



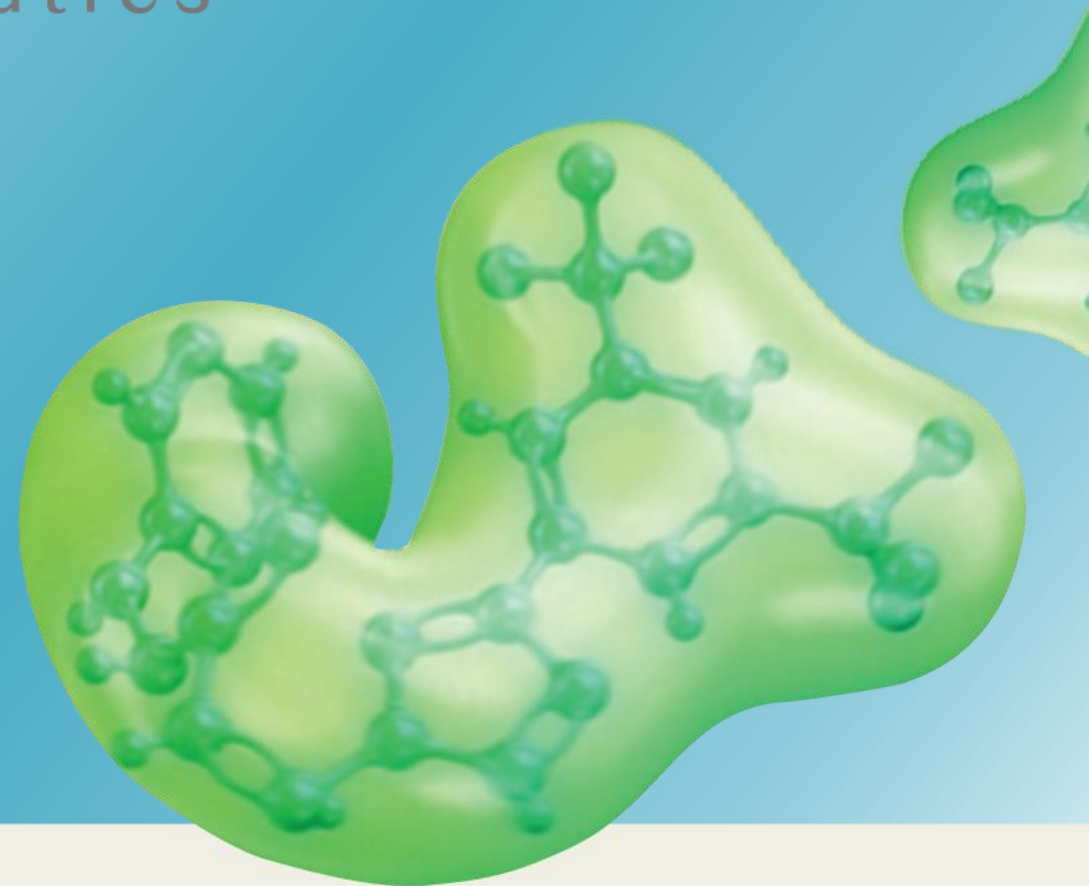
## **VEEVA VAULT CASE STUDY**

### **The Evolution of Submission and RIM Processes at Karyopharm**

**Craig Gassman, M.S.**

Associate Director

Regulatory Technology and Operations



Targeting Disease at the Nuclear Pore

# Disclaimer

The views and opinions expressed in this presentation are solely those of the author and do not reflect the official policy or position of Karyopharm Therapeutics, Inc.



# | THE FIRST 30 (DAYS)



## Jan 2015 – New Position, Expanded Role, Let's Assess...

Imminent and/or Planned  
Submissions (like...*today*)?

Technology Assessment

Process Assessment

Cross-Functional Relationship  
Assessment



**URGENT  
NEED FOR  
eDMS**



# Individual Assessments Results

## Tech

- Shared '**Public**' Drive
- Loose Collection of '**Immature**' SharePoints
- '**Band-Aid / Budget**' SaaS Document Repository (...Just Awful, but a Necessity)
- **Death** by Excel...

