

Seminar Series

# REGULATORY AFFAIRS

## ANIMAL HEALTH



## Ensuring Data Quality in Animal Health Sponsor Perspective

*Annette Kenser, Quality Assurance Expert, Bayer U.S. LLC*

*Heather Raszka, Principal Specialist, RDQA, Boehringer Ingelheim Animal Health*

*Damon Bradley, Research & Regulatory Systems Data Manager, Bayer U.S. LLC*



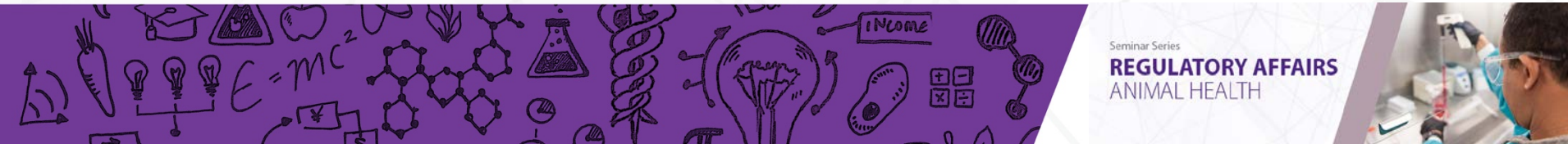
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# Agenda

## Quality By Design (QbD)

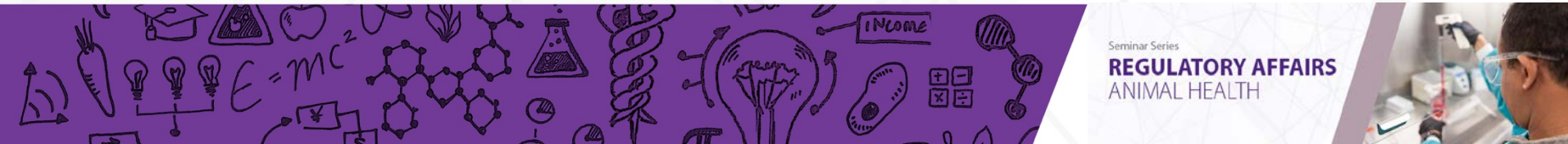
- Pre-Study
- In-Phase
- Post Study
- Communications



# Pre-Study

## Tools to Aid in Pre-Study Planning:

- Monitor Plan
- Audit Plan
- Data Management Plan
- Statistical Plan



# Pre-Study- Monitor Plan

## Monitor Plan as a tool to promote QbD

# GCP vs GLP

## General Considerations:

- Identify Roles and Responsibilities
- Training
- Checklist of items to Review During In-Phase (IVP, protocol adherence, etc.)
- Monitor Review of Protocol and Final Study Report
- Frequency of Visits and Escalation Process (GCP vs GLP)



# Pre-Study- Monitor Plan Example

Super Animal Health		Study ABCD1234		
Rumen Contraction Measurement				
Animal ID	Observation Time (24:00)	Rumen Contraction Rate (per minute)	Observed by (Initials and Date):	Recorded by (Initials and Date):

Rumen Contraction Rate (per minute)	Number of Contractions per minute	Score
	≥ 2	0
	1	1
	0	2

Site 1: Records the original observation of “number of contractions per minute” in the rumen contraction rate column

Site 2: Counts the number of contractions per minute and records “score” in the “rumen contraction rate” column

Investigator Review (signature and date):



# Pre-Study- Monitor Plan **Example**

Multisite, GCP study conducted in dogs:

Site 8- Site Monitor: Heather Raszka

Case 8001

Weight on Day 0: 30 lbs.

Weight on Day 30: 26 lbs.

