May	JUNE

#### With the Calendar you can:

See what study events the patient needs

Record the completion of a study event

See when study events are due to occur

Find the billing code for an event

Adjust future due dates

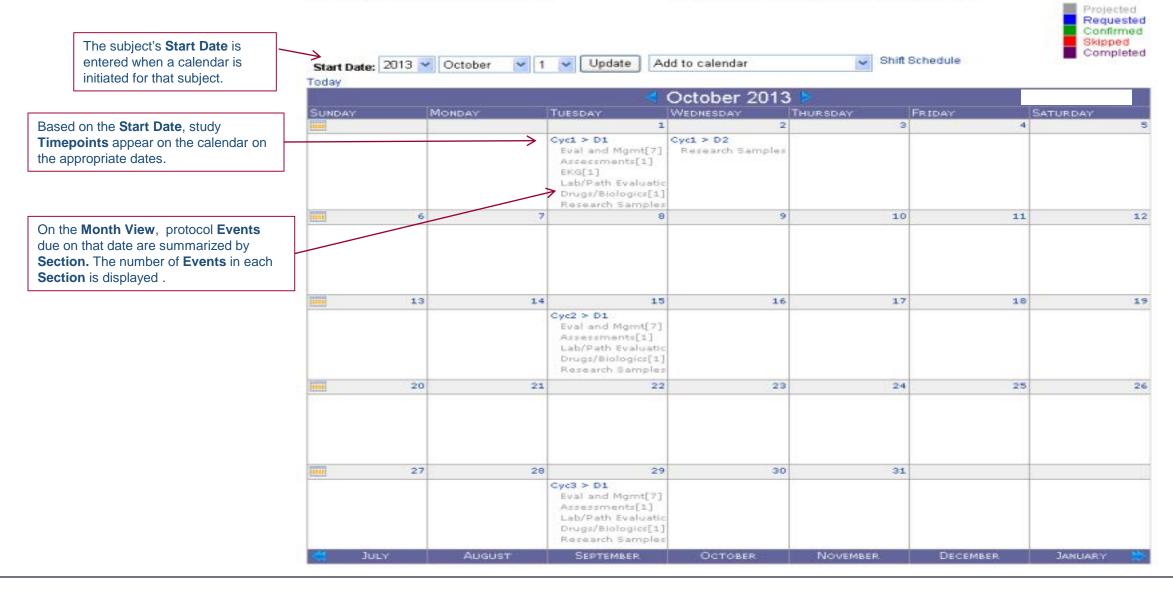
Enter notes regarding an individual event

			September 2013	Month View
		THURSDAY	WEDNESDAY	TUESDAY
	5		4	3
Services	Items and			
lgmt	Eval and M			
exam <sup>s</sup> ¬	▶ Physical e			10
	Vital signs		Cyc1 > D2 Research Samples[1]	Cyc1 > D1 Eval and Mgmt[3]
s pie in	► Weight <sup>N</sup>		Research Samples[1]	EKG[1]
				Lab/Path Evaluations[6]
	EKG			Drugs/Biologics[1]
min post	▶ ECG - 30			Research Samples[4]
Evaluatio	Lab/Path E		18	17
y test - u	▶ Pregnanc			
different	► CBC with			
ensive Me	► Comprehe			
mor mark	▶ Serum tur			

Items and Services	Status	Time Scheduled	Time Completed	Notes
Eval and Mgmt				
▶ Physical exam <sup>S</sup> ¬	- 09/10/2013			
▶ Vital signs - pre-infusion <sup>N</sup> ◄	- 09/10/2013			
▶ Weight <sup>N</sup>	- 09/10/2013			
EKG				
▶ ECG - 30 min post-infusion <sup>S</sup>	- 09/10/2013			
Lab/Path Evaluations				
Pregnancy test - urine - serum <sup>S</sup>	- 09/10/2013			
► CBC with differential <sup>S</sup>	- 09/10/2013			
Comprehensive Metabolic Panel <sup>S</sup>	- 09/10/2013			
▶ Serum tumor markers <sup>S</sup>	- 09/10/2013			
Urinalysis and Microscopic exam <sup>S</sup>	- 09/10/2013			
▶ Autoimmune and Endocrine Panel <sup>S</sup> ◄	- 09/10/2013			
Drugs/Biologics				
▶ MK-3475 <sup>F</sup>	- 09/10/2013			

