

How *One* Clinical Reviewer Approaches a Review and Works with Data

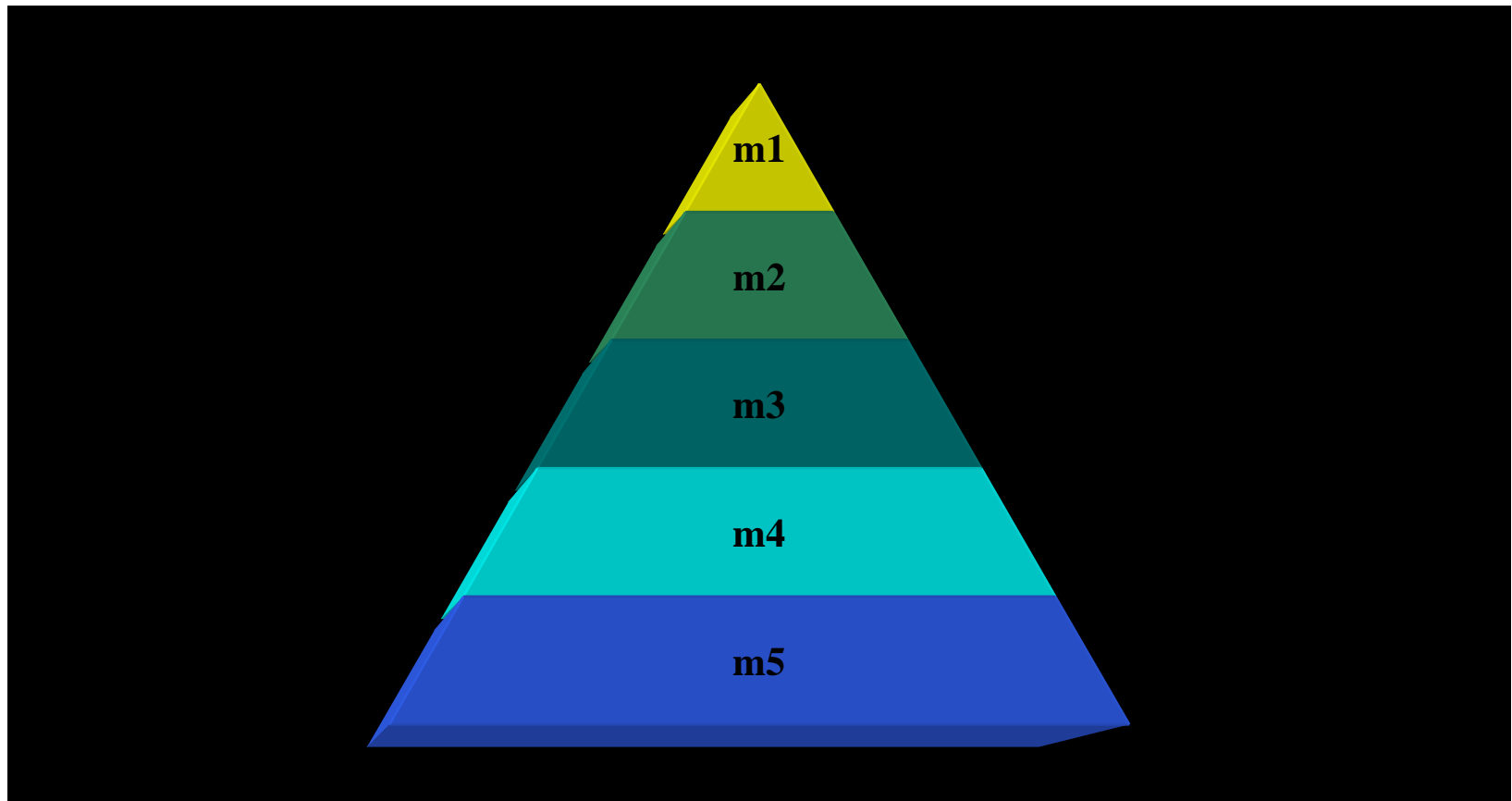
Lesley-Anne Furlong, M.D.