## Proc

- Source Documents **Scattered**
- Document Storage **Inconsistent**, Varied by Content Provider
- Documents **Emailed** to Submission Provider
- **No Authoritative** Source

## X-Func

- Information **Silos**
- **No Uniform Flow** of Information, Docs, etc.
- Functional Scope & Responsibility **Varied**

***Tech/Proc was Responsible for this...***

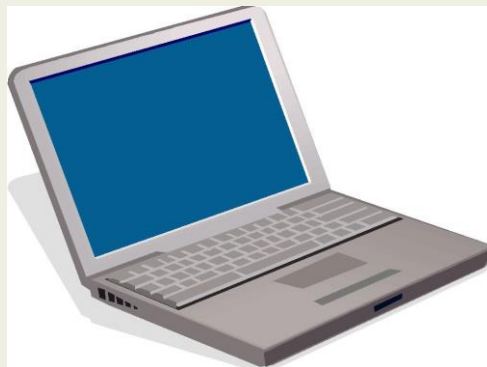


# | PRIMARY CONCERN

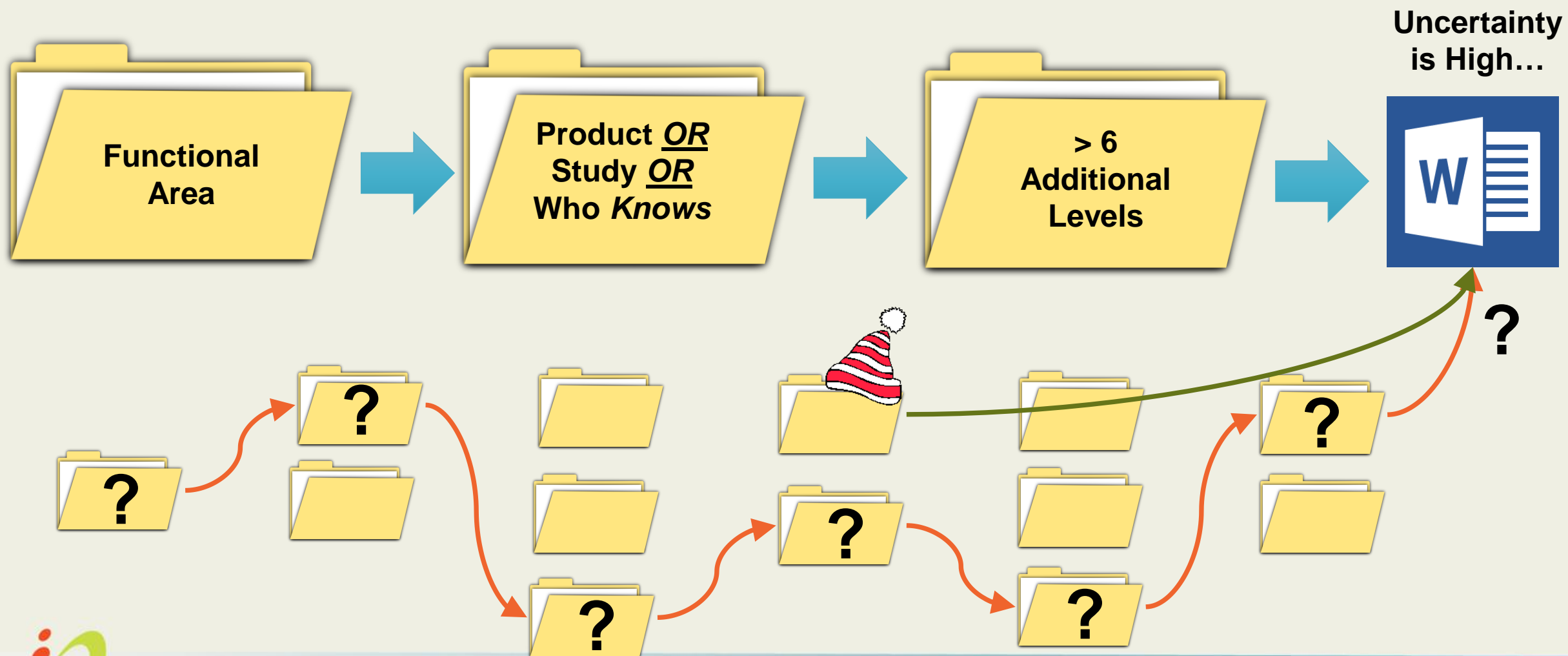


# Planning for submissions.... Where are the source documents?

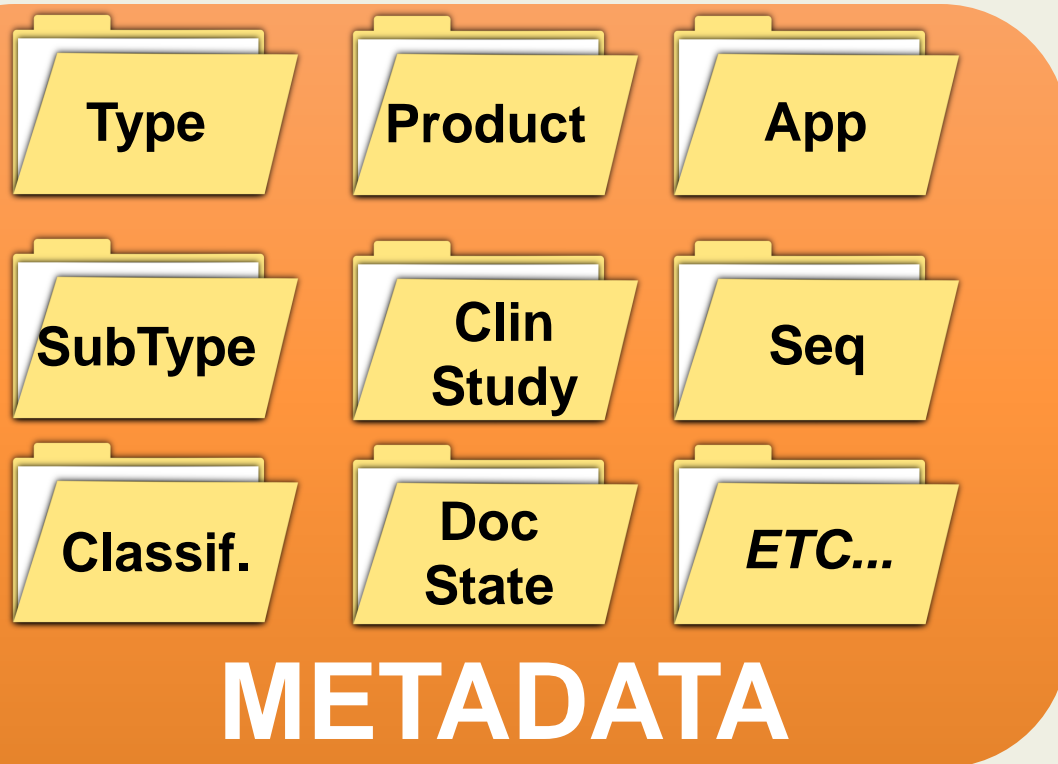
**Network? SharePoint? Desktop? Email? Black hole...**



## Single-Dimension Search



## Multi-Dimension Search



### **Gain**

- 1) Authoritative source
- 2) Streamlined retrieval
- 3) Direct connection of source to published doc

### **Prevent**

- 1) Document 'safari'
- 2) Incorrect versions usage
- 3) Uncertainty



# | SUBMISSION OVERVIEW



# Typical Submission Process

RAPID ENHANCED CHECK OUT / IN  
VIA SUBMISSION BINDER\*

BINDERS TEMPLATES &  
DOCUMENT TEMPLATES

Content  
Planning

Templates or  
Documents  
Initialized

Content  
Authoring  
and Review

Final  
Formatting  
(Limited)

Content  
Approval

Publishing,  
QC &  
Dispatch

Archive

BINDER  
STRUCTURE  
& METADATA

PLANNED  
DOCUMENTS

VIEWABLE  
RENDITIONS

BINDER EXPORT FOR  
SUBMISSION VENDOR



# | BINDERS



# Sample View – Submission Binder

[Back to previous page](#)

✓ [REDACTED]\_0001 (m2-m5) (v0.1)

[REDACTED]\_0001 (m2-m5)

Populated sections ▾