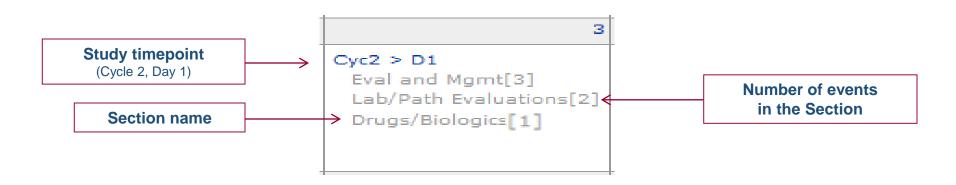
- For each study that requires an **Calendar**, a **Study Schedule** is created in CRMS by CRO staff. This **Schedule** will be used by the Study Team to create an individual **Calendar** for each subject as they are enrolled on the study.
- The **Schedule** is for this study alone, and includes all of the events required by the study and the schedule on which the events should occur.
- If a study has multiple arms, a separate **Schedule** is created for each arm.
- When a subject is enrolled on the study in CRMS, the Study Team assigns the appropriate **Schedule** to the subject. This creates the subject's **Calendar**.
- The Study Team accesses the subject's calendar through the study's CRMS **Enrollment** screen where they use it to record information about that subject's completion of study-related events.

### **Month View**



The information on the Study Calendar in the **Month View** is a summary of the more complete information found on the **Detail Screen**.

The **Detail Screen** is accessed through the **Month View**.



To document the status of the items listed on the calendar, click on the **Timepoint** or any **Event**. You will be taken to the **Detail Screen** for that day.

### **Detail View**

	Date for t the previo activity is	epoint bar includes the <b>Timepoint</b> and the <b>Events</b> that are currently displayed, bus date and the next date that protocol due.	< Cycle 1		cle 2 > Day 1 /15/2013	Cycle 3 10/29/20	> Day 1 > 13		
		Items and Services		Status	Time Scheduled	Time Completed	Notes	Data Complete	Data to Sponsor
Section name	$\rightarrow$	Eval and Mgmt							
	$\left( \right)$	Physical exam <sup>S</sup>		- 10/15/2013					
Events	$\langle  $	▶ Vital signs <sup>N</sup> 🦷		- 10/15/2013					
		▶ Weight <sup>N</sup>		- 10/15/2013					
		Lab/Path Evaluations							
		▶ CBC with diff, plts <sup>S</sup> ◄		- 10/15/2013					
	-	Comprehensive Metabolic Panel <sup>S</sup>		- 10/15/2013					
		Drugs/Biologics							
		▶ Pazopanib <sup>F</sup> 🤜		- 10/15/2013					

On the **Detail Screen** you can document the completion status (Pending, Completed, Skipped) as well as several other attributes of any event. You can also add a Note to an event.

Back to Calendar

< Cycle 1 > Day 15	Cycle 2 > Day 1	Cycle 2 > Day 15 >
05/20/2013	06/03/2013	06/17/2013

0.0		,					
	Items and Services	Status	Time Scheduled	Time Completed	Notes	Data Complete	Data to Sponsor
	Eval and Mgmt						
	▶ Physical exam <sup>S</sup>	- 06/03/2013					
	▶ Vital signs <sup>N</sup> ¬	- 06/03/2013					
	▶ Weight <sup>N</sup>	- 06/03/2013					
	Lab/Path Evaluations						
	▶ CBC with diff, plts <sup>S</sup> ◄	- 06/03/2013					
	Comprehensive Metabolic Panel <sup>S</sup>	- 06/03/2013					
	Drugs/Biologics						
	▶ Pazopanib	- 06/03/2013					
	Event <u>Service</u>	<u>↑</u> ↑ <u>Event</u> <u>Projected/</u>	↑ <u>Tin</u>		Time-stamped notes	↑ Data co	mpletion &
		status Completed				<u>submissi</u>	ion tracking
	<u>Close</u> <u>code</u> toggle	icon <u>date</u>					

#### **Event Status**

#### Statuses are assigned on the Detail Screen and include:

Projected

This is the default status. A projected event appears on the date that was projected when the calendar was generated.

#### Completed

When an event is done, the event Status is changed to Completed and the Date Completed is entered

#### Skipped

If an event is not completed on the projected or any other date, the **Status** is changed to *Skipped*.

**Requested** and **Confirmed** were originally created to reflect appointment statuses. Since CRMS is not yet linked to a clinical appointment system, these two statuses may be used at the discretion of the study team to represent appointment scheduling or any other activity they chose.