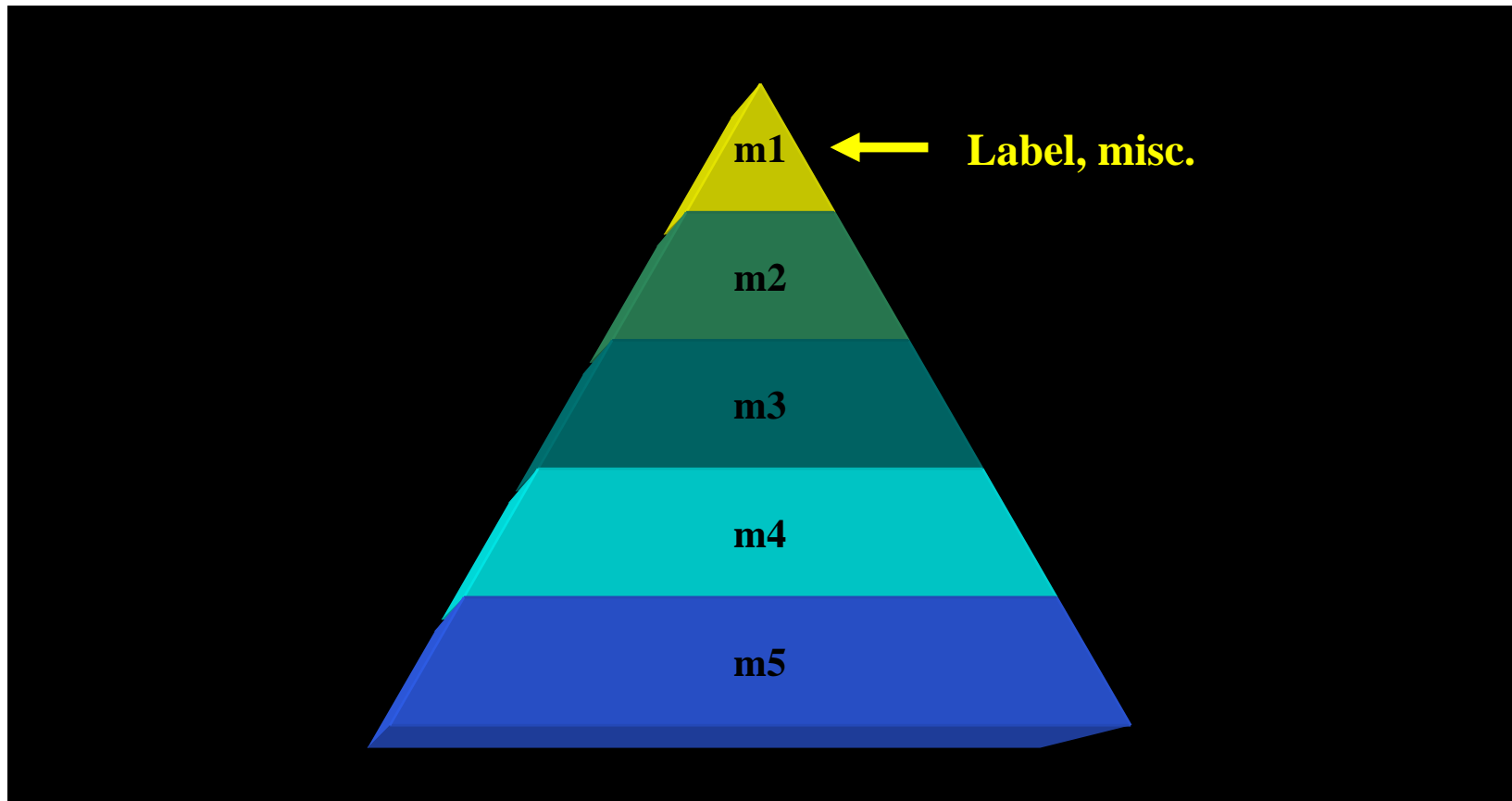
Topics

- Approach to NDA review
- Examples of working with data
- Challenges