Search Current Binder 🔍

- ▶ 1 Administrative Information (Country Specific Binder)
- ▼ 2 Common Technical Document Summaries
  - ▶ 2.2 Introduction
  - ▼ 2.4 Nonclinical Overview
    - 📄 2.4 Nonclinical Overview (Approved, v1.0)
  - ▶ 2.5 Clinical Overview
  - ▼ 2.6 Nonclinical Written and Tabulated Summaries
    - ▼ 2.6.1 Introduction
      - 📄 2.6.1 Introduction [REDACTED] (Approved, v1.0)
    - ▼ 2.6.2 Pharmacology Written Summary
      - 📄 2.6.2 Pharmacology Written Summary (Approved, v1.0)
    - ▼ 2.6.3 Pharmacology Tabulated Summary
      - 📄 2.6.3 Pharmacology Tabulated Summary (Approved, v1.0)
    - ▼ 2.6.4 Pharmacokinetic Written Summary
      - 📄 2.6.4 Pharmacokinetics Written Summary (Approved, v1.0)
    - ▼ 2.6.5 Pharmacokinetic Tabulated Summary
      - 📄 2.6.5 Pharmacokinetics Tabulated Summary (Approved, v1.0)
    - ▼ 2.6.6 Toxicology Written Summary
      - 📄 2.6.6 Toxicology Written Summary (Approved, v1.0)
    - ▼ 2.6.7 Toxicology Tabulated Summary
      - 📄 2.6.7 Toxicology Tabulated Summary (Approved, v1.0)
- ▶ 3 Quality
- ▼ 5 Clinical Study Reports
  - ▼ 5.3 Clinical Study Reports and Related Information
    - ▼ 5.3.3 Reports of Human Pharmacokinetic (PK) Studies
      - ▼ 5.3.3.2 Patient PK and Initial Tolerability Study Reports
        - 📄 [REDACTED]\_Protocol\_v1.0\_16Dec2015 (Submission Ready, v1.0)
        - 📄 [REDACTED] Informed Consent Form\_v1.0\_21Jan2016 (Submission Ready, v1.0)
        - 📄 1572 [REDACTED] (Approved, v1.0)
        - 📄 CV [REDACTED] (Approved, v1.0) ⚙️