**Monitor Actions:** The monitor determined this dog lost 13% of his body weight. She did not query the Investigator.

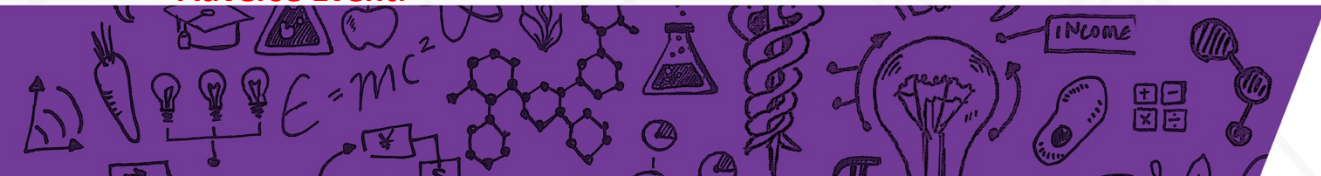
Site 9- Site Monitor: Annette Kenser

Case 9001

Weight on Day 0: 60lbs.

Weight on Day 30: 52.2 lbs.

**Monitor Actions:** The monitor determined this dog lost 13% of his body weight and asked the Investigator if this should be recorded as an adverse event of weight loss. The Investigator recorded an **Adverse Event**.



# Pre-Study- QA Plan

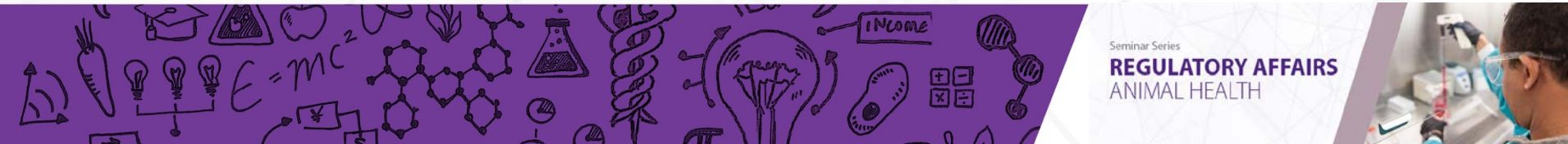
## **QA Plan as a tool to promote QbD**

Scope and Structure of your QA Plan:

- GCP vs GLP

## **General Considerations for Pre-Study:**

- Clearly Identify Sponsor Expectations
- Contract Research Organization (CRO)/Contract Research Laboratory (CRL) Audit
- Protocol Audit
  - Data Collection
- Training



# Pre-Study- QA Plan- Example

Protocol states: Blood samples will be taken on Day 0, 5, 10, 20, 30 and every unscheduled visit.

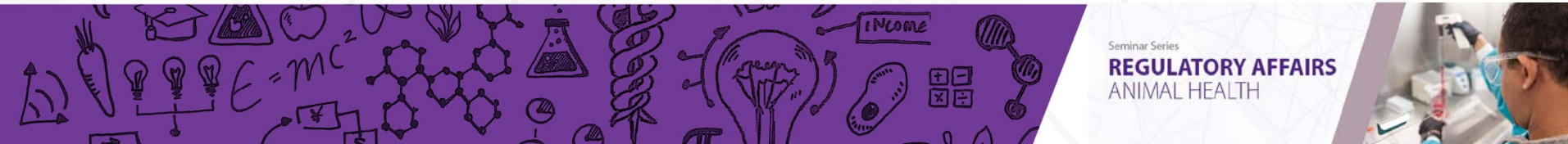
## Form for Blood Collection states:

# Blood Collection Form

# Study XYZ2018

- ☐ day 0
- ☐ day 5
- ☐ day 10
- ☐ day 20
- ☐ day 30
- ☐ unscheduled visit (if applicable)

blood samples collected ☐ yes ☐ no



# Pre-Study- Data Management Plan

## Data Management Plan as a tool to promote QbD

## General Considerations:

- Data flow
  - Paper CRFs and eCRFs
  - Data Entry
  - Data Export
- Locking Procedures
- Change Controls



# Pre-Study- Data Management Plan **Example**

## Key Elements for Data Management

- How Will Data be Collected
- How Will Data be Received and Securely Stored
- Transcription into Database Necessary
- Quality Check (QC) process
- Soft Lock/Hard Lock
- Transfer of Data to Statistics