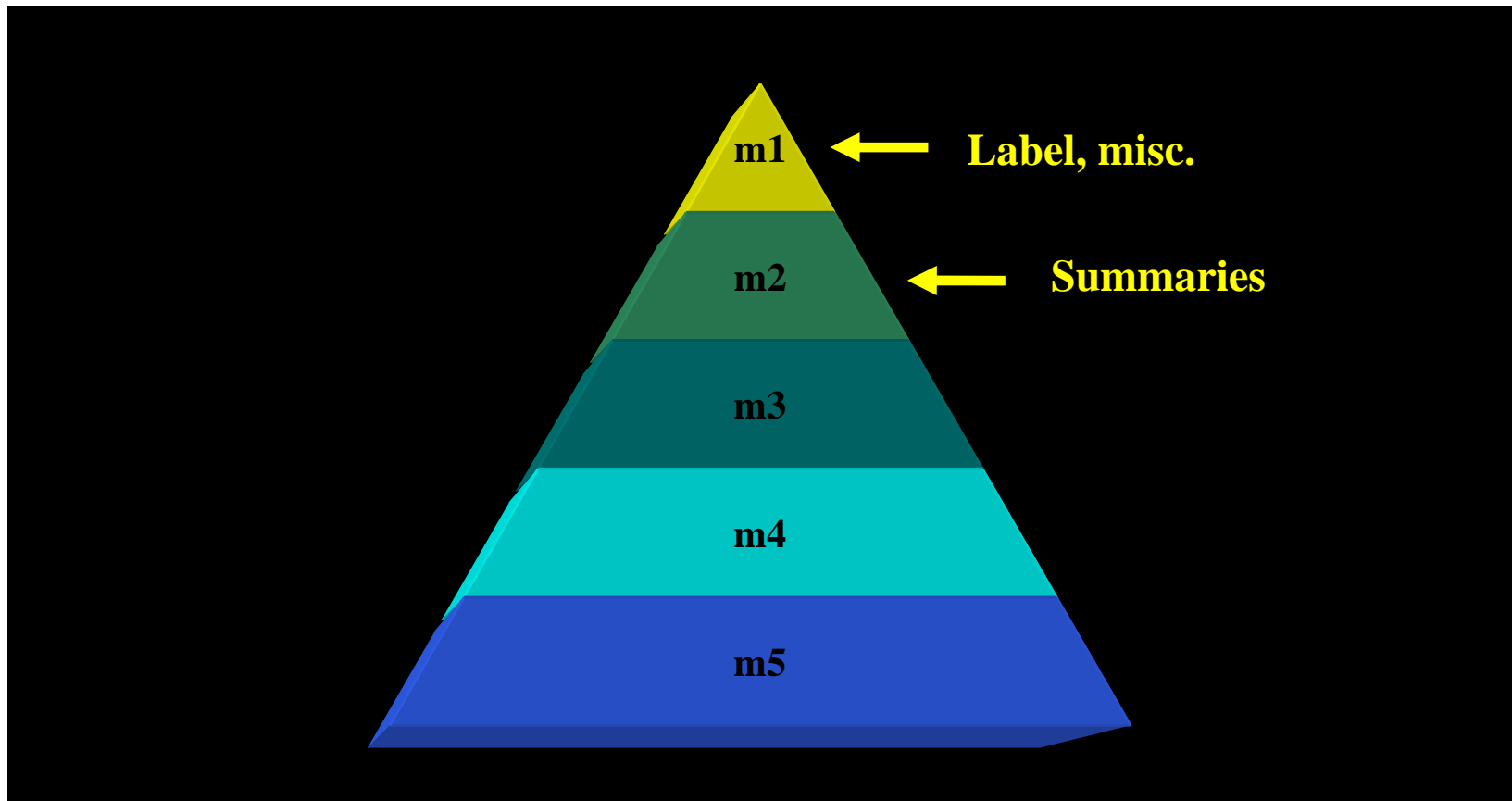
Clinical Reviewer's CTD



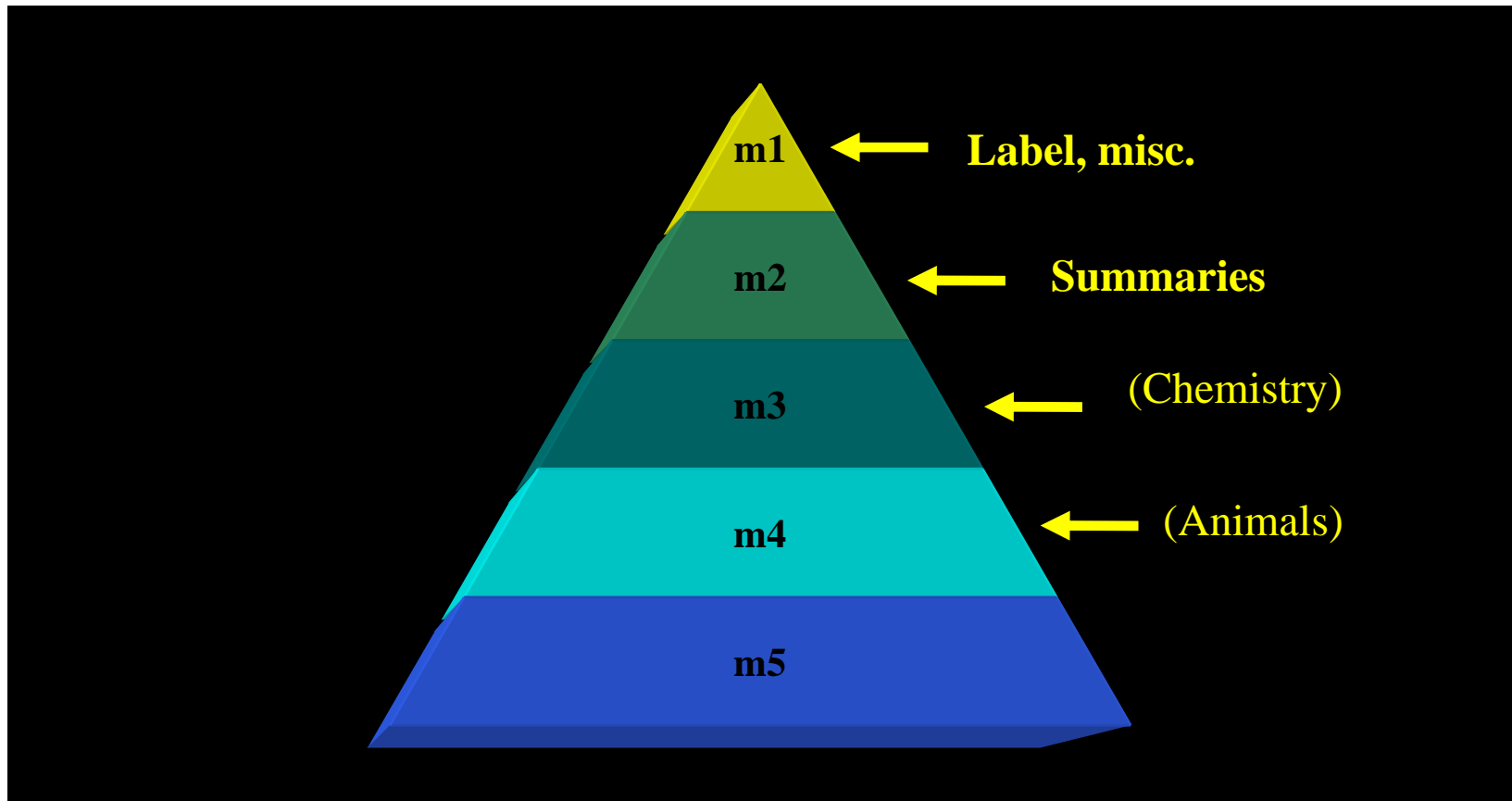
Clinical Reviewer's CTD