#### **Entering a study event status**

S001 test study Jzi, test [Documents]	ted < Cycle 2 and	> Day 1 Cy /16/2015	ycle 3 > Day 04/08/2015	1 Treatment > D 04/14/2015	)ay 35 >							
Back to Calendar     Comple       Treatment     Skipped		Time Scheduled	Time Completed	Notes		Data Complete	Data to Sponsor					
Evaluation and Management N/A		Jeneduleu	Completed									
▶ Physical exam <sup>3</sup> Ca	ncel 04/08/2015											
▶ Weight <sup>×</sup>	- 04/08/2015											
▶ ECOG Performance Status <sup>N</sup>	- 04/08/2015											
▶ Concomitant Meds <sup>™</sup>	- 04/08/2015											
► Adverse Events <sup>N</sup>	- 04/08/2015											
Assessments												
▶ CT Scan <sup>5</sup>	- 04/08/2015						S001 test study					
▶ RECIST Read <sup>5</sup>	- 04/08/2015						Jzi, test [Documents]				ycle 3 > Day	<b>1</b> Treatmer
Lab/Path Evaluations							ack to Calendar		03	/16/2015	04/08/2015	04/14/201
► Comprehensive Metabolic Panel <sup>5</sup>	- 04/08/2015						Treatment		Status	Time Scheduled	Time Completed	Notes
► CBC and Differential <sup>3</sup>	- 04/08/2015						Evaluation and Mana	gement		Scheduled	Completed	
▶ Magnesium <sup>5</sup>	- 04/08/2015						▶ Physical exam <sup>3</sup>		04/08/2015			
Treatment							▶ Weight <sup>N</sup>		- 04/08/2015			
▶ MK-3475	- 04/08/2015					-	ECOG Performance	Statue N				
Research Samples						-			- 04/08/2015			
▶ Post-infusion serum <sup>R</sup> 1	- 04/08/2015						Concomitant Meds		- 04/08/2015			
Case Report Forms							▶ Adverse Events <sup>№</sup>		- 04/08/2015			
► S001.02_Study_Visit <sup>×</sup>	t - 04/08/2015						Assessments					
							▶ CT Scan <sup>3</sup>		- 04/08/2015			
							▶ RECIST Read <sup>5</sup>		- 04/08/2015			
							Lab/Path Evaluation	5				

Comprehensive Metabolic Panel<sup>®</sup>

CBC and Differential <sup>3</sup>

- 04/08/2015

= 04/08/2015

>

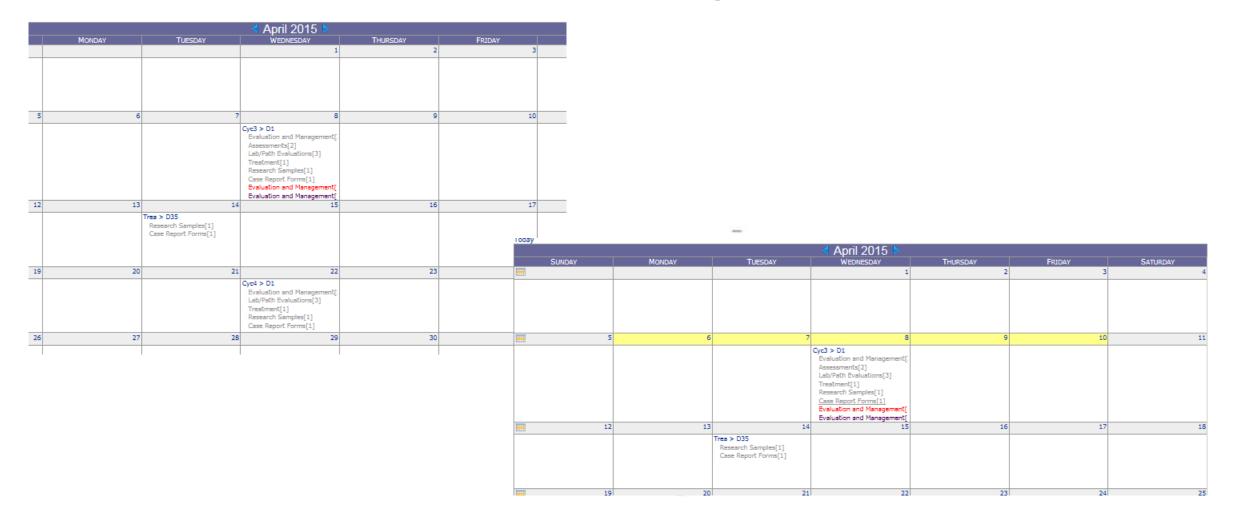
#### **Skipped Event : Note**

#### S001 test study

Treatment	Status	Time Scheduled	Time Completed	Notes	Data Complete	Data to Sponsor						
Evaluation and Management												
▶ Physical exam <sup>3</sup>	04/08/2015											
▶ Weight <sup>×</sup>	04/08/2015			The patient left the clinic before	re being weighed	*						
ECOG Performance Status <sup>™</sup>	- 04/08/2015			<b></b>		-						
► Concomitant Meds <sup>×</sup>	- 04/08/2015			Save Cancel								
Adverse Events	- 04/08/2015					*						
Assessments												
⊳ CT Scan <sup>3</sup>	- 04/08/2015											
RECIST Read	- 04/08/2015			_								
Lab/Path Evaluations												
Comprehensive Metabolic Panel <sup>5</sup>	- 04/08/2015											
CBC and Differential <sup>≤</sup>	- 04/08/2015					-						
▶ Magnesium <sup>3</sup>	- 04/08/2015				S001 test stud Uzi, test [Docu	-						
Treatment					UZI, lest [Doci	inients]	< Cycle 2 :	Day 1 Cy	cle 3 > Day	1 Treatment > Day 35 >		
► MK-3475	- 04/08/2015				Back to Calendar		03,		04/08/2015	04/14/2015		_
Research Samples					Treatment		Status	Time Scheduled	Time Completed	Notes	Data Complete	
Post-infusion serum <sup>8</sup> 7	- 04/08/2015				Evaluation Physical e	and Management			_			4
Case Report Forms					► Weight <sup>™</sup>	xam	04/08/2015			The patient left the clinic before being		4