# Content Report and Plan

Binder Section (2)		Document (7)									
Section Name ^	Section Number	Document Name	Expected Transfer Date	Pages	Pub Disposition	eCTD Module	m1 eCTD Section (US)	m2 eCTD Section	m3 eCTD Section	m4 eCTD Section	eCTD File Tag (m4)
Administrative Information	1	0005_1571 (v1.0)	07 Mar 2016	3	Published, QC Required	Module 1 (Regional)	1.1.1 FDA Form 1571: Investigational New Drug Application				
		0005_Cover Letter (v1.0)	07 Mar 2016	3	Published, External Linking Required	Module 1 (Regional)	1.2 Cover Letter				
		0005_3674 (v1.0)	07 Mar 2016	2	Published, QC Not Required	Module 1 (Regional)	1.1.1 FDA Form 3674: Certification of Compliance				
Clinical	5		04 Mar 2016	119	Published, QC Not Required	Module 5 (Clinical)					
			04 Mar 2016	116	Published, QC Not Required	Module 5 (Clinical)					
			04 Mar 2016	20	Published, QC Not Required	Module 5 (Clinical)					
			07 Mar 2016	20	Published, QC Not Required	Module 5 (Clinical)					

**Submission binder *enhances* the content plan**

Displaying all documents

All Documents

Search Current Binder

- 1 Administrative Information
  - 1.1 Forms
    - 0005\_1571 (Submission Ready, v1.1)
    - 0005\_3674 (Submission Ready, v1.0)
  - 1.2 Cover Letters
    - 0005\_Cover Letter (Submission Ready, v1.0)
- 5 Clinical
  - Protocol Amendment
    -
  - ICF
    -

**Why build and maintain a *separate* plan if your binder IS your submission plan with the addition of some 'smart' metadata and reporting?**

m5 eCTD Section	eCTD File Tag (m5)	eCTD Operator	File Being Modified	Submission Notes
		NEW		
		NEW		
		NEW		
5.3.3.2 Patient PK and Initial Tolerability Study Reports	Protocol and Amendments (E3 16.1.1)	REPLACE	Protocol v1, Seq 0001	
5.3.3.2 Patient PK and Initial Tolerability Study Reports	Protocol and Amendments (E3 16.1.1)	NEW		
5.3.3.2 Patient PK and Initial Tolerability Study Reports	List Of IECs Or IRBs (E3 16.1.3) And Consent Forms	REPLACE	ICF v1.0, Sequence 0001	
5.3.3.2 Patient PK and Initial Tolerability Study Reports	List Of IECs Or IRBs (E3 16.1.3) And Consent Forms	NEW		

# Metadata Drives the Content Plan



eCTD Information

Pub Disposition

Published, QC Required

eCTD Module

Module 4 (Nonclinical)

m4 eCTD Section

4.2.1.1 Primary Pharmacodynamics

eCTD File Tag (m4)

Preclinical Study Report

eCTD Operator

NEW

File Being Modified

N/A


Submission Notes

Having issues with TOC, re-QC prior to vendor transfer.


Pub Disposition	eCTD Module	m1 eCTD Section (US)
Published, QC Required	Module 1 (Regional)	1.1.1 FDA Form 1571: Investigational New Drug Appli
Published, External Linking Required	Module 1 (Regional)	1.2 Cover Letter
Published, QC Not Required	Module 1 (Regional)	1.1.1 FDA Form 3674: Certification of Compliance
Published, QC Not Required	Module 5 (Clinical)	
Published, QC Not Required	Module 5 (Clinical)	
Published, QC Not Required	Module 5 (Clinical)	
Published, QC Not Required	Module 5 (Clinical)	
Published, QC Not Required	Module 5 (Clinical)	



# Submission Email, Content Links and Access Instructions

 **Craig Gassman**  
SUBMISSION: [REDACTED] (IND App [REDACTED] SEQ [REDACTED] SN [REDACTED])

To [REDACTED]  
Bcc [REDACTED]

 You replied to this message on 3/3/2016 3:05 PM.