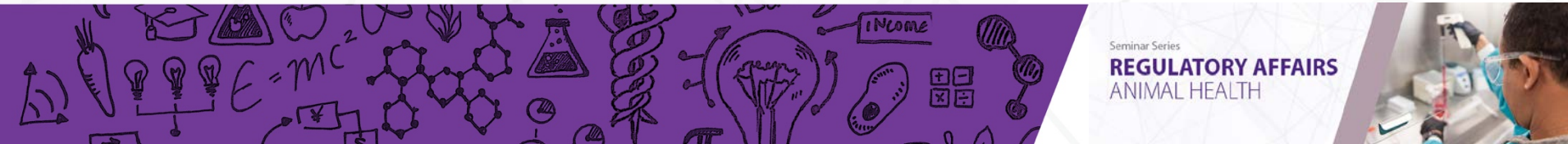
Microsoft Word  
Document

**Data Entry/QC/Verification Form**



Microsoft Word  
Document

**Locking Form**

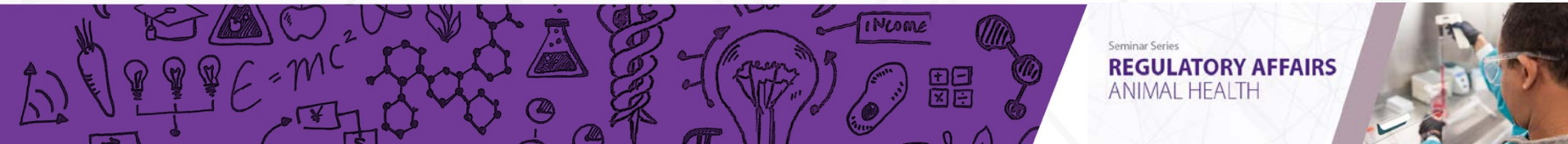


# Pre-Study- Statistical Plan

## Statistical Plan as a tool to promote QbD

## General Considerations:

- Primary variables
- Secondary variables
- Interim Analysis
- How will the statistician receive the data?



# In-Phase

## Considerations for Quality by Design During In-Phase:

- Execution of Monitor Plan
- Trending
- Investigator/ Test Facility Audits by QA
  - Considerations for multisite studies
- Draft Amendments
- Raw Data
- Interim Analysis



# In-Phase- Example

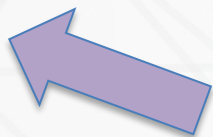
**Protocol States: Visit 2 will occur within  $15 \pm 2$  days after the cat has been enrolled.**

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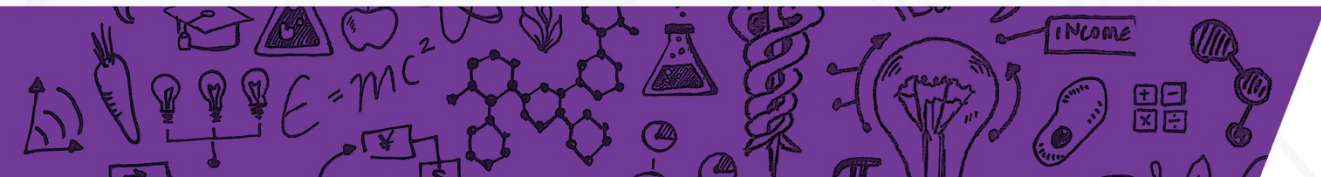
## Deviation Form

**Description:** The cat was enrolled on March 1<sup>st</sup>, 2017. The owner brought in the cat on March 28<sup>th</sup>. Visit 2 did occur within  $15 \pm 2$  days.