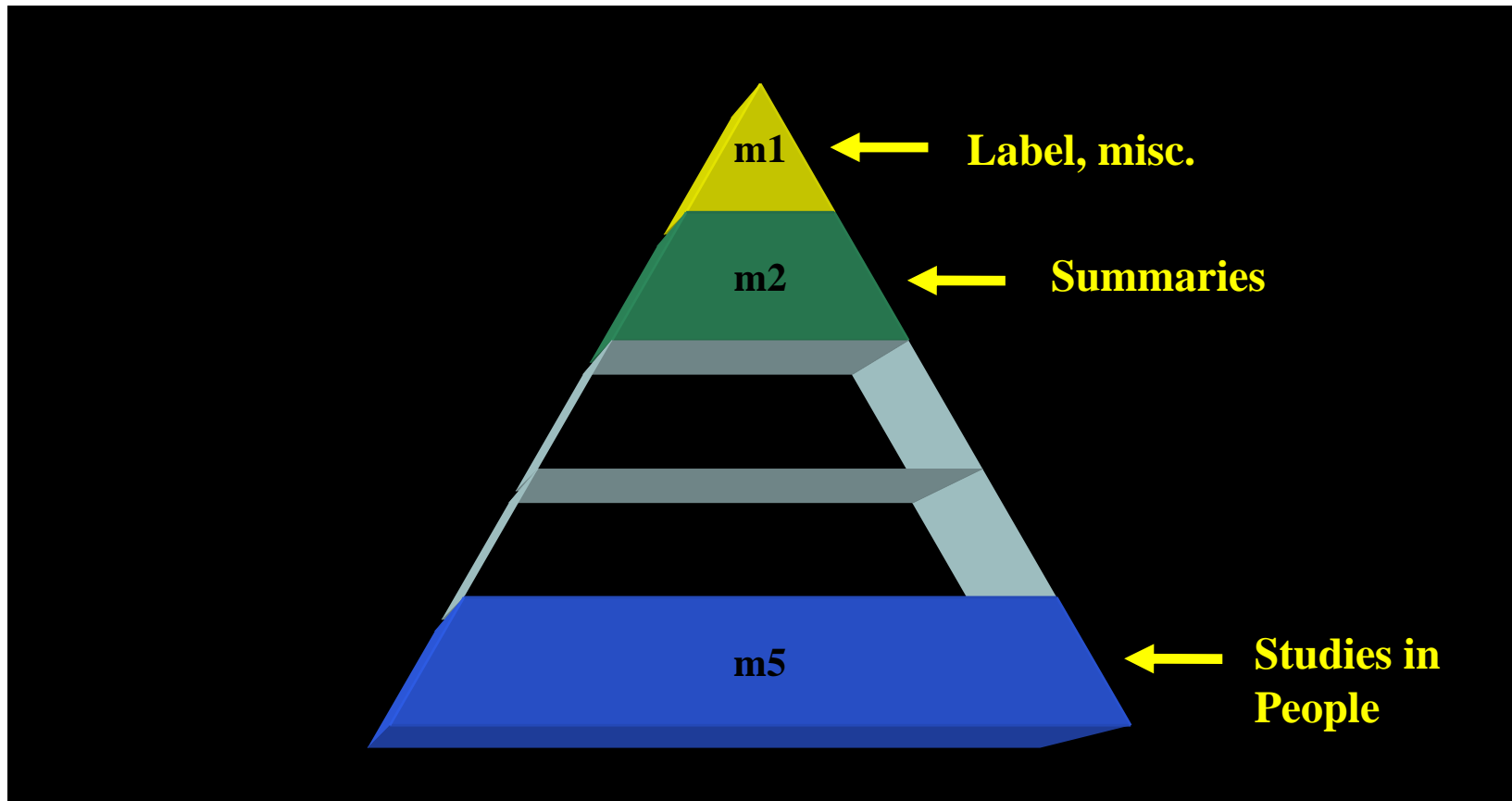
Clinical Reviewer's CTD



Clinical Reviewer's CTD



Clinical Reviewer's CTD



Approach to NDA Review

- Where does the sponsor want me to go?
- Where does the science want me to go?
- What does common sense tell me?

What Do I Do with Data?