Treatment	Status	Scheduled	Completed	Notes	Data Complete	Data to
Evaluation and Management						
▶ Physical exam <sup>5</sup>	04/08/2015					
▶ Weight <sup>®</sup>	<b>0</b> 4/08/2015			The patient left the clinic before being weighed sbooker2@johnshopkins.edu 04/14/15@09:24.		
▶ ECOG Performance Status <sup>N</sup>	- 04/08/2015					
► Concomitant Meds <sup>N</sup>	- 04/08/2015					
► Adverse Events <sup>N</sup>	= 04/08/2015					
Assessments						
► CT Scan <sup>3</sup>	- 04/08/2015					
► RECIST Read <sup>3</sup>	- 04/08/2015					
A LONDER LOC						

### **Ideal Range**



### **Protocol Deviation**

Treatment	Status	Time Scheduled	Time Completed	Notes	Data Complete D						
Evaluation and Management		Jenedalea	Completed								
Physical exam <sup>3</sup>	4/08/2015										
▶ Weight <sup>™</sup>	04/08/2015			The patient left the clinic before being weighed sbooker2@johnshopkins.edu 04/14/15@09:24.							
► ECOG Performance Status <sup>N</sup>	04/08/2015										
▶ Concomitant Meds <sup>N</sup>	04/08/2015				— Today			April 2015			
▶ Adverse Events <sup>™</sup>	04/08/2015				SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Assessments								1	2		3
▶ CT Scan <sup>5</sup>	04/08/2015										
▶ RECIST Read <sup>5</sup>	04/08/2015										
Lab/Path Evaluations						5 6		7 8	9		10
Comprehensive Metabolic Panel <sup>5</sup>	04/08/2015							Cyc3 > D1			
► CBC and Differential <sup>3</sup>	04/13/2015							Evaluation and Management[- Assessments[2] Lab/Path Evaluations[2]			
▶ Magnesium <sup>3</sup>	04/13/2015 Save Can				—			Treatment[1] Research Samples[1]			
Treatment								Case Report Forms[1] Evaluation and Management[:			
▶ MK-3475 <sup>′</sup>	04/08/2015					12 13			16		17
Research Samples						Cyc3 > D1 Lab/Path Evaluations[1]	Trea > D35 Research Samples[1]				
▶ Post-infusion serum <sup>≈</sup> ¬	04/08/2015						Case Report Forms[1]				
Lab/Path Evaluations						19 20	2:		23		24
Comprehensive Metabolic Panel <sup>3</sup>	04/08/2015							Cyc4 > D1 Evaluation and Management[]			
▶ Magnesium <sup>5</sup>		-						Lab/Path Evaluations[3] Treatment[1]			
rugircadii	04/08/2015							Research Samples[1] Case Report Forms[1]			

#### Service Note : Billing Code

	< Treatme	ent > Day 35 04/14/2015			Cycle 5 > Day 1 > 05/06/2015	
Back to Calendar						
Treatment	Status	Time Scheduled	Time Completed	Notes		Data Complet
Evaluation and Management						
▶ Physical exam <sup>3</sup>	- 04/22/2015					
▶ Weight <sup>™</sup>	- 04/22/2015					
► ECOG Performance Status <sup>N</sup>	- 04/22/2015					
► Concomitant Meds <sup>N</sup>	- 04/22/2015					
► Adverse Events <sup>™</sup>	- 04/22/2015					
Lab/Path Evaluations						
► Comprehensive Metabolic Panel <sup>5</sup>	- 04/22/2015					
► CBC and Differential <sup>3</sup>	- 04/22/2015					
▶ Magnesium <sup>3</sup>	- 04/22/2015					
Treatment						
▶ MK-3475 °	- 04/22/2015					
Research Samples						
▼ Post-infusion serum <sup>R</sup> ¬	- 04/22/2015					
Treatment > Cycle 4 > Day 1 04/20/201504/24/2015	,		- '			
Service Notes Collect 3 red top tubes within 30 minutes of	of completion of infus	ion.				
Additional Notes						
Case Report Forms						
▶ S001.02_Study_Visit * 🗎 Sta	art - 04/22/2015					