**Impact:** No impact



**Who's tracking this and assessing this?**



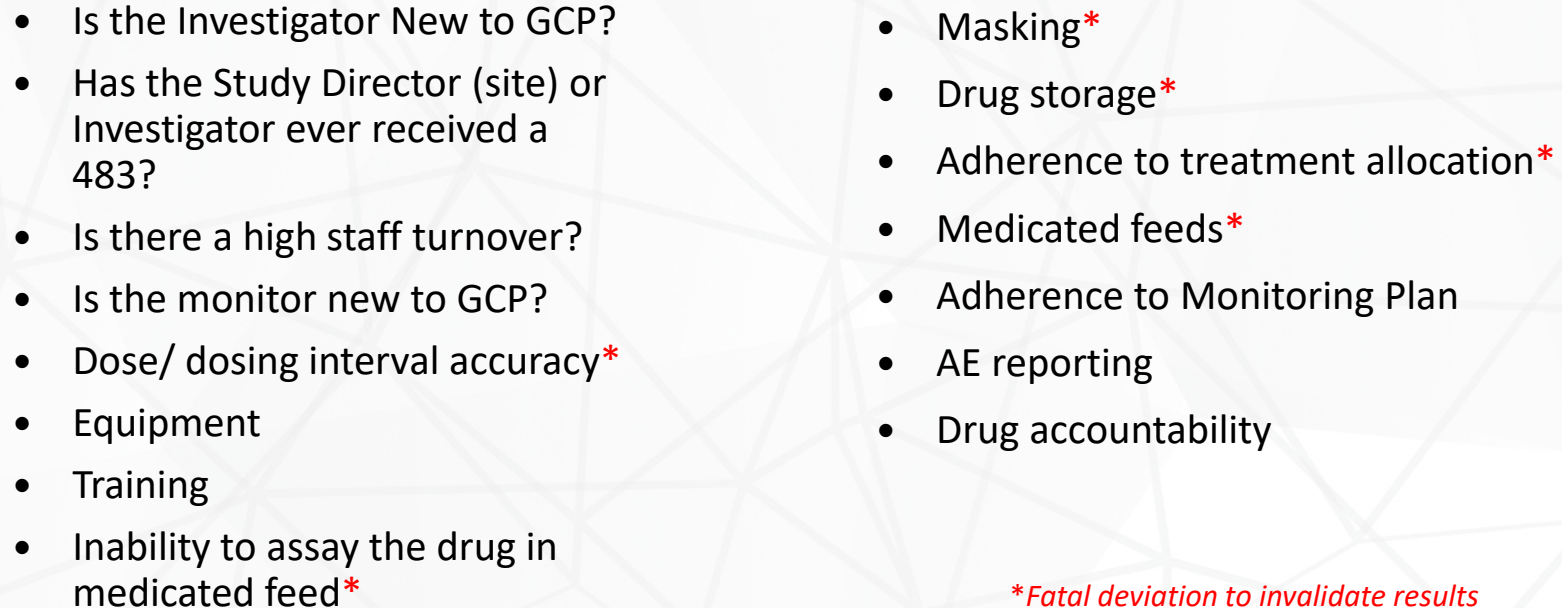
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# In Phase– QA Plan

# Risk Based Auditing

- 
- Is the Investigator New to GCP?
  - Has the Study Director (site) or Investigator ever received a 483?
  - Is there a high staff turnover?
  - Is the monitor new to GCP?
  - Dose/ dosing interval accuracy\*
  - Equipment
  - Training
  - Inability to assay the drug in medicated feed\*
  - Masking\*
  - Drug storage\*
  - Adherence to treatment allocation\*
  - Medicated feeds\*
  - Adherence to Monitoring Plan
  - AE reporting
  - Drug accountability
- \*Fatal deviation to invalidate results*

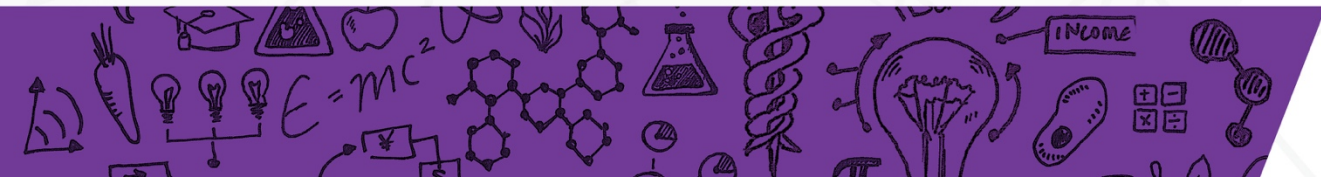
*\*Fatal deviation to invalidate results*