- Check coding
- Look for answers to questions that arise
- Repeat some analyses or do them differently
- Look for outlier sites to advise inspectors

Check Coding

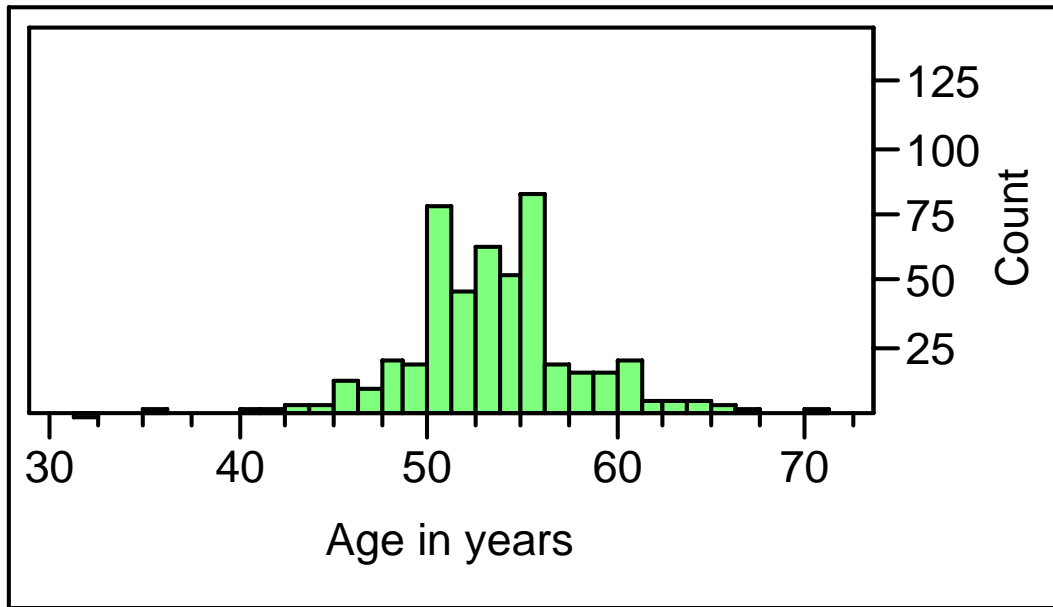
- “Vasodilatation”?
- Coding term
- What did patients say?
- Verbatim term
- Hot flushes, hot flushes and sweating
- Labeling?

Look for answers to questions that arise

- “Injection site reaction”
- Investigators say “mild,” “not serious”
- But...one third “not recovered”, one tenth stopped drug
- What did the patients say?
- “Extremely unlikely” to use again or recommend to a friend
- Labeling?