### SUBMISSION INFORMATION

PROD	[REDACTED]	[REDACTED]	[REDACTED]
APP	[REDACTED]	[REDACTED]	[REDACTED]
SEQ	[REDACTED]	[REDACTED]	[REDACTED]
SN	[REDACTED]	[REDACTED]	[REDACTED]
DESCR	[REDACTED]	[REDACTED]	[REDACTED]
CL / FORM FINAL BY <b>THUR</b> <b>MAR 03, 2016</b> <b>EOB</b>			
SUBMISSION QC	<b>FRI</b>	<b>MAR 04, 2016</b>	<b>2:45PM</b>
PLANNED DISPATCH	<b>FRI</b>	<b>MAR 04, 2016</b>	<b>3:30PM</b>

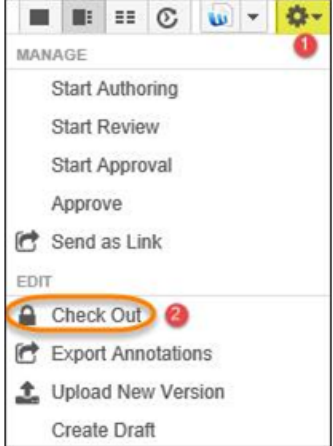
The Submission Binder can be found at the **Veeva** link below:

[BINDER](#)


Please contact me with any questions or issues!  
Craig

### Access Instructions

- Click link(s) provided (*the binder link is best for multiple documents*)
- Enter Login Credentials (if not already logged on)
- Hover your cursor over the desired document and find the **Action Wheel** Icon



- Choose **Check Out**
- The document will launch automatically If your Java is updated properly (*accept all java-related messages if they appear*), or Open the Document per your internet browser.
- Make and/or consolidate edits as normal. Save the document, but **do not change** the save location
- Back in Veeva, navigate to your document (or use the link in this email). You may need sign back into Veeva if timed-out.
- Hover your cursor over the desired document and find the **Action Wheel** Icon



**Content Providers and RA Colleagues are noticeably more confident when provided 'just-in-time' instructions pending on their activity**  
**Ex: Check out/in instructions, downloading renditions, etc.**



# | REG INFO MANAGEMENT





# Correspondence Reporting

Home Library eCTD ▾ Products Applications Clinical Studies Nonclinical Studies Reports Dashboards Literature Loader

[◀ Back to reports](#)

Regulatory Correspondence ★

▸ FILTERS (3) 

Document Name ▾	Product	Application	Subtype	Classification	Correspondence Type	Brief Summary	
YYYYMMDD_[content].pdf 			Correspondence	From Health Authority	Email		
			Correspondence	From Health Authority	Letter		
			Correspondence	To Health Authority			
			Correspondence	To Health Authority	Email		
			Correspondence	From Health Authority	Email		
			Correspondence	From Health Authority	Email		
			Correspondence	From Health Authority	Email		
			Correspondence	From Health Authority	Email		
			Correspondence	From Health Authority			
			Correspondence	To Health Authority			
			Correspondence	Meeting Materials			
			Correspondence	From Health Authority			
			Correspondence	To Health Authority	Letter		

Previous: Numerous (*versions of*) Excel trackers

RA colleagues verdict = Awesome



# ESG Acknowledgements Report

## ESG Acknowledgements ★

▸ FILTERS (3) 

Document Name ▾		Subtype	Product	Application	Submission	Document Status	Created By	Created Date
IND	0005-ESG (v1.0)	ESG Acknowledgement	KPT-	IND	0005	Archived	Craig Gassman	08 Mar 2016 4:12 PM EST
IND	0004-ESG (v1.0)	ESG Acknowledgement	KPT-	IND	0004	Archived	Craig Gassman	03 Mar 2016 3:59 PM EST
IND	0003-ESG (v1.0)	ESG Acknowledgement	KPT-	IND	0003	Archived	Craig Gassman	03 Mar 2016 3:59 PM EST
IND	0002-ESG (v1.0)	ESG Acknowledgement	KPT-	IND	0002	Archived	Craig Gassman	08 Mar 2016 4:17 PM EST
IND	0001-ESG (v1.0)	ESG Acknowledgement	KPT-	IND	0001	Archived	Craig Gassman	03 Mar 2016 3:58 PM EST



# | OTHER REPORTING



# Nonclinical Report Review

Nonclinical Report Listing ★

FILTERS (3)

Document Name	Product	Nonclinical Study ▲	Type	Subtype	Classification	Document Status	Last Modified Date	Pages	
<a href="#">Nonclinical Study Report KS-01 (v0.1)</a>			Nonclinical	Pharmacology Study Reports	Study Report Body	Draft	26 Mar 2016 8:14 AM EDT	6	
<a href="#">Nonclinical Study Report KS-02 (v0.1)</a>			Nonclinical	Pharmacology Study Reports	Study Report Body	Draft	26 Mar 2016 8:24 AM EDT	6	
<a href="#">Nonclinical Study Report KS-03 (v0.1)</a>			Nonclinical	Pharmacology Study Reports	Study Report Body	Draft	26 Mar 2016 8:15 AM EDT	16	
<a href="#">KS-04 Nonclinical Report (v0.1)</a>			Nonclinical	Pharmacology Study Reports	Study Report Body	Draft	26 Mar 2016 8:17 AM EDT	6	
<a href="#">KS-05 (v0.1)</a>			Nonclinical	Pharmacology Study Reports	Study Report Body	Draft	26 Mar 2016 8:18 AM EDT	7	
<a href="#">Nonclinical Study Report KS-07 (v0.1)</a>			Nonclinical	Pharmacology Study Reports	Study Report Body	Draft	26 Mar 2016 8:24 AM EDT	7	
<a href="#">KS-08 (v0.1)</a>									
<a href="#">KS-09 (v0.1)</a>									
<a href="#">Nonclinical Study Report KS-10 (v0.1)</a>									