# Post Study

## General Considerations for Quality by Design Post Study Quality:

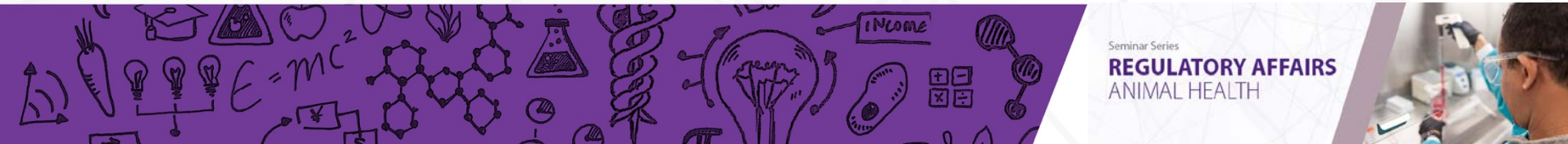
- Data Export / Database Audit
- Final Study Report Audit
- Statistical Report Audit
- QA Statement / Sponsor Compliance Statement
- Other:
  - Read-Me Files and Presentation of Data
    - Road Map
  - Narratives (e.g. to 21CFR part 11)



# Communication

## Cross-functional Communication:

Ensuring all members of the Sponsor study team are aware of study issues or changes and provide impact as the subject matter expert for their area.



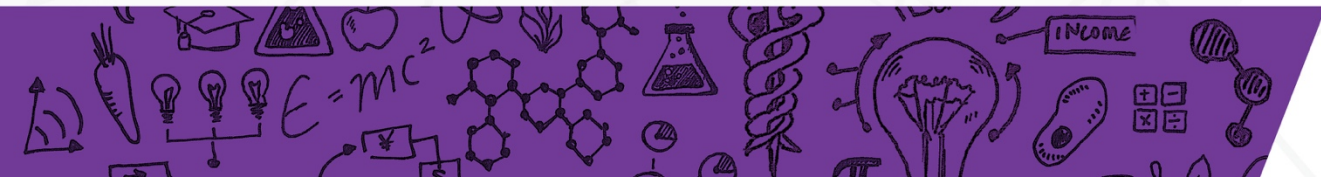
# Communication- Example

During a GCP trial the laboratory vendor notifies the Clinical Manager that a new hematology analyzer will be installed in the lab. What are his next steps?

Depending on how the Clinical Manager reacts to this news can cause consequences to data quality.

Communication is a key element to assessing this information.

- QA – validity
- Project Leader- timelines
- Statistician – reference range
- Monitors and Investigators – new lab forms?

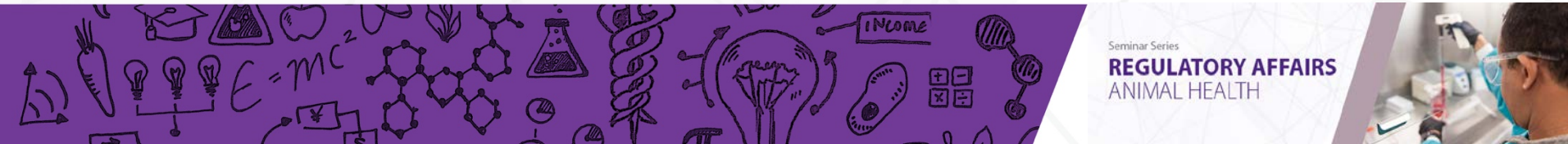


## Contact Information

**Heather Raszka**, Principal Specialist, RDQA, Boehringer Ingelheim Animal Health  
*Email: [heather.raszka@boehringer-ingelheim.com](mailto:heather.raszka@boehringer-ingelheim.com)*

**Annette Kenser**, Quality Assurance Expert, Bayer US, LLC  
*Email: [annette.kenser@bayer.com](mailto:annette.kenser@bayer.com)*

**Damon Bradley**, Research & Regulatory Systems Data Manager, Bayer US, LLC  
*Email: [damon.bradley@bayer.com](mailto:damon.bradley@bayer.com)*



# Questions