Repeat some analyses or do them slightly differently

- Average age is 53.4 years old



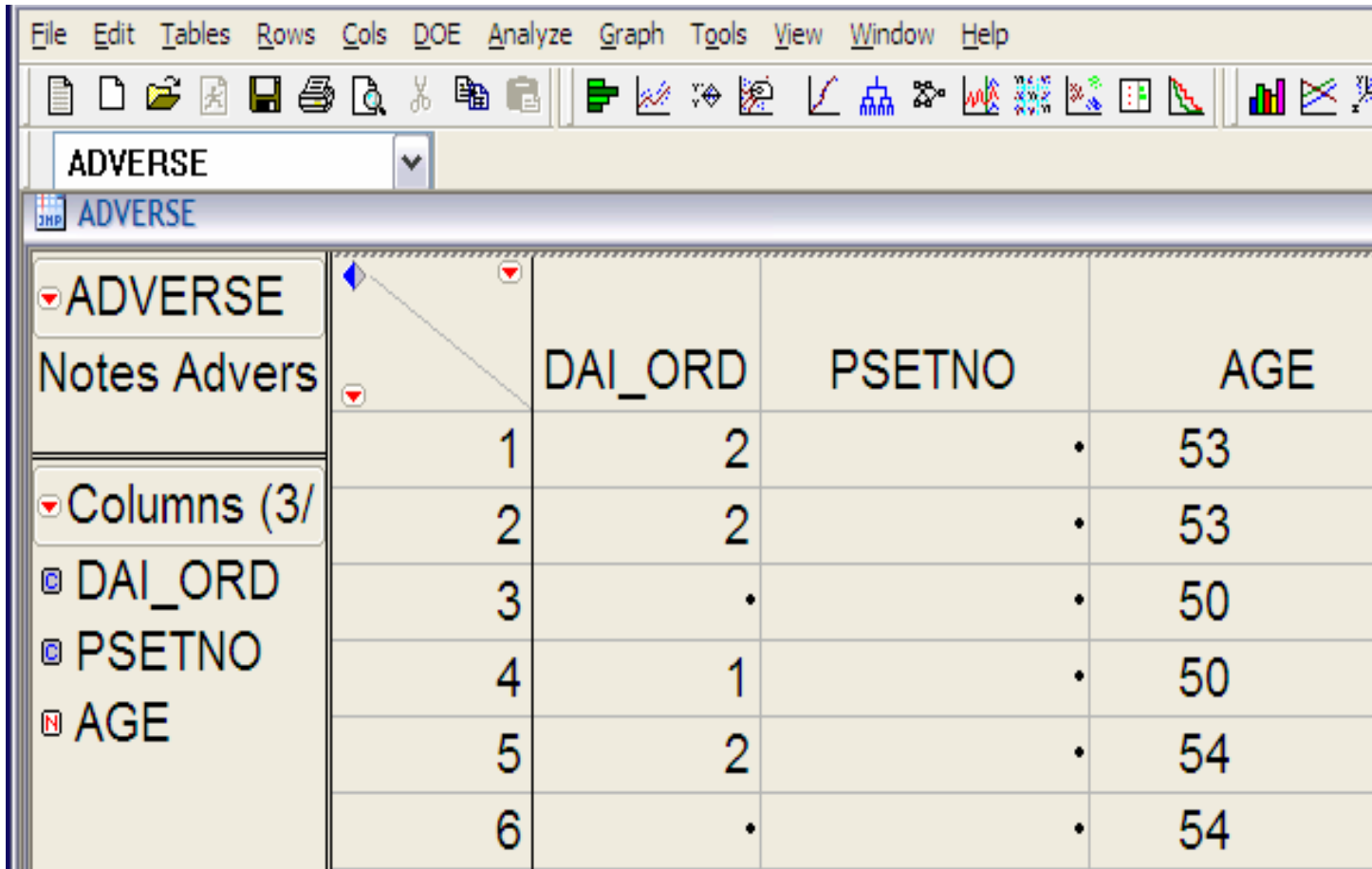
Challenges of Reviewing e-data

- Obscure datasets
- Need for standards
- SDTM



- Blinded data?
- Easy to make mistakes ✓ ✓ ✓

Obscure Datasets



ADVERSE

ADVERSE

ADVERSE	DAI_ORD	PSETNO	AGE
Notes Advers	1	2	53
Columns (3/	2	2	53
DAI_ORD	3	.	50
PSETNO	4	1	50
AGE	5	2	54
	6	.	54



Excerpt of “define.pdf”

Column Header	Explanation
AGE	AGE
DAI_ORD	Partitioning column - DA I Order
PSETNO	PSETNO

Writer, Editor, Printer, Statesman, Scientist



Ben's Data on Beer

Belief: Men are made stronger by drinking strong beer

“My companion at the press drank every day a pint before breakfast, a pint at breakfast with his bread and cheese, a pint between breakfast and dinner, a pint at dinner, a pint in the afternoon about six o'clock, and another when he had done his day's work.”

“I drank only water; the other workmen, near fifty in number, were great guzzlers of beer.”

“On occasion, I carried up and down stairs a large form of types in each hand, when others carried but one in both hands.”

“They wondered to see, from this and several instances, that the Water-American, as they called me, was stronger than themselves, who drank strong beer!”

My Conclusions

- Datasets help us understand and do better reviews
- Better reviews serve everyone
- Standards serve everyone
- Strong beer doesn't make you stronger