Returned 52 records

	Legacy Document?	Source Data Available?	Source Data Embedded in Report?	Review Disposition	Review Comments
	Yes	Yes	No	3 - Substantial Corrections Req'd	
	Yes	Yes	No	2 - Minor Corrections Req'd	
	Yes	Yes	No	2 - Minor Corrections Req'd	
	Yes	Yes	No	2 - Minor Corrections Req'd	
	Yes	Yes	No	3 - Substantial Corrections Req'd	
	Yes	Yes	No	3 - Substantial Corrections Req'd	Needs: signature; source data;
	Yes	Yes	No	3 - Substantial Corrections Req'd	Needs: source data;
	Yes	Yes	No	3 - Substantial Corrections Req'd	Needs: signature; interpretation; source data;
	Yes	Yes	No	3 - Substantial Corrections Req'd	Needs: signature; source data;
	Yes	Yes	No	3 - Substantial Corrections Req'd	Needs: source data; interpretation;
	Yes	Yes	No	3 - Substantial Corrections Req'd	



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# Metadata-Driven Reporting

▼ Product Information

Product

Nonclinical Study

Review Disposition3 - Substantial Corrections Req'd

Vendor Study ID

▶ eCTD Information

▼ Legacy Information

Legacy Document?

Legacy Review Complete?

Source Data Available?

Source Data Embedded in Report?

Review Comments



# Literature Reference Example

Literature Reference Index	
Reference Type	Journal Publication
Title	Nuclear expression of Survivin in paediatric ependymomas and choroid plexus tumours correlates with morphologic tumour grade
Publication Name	British Journal of Cancer
Publication Year	2003
Author (Primary)	Altura

Document Name ▲	Title	Publication Name	Publication Year	Author (Primary)	Reference Type	Document Status
A Functional Connection between RanGTP NF-κB and Septic Shock (v1.0)					Journal Publication	Submission F
A chemical genetic screen identifies inhibitors of regulated nuclear export of a Forkhead transcript (v1.0)					Journal Publication	Submission F
Adaptation of Pandemic H1N1 Influenza Viruses in Mice Journal of Virology (v1.0)					Journal Publication	Submission F
Altura-2003-British Journal of Cancer (v0.1)	Nuclear expression of Survivin in paediatric ependymomas and choroid plexus tumors correlates with morphologic tumour grade	British Journal of Cancer	2003	Altura	Journal Publication	Draft
Animal models for influenza viruses implications for universal vaccine development (v1.0)					Journal Publication	Submission F
Antiviral Agents for the Treatment and Chemoprophylaxis of Influenza (v1.0)					Journal Publication	Submission F
Antman-1993-Journal of Clinical Oncology (v0.1)	An intergroup phase III randomized study of doxorubicin and dacarbazine with or without ifosfamide and mesna in advanced soft tissue and bone sarcomas	Journal of Clinical Oncology	1993	Antman	Journal Publication	Draft
Antonucci V 2011 (v1.0)					Journal Publication	Submission F
Appledorn 2010 (v1.0)					Journal Publication	Submission F
Arias-Romero LE 2013 (v1.0)					Journal Publication	Submission F
Arnaoutov-2005-Nature Cell Biology (v0.1)	Crm1 is a mitotic effector of Ran-GTP in somatic cells	Nature Cell Biology	2005	Arnaoutov	Journal Publication	Draft



# | OTHER DISCOVERIES



# AutoNaming

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{clinical\_study\_\_v.name\_\_v} Protocol vX.X - DDMMYYYY - CLEAN I

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{clinical\_study\_\_v.name\_\_v} CSR Body - DDMMYYYY - FINAL INTE

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{clinical\_study\_\_v.name\_\_v}-app-16-01-01

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{application\_\_v.name\_\_v}\_{submission\_\_v.name\_\_v}-SUB

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{application\_\_v.name\_\_v}\_{submission\_\_v.name\_\_v}-ARC

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{application\_\_v.name\_\_v}\_{submission\_\_v.name\_\_v}-VAL

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

{application\_\_v.name\_\_v}\_{submission\_\_v.name\_\_v}-ESG

*Field truncates at 100 resolved characters*

Document Name Format(Not inherited from parent. [Remove override](#)) ?

- ☐ Use File Name  
☒ Use custom format

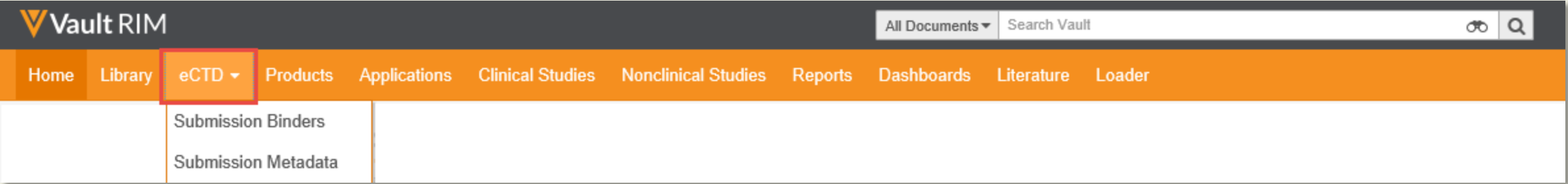
{author\_primary\_\_c}-{publication\_year\_\_c}-{publication\_name\_\_c}

*Field truncates at 100 resolved characters*



# Configurable Tabs

## Sub-Container



## Submission BINDER

**KPT-9274 IND Binders** Save View

Filters (1) [Clear All](#)

Application: IND [REDACTED]

Name	Description	Product	Application	Submission
[REDACTED]	[REDACTED]	KPT	[REDACTED]	0005
[REDACTED]	[REDACTED]	KPT	[REDACTED]	0004
[REDACTED]	[REDACTED]	KPT	[REDACTED]	0003
[REDACTED]	[REDACTED]	KPT	[REDACTED]	0002
[REDACTED]	[REDACTED]	KPT	[REDACTED]	0001
[REDACTED]	Initial IND	KPT	[REDACTED]	0001

## Submission OBJECT

**IND 127962 (NHL)** ACTIVE

**Details**

Application Number: IND [REDACTED] Indication: [REDACTED]

Region: [North America](#) External ID: [REDACTED]

Application Type: [Investigational New Drug \(IND\)](#) Status: [Active](#)

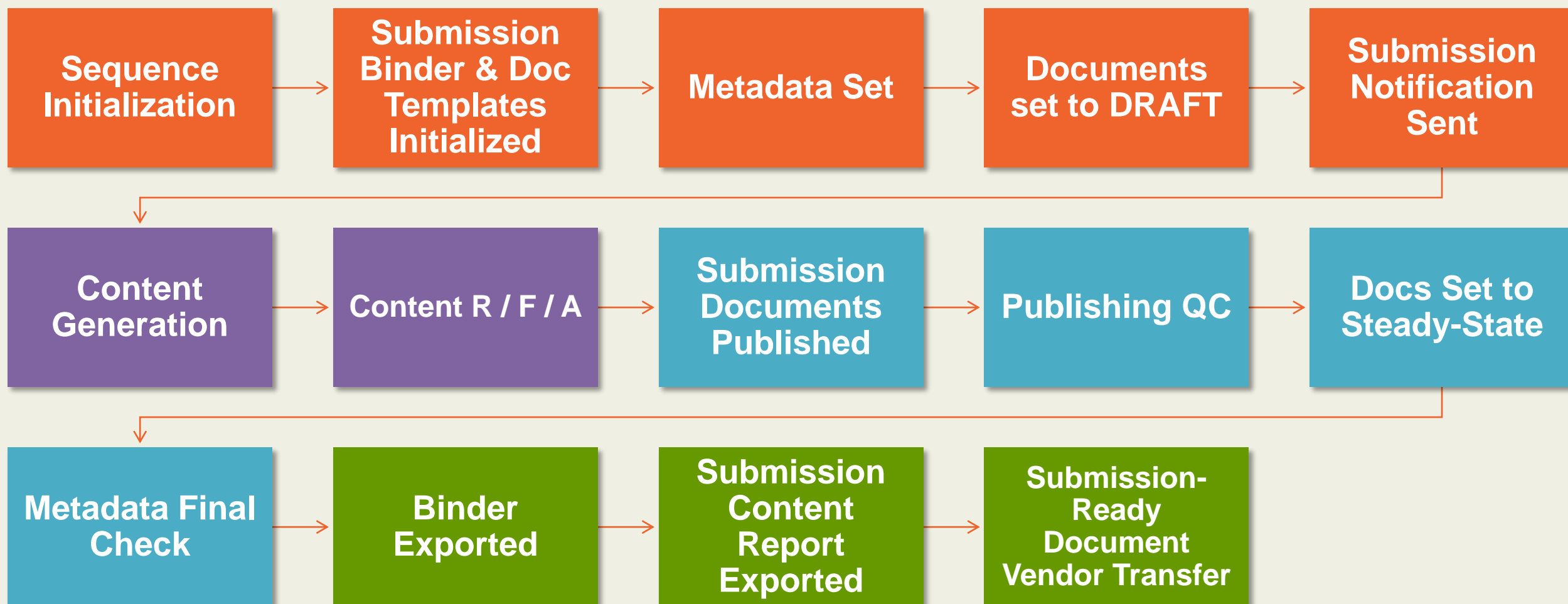
Procedure Type: [REDACTED]

**Submissions** + Create

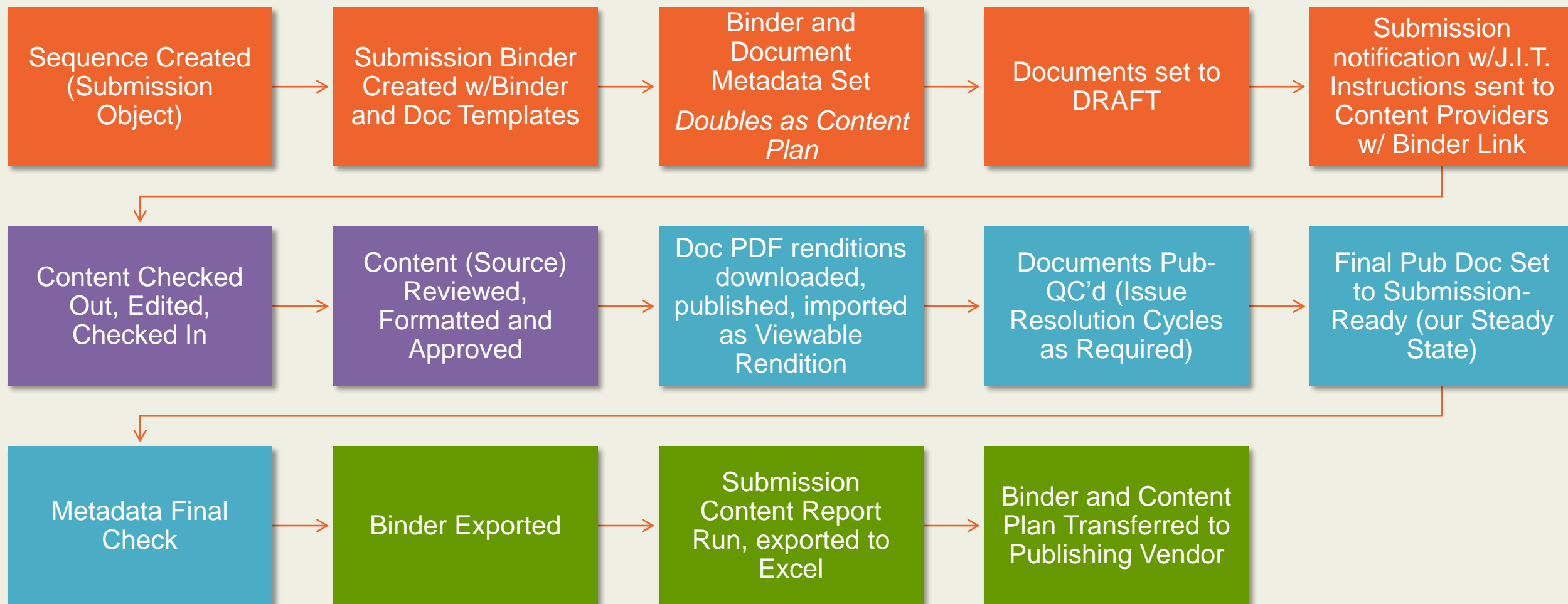
Submission ID	Submission Subtype	Description	Planned Submission Date	Actual Submission Date
0005	Amendment	[REDACTED]	07 Mar 2016	
0004	Amendment	[REDACTED]	29 Feb 2016	01 Mar 2016
0003	Amendment	[REDACTED]	29 Feb 2016	01 Mar 2016
0002	Amendment	[REDACTED]	24 Feb 2016	24 Feb 2016
0001	Original	[REDACTED]	29 Jan 2016	02 Feb 2016



# Evolving Process – Submission Pilot (Summary)



# Evolving Process – Submission Pilot (Details)



# Lessons Learned

eDMS is one of your most important tools for submission management and execution

Form an effective implementation team with diverse skills (SMEs, Tech, Quality, etc.)

Continued use of Veeva leads to expanded use of advanced system functionality which ultimately drives process evolution – Change is GOOD.

Implementation vs. Day 1 Process vs. Day 1+X will not be identical, and that is OK! It must be an organic flow to determine best use of Submission Vault functionality.

**OPT FOR MANAGED SERVICES & ADMIN TRAINING (Key for user enablement)**



# THANK YOU!

